Pad Shape - Pad Size / Pad Material / Option List

Pad Shape		Pad Shape Code	Pad Size 0.7	1	1.5	2	2.5	3	3.5	4	5	6	8	10	15	20	25	30	35	40	50	60	70	80	100	150	200
Standard Type	General-type	R	–	●	–	●	-	●	–	●	–	●	●	●	●	●	●	●	–	●	●	●	–	●	●	●	●
	Deep Type	A	–	–	–	–	-	–	–	–	–	–	–	–	●	●	●	●	–	●	●	●	–	●	●	–	–
	Compact	RM	●	●	●	●	-	●	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sponge Type		S	–	–	–	–	-	–	–	–	–	–	–	●	●	●	●	●	●	–	●	–	●	–	●	–	–
Bellows Type		B	–	–	–	●	-	–	–	●	–	●	●	●	●	●	●	●	–	●	●	●	–	●	●	–	–
Multi-stage Bellows Type		W	–	–	–	–	-	–	–	–	–	●	●	●	–	●	–	●	–	●	●	–	–	–	–	–	–
Oval-type		E	–	–	–	2x4 ●	-	–	3.5x7 ●	4x10, 4x20 ● 4 x 30,	–	5x10, 5 x 20 ● 5 x 30	6 x 10, 6 x 20, ● 6 x 30	8 x 20, 8 x 30 ●	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Soft Type		L	–	–	–	–	-	–	–	●	–	●	●	●	●	●	–	●	–	●	–	–	–	–	–	–	–
Soft Bellows Type		LB	–	–	–	–	-	–	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–
Anti-slip Type		K	–	–	–	–	-	–	–	–	–	–	–	●	–	●	–	●	–	●	●	–	–	–	–	–	–
Thin workpiece type		P	–	–	–	–	-	–	–	–	–	–	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–
Flat Type	Suction Flow Rate Standard	F	–	–	–	–	-	–	–	–	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–	–	–
	Suction Flow Rate Increased	FH	–	–	–	–	-	–	–	–	–	–	–	●	●	●	●	●	–	–	–	–	–	–	–	–	–
Suction Mark Prevention Type		Q	–	–	–	–	-	–	–	–	–	–	–	●	–	●	–	●	–	–	–	–	–	–	–	–	–
Packaging bag type		PB	-	-	-	-	-	-	-	-	-	-	-	-	-	●	●	●	-	●	-	-	-	-	-	-	-
Metal detector type		BE BD	-	-	-	-	-	-	-	-	-	-	-	●	●	●	-	-	-	-	-	-	-	-	-	-	-
Mechanical-type with Break Function		Y	-	-	-	-	●	●	-	●	-	●	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-

Pad Material	Nitrile rubber N	Silicone Rubber S	Urethane rubber U	Fluororubber F	Conductive Silicone Rubber SE	Conductive NBR (Low Resistance-type) NE	Food Sanitation Act Compliant NBR G	HNBR HN	EPDM EP	Fluorosilicone Rubber FS	Oil Resistant NBR NH	Extra Soft Silicone Rubber 20° YS2	Extra Soft Silicone Rubber 40° YS4	Chloroprene Rubber Blank	PEEK K	POM M	Conductive EEK KE
Standard Type General-type	●	●	●	●	●	●	●	●	●	–	–	–	–	–	–	–	–
Standard Type Deep Type	●	●	●	●	●	●	●	●	●	–	–	–	–	–	–	–	–
Standard Type Compact	●	●	●	●	●	●	●	●	●	–	–	–	–	–	–	–	–
Sponge Type	–	●	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–
Bellows Type	●	●	●	●	●	●	–	●	●	–	–	●	●	–	–	–	–
Multi-stage Bellows Type	●	●	●	●	–	●	●	●	●	–	–	●	●	–	–	–	–
Oval-type	●	●	●	●	●	●	–	●	●	–	–	–	–	–	–	–	–
Soft Type	●	●	–	–	●	●	–	–	–	●	–	–	–	–	–	–	–
Soft Bellows Type	●	●	●	–	●	●	–	●	●	–	–	–	–	–	–	–	–
Anti-slip Type	–	●	●	●	–	●	–	–	–	–	●	–	–	–	–	–	–
Thin workpiece type	●	●	●	●	–	●	–	–	–	●	–	–	–	–	–	–	–
Flat Type Suction Flow Rate Standard	●	●	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–
Flat Type Suction Flow Rate Increased	●	●	–	●	●	●	–	–	–	–	–	–	–	–	–	–	–
Suction Mark Prevention Type	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	●	●
Packaging bag type	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metal detector type	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mechanical-type with Break Function	●	●	-	●	●	-	-	-	-	-	-	-	-	-	-	-	-

Option	Free Holder (Swing)	Flexible Holder (Swing)	Direct Mount Filter	Drop Prevention Valve	Surface Treated Rubber	Resin Attachment	Rechargeable Battery Compatible Specification	Food FP Specification
Standard Type General-type	●	●	●	●	●	–	●	●
Standard Type Deep Type	●	●	●	●	●	–	●	●
Standard Type Compact	–	●	-	●	●	–	●	-
Sponge Type	●	●	●	●	–	–	●	●
Bellows Type	●	●	●	●	●	● Mounting Parts	●	●
Multi-stage Bellows Type	●	●	●	●	●	–	●	●
Oval-type	●	●	●	●	●	–	●	-
Soft Type	●	●	●	●	●	–	●	●
Soft Bellows Type	●	●	●	●	●	–	●	●
Anti-slip Type	●	●	●	●	–	–	●	-
Thin workpiece type	●	●	●	●	–	–	●	●
Flat Type Suction Flow Rate Standard	●	●	●	●	●	–	●	●
Flat Type Suction Flow Rate Increased	●	●	●	●	●	–	●	●
Suction Mark Prevention Type	–	Standard ●	●	●	–	–	●	-
Packaging bag type	-	-	-	-	-	-	-	●
Metal detector type	-	-	●	-	-	-	-	●
Mechanical-type with Break Function	-	-	-	-	-	-	-	-

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Pad Shape - Holder Shape List

Pad Shape \ Holder Shape	VSP-A / VSP-MA	VSP-B / VSP-MB	VSP-C / VSP-MC	VSP-D / VSP-MD	VSP-E / VSP-ME	VSP-F	VSP-LFC	VSP-LFD	VSP-HC	VSP-HD	VSP-HDW	VSP-HE	VSP-HEW	VSP-AE	VSP-BE	VSP-KE
Standard Type	●	●	●	●	●	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	●											
Sponge Type	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	–											
Bellows Type	●	●	●	●	●	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	●											
Multi-stage Bellows Type	●	●	●	●	●	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	●											
Oval Type	●	●	●	●	–	●	●	●	●	●	●	●	●	●	●	–
	●	●	●	●	–											
Soft Type	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	–											
Soft Bellows Type	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	–											
Anti-slip Type	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	–											
For Thin Objects Type	●	●	●	●	●	●	●	●	–	●	●	●	●	–	–	–
	●	●	●	●	●											
Flat Type	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	–											
Suction Mark Prevention Type	●	●	●	●	–	●	●	●	●	●	●	●	●	–	–	–
	●	●	●	●	–											
For Packaging Bags Type	●	-	-	-	●	-	-	-	-	-	-	-	-	-	-	–
	-	-	-	-	-											
For Metal Detectors Type	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-	–
	●	●	●	●	-											
Mechanical-type with Break Function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
	-	-	-	-	-											

Holder Shape

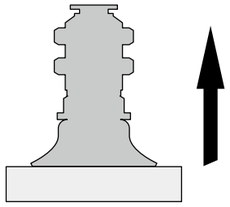
Code		VSP-A	VSP-B	VSP-C	VSP-D	VSP-E	VSP-F	VSP-LFC	VSP-LFD
	Standard	VSP-A	VSP-B	VSP-C	VSP-D	VSP-E	VSP-F	VSP-LFC	VSP-LFD
	Compact	VSP-MA	VSP-MB	VSP-MC	VSP-MD	VSP-ME	–	–	–
Shape		Fixed Type Vacuum Outlet Top	Fixed Type Vacuum Outlet Side	Buffer Type Vacuum Outlet Top	Buffer Type Vacuum Outlet Side	Direct Mount Type Fixed	Direct Mount Type Buffer	Low Particle Generation Buffer Type Vacuum Outlet Top	Low Particle Generation Buffer Type Vacuum Outlet Side

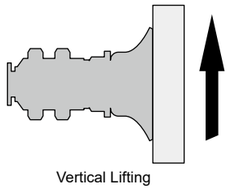
Code	Standard	VSP-HC	VSP-HD	VSP-HDW	VSP-HE	VSP-HEW	VSP-AE	VSP-BE	VSP-KE
Shape		Lightweight Buffer Type Vacuum Outlet Top	Lightweight Buffer Type Vacuum Outlet Side	Lightweight Buffer Type Vacuum Outlet Both Sides	Low Profile Direct Mount Fixed Type Vacuum Outlet Side	Low Profile Direct Mount Fixed Type Vacuum Outlet Both Sides	Screw Mount Type Vacuum Outlet Top	Screw Mount Type Vacuum Outlet Side	Direct Mount Type with Mechanical Break Function

Suction Pad Selection Method

Theoretical Suction Force

Theoretical suction force is determined by the pad area and the vacuum pressure generated when using that pad. Use calculated values as reference; perform actual suction tests as needed for confirmation. Theoretical suction force is a value under static conditions. Allow sufficient margin considering the workpiece Weight and forces due to acceleration during movement(lifting, stopping, rotating, etc.). Also, allow sufficient margin when determining the number and placement of pads.





① Method by Calculation Formula

$$W = x10.13xf\frac{C \times P}{101}$$

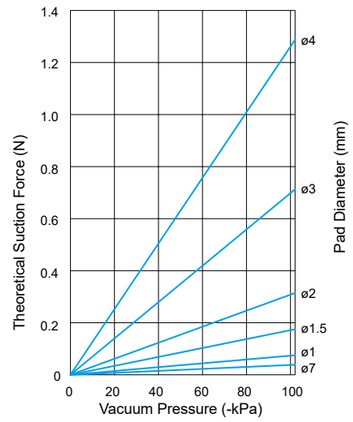
W: Suction Force (N)
C: Pad Area (cm²)
P: Vacuum Pressure (-kPa)
f: Safety Factor Horizontal Lifting (See figure on right): 1/4
Vertical Lifting (See figure on right): 1/8

*1: For sponge-type pads, calculation uses the inner diameter of the sponge pad section. Refer to the table on the right.
*2: For flat type pads, calculation uses the grooves on the suction surface. Refer to the table on the next page.
*3: Regarding the suction force of Bellows (Multi-stage Bellows), Soft (Soft Bellows), and Thin Workpiece-type pads, due to pad characteristics, the theoretical suction force may exceed the pad's own strength depending on the vacuum level. Please verify with actual equipment.

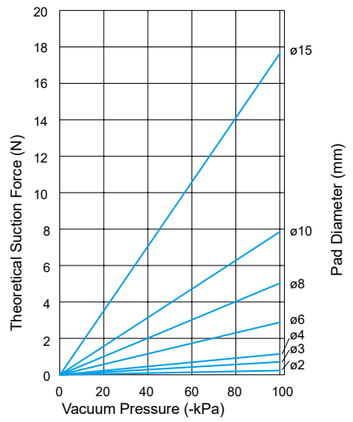
② Theoretical Suction Force Graph [Add a safety factor to the values obtained from the graph.]

Standard, Bellows, Multi-stage Bellows, Soft, Soft Bellows, Non-slip, Thin Workpiece, Suction Mark Prevention Pads (*)

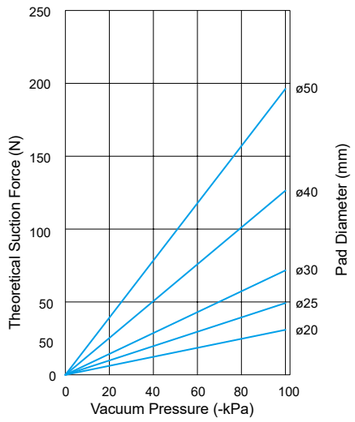
●Pad Diameter (Compact): ø0.7 mm to ø4 mm



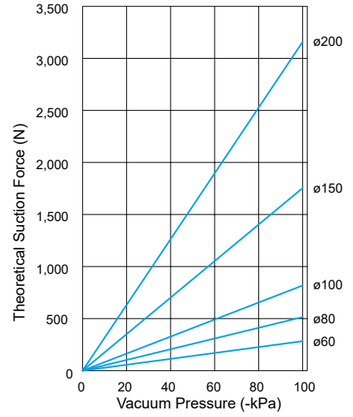
●Pad Diameter: ø2 mm to ø15 mm



●Pad Diameter: ø20 mm to ø50 mm



●Pad Diameter: ø60 mm to ø200 mm

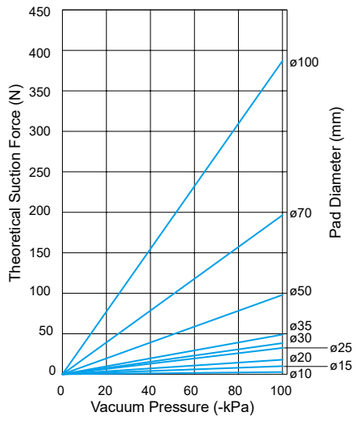


*Depending on the pad shape, some listed pad diameters in the graph may not be available. Please confirm the size from the pad size list in the table below.

Pad Shape		Standard	Bellows	Multi-stage Bellows	Soft	Soft Bellows	Non-slip	Thin Workpiece	Suction Mark Prevention
Pad diameter (mm)	ø0.7	●	-	-	-	-	-	-	-
	ø1	●	-	-	-	-	-	-	-
	ø1.5	●	-	-	-	-	-	-	-
	ø2	●	●	-	-	-	-	-	-
	ø4	●	●	-	●	-	-	-	-
	ø6	●	●	●	●	●	-	-	-
	ø8	●	●	●	●	●	-	●	-
	ø10	●	●	●	●	●	●	●	●
	ø15	●	●	-	●	●	-	●	-
	ø20	●	●	●	●	●	●	●	●
	ø25	●	●	-	-	-	-	-	-
	ø30	●	●	●	●	-	●	-	●
	ø40	●	●	●	●	-	●	-	-
	ø50	●	●	●	-	-	●	-	-
	ø60	●	●	-	-	-	-	-	-
	ø80	●	●	-	-	-	-	-	-
	ø100	●	●	-	-	-	-	-	-
	ø150	●	-	-	-	-	-	-	-
	ø200	●	-	-	-	-	-	-	-

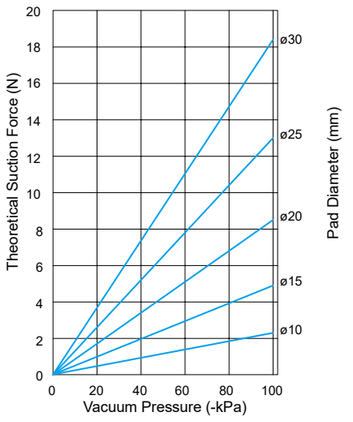
Sponge Pad

●Pad diameter: ø10 mm to ø100 mm



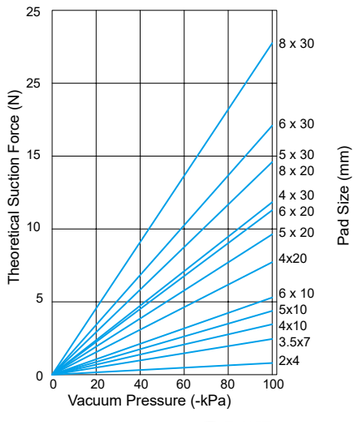
Flat Pad

●Pad diameter: ø10 mm to ø30 mm

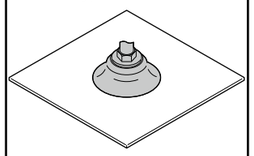
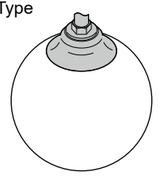
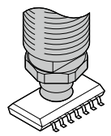
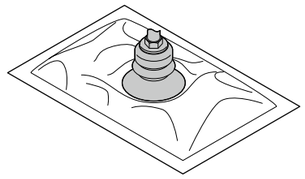


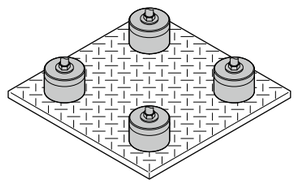
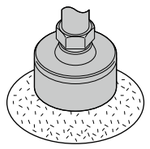
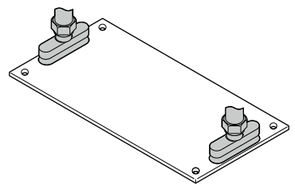
Oval Pad

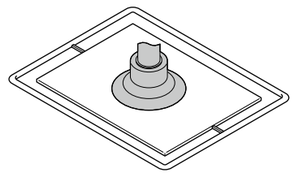
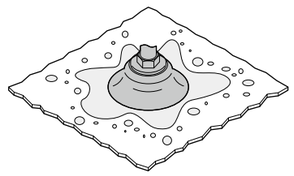
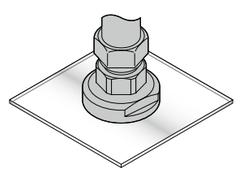
● Pad Size: 2 x 4 mm to 8 x 30 mm

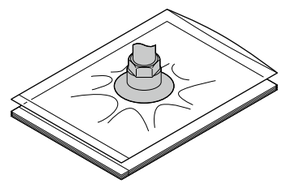
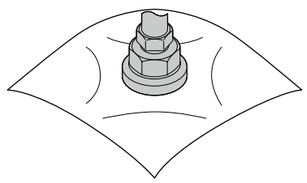


Suction Pad Shapes

Standard Type			Bellows / Multi-stage Bellows Type
General-type 	Deep Type 	Compact 	
Thick, flat workpieces.	Round fruits(apples, etc.) and round balls.	Compact workpieces and semiconductor manufacturing equipment.	Bags containing retort pouches, foodstuffs, etc.

Sponge-type		Oval-type
		
Building exterior materials, small stone objects, or shell-like workpieces.		Long workpieces like circuit boards or semiconductors.

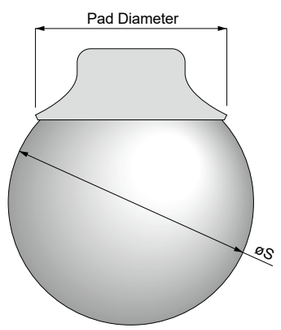
Soft / Soft Bellows Type	Anti-slip Type	Suction Mark Prevention Type
		
Extracting molded products or easily scratched workpieces.	Workpieces with oil adhesion, such as press parts.	LCD glass, painting processes, semiconductor manufacturing equipment.

For Packaging Bags Type	For Thin Objects Type	Flat Type/Flat Increased Suction Flow Type
		
Thin workpieces like copy paper or vinyl.		Thin workpieces like sheets or vinyl.

●[Reference] Suction of spherical surfaces(deep pad)

Minimum Adsorbable Diameter

Pad Diameter (mm)	ø15	ø20	ø25	ø30	ø40	ø50	ø60	ø80	ø100
Sphere Diameter (øS mm)	20	30	40	50	80	100	120	160	200



Characteristics of Each Pad Material

■Rubber material

Item	Ordering Code	Pad Material	Nitrile rubber	Food Sanitation Act Compliant NBR	HNBR	Silicone Rubber	Conductive Silicone Rubber	Extra Soft Silicone Rubber		Urethane rubber	Fluororubber	Fluorosilicone Rubber	EPDM	Conductive NBR (Low Resistance-type)	Metal Detectable Silicone			
															Iron Powder Specification		SUS Powder Specification	
			N, NH (*1)	G	HN	S	SE	YS2	YS4	U	F	FS	EP	NE	SF3	SF5	SS3	SS5
Application			Cardboard Plywood Steel Plate Food Related Other General Workpieces		Cardboard, Plywood, Steel Plate, Food Related, Other General Workpieces. Use in low-concentration ozone environments	Semiconductor Mold Ejection Thin Workpieces Food Related		Food Related		Cardboard, Plywood, Steel Plate	Chemical Atmosphere, High Temperature Workpieces	Mold Ejection	Applications requiring light/ozone resistance, use in humid. atmospheres	Semiconductor	For processes sensitive to foreign matter contamination, such as food production lines			
Pad Color			Black	Light Gray	Black	Clear White	Black	Pink	Blue	Dark Blue	Gray	Dark Orange	Black	Black	Reddish Brown	Dark Green	Brown	Green
Various Properties	Surface Hardness by Pad Shape (Shore A)	Standard Type	50° to 80°	60° to 70°	50° to 70°	50°	60°	–	–	55° to 70°	60° to 70°	-	50° to 70°	60° to 70°	-	–	–	–
		Bellows Type	50°	–	50°	50°	60°	20°	40°	55°	60°	-	50°	60°	–	–	–	–
		Multi-stage Bellows Type	50°	50°	50°	50°	–	20°	40°	55°	50°	-	50°	60°	–	–	–	–
		Oval Type	40° to 50°	–	50°	40° to 50°	50° to 60°	–	–	55°	50°	–	50°	70°	–	–	–	–
		Soft Type	40°	–	–	40°	60°	–	–	–	–	40°	–	50°	–	–	–	–
		Soft Bellows Type	40°	–	50°	40°	60°	–	–	55°	–	–	50°	60°	–	–	–	–
		Anti-slip Type	50°	–	–	50°	–	–	–	55°	60°	–	–	60°	–	–	–	–
		Flat Type	60°	–	–	40°	40°	–	–	50°	50°	–	–	60°	–	–	–	–
		Flat Increased Suction Flow Type								–								
		For Thin Objects Type	40°	–	–	40°	–	–	–	55°	50°	40°	–	60°	–	–	–	–
		Metal Detector Type	–	–	–	–	–	–	–	–	–	–	–	–	30°	50°	30°	50°
	High Temp. Operating Limit		110°C		140°C	180°C		180°C		60°C	230°C	180°C	150°C	110°C	180°C			
	Low Temp. Operating Limit		-30°C		-30°C	-40°C		-40°C		-20°C	-10°C	-50°C	-40°C	-30°C	-40°C			
	Weather Resistance		△		○	◎		◎		○	○	○	◎	△	◎			
	Ozone Resistance		x		○	◎		◎		◎	◎	◎	◎	x	◎			
	Acid Resistance		△		△	○		○		x	◎	○	◎	△	○			
	Alkali Resistance		○		○	◎		◎		x	x	◎	◎	○	◎			
	Oil Resistance	(Gasoline/Diesel)	◎		◎	△		△		◎	◎	△	x	◎	△			
		(Benzene/Toluene)	△		x	△		△		△	◎	△	x	△	△			
	Volume Resistivity		–		–	–	10^5 Ω·cm or less	–		–	–	–	–	200 Ω·cm or less	–			

Reading the rating ➡◎: Optimal, ○: Suitable△: Good, x: Unsuitable

*1: Pad material order code: NH is only available for the non-slip type.

Note 1: Various properties indicate the characteristics of general synthetic rubber used for the pad material.

Note 2: Actual use at the operating limit temperature is instantaneous; if continuing for a certain period, confirm sufficiently before use.

Note 3: When the fiber flocked type surface treatment (option) is selected, the high-temperature operating limit for fluororubber becomes 200°C.

■Sponge Material

Item	Ordering Code	Pad Material	Chloroprene Rubber (Sponge-type)	Silicone Rubber (Sponge-type)
			Blank	S
Application			Workpieces with uneven surfaces	Workpieces with uneven surfaces Food Related
Pad Color			Black	Dark Orange
Various Properties	High Temp. Operating Limit		80°C	180°C
	Low Temp. Operating Limit		-45°C	-40°C
	Weather Resistance		○	◎
	Ozone Resistance		○	◎
	Acid Resistance		△	○
	Alkali Resistance		◎	◎
	Oil Resistance	(Gasoline/Diesel)	x	△
		(Benzene/Toluene)	△	△
	Volume Resistivity		–	–

■Resin material

Item	Ordering Code	Pad Material	PEEK	POM	Conductive PEEK
			K	M	KE
Application			Semiconductor/LCD manufacturing equipment	Various production lines Food-related equipment/ Packaging machinery	Semiconductor/LCD manufacturing equipment Electronic equipment parts
Pad Color			Beige	White	Black
Various Physical Properties	High Temp. Operating Limit		250°C	95°C	250°C
	Low Temp. Operating Limit		-50°C	-60°C	-50°C
	Weather Resistance		◎	x	◎
	Acid Resistance		◎	x	◎
	Alkali Resistance		◎	△	◎
	Self-lubricating		○	◎	○
	Abrasion resistant		◎	◎	◎
	Volume Resistivity		–	–	10^3 to 10^8 Ω·cm

Reading the rating ➡◎: Optimal, ○: Suitable△: Good, x: Unsuitable

*1: Various properties pertain to the pad section resin material and do not include the characteristics of the adsorption mark prevention pad holder section. Please select considering the specifications of the vacuum pad holder used and the adsorption mark prevention pad holder section.

*2: Various properties are general characteristics of each material and are not guaranteed values. Please confirm with actual equipment before use.

*3: Actual use at the high-temperature usage limit temperature is instantaneous; if continued for a certain period, please confirm sufficiently before use.

*4: Volume resistivity is a representative value published by the material manufacturer and is not a guaranteed value.

Pad Diameter Compatibility Table by Material

Pad Material		N: Nitrile									
Pad Shape		Standard Type			Bellows Type	Multi-stage Bellows Type	Soft Type	Soft Bellows Type	For Thin Objects Type	Flat Type	Mechanical-type with Break Function
		General-type	Deep Type	Compact Type							
Pad Diameter (mm)	ø0.7			●							
	ø1	●		●							
	ø1.5			●							
	ø2	●		●	●						
	ø2.5										●
	ø3	●		●							●
	ø4	●		●	●		●				●
	ø6	●			●	●	●	●			●
	ø8	●			●	●	●	●	●		●
	ø10	●			●	●	●	●	●	●	●
	ø15	●	●		●		●	●	●	●	
	ø20	●	●		●	●	●	●	●	●	
	ø25	●	●		●					●	
	ø30	●	●		●	●	●			●	
	ø40	●	●		●	●	●				
	ø50	●	●		●	●					
	ø60	●	●		●						
	ø80	●	●		●						
	ø100	●	●		●						
	ø150	●									
	ø200	●									

Pad Material		S: Silicone												
Pad Shape		Standard Type			Bellows Type	Multi-stage Bellows Type	Soft Type	Soft Bellows Type	Flat Type	Anti-slip Type	For Thin Objects Type	Sponge Type	For Packaging Bags Type	Mechanical-type with Break Function
		General-type	Deep Type	Compact Type										
Pad Diameter (mm)	ø0.7			●										
	ø1	●		●										
	ø1.5			●										
	ø2	●		●	●									
	ø2.5													●
	ø3	●		●										●
	ø4	●		●	●		●							●
	ø6	●			●	●	●	●						●
	ø8	●			●	●	●	●			●			●
	ø10	●			●	●	●	●	●	●	●	●		●
	ø15	●	●		●		●	●	●		●	●		
	ø20	●	●		●	●	●	●	●	●	●	●	●	
	ø25	●	●		●				●			●	●	
	ø30	●	●		●	●	●		●	●		●	●	
	ø35											●		
	ø40	●	●		●	●	●			●			●	
	ø50	●	●		●	●				●		●		
	ø60	●	●		●									
	ø70											●		
	ø80	●	●		●									
	ø100	●	●		●							●		
	ø150	●												
	ø200	●												

Pad Material		U: Urethane								
Pad Shape		Standard Type			Bellows Type	Multi-stage Bellows Type	Soft Bellows Type	Anti-slip Type	For Thin Objects Type	Flat Type (*1)
		General-type	Deep Type	Compact Type						
Pad Diameter (mm)	ø0.7			●						
	ø1	●		●						
	ø1.5			●						
	ø2	●		●						
	ø3	●		●						
	ø4	●		●						
	ø6	●			●		●			
	ø8	●			●		●		●	
	ø10	●			●	●	●	●	●	●
	ø15	●	●		●		●		●	●
	ø20	●	●		●	●	●	●	●	●
	ø25	●	●		●					●
	ø30	●	●		●	●		●		●
	ø40	●	●		●	●		●		
	ø50	●	●		●	●		●		
	ø60	●	●		●					
	ø80	●	●		●					
	ø100	●	●		●					
	ø150	●								
	ø200	●								

*1: Suction Flow Rate Increased Type FH is not supported.

Pad Material		F: Fluorine									G: Food Sanitation Act Compliant NBR			
Pad Shape		Standard Type			Bellows Type	Multi-stage Bellows Type	Anti-slip Type	For Thin Objects Type	Flat Type	With Mechanical Break Function Type	Standard Type			Multi-stage Bellows Type
		General-type	Deep Type	Compact Type							General-type	Deep Type	Compact Type	
Pad Diameter (mm)	ø0.7			●									●	
	ø1	●		●							●		●	
	ø1.5			●									●	
	ø2	●		●							●		●	
	ø2.5									●				
	ø3	●		●						●	●		●	
	ø4	●		●						●	●		●	
	ø6	●			●	●				●	●			●
	ø8	●			●	●		●		●	●			●
	ø10	●			●	●	●	●	●	●	●			●
	ø15	●	●		●			●	●		●	●		
	ø20	●	●		●	●	●	●	●		●	●		●
	ø25	●	●		●				●		●	●		
	ø30	●	●		●	●	●		●		●	●		●
	ø40	●	●		●	●	●				●	●		●
	ø50	●	●		●	●	●				●	●		●
	ø60	●	●		●									
	ø80	●	●		●									
	ø100	●	●		●									
	ø150	●												
	ø200	●												

Pad Material		SE: Conductive Silicone								Blank: Chloroprene Sponge Type	NH: Oil Resistant NBR Anti-slip Type	SF3, SF5, SS3, SS5: Metal Detectable Silicone For Metal Detectors Type
Pad Shape		Standard Type			Bellows Type	Soft Type	Soft Bellows Type	Flat Type	Mechanical-type with Break Function			
		General-type	Deep Type	Compact Type								
Pad Diameter (mm)	ø0.7			●								
	ø1	●		●								
	ø1.5			●								
	ø2	●		●								
	ø2.5								●			
	ø3	●		●					●			
	ø4	●		●	●	●			●			
	ø6	●			●	●	●		●			
	ø8	●			●	●	●		●			
	ø10	●			●	●	●	●	●	●	●	●
	ø15	●	●		●	●	●	●		●		●
	ø20	●	●		●	●	●	●		●	●	●
	ø25	●	●		●			●		●		
	ø30	●	●		●	●		●		●	●	
	ø35									●		
	ø40	●	●		●	●					●	
	ø50	●	●		●					●	●	
	ø60	●			●							
	ø70									●		
	ø80	●			●							
	ø100	●			●					●		
	ø150	●										
	ø200	●										

Pad Material		NE: Conductive NBR (Low Resistance-type)										YS2, YS4: Extra Soft Silicone	
Pad Shape		Standard Type			Bellows Type	Multi-stage Bellows Type	Soft Type	Soft Bellows Type	Anti-slip Type	For Thin Objects Type	Flat Type	Bellows Type	Multi-stage Bellows Type
		General-type	Deep Type	Compact Type									
Pad Diameter (mm)	ø0.7			●									
	ø1	●		●									
	ø1.5			●									
	ø2	●		●									
	ø3	●		●									
	ø4	●		●			●						
	ø6	●			●	●	●	●					
	ø8	●			●	●	●	●		●			
	ø10	●			●	●	●	●	●	●	●	●	●
	ø15	●	●		●		●	●		●	●	●	
	ø20	●	●		●	●	●	●	●	●	●	●	●
	ø25	●	●		●						●	●	
	ø30	●	●		●	●	●		●		●	●	●
	ø40	●	●		●	●	●		●			●	●
	ø50	●	●		●	●			●			●	●
	ø60	●	●		●								
	ø80	●			●								
	ø100	●	●		●								
	ø150	●											
	ø200	●											

Pad Diameter Compatibility Table by Material

Pad Material		HN: HNBR						EP: EPDM						FS: Fluorosilicone	
Pad Shape		Standard Type			Bellows Type	Multi-stage Bellows Type	Soft Bellows Type	Standard Type			Bellows Type	Multi-stage Bellows Type	Soft Bellows Type	Soft Type	For Thin Objects Type
		General-type	Deep Type	Compact Type				General-type	Deep Type	Compact Type					
Pad Diameter (mm)	ø0.7			●						●					
	ø1	●		●				●		●					
	ø1.5			●						●					
	ø2	●		●				●		●					
	ø3	●		●				●		●					
	ø4	●		●				●		●				●	
	ø6	●			●	●	●	●			●	●	●	●	
	ø8	●			●	●	●	●			●	●	●	●	●
	ø10	●			●	●	●	●			●	●	●	●	●
	ø15	●	●		●		●	●	●		●		●	●	●
	ø20	●	●		●	●	●	●	●		●	●	●	●	●
	ø25	●	●		●			●	●		●				
	ø30	●	●		●	●		●	●		●			●	
	ø40	●	●		●	●		●	●		●	●		●	
	ø50	●	●		●	●		●	●		●	●			
	ø60	●	●		●			●	●		●				
	ø80	●	●		●			●	●		●				
	ø100	●	●		●			●	●		●				
	ø150	●						●							
	ø200	●						●							

Pad Material		N: Nitrile	S: Silicone	U: Urethane	F: Fluorine	SE: Conductive Silicone	E: Conductive Butadiene Rubber (Low Resistance-type)	NE: Conductive NBR (Low Resistance-type)	HN: HNBR	EP: EPDM
Pad Shape		Oval Type								
Pad Size (mm)	2x4	●	●	●	●	●		●	●	●
	3.5x7	●	●	●	●	●		●	●	●
	4x10	●	●	●	●	●	●	●	●	●
	4x20	●	●	●	●	●	●	●	●	●
	4 x 30	●	●			●	●	●	●	●
	5x10	●	●	●	●	●	●	●	●	●
	5 x 20	●	●	●	●	●	●	●	●	●
	5 x 30	●	●	●	●	●	●	●	●	●
	6 x 10	●	●	●	●	●	●	●	●	●
	6 x 20	●	●	●	●	●	●	●	●	●
	6 x 30	●	●	●	●	●	●	●	●	●
	8 x 20	●	●	●	●	●	●	●	●	●
	8 x 30	●	●	●	●	●	●	●	●	●

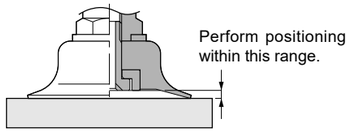
Pad Material		K: PEEK	M: POM	KE: Conductive PEEK
Pad Shape		Suction Mark Prevention Type		
Pad Diameter (mm)	ø10	●	●	●
	ø20	●	●	●
	ø30	●	●	●

Pad Material		K: PEEK	M: POM	KE: Conductive PEEK
Pad Shape		Resin Attachment for Suction Mark Prevention Bellows Type		
Pad Diameter (mm)	ø10	●	●	●
	ø15	●	●	●
	ø20	●	●	●
	ø25	●	●	●
	ø30	●	●	●

Reference Material for Using Suction Pads

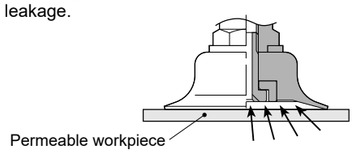
Impact on Pad

When pressing the pad against the workpiece, do not apply impact or large forces. Pad deformation, cracking, and wear will accelerate. Therefore, ensure it is within the deformation range of the pad skirt, or that the rib part, etc., makes light contact. Especially with small diameter pads, perform positioning accurately.



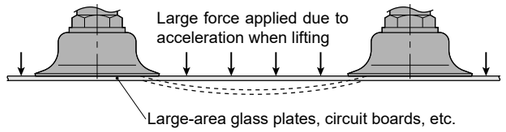
For Workpieces with Permeability or Holes

For suction of permeable workpieces, suction force decreases due to air leakage, so countermeasures such as increasing ejector or vacuum pump capacity, or increasing the effective cross-sectional area of the piping path are necessary. Also, selecting a small diameter pad is one way to reduce air leakage.



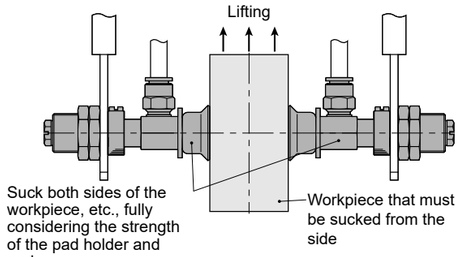
For Large-Area Flat Workpieces

When lifting large-area glass plates, circuit boards, etc., large forces due to acceleration may be applied, or they may ripple under their own weight. Therefore, consider pad arrangement and size, ensuring a sufficient margin.



When Sucking the Side of a Workpiece to Lift It

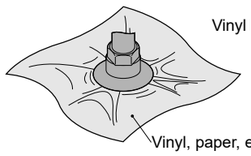
All pad holders are designed for horizontal lifting. Therefore, when sucking the side of a workpiece and lifting it, fully consider the strength of the pad holder and pad.



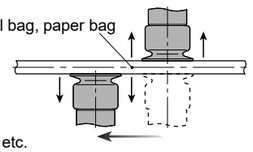
When Sucking Soft Workpieces

When sucking soft workpieces like vinyl, paper, thin plates, etc., the workpiece may deform or wrinkle due to vacuum pressure. Therefore, it is necessary to use a small pad and further lower the vacuum pressure (See Fig-1). Also, when opening vinyl bags, paper bags, etc., small diameter pads are suitable. Mounting opposing pads slightly offset left/right from the center makes opening easier(See Fig-2).

●Fig. -1

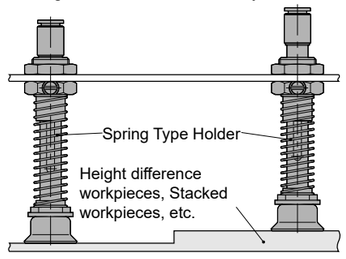


●Fig. -2



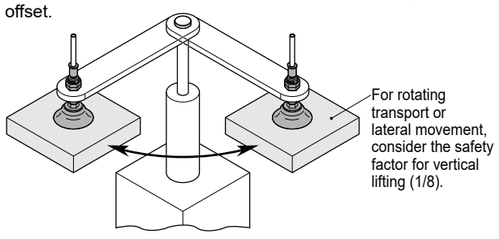
When the Distance Between Pad and Workpiece is Not Constant

If positioning between the pad and workpiece is not possible, such as for workpieces with steps or stacked workpieces, use a spring type. Even if the distance between the pad and workpiece changes, it can be absorbed by the stroke.



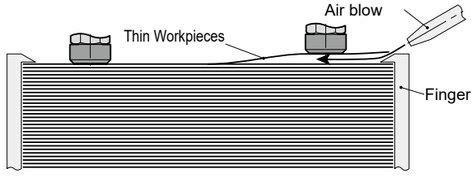
When Performing Rotating Transport

When performing rotating transport with pads fixed by screws, the screws may loosen and the pad may detach. Therefore, design with a sufficient margin. Also, be especially careful if the suction position and the workpiece's center of gravity are offset.



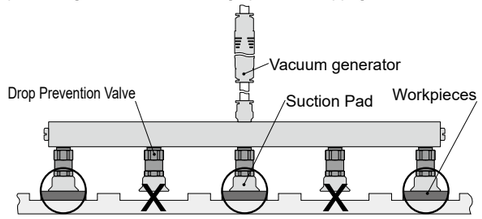
When Sucking Multiple Stacked Thin Workpieces

Since multiple workpieces may be suctioned at once, it is necessary to use a small-diameter pad and further lower the vacuum pressure/. Also, one method to prevent suction of multiple workpieces is to use air blow or Fingers as shown in the diagram below.



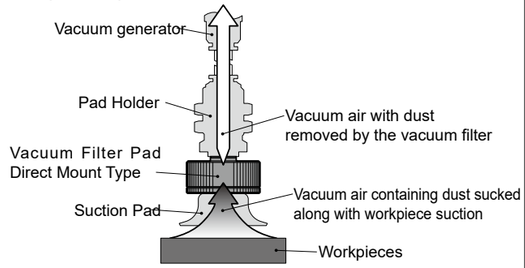
When Using Multiple Pads with One Vacuum Source

Installing a drop prevention valve between the pad and pad holder automatically reduces suction when a workpiece detaches from the pad (within a non-problematic range) or when no workpiece is contacting the pad, mitigating vacuum drop in the entire system and preventing troubles like handling operation stoppage.



When Wanting to Stop Dust at the Pad Section

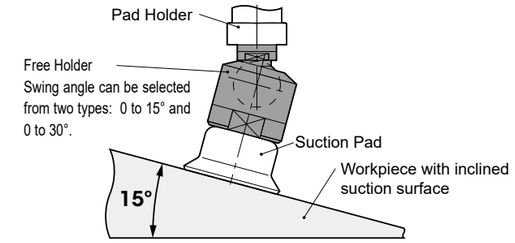
Use the vacuum filter pad direct mount type installed between the pad and pad holder.



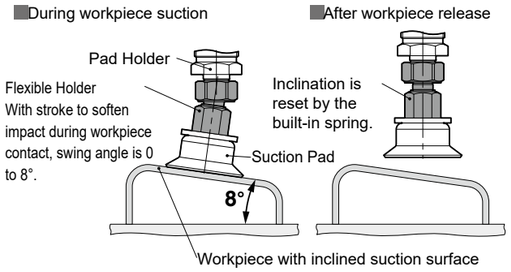
When the Sucked Workpiece Surface is Not Flat

If the sucked workpiece surface is not flat (inclined or curved), use a pad swing device.

● For **Free Holder**



● For **Flexible Holder**



When Adsorption Marks from Suction Pads are Problematic

While not completely preventable, adsorption marks can be reduced by using the Adsorption Mark Countermeasure Series with special surface treatment on the pad or the Suction Mark Prevention Type made of resin material. (The degree of adsorption mark reduction varies depending on the environment and workpiece. Please perform suction tests with actual equipment for model selection.)

Adsorption Mark Countermeasure Surface Treatment Series

Fiber Raised Type (-NF, -SF)

Fibers(nylon or silk) on the pad surface prevent direct contact with the workpiece, thus preventing rubber material transfer.

●Pad material (2 types)
Silicone Rubber, Fluororubber
●Pad diameter (mm)(9 types)
ø10 to ø80
●Pad shape (5 types)
Standard (General-type, Deep Type), Soft, Soft Bellows, Bellows

Sticking Prevention Type (-DL)

Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.

●Pad material (3 types)
Silicone Rubber, Fluororubber, Conductive Silicone
●Pad diameter (mm)(23 types)
ø4 to ø50 (circular), 2 x 4 to 8 x 30 (oblong)
●Pad shape (10 types)
Standard (standard/deep), Soft/soft bellows, Bellows, multi-stage bellows,
For thin objects, flat, Flat intake flow rate increase, oval

Adsorption Mark Reduction Type (-ER)

Surface modification of nitrile rubber with chemicals reduces adsorption marks.

●Pad material (2 types)
Nitrile Rubber, Conductive NBR (Low Resistance-type)
●Pad diameter (mm)(29 types)
ø0.7 to ø60 (circular), 2 x 4 to 8 x 30 (oblong)
●Pad shape (11 types)
Standard (General-type, Deep Type, Compact Type), Soft, Soft Bellows, Bellows, Multi-stage Bellows, Thin Workpiece, Flat, Flat Suction Flow Rate Increased, Oblong

Fluorine Coating Type (-FG)

Fluorine coating prevents sticking to the workpiece and sticking of the bellows section. Improved pad durability and abrasion resistance.

●Pad material (4 types)
Silicone Rubber, Conductive Silicone Extra Soft Silicone Rubber (Hardness 20°, 40°)
●Pad diameter (mm)(33 types)
ø0.7 to ø200 (circular), 2 x 4 to 8 x 30 (oblong)
●Pad shape (11 types)
Standard (General-type, Deep Type, Compact Type), Soft, Soft Bellows, Bellows, Multi-stage Bellows, Thin Workpiece, Flat, Flat Suction Flow Rate Increased, Oblong

Suction Mark Prevention Type

Suction Mark Prevention Type

Resin pad resistant to marking workpieces integrated with a flexible holder. Can also suck inclined workpieces.

●Resin material (3 types)
PEEK, POM, Conductive PEEK
●Pad diameter (mm)(3 types)
ø10 to ø30

Suction Mark Prevention Resin Attachment(Bellows Only)

Simply attach the dedicated resin attachment to the bellows type to handle workpieces sensitive to adsorption marks. Can also suck inclined workpieces.

●Resin material (3 types)
PEEK, POM, Conductive PEEK
●Applicable pad diameter (mm)(5 types)
ø10 to ø30

Suction Pad Standard Type (General-type, Deep Type, Compact Type)

VSP- □R□, □A□, □RM□ Series

Suction pads with basic shapes for general-purpose use

RoHS

Three shapes available: General-type optimal for flat workpieces, Deep type optimal for round workpieces, Compact type optimal for small workpieces

Abundant holder variations

Shape 18 types

- Standard6 types
- CompactClass 5
- Low dust generation ..... 2 types
- Lightweight3 types
- Low back2 types

Piping Connection 12 types

- Push-in fitting (ø1.8 to ø12) Six types
- Barbed fitting (ø4, ø6) ..... 2 types
- Screw-in (M3, M5, G1/8, G1/4), 4 types

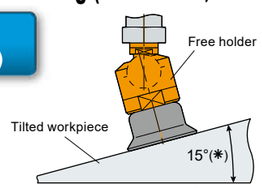
Stroke 12 types

2 mm to 50 mm
(Depends on pad diameter, holder type)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

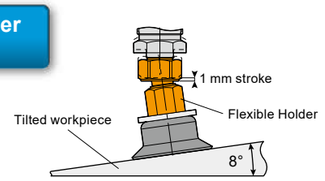
Free holder (F1:30°, F2:15°)



*7.5° for 15° swing angle type

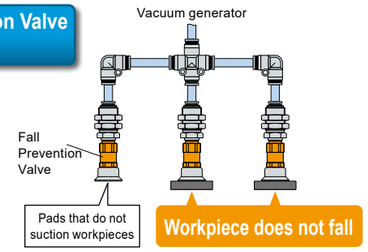
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

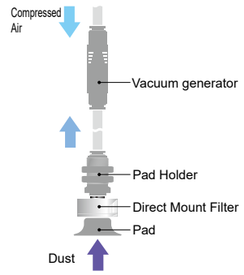
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



Pad surface treatment (option) with special processing to reduce adsorption marks is available

	-NF	-SF	-DL	-ER	-FG
Surface Treatment	Fiber Raised: Nylon	Fiber Raised: Silk	Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
Compatible Material	Silicone Fluorine	Silicone Fluorine	Silicone Fluorine Conductive Silicone	Nitrile Conductive NBR (Low Resistance-type)	Silicone Conductive Silicone
Features	Fibers(nylon or silk) on the pad surface prevent direct contact with the workpiece, thus preventing rubber material transfer.		Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.
Compatible-type	General-type, Deep Type			General-type, Deep Type, Compact Type	

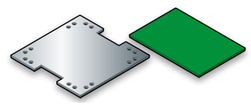
Pad Shape

General-type

The most basic shaped pad for general-purpose use

Recommended Workpiece

Thick and flat items

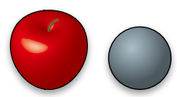


Deep Type

Deep lip provides good conformity to curved surfaces

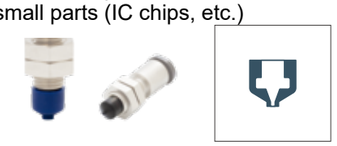
Recommended Workpiece

Round items like fruits or balls



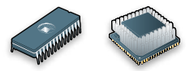
Compact

Specialized in small diameter sizes, compatible with suction of small parts (IC chips, etc.)



Recommended Workpiece

Small items like semiconductor parts



Pad Diameter

General-type 18 types

1 2 3 4 6
8 10 15 20 25
30 40 50 60 80
100 150 200

Deep Type 9 types

15 20 25 30 40
50 60 80 100

Compact 6 types

0.7 1 1.5 2 3
4

Pad Material

General-type	9 types	Nitrile, Silicone, Urethane, Fluorine, Conductive Silicone, Conductive NBR (Low Resistance-type), Food Sanitation Act Complia HNBR, EPDM
Deep Type	9 types	Nitrile, Silicone, Urethane, Fluorine Conductive Silicone, Conductive NBR (Low Resistance-type), Food Sanitation Act Compliant NBR, HNBR, EPDM
Compact	9 types	Nitrile, Silicone, Urethane, Fluorine Conductive Silicone, Conductive NBR (Low Resistance-type), Food Sanitation Act Compliant NBR, HNBR, EPDM

*Food Sanitation Act compliant NBR (G), Silicone (S) are compliant with the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Transport of heavy steel plates

Press working, laser processing,

Transport of spherical workpieces

Food machinery, etc.

Compact transport unit

Electronic parts, semiconductor

Model No. Notation

●Standard, general (R), deep (A), compact (RM)

Suction Pad

VSP – C – 40 – -20 – R – N – -ER – 6 – [ ] – F1 – V – T1

Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Size/Shape	❽ Buffer Load	❾ Pad Swinging	❿ Drop Prevention Valve	⓫ Direct Mount Filter
VSP	C	40	-20	R	N	-ER	6		F1	V	T1

Pad Rubber Only

VSPG – 40 — R N -ER

Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment
VSPG	40	R	N	-ER

Pad Rubber + Set with Fixing Screw

VSPG – 40 — R N -ER A

Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	
VSPG	40	R	N	-ER	A

*1: For ❹ R with ❷ 10 to 200, and for ❹ A, the "Pad Rubber + Set Screw Set" can be selected.

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code
Fixed Type	Standard	Top Direction	A
	Compact		MA
	Standard	Side Direction	B
	Compact		MB
	Low Profile		HE
		Both Sides Direction	HEW
	Standard	Direct Mount Type	E
	Compact		ME

Buffer Present/Absent	Type	Vacuum Outlet	Code
Buffer Type	Standard	Top Direction	C
	Compact		MC
	Low Particle Generation		LFC
	Lightweight		HC
	Standard	Side Direction	D
	Compact		MD
	Low Particle Generation		LFD
	Lightweight		HD
		Both Sides Direction	HDW
	Standard	Direct Mount Type	F

❷ Pad Diameter

Pad Shape	R									A									RM								
Pad Material	N	S	U	F	SE	NE	G	HN	EP	N	S	U	F	SE	NE	G	HN	EP	N	S	U	F	SE	NE	G	HN	EP	Code
Pad Diameter																												
ø0.7																			●	●	●	●	●	●	●	●	●	0.7
ø1	●	●	●	●	●	●	●	●	●										●	●	●	●	●	●	●	●	●	1
ø1.5																			●	●	●	●	●	●	●	●	●	1.5
ø2	●	●	●	●	●	●	●	●	●										●	●	●	●	●	●	●	●	●	2
ø3	●	●	●	●	●	●	●	●	●										●	●	●	●	●	●	●	●	●	3
ø4	●	●	●	●	●	●	●	●	●										●	●	●	●	●	●	●	●	●	4
ø6	●	●	●	●	●	●	●	●	●																			6
ø8	●	●	●	●	●	●	●	●	●																			8
ø10	●	●	●	●	●	●	●	●	●																			10
ø15	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										15
ø20	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										20
ø25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										25
ø30	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										30
ø40	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										40
ø50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										50
ø60	●	●	●	●	●	●		●	●	●	●	●	●		●		●	●										60
ø80	●	●	●	●	●	●		●	●	●	●	●	●		●		●	●										80
ø100	●	●	●	●	●	●		●	●	●	●	●	●		●		●	●										100
ø150	●	●	●	●	●	●		●	●																			150
ø200	●	●	●	●	●	●		●	●																			200

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code
Specified Stroke, or No Buffer	●	●				Blank
Stroke 2 mm				●		-2
Stroke 5 mm				●	●	-5
Stroke 10 mm	●	●	●	●	●	-10
Stroke 15 mm	●	●	●	●	●	-15
Stroke 20 mm	●	●	●	●	●	-20
Stroke 25 mm			●			-25
Stroke 30 mm	●	●	●			-30
Stroke 40 mm	●	●	●			-40
Stroke 50 mm	●	●	●			-50

❹ Pad Shape

Code	Content
R	Standard Type General-type
A	Standard Type Deep Type
RM	Standard Type Compact Type

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
U	Urethane rubber
F	Fluororubber
SE	Conductive Silicone Rubber
NE	Conductive NBR (Low Resistance-type)
G	Food Sanitation Act Compliant NBR
HN	HNBR
EP	EPDM

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'. *2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 0.7 to 15, -2 can be selected for ❸. *4: When ❷ Pad Diameter is 6 to 50, -30, -40, and -50 can be selected for ❸.
*5: When ❷ Pad Diameter is 60 to 200, ❸ is 'Blank'.

Model No. Notation

Refer to the following page for holder shape - pad diameter - pad shape - port size/shape combinations.

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP – ..... – P4*

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP – ..... – FP*

*Please inquire for details.

❻ Surface Treatment

Content	Compatible Pad Material N	S	F	SE	NE	Compatible Pad Diameter General-type (R)	Deep Type (A)	Compact Type (RM)	Code
No surface treatment	All pad materials, all pad diameters								Blank
Fiber Raised (Nylon)		●	●			ø15 to ø80	ø15 to ø80		-NF
Fiber Raised (Silk)		●	●			ø15 to ø80	ø15 to ø80		-SF
Anti-Adhesion Special Coating		●	●	●		ø6 to ø50	ø15 to ø50		-DL
Suction Mark Reduction Surface Modification	●				●	ø6 to ø60	ø15 to ø60	ø0.7 to ø4	-ER
Fluorine Coating		●		●		ø6 to ø200	ø15 to ø100	ø0.7 to ø4	-FG

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	ME	LFC	LFD	HC	HD	HDW	HE	HEW	Code
(❶: For E and F)																	Blank
ø1.8 Push-in fitting		●	●	●	●	●	●	●				●	●	●	●	●	2
ø4 Push-in fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	4
ø6 Push-in fitting	●	●	●	●		●		●		●	●	●	●	●	●	●	6
ø8 Push-in fitting	●	●	●	●													8
ø10 Push-in fitting	●	●	●	●													10
ø12 Push-in fitting	●		●														12
ø4 Push-in fitting, without spring cover			●	●													4C
ø6 Push-in fitting, without spring cover			●	●													6C
ø4 Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	4T
ø6 Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	6T
ø4 Barb fitting, without spring cover			●	●													4TC
ø6 Barb fitting, without spring cover			●	●													6TC
M3×0.5									●								M3
M5×0.8									●								M5
G1/8	●	●	●	●													6A
G1/4	●	●	●	●													8A

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❼. Additionally, for (3) Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table on the next page.

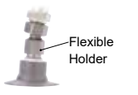
❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

❾ Pad Swing

Code	Content
Blank	None
F1	With Free Holder (Angle 30°)
F2	With Free Holder (Angle 15°)
CF	Flexible Holder (Angle 8°)



*1: ❾ F1 and F2 can be selected when ❷ Pad Diameter is 10 to 100.
*2: ❾ CF can be selected in the following cases: with ❶ Holder Shape E and ❷ Pad Diameter 6 or 8; with ❶ Holder Shape ME and ❼ Port Size/Shape M5; and with ❷ Pad Diameter 10 to 50.
*3: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

⓫ Direct Mount Filter

Code	Content
Blank	None
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)
T2	With Direct Mount Filter (Filtration Area 7 cm²)

*1: ⓫ T1 can be selected when ❷ Pad Diameter is 10 to 50.
*2: ⓫ T2 can be selected when ❷ Pad Diameter is 20 to 50.
*3: For dimensions with the direct mount filter, please refer to P. 1064.

❿ Drop Prevention Valve

Code	Content
Blank	None
V	Drop With prevention valve

*1: ❿ V can only be selected for ❶ Holder Shape E and ME, and for ❷ Pad Diameter 10 to 100
*2: For ❻ -NF and -SF, ❿ is 'Blank'.
*3: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

Holder Shape	Pad Diameter	Pad Shape	Push-in fitting								Barb fitting				Thread	
			ø1.8	ø4		ø6		ø8	ø10	ø12	ø4		ø6		G1/8	G1/4
			2	**4**	**4C**	**6**	**6C**	**8**	**10**	**12**	**4T**	**4TC**	**6T**	**6TC**	**6A**	**8A**
A	ø1 to ø4	R		●							●					
	ø6 to ø8			●		●					●		●			
	ø10 to ø15	R(A)				●							●			
	ø20 to ø50			●		●					●		●			
	ø60 to ø100			●		●		●							●	
	ø150 to ø200	R				●		●	●	●						●
B	ø1 to ø4	R	●	●							●		●			
	ø6 to ø8		●	●		●					●		●			
	ø10 to ø50	R(A)		●		●					●		●			
	ø60 to ø100			●		●		●							●	
	ø150 to ø200	R				●		●	●							●
C	ø1 to ø4	R	●	●		●					●		●			
	ø6 to ø8		●	●	●	●	●				●	●	●	●		
	ø10 to ø50	R(A)		●	●	●	●				●	●	●	●		
	ø60 to ø100			●		●		●							●	
	ø150 to ø200	R				●		●	●	●						●
D	ø1 to ø4	R	●	●		●					●		●			
	ø6 to ø8		●	●	●	●	●				●	●	●	●		
	ø10 to ø50	R(A)		●	●	●	●				●	●	●	●		
	ø60 to ø100			●		●		●							●	
	ø150 to ø200	R				●		●	●							●

Holder Shape	Pad Diameter	Pad Shape	Thread	
			M3	M5
			Blank	
E	ø0.7 to ø4	RM		●
	ø1 to ø4	R	●	
	ø6 to ø8			●

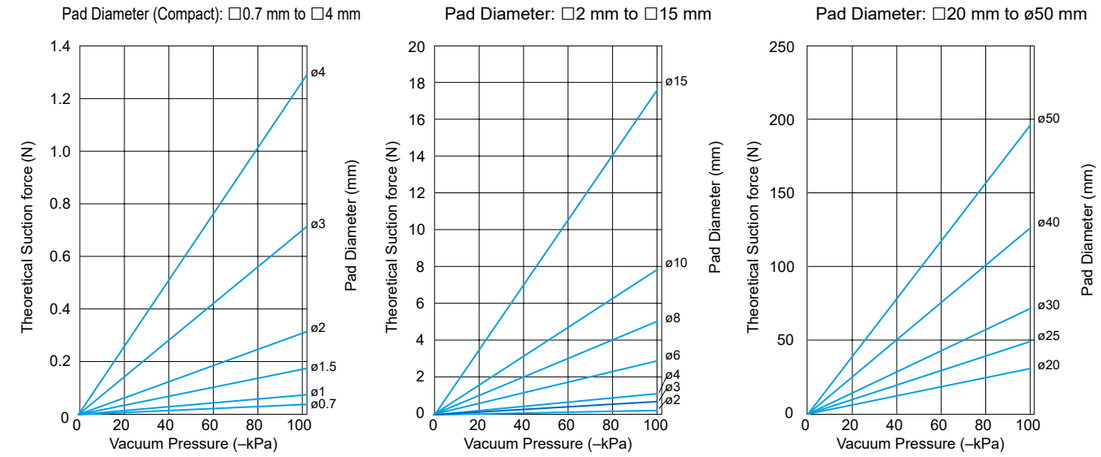
Holder Shape	Pad Diameter	Pad Shape	Thread	
			M10	M14
			Blank	
F	ø1 to ø8	R	●	
	ø10 to ø50	R(A)		●

Holder Shape	Pad Diameter	Pad Shape	Push-in fitting			Barb fitting	
			ø1.8	ø4	ø6	ø4	ø6
			2	**4**	**6**	**4T**	**6T**
MA	ø0.7 to ø4	RM	●			●	
	ø6 to ø8	R	●			●	
	ø10 to ø15	R(A)		●		●	
	ø20 to ø50			●		●	●
MB	ø0.7 to ø4	RM	●	●		●	●
	ø6 to ø8	R	●	●		●	●
	ø10 to ø50	R(A)	●	●	●	●	●
MC	ø0.7 to ø4	RM	●			●	●
	ø6 to ø8	R	●			●	●
	ø10 to ø50	R(A)	●	●		●	●
MD	ø0.7 to ø4	RM	●	●		●	●
	ø6 to ø8	R	●	●		●	●
	ø10 to ø50	R(A)	●	●	●	●	●

Holder Shape	Pad Diameter	Pad Shape	Push-in fitting			Barb fitting	
			ø1.8	ø4	ø6	ø4	ø6
			2	**4**	**6**	**4T**	**6T**
LFC	ø0.7 to ø4	RM		●		●	●
	ø6 to ø15	R(A)		●		●	●
	ø20 to ø50			●	●	●	●
LFD	ø0.7 to ø4	RM		●		●	●
	ø6 to ø15	R(A)		●		●	●
	ø20 to ø50			●	●	●	●
HC	ø10 to ø50	R(A)	●	●	●	●	●
HD	ø6 to ø50	R(A)	●	●	●	●	●
HDW	ø6 to ø50	R(A)	●	●	●	●	●
HE	ø6 to ø50	R(A)	●	●	●	●	●
HEW	ø6 to ø50	R(A)	●	●	●	●	●

Holder Shape	Pad Diameter	Pad Shape	Thread	
			M3	M5
			M3	**M5**
ME	ø0.7 to ø4	RM	●	
	ø6 to ø8	R		●

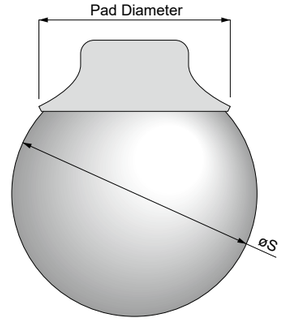
Theoretical Suction Force



Theoretical suction force is a value under static conditions. For actual use, consider a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting.

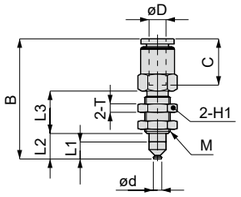
●Spherical Surface Suction (Deep Pad
Minimum Adsorbable Diameter

Pad Diameter (mm)	ø15	ø20	ø25	ø30	ø40	ø50	ø60	ø80	ø100
Sphere Diameter (øS mm)	20	30	40	50	80	100	120	160	200

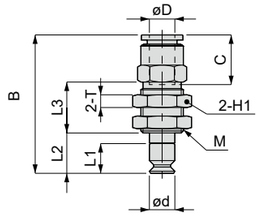


Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

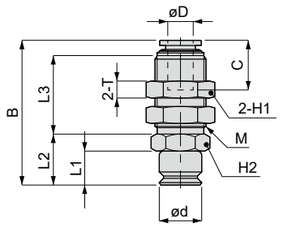
●VSP-A1 to 4R□-4



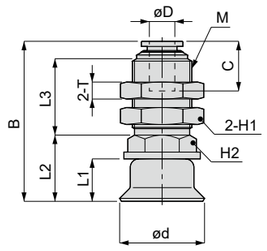
●VSP-A6, 8R□-4/6



●VSP-A10R□-6
●VSP-A15R(A)□-6



●VSP-A20 to 50R(A)□-4/6



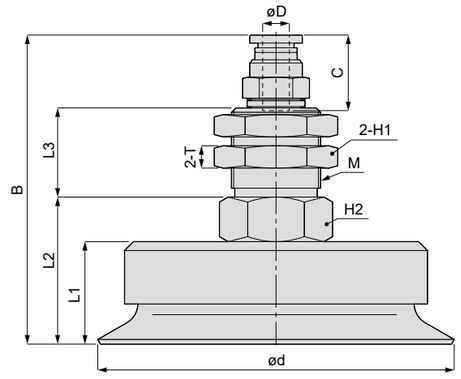
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	Tube End C	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A1R□-4	1	4	M6x0.75	28.6	4	6	10	11.2	8	-	2	5.7
VSP-A2R□-4	2	4	M6x0.75	28.6	4	6	10	11.2	8	-	2	5.7
VSP-A3R□-4	3	4	M6x0.75	28.6	4	6	10	11.2	8	-	2	5.7
VSP-A4R□-4	4	4	M6x0.75	28.6	4	6	10	11.2	8	-	2	5.7
VSP-A6R□-4	6	4	M8x0.75	32.1	7	9.5	12	11.2	12	-	3	8.5
VSP-A6R□-6		6	M10x1	32.8				11.9				13
VSP-A8R□-4	8	4	M8x0.75	30.6	5.5	8	12	11.2	12	-	3	8.5
VSP-A8R□-6		6	M10x1	31.3				11.9				13
VSP-A10R□-6	10	6	M12x1	34.3	8	12	18.5	11.9	14	12	4	21
VSP-A15R(A)□-6	15	6	M12x1	35.3 (36.3)	9 (10)	13 (14)	18.5	11.9	14	12	4	21 (21)
VSP-A20R(A)□-4	20	4	M12x1	46.9 (47.9)	10 (11)	16 (17)	18	11.2	14	12	4	31 (31)
VSP-A20R(A)□-6		6	M14x1	37.9 (38.9)		15.6 (16.6)		11.9	17	14		37 (37)
VSP-A25R(A)□-4	25	4	M12x1	47.9 (48.9)	11 (12)	17 (18)	18	11.2	14	12	4	31 (31)
VSP-A25R(A)□-6		6	M14x1	38.9 (39.9)		16.6 (17.6)		11.9	17	14		37 (37)
VSP-A30R(A)□-4	30	4	M12x1	47.9 (50.9)	11 (14)	17 (20)	18	11.2	14	12	4	33 (33)
VSP-A30R(A)□-6		6	M14x1	38.9 (41.9)		16.6 (19.6)		11.9	17	14		39 (39)
VSP-A40R(A)□-4	40	4	M12x1	50.9 (54.4)	14 (17.5)	20 (23.5)	18	11.2	14	12	4	40 (41)
VSP-A40R(A)□-6		6	M14x1	41.9 (45.4)		19.6 (23.1)		11.9	17	14		46 (47)
VSP-A50R(A)□-4	50	4	M12x1	51.9 (54.9)	15 (18)	21 (24)	18	11.2	14	12	4	46 (48)
VSP-A50R(A)□-6		6	M14x1	42.9 (45.9)		20.6 (23.6)		11.9	17	14		52 (54)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A60 to 100R(A)□-4/6/8
●VSP-A150, 200R□-6/8/10/12



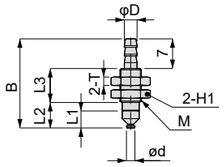
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	Tube End C	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A60R(A)□-4	60	4	M20x1	61.2 (68.2)	18 (25)	30.6 (37.6)	20	11.2	24	22	5	141 (142)
VSP-A60R(A)□-6		6		63.4 (70.4)				11.9				142 (143)
VSP-A60R(A)□-8		8		71.8 (78.8)				18.2				147 (148)
VSP-A80R(A)□-4	80	4	M20x1	63.6 (73.6)	23 (33)	33 (43)	20	11.2	24	22	5	225 (234)
VSP-A80R(A)□-6		6		65.8 (75.8)				11.9				226 (235)
VSP-A80R(A)□-8		8		74.2 (84.2)				18.2				231 (240)
VSP-A100R(A)□-4	100	4	M20x1	65.6 (74.6)	25 (34)	35 (44)	20	11.2	24	22	5	315 (321)
VSP-A100R(A)□-6		6		67.8 (76.8)				11.9				316 (322)
VSP-A100R(A)□-8		8		76.2 (85.2)				18.2				321 (327)
VSP-A150R□-6	150	6	M24x2	111	45	65	30	11.9	30	27	10	938
VSP-A150R□-8		8		111.7				18.2				937
VSP-A150R□-10		10		118.7				20.7				942
VSP-A150R□-12		12		124				23.3				960
VSP-A200R□-6	200	6	M24x2	116	50	70	30	11.9	30	27	10	1,418
VSP-A200R□-8		8		116.7				18.2				1,417
VSP-A200R□-10		10		123.7				20.7				1,422
VSP-A200R□-12		12		128.9				23.3				1,440

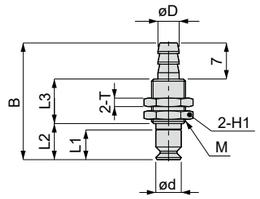
*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb Fitting)

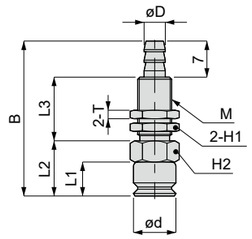
●VSP-A1 to 4R□-4T



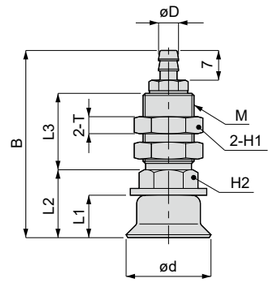
●VSP-A6, 8R□-4T/6T



●VSP-A10R□-6T
●VSP-A15R(A)□-6T



●VSP-A20 to 50R(A)□-4T/6T



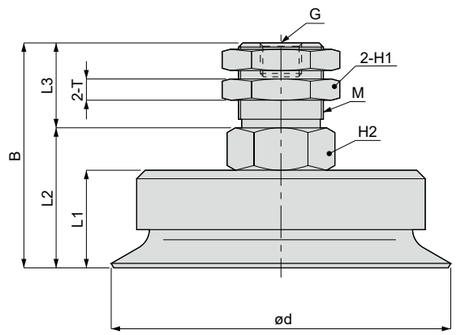
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A1R□-4T	1	2.5	M5x0.5	21	4	6	8	8	-	2	3
VSP-A2R□-4T	2	2.5	M5x0.5	21	4	6	8	8	-	2	3
VSP-A3R□-4T	3	2.5	M5x0.5	21	4	6	8	8	-	2	3
VSP-A4R□-4T	4	2.5	M5x0.5	21	4	6	8	8	-	2	3
VSP-A6R□-4T	6	2.5	M5x0.5	24.5	7	9.5	8	8	-	2	4
VSP-A6R□-6T		4	M8x0.75	26		8.5	10.5	10	-		6
VSP-A8R□-4T	8	2.5	M5x0.5	23	5.5	8	8	8	-	2	5
VSP-A8R□-6T		4	M8x0.75	24.5		7	10.5	10	-		7
VSP-A10R□-6T	10	4	M8x0.75	35	8	12	15	10	10	2	12
VSP-A15R(A)□-6T	15	4	M8x0.75	36 (37)	9 (10)	13 (14)	15	10	10	2	12
VSP-A20R(A)□-4T	20	2.5	M12x1	44 (45)	10 (11)	16 (17)	18	14	12	4	28 (28)
VSP-A20R(A)□-6T		4									
VSP-A25R(A)□-4T	25	2.5	M12x1	45 (46)	11 (12)	17 (18)	18	14	12	4	29 (29)
VSP-A25R(A)□-6T		4									
VSP-A30R(A)□-4T	30	2.5	M12x1	45 (48)	11 (14)	17 (20)	18	14	12	4	33 (33)
VSP-A30R(A)□-6T		4									
VSP-A40R(A)□-4T	40	2.5	M12x1	48 (51.5)	14 (17.5)	20 (23.5)	18	14	12	4	40 (41)
VSP-A40R(A)□-6T		4									
VSP-A50R(A)□-4T	50	2.5	M12x1	49 (52)	15 (18)	21 (24)	18	14	12	4	46 (47)
VSP-A50R(A)□-6T		4									

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Female Thread)

●VSP-A60 to 100R(A)□-6A
●VSP-A150, 200R□-8A



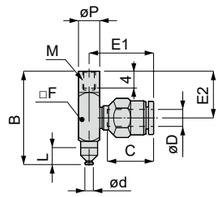
Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	Mounting screw M	B	L1	L2	L3	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A60R(A)□-6A	60	G1/8	M20x1	50.6 (57.6)	18 (25)	30.6 (37.6)	20	24	22	5	133 (133)
VSP-A80R(A)□-6A	80	G1/8	M20x1	53 (63)	23 (33)	33 (43)	20	24	22	5	217 (226)
VSP-A100R(A)□-6A	100	G1/8	M20x1	55 (64)	25 (34)	35 (44)	20	24	22	5	307 (313)
VSP-A150R□-8A	150	G1/4	M24x2	95	45	65	30	30	27	10	923
VSP-A200R□-8A	200	G1/4	M24x2	100	50	70	30	30	27	10	1,403

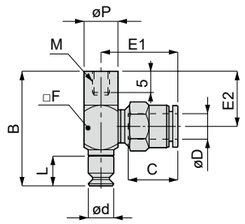
*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

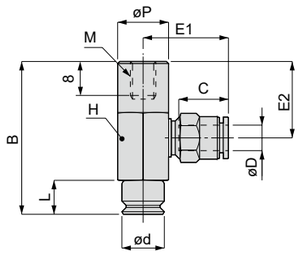
●VSP-B1 to 4R□-2/4



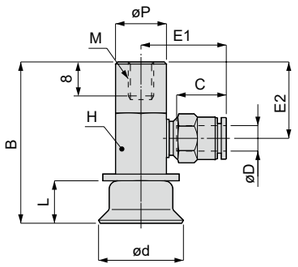
●VSP-B6, 8R□-2/4/6



●VSP-B10R□-4/6
●VSP-B15R(A)□-4/6



●VSP-B20 to 50R(A)□-4/6



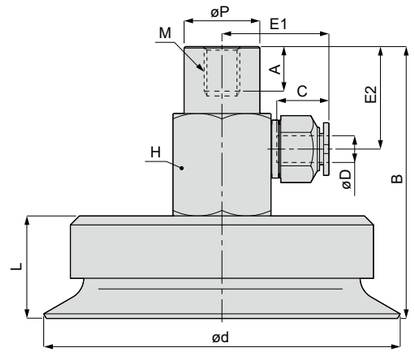
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L	Tube End C	øP	E1	E2	Width Across Flats H	□F	Weight (g)
VSP-B1R□-2	1	1.8	M3x0.5	22	4	8.4	5	12	11	-	5	5
VSP-B1R□-4		4				11.2		15.3				6
VSP-B2R□-2	2	1.8	M3x0.5	22	4	8.4	5	12	11	-	5	5
VSP-B2R□-4		4				11.2		15.3				6
VSP-B3R□-2	3	1.8	M3x0.5	22	4	8.4	5	12	11	-	5	5
VSP-B3R□-4		4				11.2		15.3				6
VSP-B4R□-2	4	1.8	M3x0.5	22	4	8.4	5	12	11	-	5	5
VSP-B4R□-4		4				11.2		15.3				6
VSP-B6R□-2	6	1.8	M4x0.7	27	7	8.4	8	12.7	13	-	8	11
VSP-B6R□-4		4				11.2		16.8				12
VSP-B6R□-6		6				11.9		18.6				13
VSP-B8R□-2	8	1.8	M4x0.7	25.5	5.5	8.4	8	12.7	13	-	8	11
VSP-B8R□-4		4				11.2		16.8				12
VSP-B8R□-6		6				11.9		18.6				13
VSP-B10R□-4	10	4	M6x1	36	8	11.2	12	18.8	18	12	-	29
VSP-B10R□-6		6				11.9		20.1				30
VSP-B15R(A)□-4	15	4	M6x1	37 (38)	9 (10)	11.2	12	18.8	18	12	-	30 (30)
VSP-B15R(A)□-6		6				11.9		20.1				31 (31)
VSP-B20R(A)□-4	20	4	M6x1	38 (39)	10 (11)	11.2	12	18.8	18	12	-	33 (33)
VSP-B20R(A)□-6		6				11.9		20.1				34 (34)
VSP-B25R(A)□-4	25	4	M6x1	39 (40)	11 (12)	11.2	12	18.8	18	12	-	34 (34)
VSP-B25R(A)□-6		6				11.9		20.1				35 (35)
VSP-B30R(A)□-4	30	4	M6x1	39 (42)	11 (14)	11.2	12	18.8	18	12	-	36 (36)
VSP-B30R(A)□-6		6				11.9		20.1				37 (37)
VSP-B40R(A)□-4	40	4	M6x1	42 (45.5)	14 (17.5)	11.2	12	18.8	18	12	-	43 (44)
VSP-B40R(A)□-6		6				11.9		20.1				44 (45)
VSP-B50R(A)□-4	50	4	M6x1	43 (46)	15 (18)	11.2	12	18.8	18	12	-	49 (50)
VSP-B50R(A)□-6		6				11.9		20.1				50 (51)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B60 to 100R(A)□-4/6/8
●VSP-B150, 200R□-6/8/10



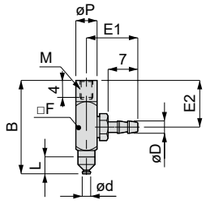
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	A	B	L	Tube End C	øP	E1	E2	Width Across Flats H	Weight (g)
VSP-B60R(A)□-4	60	4	M8 x 1.25	10	58.6 (65.6)	18 (25)	11.2	17	21.5	23	22	148 (147)
VSP-B60R(A)□-6		6					11.9		23.7			149 (148)
VSP-B60R(A)□-8		8					18.2		32.1			154 (153)
VSP-B80R(A)□-4	80	4	M8 x 1.25	10	61 (71)	23 (33)	11.2	17	21.5	23	22	232 (240)
VSP-B80R(A)□-6		6					11.9		23.7			233 (241)
VSP-B80R(A)□-8		8					18.2		32.1			237 (245)
VSP-B100R(A)□-4	100	4	M8 x 1.25	10	63 (72)	25 (34)	11.2	17	21.5	23	22	321 (327)
VSP-B100R(A)□-6		6					11.9		23.7			322 (328)
VSP-B100R(A)□-8		8					18.2		38.6			327 (333)
VSP-B150R□-6	150	6	M16 x 2	20	110	45	17	26	30.9	40	30	1,008
VSP-B150R□-8		8					18.2		31.6			1,008
VSP-B150R□-10		10					20.7		38.6			1,115
VSP-B200R□-6	200	6	M16 x 2	20	115	50	17	26	30.9	40	30	1,487
VSP-B200R□-8		8					18.2		31.6			1,487
VSP-B200R□-10		10					20.7		38.6			1,494

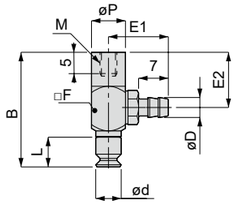
*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

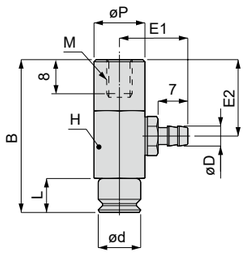
●VSP-B1 to 4R□-4T/6T



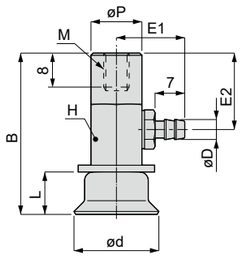
●VSP-B6, 8R□-4T/6T



●VSP-B10R□-4T/6T
●VSP-B15R(A)□-4T/6T



●VSP-B20 to 50R(A)□-4T/6T



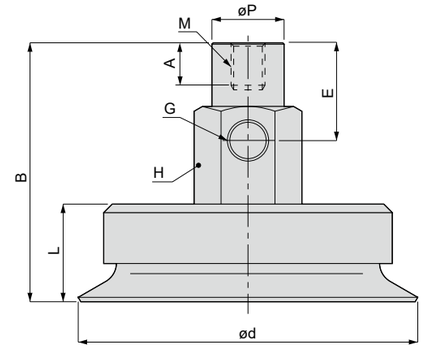
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L	øP	E1	E2	Width Across Flats H	□F	Weight (g)
VSP-B1R□-4T	1	2.5	M3x0.5	22	4	5	11.9	11	-	5	4
VSP-B1R□-6T		4									
VSP-B2R□-4T	2	2.5	M3x0.5	22	4	5	11.9	11	-	5	4
VSP-B2R□-6T		4									
VSP-B3R□-4T	3	2.5	M3x0.5	22	4	5	11.9	11	-	5	4
VSP-B3R□-6T		4									
VSP-B4R□-4T	4	2.5	M3x0.5	22	4	5	11.9	11	-	5	4
VSP-B4R□-6T		4									
VSP-B6R□-4T	6	2.5	M4x0.7	27	7	8	13.9	13	-	8	11
VSP-B6R□-6T		4									
VSP-B8R□-4T	8	2.5	M4x0.7	25.5	5.5	8	13.9	13	-	8	11
VSP-B8R□-6T		4									
VSP-B10R□-4T	10	2.5	M6x1	36	8	12	15.9	18	12	-	29
VSP-B10R□-6T		4									
VSP-B15R(A)□-4T	15	2.5	M6x1	37 (38)	9 (10)	12	15.9	18	12	-	29 (29)
VSP-B15R(A)□-6T		4									
VSP-B20R(A)□-4T	20	2.5	M6x1	38 (39)	10 (11)	12	15.9	18	12	-	32 (32)
VSP-B20R(A)□-6T		4									
VSP-B25R(A)□-4T	25	2.5	M6x1	39 (40)	11 (12)	12	15.9	18	12	-	33 (33)
VSP-B25R(A)□-6T		4									
VSP-B30R(A)□-4T	30	2.5	M6x1	39 (42)	11 (14)	12	15.9	18	12	-	35 (35)
VSP-B30R(A)□-6T		4									
VSP-B40R(A)□-4T	40	2.5	M6x1	42 (45.5)	14 (17.5)	12	15.9	18	12	-	42 (43)
VSP-B40R(A)□-6T		4									
VSP-B50R(A)□-4T	50	2.5	M6x1	43 (46)	15 (18)	12	15.9	18	12	-	48 (49)
VSP-B50R(A)□-6T		4									

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Female Thread)

●VSP-B60 to 100R(A)□-6A
●VSP-B150, 200R□-8A



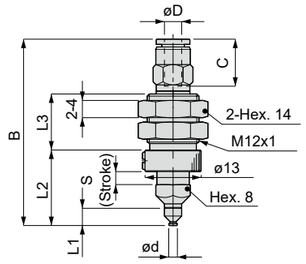
Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	Mounting screw M	A	B	L	øP	E	Width Across Flats H	Weight (g)
VSP-B60R(A)□-6A	60	G1/8	M8 x 1.25	10	58.6 (65.6)	18 (25)	17	23	22	140 (139)
VSP-B80R(A)□-6A	80	G1/8	M8 x 1.25	10	61 (71)	23 (33)	17	23	22	224 (232)
VSP-B100R(A)□-6A	100	G1/8	M8 x 1.25	10	63 (72)	25 (34)	17	23	22	313 (319)
VSP-B150R□-8A	150	G1/4	M16 x 2	20	110	45	26	40	30	995
VSP-B200R□-8A	200	G1/4	M16 x 2	20	115	50	26	40	30	1,474

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C1 to 4R□-2/4/6□
●VSP-C1 to 4-□R□-2/4/6

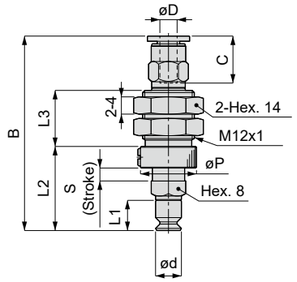


Unit: mm

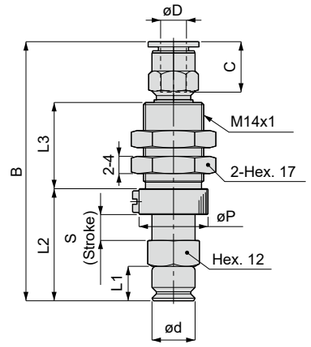
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C1R□-2	1	1.8	39.4	4	17.5	13	8.4	3	0.9 to 1.9	16
VSP-C1R□-4		4	43.5				11.2			17
VSP-C1R□-6		6	45.3				11.9			20
VSP-C1-10R□-2		1.8	53.4		27	17.5	8.4	10	0.6 to 1.7	20
VSP-C1-10R□-4		4	57.5				11.2			21
VSP-C1-10R□-6		6	59.3				11.9			24
VSP-C1-15R□-2		1.8	64.4		32	23.5	8.4	15	0.4 to 1.7	23
VSP-C1-15R□-4		4	68.5				11.2			24
VSP-C1-15R□-6		6	70.3				11.9			27
VSP-C1-20R□-2		1.8	74.4		37	28.5	8.4	20	0.3 to 1.8	26
VSP-C1-20R□-4		4	78.5				11.2			27
VSP-C1-20R□-6		6	80.3				11.9			30
VSP-C2R□-2	2	1.8	39.4	4	17.5	13	8.4	3	0.9 to 1.9	16
VSP-C2R□-4		4	43.5				11.2			17
VSP-C2R□-6		6	45.3				11.9			20
VSP-C2-10R□-2		1.8	53.4		27	17.5	8.4	10	0.6 to 1.7	20
VSP-C2-10R□-4		4	57.5				11.2			21
VSP-C2-10R□-6		6	59.3				11.9			24
VSP-C2-15R□-2		1.8	64.4		32	23.5	8.4	15	0.4 to 1.7	23
VSP-C2-15R□-4		4	68.5				11.2			24
VSP-C2-15R□-6		6	70.3				11.9			27
VSP-C2-20R□-2		1.8	74.4		37	28.5	8.4	20	0.3 to 1.8	26
VSP-C2-20R□-4		4	78.5				11.2			27
VSP-C2-20R□-6		6	80.3				11.9			30
VSP-C3R□-2	3	1.8	39.4	4	17.5	13	8.4	3	0.9 to 1.9	16
VSP-C3R□-4		4	43.5				11.2			17
VSP-C3R□-6		6	45.3				11.9			20
VSP-C3-10R□-2		1.8	53.4		27	17.5	8.4	10	0.6 to 1.7	20
VSP-C3-10R□-4		4	57.5				11.2			21
VSP-C3-10R□-6		6	59.3				11.9			24
VSP-C3-15R□-2		1.8	64.4		32	23.5	8.4	15	0.4 to 1.7	23
VSP-C3-15R□-4		4	68.5				11.2			24
VSP-C3-15R□-6		6	70.3				11.9			27
VSP-C3-20R□-2		1.8	74.4		37	28.5	8.4	20	0.3 to 1.8	26
VSP-C3-20R□-4		4	78.5				11.2			27
VSP-C3-20R□-6		6	80.3				11.9			30
VSP-C4R□-2	4	1.8	39.4	4	17.5	13	8.4	3	0.9 to 1.9	16
VSP-C4R□-4		4	43.5				11.2			17
VSP-C4R□-6		6	45.3				11.9			20
VSP-C4-10R□-2		1.8	53.4		27	17.5	8.4	10	0.6 to 1.7	20
VSP-C4-10R□-4		4	57.5				11.2			21
VSP-C4-10R□-6		6	59.3				11.9			24
VSP-C4-15R□-2		1.8	64.4		32	23.5	8.4	15	0.4 to 1.7	23
VSP-C4-15R□-4		4	68.5				11.2			24
VSP-C4-15R□-6		6	70.3				11.9			27
VSP-C4-20R□-2		1.8	74.4		37	28.5	8.4	20	0.3 to 1.8	26
VSP-C4-20R□-4		4	78.5				11.2			27
VSP-C4-20R□-6		6	80.3				11.9			30

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C6, 8R□-2/4/6
●VSP-C6, 8-□R□-2/4/6



●VSP-C10R□-4/6
●VSP-C10-□R□-4/6
●VSP-C15R(A)□-4/6
●VSP-C15-□R(A)□-4/6



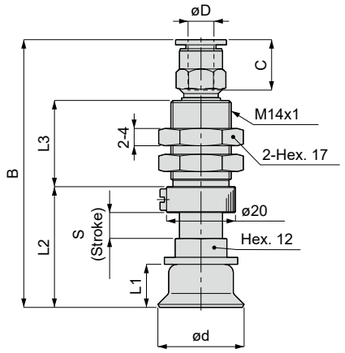
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	øP	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6R□-2	6	1.8	41.4	7	19.5	13	13	8.4	3	0.9 to 1.9	17
VSP-C6R□-4		4	45.5					11.2			18
VSP-C6R□-6		6	47.3					11.9			19
VSP-C6-10R□-2		1.8	52.9		26.5	17.5		8.4	10	0.8 to 2.7	19
VSP-C6-10R□-4		4	57					11.2			20
VSP-C6-10R□-6		6	58.8					11.9			21
VSP-C6-15R□-2		1.8	63.9		31.5	23.5		8.4	15	0.7 to 3.0	23
VSP-C6-15R□-4		4	68					11.2			24
VSP-C6-15R□-6		6	69.8					11.9			25
VSP-C6-20R□-2		1.8	73.9		36.5	28.5		8.4	20	0.9 to 3.4	25
VSP-C6-20R□-4		4	78					11.2			26
VSP-C6-20R□-6		6	79.8					11.9			26
VSP-C8R□-2	8	1.8	39.9	5.5	18	13	13	8.4	3	0.9 to 1.9	17
VSP-C8R□-4		4	44					11.2			18
VSP-C8R□-6		6	45.8					11.9			19
VSP-C8-10R□-2		1.8	51.4		25	17.5		8.4	10	0.8 to 2.7	19
VSP-C8-10R□-4		4	55.5					11.2			20
VSP-C8-10R□-6		6	57.3					11.9			21
VSP-C8-15R□-2		1.8	62.4		30	23.5		8.4	15	0.7 to 3.0	23
VSP-C8-15R□-4		4	66.5					11.2			24
VSP-C8-15R□-6		6	68.3					11.9			25
VSP-C8-20R□-2		1.8	72.4		35	28.5		8.4	20	0.9 to 3.4	25
VSP-C8-20R□-4		4	76.5					11.2			26
VSP-C8-20R□-6		6	78.3					11.9			27
VSP-C10R□-4	10	4	59	8	26	20	16	11.2	6	4.0 to 7.1	35
VSP-C10R□-6		6	60.3					11.9			36
VSP-C10-10R□-4		4	63.5		30.5			11.2	10	2.0 to 5.2	36
VSP-C10-10R□-6		6	64.8					11.9			37
VSP-C10-15R□-4		4	73.5		35.5	25		11.2	15	2.0 to 5.9	41
VSP-C10-15R□-6		6	74.8					11.9			42
VSP-C10-20R□-4		4	89.5		42.5	34		11.2	20	1.1 to 4.8	48
VSP-C10-20R□-6		6	90.8					11.9			49
VSP-C15R(A)□-4	15	4	60 (61)	9 (10)	27 (28)	20	16	11.2	6	4.0 to 7.1	35 (35)
VSP-C15R(A)□-6		6	61.3 (62.3)					11.9			36 (36)
VSP-C15-10R(A)□-4		4	64.5 (65.5)		31.5 (32.5)			11.2	10	2.0 to 5.2	36 (36)
VSP-C15-10R(A)□-6		6	65.8 (66.8)					11.9			37 (37)
VSP-C15-15R(A)□-4		4	74.5 (75.5)		36.5 (37.5)	25		11.2	15	2.0 to 5.9	41 (41)
VSP-C15-15R(A)□-6		6	75.8 (76.8)					11.9			42 (42)
VSP-C15-20R(A)□-4		4	90.5 (91.5)		43.6 (44.5)	34		11.2	20	1.1 to 4.8	49 (49)
VSP-C15-20R(A)□-6		6	91.8 (92.8)					11.9			50 (50)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C20 to 50R(A)□-4/6
●VSP-C20 to 50-□R(A)□-4/6



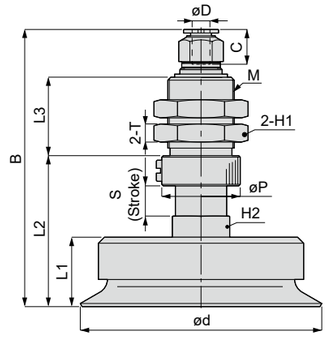
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C20R(A)□-4	20	4	61 (62)	10 (11)	28 (29)	20	11.2	6	7.0 to 12.6	39 (40)
VSP-C20R(A)□-6		6	62.3 (63.3)				11.9			40 (41)
VSP-C20-10R(A)□-4		4	67 (68)		34 (35)		11.2	10	3.3 to 10.0	41 (42)
VSP-C20-10R(A)□-6		6	68.3 (69.3)				11.9			42 (43)
VSP-C20-15R(A)□-4		4	77 (78)		39 (40)	25	11.2	15	3.3 to 10.4	46 (47)
VSP-C20-15R(A)□-6		6	78.3 (79.3)				11.9			47 (48)
VSP-C20-20R(A)□-4		4	93 (94)		46 (47)	34	11.2	20	2.0 to 8.7	53 (54)
VSP-C20-20R(A)□-6		6	94.3 (95.3)				11.9			54 (55)
VSP-C25R(A)□-4	25	4	62 (63)	11 (12)	29 (30)	20	11.2	6	7.0 to 12.6	39 (40)
VSP-C25R(A)□-6		6	63.3 (64.3)				11.9			40 (41)
VSP-C25-10R(A)□-4		4	68 (69)		35 (36)		11.2	10	3.3 to 10.0	42 (43)
VSP-C25-10R(A)□-6		6	69.3 (70.3)				11.9			43 (44)
VSP-C25-15R(A)□-4		4	78 (79)		40 (41)	25	11.2	15	3.3 to 10.4	47 (48)
VSP-C25-15R(A)□-6		6	79.3 (80.3)				11.9			48 (49)
VSP-C25-20R(A)□-4		4	94 (95)		47 (48)	34	11.2	20	2.0 to 8.7	53 (54)
VSP-C25-20R(A)□-6		6	95.3 (96.3)				11.9			54 (55)
VSP-C30R(A)□-4	30	4	62 (65)	11 (14)	29 (32)	20	11.2	6	7.0 to 12.6	42 (43)
VSP-C30R(A)□-6		6	63.3 (66.3)				11.9			43 (44)
VSP-C30-10R(A)□-4		4	68 (71)		35 (38)		11.2	10	3.3 to 10.0	44 (45)
VSP-C30-10R(A)□-6		6	69.3 (72.3)				11.9			45 (46)
VSP-C30-15R(A)□-4		4	78 (81)		40 (43)	25	11.2	15	3.3 to 10.4	49 (50)
VSP-C30-15R(A)□-6		6	79.3 (82.3)				11.9			50 (51)
VSP-C30-20R(A)□-4		4	94 (97)		47 (50)	34	11.2	20	2.0 to 8.7	56 (57)
VSP-C30-20R(A)□-6		6	95.3 (98.3)				11.9			57 (58)
VSP-C40R(A)□-4	40	4	65 (68.5)	14 (17.5)	32 (35.5)	20	11.2	6	7.0 to 12.6	49 (50)
VSP-C40R(A)□-6		6	66.3 (69.8)				11.9			50 (51)
VSP-C40-10R(A)□-4		4	71 (74.5)		38 (41.5)		11.2	10	3.3 to 10.0	51 (52)
VSP-C40-10R(A)□-6		6	72.3 (75.8)				11.9			52 (53)
VSP-C40-15R(A)□-4		4	81 (84.5)		43 (46.5)	25	11.2	15	3.3 to 10.4	56 (57)
VSP-C40-15R(A)□-6		6	82.3 (85.8)				11.9			57 (58)
VSP-C40-20R(A)□-4		4	97 (100.5)		50 (53.5)	34	11.2	20	2.0 to 8.7	63 (64)
VSP-C40-20R(A)□-6		6	98.3 (101.8)				11.9			64 (65)
VSP-C50R(A)□-4	50	4	66 (69)	15 (18)	33 (36)	20	11.2	6	7.0 to 12.6	54 (56)
VSP-C50R(A)□-6		6	67.3 (70.3)				11.9			55 (57)
VSP-C50-10R(A)□-4		4	72 (75)		39 (42)		11.2	10	3.3 to 10.0	57 (58)
VSP-C50-10R(A)□-6		6	73.3 (76.3)				11.9			58 (59)
VSP-C50-15R(A)□-4		4	82 (85)		44 (47)	25	11.2	15	3.3 to 10.4	62 (63)
VSP-C50-15R(A)□-6		6	83.3 (86.3)				11.9			63 (64)
VSP-C50-20R(A)□-4		4	98 (101)		51 (54)	34	11.2	20	2.0 to 8.7	68 (70)
VSP-C50-20R(A)□-6		6	99.3 (102.3)				11.9			69 (71)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C60 to 100R(A)□-4/6/8
●VSP-C150, 200R□-6/8/10/12



Unit: mm

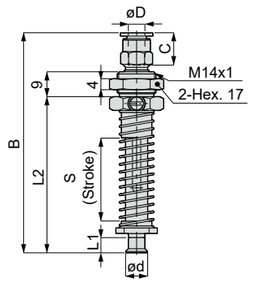
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	øP	Tube End C	Width across flats H1	Width across flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C60R(A)□-4	60	4	M22x1	87.2 (95.2)	18 (25)	47.6 (54.6)	26	26	10.9	27	19	6	10	10.1 to 15.8	169 (169)
VSP-C60R(A)□-6		6		89.4 (97.4)					11.7						170 (170)
VSP-C60R(A)□-8		8		97.8 (105.8)					18.2						175 (175)
VSP-C80R(A)□-4	80	4	M22x1	89.6 (99.6)	23 (33)	50 (60)	26	26	10.9	27	19	6	10	10.1 to 15.8	253 (262)
VSP-C80R(A)□-6		6		91.8 (101.8)					11.7						254 (263)
VSP-C80R(A)□-8		8		100.2 (110.2)					18.2						259 (268)
VSP-C100R(A)□-4	100	4	M22x1	91.6 (100.6)	25 (34)	52 (61)	26	26	10.9	27	19	6	10	10.1 to 15.8	343 (349)
VSP-C100R(A)□-6		6		93.8 (102.8)					11.7						344 (350)
VSP-C100R(A)□-8		8		102.2 (111.2)					18.2						349 (361)
VSP-C150R□-6	150	6	M30x2	180	45	112.1	48	35	11.7	36	30	10	20.1	14.0 to 25.5	1,205
VSP-C150R□-8		8		180.7					18.2						1,210
VSP-C150R□-10		10		187.7					20.7						1,215
VSP-C150R□-12		12		192.9					23.3						1,242
VSP-C200R□-6	200	6	M30x2	185	50	117.1	48	35	11.7	36	30	10	20.1	14.0 to 25.5	1,684
VSP-C200R□-8		8		185.7					18.2						1,689
VSP-C200R□-10		10		192.7					20.7						1,694
VSP-C200R□-12		12		197.9					23.3						1,712

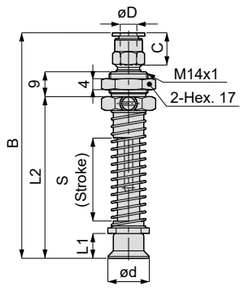
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C6, 8-□R□-4C/6C

●VSP-C10-□R□-4C/6C
●VSP-C15-□R(A)□-4C/6C





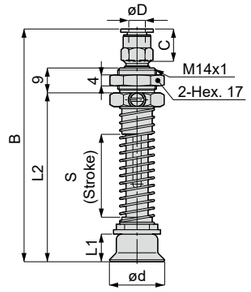
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20R□-4C	6	4	67	7	45	11.2	20	1.5 to 4.9	43
VSP-C6-20R□-6C		6	68.3			11.9			44
VSP-C6-30R□-4C		4	80		58	11.2	30	1.1 to 4.8	48
VSP-C6-30R□-6C		6	81.3			11.9			49
VSP-C6-40R□-4C		4	93		71	11.2	40	1.0 to 4.5	54
VSP-C6-40R□-6C		6	94.3			11.9			55
VSP-C6-50R□-4C		4	106		84	11.2	50	0.9 to 4.5	59
VSP-C6-50R□-6C		6	107.3			11.9			60
VSP-C8-20R□-4C	8	4	65.5	5.5	43.5	11.2	20	1.5 to 4.9	43
VSP-C8-20R□-6C		6	66.8			11.9			44
VSP-C8-30R□-4C		4	78.5		56.5	11.2	30	1.1 to 4.8	48
VSP-C8-30R□-6C		6	79.8			11.9			49
VSP-C8-40R□-4C		4	91.5		69.5	11.2	40	1.0 to 4.5	54
VSP-C8-40R□-6C		6	92.8			11.9			55
VSP-C8-50R□-4C		4	104.5		82.5	11.2	50	0.9 to 4.5	59
VSP-C8-50R□-6C		6	105.8			11.9			60
VSP-C10-20R□-4C	10	4	66.5	8	44.5	11.2	20	1.5 to 4.9	43
VSP-C10-20R□-6C		6	67.8			11.9			44
VSP-C10-30R□-4C		4	79.5		57.5	11.2	30	1.1 to 4.8	48
VSP-C10-30R□-6C		6	80.8			11.9			49
VSP-C10-40R□-4C		4	92.5		70.5	11.2	40	1.0 to 4.5	54
VSP-C10-40R□-6C		6	93.8			11.9			55
VSP-C10-50R□-4C		4	105.5		83.5	11.2	50	0.9 to 4.5	59
VSP-C10-50R□-6C		6	106.8			11.9			60
VSP-C15-20R(A)□-4C	15	4	67.5 (68.5)	9 (10)	45.5 (46.5)	11.2	20	1.5 to 4.9	43 (43)
VSP-C15-20R(A)□-6C		6	68.8 (69.8)			11.9			44 (44)
VSP-C15-30R(A)□-4C		4	80.5 (81.5)		58.5 (59.5)	11.2	30	1.1 to 4.8	48 (48)
VSP-C15-30R(A)□-6C		6	81.8 (82.8)			11.9			49 (49)
VSP-C15-40R(A)□-4C		4	93.5 (94.5)		71.5 (72.5)	11.2	40	1.0 to 4.5	54 (54)
VSP-C15-40R(A)□-6C		6	94.8 (95.8)			11.9			55 (55)
VSP-C15-50R(A)□-4C		4	106.5 (107.5)		84.5 (85.5)	11.2	50	0.9 to 4.5	59 (59)
VSP-C15-50R(A)□-6C		6	107.8 (108.8)			11.9			60 (60)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C20 to 50-□R(A)□-4C/6C



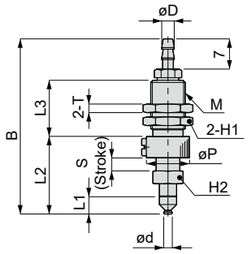
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C20-20R(A)□-4C	20	4	70 (71)	10 (11)	48 (49)	11.2	20	1.5 to 4.9	49 (50)
VSP-C20-20R(A)□-6C		6	71.3 (72.3)			11.9			50 (51)
VSP-C20-30R(A)□-4C		4	83 (84)		61 (62)	11.2	30	1.1 to 4.8	54 (55)
VSP-C20-30R(A)□-6C		6	84.3 (85.3)			11.9			55 (56)
VSP-C20-40R(A)□-4C		4	96 (97)		74 (75)	11.2	40	1.0 to 4.5	59 (60)
VSP-C20-40R(A)□-6C		6	97.3 (98.3)			11.9			60 (61)
VSP-C20-50R(A)□-4C		4	109 (110)		87 (88)	11.2	50	0.9 to 4.5	64 (65)
VSP-C20-50R(A)□-6C		6	110.3 (111.3)			11.9			65 (66)
VSP-C25-20R(A)□-4C	25	4	71 (72)	11 (12)	49 (50)	11.2	20	1.5 to 4.9	49 (50)
VSP-C25-20R(A)□-6C		6	72.3 (73.3)			11.9			50 (51)
VSP-C25-30R(A)□-4C		4	84 (85)		62 (63)	11.2	30	1.1 to 4.8	54 (55)
VSP-C25-30R(A)□-6C		6	85.3 (86.3)			11.9			55 (56)
VSP-C25-40R(A)□-4C		4	97 (98)		75 (76)	11.2	40	1.0 to 4.5	60 (61)
VSP-C25-40R(A)□-6C		6	98.3 (99.3)			11.9			61 (62)
VSP-C25-50R(A)□-4C		4	110 (111)		88 (89)	11.2	50	0.9 to 4.5	65 (66)
VSP-C25-50R(A)□-6C		6	111.3 (112.3)			11.9			66 (67)
VSP-C30-20R(A)□-4C	30	4	71 (74)	11 (14)	49 (52)	11.2	20	1.5 to 4.9	51 (52)
VSP-C30-20R(A)□-6C		6	72.3 (75.3)			11.9			52 (53)
VSP-C30-30R(A)□-4C		4	84 (87)		62 (65)	11.2	30	1.1 to 4.8	56 (57)
VSP-C30-30R(A)□-6C		6	85.3 (88.3)			11.9			57 (58)
VSP-C30-40R(A)□-4C		4	97 (100)		75 (78)	11.2	40	1.0 to 4.5	62 (61)
VSP-C30-40R(A)□-6C		6	98.3 (101.3)			11.9			63 (62)
VSP-C30-50R(A)□-4C		4	110 (113)		88 (91)	11.2	50	0.9 to 4.5	67 (68)
VSP-C30-50R(A)□-6C		6	111.3 (114.3)			11.9			68 (69)
VSP-C40-20R(A)□-4C	40	4	74 (77.5)	14 (17.5)	52 (55.5)	11.2	20	1.5 to 4.9	58 (59)
VSP-C40-20R(A)□-6C		6	75.3 (78.8)			11.9			59 (60)
VSP-C40-30R(A)□-4C		4	87 (90.5)		65 (68.5)	11.2	30	1.1 to 4.8	64 (65)
VSP-C40-30R(A)□-6C		6	88.3 (91.8)			11.9			65 (66)
VSP-C40-40R(A)□-4C		4	100 (103.5)		78 (81.5)	11.2	40	1.0 to 4.5	69 (70)
VSP-C40-40R(A)□-6C		6	101.3 (104.8)			11.9			70 (71)
VSP-C40-50R(A)□-4C		4	113 (116.5)		91 (94.5)	11.2	50	0.9 to 4.5	74 (75)
VSP-C40-50R(A)□-6C		6	114.3 (117.8)			11.9			75 (76)
VSP-C50-20R(A)□-4C	50	4	75 (78)	15 (18)	53 (56)	11.2	20	1.5 to 4.9	64 (65)
VSP-C50-20R(A)□-6C		6	76.3 (79.3)			11.9			65 (67)
VSP-C50-30R(A)□-4C		4	88 (91)		66 (69)	11.2	30	1.1 to 4.8	69 (71)
VSP-C50-30R(A)□-6C		6	89.3 (92.3)			11.9			70 (72)
VSP-C50-40R(A)□-4C		4	101 (104)		79 (82)	11.2	40	1.0 to 4.5	75 (76)
VSP-C50-40R(A)□-6C		6	102.3 (105.3)			11.9			76 (77)
VSP-C50-50R(A)□-4C		4	114 (117)		92 (95)	11.2	50	0.9 to 4.5	80 (81)
VSP-C50-50R(A)□-6C		6	115.3 (118.3)			11.9			81 (82)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C1 to 4R□-4T/6T
●VSP-C1 to 4-□R□-4T/6T



Unit: mm

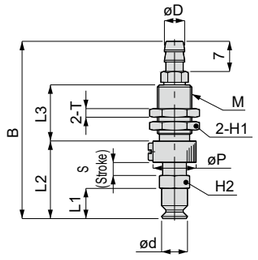
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	Width across flats H1	Width across flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C1R□-4T	1	2.5	M8x0.75	40.6	4	18	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C1R□-6T		4												
VSP-C1-10R□-4T		2.5	M12x1	54.6		27	17.5	13	14	8	4	10	0.6 to 1.7	19
VSP-C1-10R□-6T		4												
VSP-C1-15R□-4T		2.5		65.6		32	23.5					15	0.4 to 1.7	22
VSP-C1-15R□-6T		4												
VSP-C1-20R□-4T		2.5		75.6		37	28.5					20	0.3 to 1.8	25
VSP-C1-20R□-6T		4												
VSP-C2R□-4T	2	2.5	M8x0.75	40.6	4	18	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C2R□-6T		4												
VSP-C2-10R□-4T		2.5	M12x1	54.6		27	17.5	13	14	8	4	10	0.6 to 1.7	19
VSP-C2-10R□-6T		4												
VSP-C2-15R□-4T		2.5		65.6		32	23.5					15	0.4 to 1.7	22
VSP-C2-15R□-6T		4												
VSP-C2-20R□-4T		2.5		75.6		37	28.5					20	0.3 to 1.8	25
VSP-C2-20R□-6T		4												
VSP-C3R□-4T	3	2.5	M8x0.75	40.6	4	18	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C3R□-6T		4												
VSP-C3-10R□-4T		2.5	M12x1	54.6		27	17.5	13	14	8	4	10	0.6 to 1.7	19
VSP-C3-10R□-6T		4												
VSP-C3-15R□-4T		2.5		65.6		32	23.5					15	0.4 to 1.7	22
VSP-C3-15R□-6T		4												
VSP-C3-20R□-4T		2.5		75.6		37	28.5					20	0.3 to 1.8	25
VSP-C3-20R□-6T		4												
VSP-C4R□-4T	4	2.5	M8x0.75	40.6	4	18	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C4R□-6T		4												
VSP-C4-10R□-4T		2.5	M12x1	54.6		27	17.5	13	14	8	4	10	0.6 to 1.7	19
VSP-C4-10R□-6T		4												
VSP-C4-15R□-4T		2.5		65.6		32	23.5					15	0.4 to 1.7	22
VSP-C4-15R□-6T		4												
VSP-C4-20R□-4T		2.5		75.6		37	28.5					20	0.3 to 1.8	25
VSP-C4-20R□-6T		4												

VSP-□R□, □A□, □RM□ Series

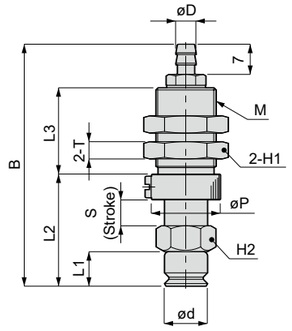
External Dimension Drawings

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C6, 8R□-4T/6T
●VSP-C6, 8-□R□-4T/6T



●VSP-C10R□-4T/6T
●VSP-C10-□R□-4T/6T
●VSP-C15R(A)□-4T/6T
●VSP-C15-□R(A)□-4T/6T



Unit: mm

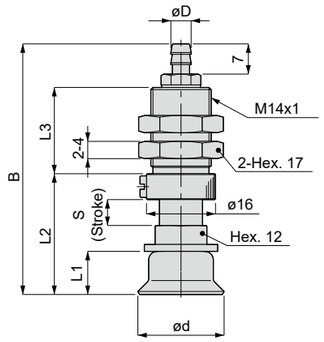
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	Width across flats H1	Width across flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C6R□-4T	6	2.5	M8x0.75	40.6	7	18	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C6R□-6T		4												
VSP-C6-10R□-4T		2.5	M12x1	54.1		26.5	17.5	13	14	8	4	10	0.8 to 2.7	19
VSP-C6-10R□-6T		4												
VSP-C6-15R□-4T		2.5		65.1		31.5	23.5					15	0.7 to 3.0	22
VSP-C6-15R□-6T		4												
VSP-C6-20R□-4T		2.5		75.1		36.5	28.5					20	0.9 to 3.4	24
VSP-C6-20R□-6T		4												
VSP-C8R□-4T	8	2.5	M8x0.75	39.1	5.5	16.5	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C8R□-6T		4												
VSP-C8-10R□-4T		2.5	M12x1	52.6		25	17.5	13	14	8	4	10	0.8 to 2.7	19
VSP-C8-10R□-6T		4												
VSP-C8-15R□-4T		2.5		63.6		30	23.5					15	0.7 to 3.0	22
VSP-C8-15R□-6T		4												
VSP-C8-20R□-4T		2.5		73.6		35	28.5					20	0.9 to 3.4	24
VSP-C8-20R□-6T		4												
VSP-C10R□-4T	10	2.5	M14x1	56.1	8	26	20	16	17	12	4	6	4.0 to 7.1	34
VSP-C10R□-6T		4												
VSP-C10-10R□-4T		2.5		60.6		30.5						10	2.0 to 5.2	35
VSP-C10-10R□-6T		4												
VSP-C10-15R□-4T		2.5		70.6		35.5	25					15	2.0 to 5.9	40
VSP-C10-15R□-6T		4												
VSP-C10-20R□-4T		2.5		86.6		42.5	34					20	1.1 to 4.8	47
VSP-C10-20R□-6T		4												
VSP-C15R(A)□-4T	15	2.5	M14x1	57.1 (58.1)	9 (10)	27 (28)	20	16	17	12	4	6	4.0 to 7.1	34 (34)
VSP-C15R(A)□-6T		4												
VSP-C15-10R(A)□-4T		2.5		61.6 (62.6)		31.5 (32.5)						10	2.0 to 5.2	35 (35)
VSP-C15-10R(A)□-6T		4												
VSP-C15-15R(A)□-4T		2.5		71.6 (72.6)		36.5 (37.5)	25					15	2.0 to 5.9	40 (40)
VSP-C15-15R(A)□-6T		4												
VSP-C15-20R(A)□-4T		2.5		87.6 (88.6)		43.5 (44.5)	34					20	1.1 to 4.8	48 (48)
VSP-C15-20R(A)□-6T		4												

*Dimensions in ( ) are for deep type pads.

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C20 to 50R(A)□-4T/6T
●VSP-C20 to 50-□R(A)□-4T/6T



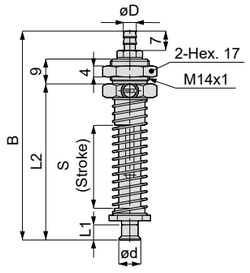
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C20R(A)□-4T	20	2.5	58.1 (59.1)	10 (11)	28 (29)	20	6	7.0 to 12.6	38 (39)
VSP-C20R(A)□-6T		4							
VSP-C20-10R(A)□-4T		2.5	64.1 (65.1)		34 (35)		10	3.3 to 10.0	40 (41)
VSP-C20-10R(A)□-6T		4							
VSP-C20-15R(A)□-4T		2.5	74.1 (75.1)		39 (40)	25	15	3.3 to 10.4	45 (46)
VSP-C20-15R(A)□-6T		4							
VSP-C20-20R(A)□-4T		2.5	90.1 (91.1)		46 (47)	34	20	2.0 to 8.7	52 (52)
VSP-C20-20R(A)□-6T		4							
VSP-C25R(A)□-4T	25	2.5	59.1 (60.1)	11 (12)	29 (30)	20	6	7.0 to 12.6	39 (40)
VSP-C25R(A)□-6T		4							
VSP-C25-10R(A)□-4T		2.5	65.1 (66.1)		35 (36)		10	3.3 to 10.0	43 (44)
VSP-C25-10R(A)□-6T		4							
VSP-C25-15R(A)□-4T		2.5	75.1 (76.1)		40 (41)	25	15	3.3 to 10.4	48 (49)
VSP-C25-15R(A)□-6T		4							
VSP-C25-20R(A)□-4T		2.5	91.1 (92.1)		47 (48)	34	20	2.0 to 8.7	54 (55)
VSP-C25-20R(A)□-6T		4							
VSP-C30R(A)□-4T	30	2.5	59.1 (62.1)	11 (14)	29 (32)	20	6	7.0 to 12.6	40 (41)
VSP-C30R(A)□-6T		4							
VSP-C30-10R(A)□-4T		2.5	65.1 (68.1)		35 (38)		10	3.3 to 10.0	43 (44)
VSP-C30-10R(A)□-6T		4							
VSP-C30-15R(A)□-4T		2.5	75.1 (78.1)		40 (43)	25	15	3.3 to 10.4	48 (49)
VSP-C30-15R(A)□-6T		4							
VSP-C30-20R(A)□-4T		2.5	91.1 (94.1)		47 (50)	34	20	2.0 to 8.7	54 (55)
VSP-C30-20R(A)□-6T		4							
VSP-C40R(A)□-4T	40	2.5	62.1 (65.6)	14 (17.5)	32 (35.5)	20	6	7.0 to 12.6	47 (48)
VSP-C40R(A)□-6T		4							
VSP-C40-10R(A)□-4T		2.5	68.1 (71.6)		38 (41.5)		10	3.3 to 10.0	50 (51)
VSP-C40-10R(A)□-6T		4							
VSP-C40-15R(A)□-4T		2.5	78.1 (81.6)		43 (46.5)	25	15	3.3 to 10.4	55 (56)
VSP-C40-15R(A)□-6T		4							
VSP-C40-20R(A)□-4T		2.5	94.1 (97.6)		50 (53.5)	34	20	2.0 to 8.7	61 (62)
VSP-C40-20R(A)□-6T		4							
VSP-C50R(A)□-4T	50	2.5	63.1 (66.1)	15 (18)	33 (36)	20	6	7.0 to 12.6	53 (55)
VSP-C50R(A)□-6T		4							
VSP-C50-10R(A)□-4T		2.5	69.1 (72.1)		39 (42)		10	3.3 to 10.0	56 (57)
VSP-C50-10R(A)□-6T		4							
VSP-C50-15R(A)□-4T		2.5	79.1 (82.1)		44 (47)	25	15	3.3 to 10.4	61 (62)
VSP-C50-15R(A)□-6T		4							
VSP-C50-20R(A)□-4T		2.5	95.1 (98.1)		51 (54)	34	20	2.0 to 8.7	67 (69)
VSP-C50-20R(A)□-6T		4							

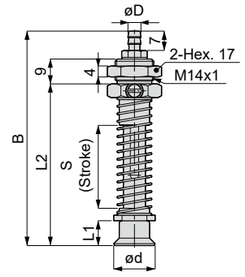
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C6, 8-□R□-4TC/6TC



●VSP-C10-□R□-4TC/6TC
●VSP-C15-□R(A)□-4TC/6TC



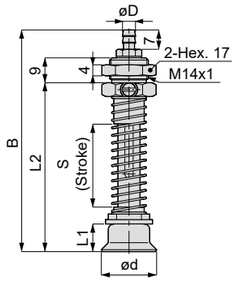
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20R□-4TC	6	2.5	64.1	7	45	20	1.5 to 4.9	42
VSP-C6-20R□-6TC		4						
VSP-C6-30R□-4TC		2.5	77.1		58	30	1.1 to 4.8	47
VSP-C6-30R□-6TC		4						
VSP-C6-40R□-4TC		2.5	90.1		71	40	1.0 to 4.5	52
VSP-C6-40R□-6TC		4						
VSP-C6-50R□-4TC		2.5	103.1		84	50	0.9 to 4.5	58
VSP-C6-50R□-6TC		4						
VSP-C8-20R□-4TC	8	2.5	62.6	5.5	43.5	20	1.5 to 4.9	42
VSP-C8-20R□-6TC		4						
VSP-C8-30R□-4TC		2.5	75.6		56.5	30	1.1 to 4.8	47
VSP-C8-30R□-6TC		4						
VSP-C8-40R□-4TC		2.5	88.6		69.5	40	1.0 to 4.5	52
VSP-C8-40R□-6TC		4						
VSP-C8-50R□-4TC		2.5	101.6		82.5	50	0.9 to 4.5	58
VSP-C8-50R□-6TC		4						
VSP-C10-20R□-4TC	10	2.5	63.6	8	44.5	20	1.5 to 4.9	43
VSP-C10-20R□-6TC		4						
VSP-C10-30R□-4TC		2.5	76.6		57.5	30	1.1 to 4.8	48
VSP-C10-30R□-6TC		4						
VSP-C10-40R□-4TC		2.5	89.6		70.5	40	1.0 to 4.5	53
VSP-C10-40R□-6TC		4						
VSP-C10-50R□-4TC		2.5	102.6		83.5	50	0.9 to 4.5	59
VSP-C10-50R□-6TC		4						
VSP-C15-20R(A)□-4TC	15	2.5	64.6 (65.6)	9 (10)	45.5 (46.5)	20	1.5 to 4.9	43 (43)
VSP-C15-20R(A)□-6TC		4						
VSP-C15-30R(A)□-4TC		2.5	77.6 (78.6)		58.5 (59.5)	30	1.1 to 4.8	48 (48)
VSP-C15-30R(A)□-6TC		4						
VSP-C15-40R(A)□-4TC		2.5	90.6 (91.6)		71.5 (72.5)	40	1.0 to 4.5	53 (53)
VSP-C15-40R(A)□-6TC		4						
VSP-C15-50R(A)□-4TC		2.5	103.6 (104.6)		84.5 (85.5)	50	0.9 to 4.5	59 (59)
VSP-C15-50R(A)□-6TC		4						

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C20 to 50-□R(A)□-4TC/6TC



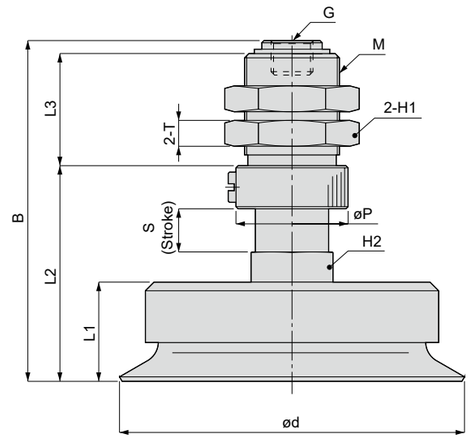
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C20-20R(A)□-4TC	20	2.5	67.1 (68.1)	10 (11)	48 (49)	20	1.5 to 4.9	48
VSP-C20-20R(A)□-6TC		4						
VSP-C20-30R(A)□-4TC		2.5	80.1 (81.1)		61 (62)	30	1.1 to 4.8	53
VSP-C20-30R(A)□-6TC		4						
VSP-C20-40R(A)□-4TC		2.5	93.1 (94.1)		74 (75)	40	1.0 to 4.5	58
VSP-C20-40R(A)□-6TC		4						
VSP-C20-50R(A)□-4TC		2.5	106.1 (107.1)		87 (88)	50	0.9 to 4.5	63
VSP-C20-50R(A)□-6TC		4						
VSP-C25-20R(A)□-4TC	25	2.5	68.1 (69.1)	11 (12)	49 (50)	20	1.5 to 4.9	48
VSP-C25-20R(A)□-6TC		4						
VSP-C25-30R(A)□-4TC		2.5	81.1 (82.1)		62 (63)	30	1.1 to 4.8	53
VSP-C25-30R(A)□-6TC		4						
VSP-C25-40R(A)□-4TC		2.5	94.1 (95.1)		75 (76)	40	1.0 to 4.5	58
VSP-C25-40R(A)□-6TC		4						
VSP-C25-50R(A)□-4TC		2.5	107.1 (108.1)		88 (89)	50	0.9 to 4.5	64
VSP-C25-50R(A)□-6TC		4						
VSP-C30-20R(A)□-4TC	30	2.5	68.1 (71.1)	11 (14)	49 (52)	20	1.5 to 4.9	49
VSP-C30-20R(A)□-6TC		4						
VSP-C30-30R(A)□-4TC		2.5	81.1 (84.1)		62 (65)	30	1.1 to 4.8	54
VSP-C30-30R(A)□-6TC		4						
VSP-C30-40R(A)□-4TC		2.5	94.1 (97.1)		75 (78)	40	1.0 to 4.5	59
VSP-C30-40R(A)□-6TC		4						
VSP-C30-50R(A)□-4TC		2.5	107.1 (110.1)		88 (91)	50	0.9 to 4.5	64
VSP-C30-50R(A)□-6TC		4						
VSP-C40-20R(A)□-4TC	40	2.5	71.1 (74.6)	14 (17.5)	52 (55.5)	20	1.5 to 4.9	57 (58)
VSP-C40-20R(A)□-6TC		4						
VSP-C40-30R(A)□-4TC		2.5	84.1 (87.6)		65 (68.5)	30	1.1 to 4.8	62 (63)
VSP-C40-30R(A)□-6TC		4						
VSP-C40-40R(A)□-4TC		2.5	97.1 (100.6)		78 (81.5)	40	1.0 to 4.5	68 (69)
VSP-C40-40R(A)□-6TC		4						
VSP-C40-50R(A)□-4TC		2.5	110.1 (113.6)		91 (94.5)	50	0.9 to 4.5	73 (74)
VSP-C40-50R(A)□-6TC		4						
VSP-C50-20R(A)□-4TC	50	2.5	72.1 (75.1)	15 (18)	53 (56)	20	1.5 to 4.9	63 (65)
VSP-C50-20R(A)□-6TC		4						
VSP-C50-30R(A)□-4TC		2.5	85.1 (88.1)		66 (69)	30	1.1 to 4.8	68 (70)
VSP-C50-30R(A)□-6TC		4						
VSP-C50-40R(A)□-4TC		2.5	98.1 (101.1)		79 (82)	40	1.0 to 4.5	73 (75)
VSP-C50-40R(A)□-6TC		4						
VSP-C50-50R(A)□-4TC		2.5	111.1 (114.1)		92 (95)	50	0.9 to 4.5	79 (80)
VSP-C50-50R(A)□-6TC		4						

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Female Thread)

●VSP-C60 to 100R(A)□-6A
●VSP-C150, 200R□-8A



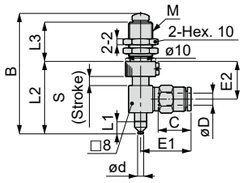
Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	Mounting screw M	B	L1	L2	L3	øP	Width across flats H1	Width across flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C60R(A)□-6A	60	G1/8	M22x1	76.6 (83.6)	18 (25)	47.6 (54.6)	26	26	27	19	6	10	10.1 to 15.8	161 (161)
VSP-C80R(A)□-6A	80	G1/8	M22x1	79 (89)	23 (33)	50 (60)	26	26	27	19	6	10	10.1 to 15.8	245 (254)
VSP-C100R(A)□-6A	100	G1/8	M22x1	81 (90)	25 (34)	52 (61)	26	26	27	19	6	10	10.1 to 15.8	335 (341)
VSP-C150R□-8A	150	G1/4	M30x2	164	45	112.1	48	35	36	30	10	20.1	14.0 to 25.5	1,196
VSP-C200R□-8A	200	G1/4	M30x2	169	50	117.1	48	35	36	30	10	20.1	14.0 to 25.5	1,675

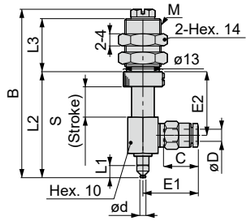
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D1 to 4R□-2/4/6



●VSP-D1 to 4-□R□-2/4/6

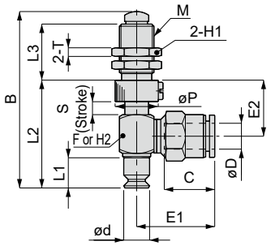


Unit: mm

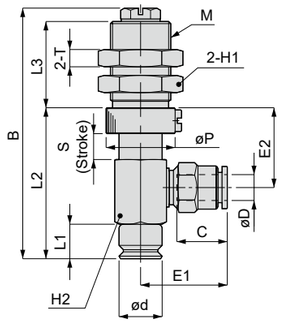
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D1R□-2	1	1.8	M8x0.75	40	4	24	13	8.4	12.7	12.5	3	0.9 to 1.9	13
VSP-D1R□-4		4						11.2	16.8				14
VSP-D1R□-6		6						11.9	18.6				15
VSP-D1-10R□-2		1.8	M12x1	55.6		35	17.5	8.4	13.7	21	10	0.6 to 1.7	29
VSP-D1-10R□-4		4						11.2	17.8				30
VSP-D1-10R□-6		6						11.9	19.1				31
VSP-D1-15R□-2		1.8		66.6		40	23.5	8.4	13.7	26	15	0.4 to 1.7	33
VSP-D1-15R□-4		4						11.2	17.8				34
VSP-D1-15R□-6		6						11.9	19.1				35
VSP-D1-20R□-2		1.8		76.6		45	28.5	8.4	13.7	31	20	0.3 to 1.8	36
VSP-D1-20R□-4		4						11.2	17.8				37
VSP-D1-20R□-6		6						11.9	19.1				38
VSP-D2R□-2	2	1.8	M8x0.75	40	4	24	13	8.4	12.7	12.5	3	0.9 to 1.9	13
VSP-D2R□-4		4						11.2	16.8				14
VSP-D2R□-6		6						11.9	18.6				15
VSP-D2-10R□-2		1.8	M12x1	55.6		35	17.5	8.4	13.7	21	10	0.6 to 1.7	29
VSP-D2-10R□-4		4						11.2	17.8				30
VSP-D2-10R□-6		6						11.9	19.1				31
VSP-D2-15R□-2		1.8		66.6		40	23.5	8.4	13.7	26	15	0.4 to 1.7	33
VSP-D2-15R□-4		4						11.2	17.8				34
VSP-D2-15R□-6		6						11.9	19.1				35
VSP-D2-20R□-2		1.8		76.6		45	28.5	8.4	13.7	31	20	0.3 to 1.8	36
VSP-D2-20R□-4		4						11.2	17.8				37
VSP-D2-20R□-6		6						11.9	19.1				38
VSP-D3R□-2	3	1.8	M8x0.75	40	4	24	13	8.4	12.7	12.5	3	0.9 to 1.9	13
VSP-D3R□-4		4						11.2	16.8				14
VSP-D3R□-6		6						11.9	18.6				15
VSP-D3-10R□-2		1.8	M12x1	55.6		35	17.5	8.4	13.7	21	10	0.6 to 1.7	29
VSP-D3-10R□-4		4						11.2	17.8				30
VSP-D3-10R□-6		6						11.9	19.1				31
VSP-D3-15R□-2		1.8		66.6		40	23.5	8.4	13.7	26	15	0.4 to 1.7	33
VSP-D3-15R□-4		4						11.2	17.8				34
VSP-D3-15R□-6		6						11.9	19.1				35
VSP-D3-20R□-2		1.8		76.6		45	28.5	8.4	13.7	31	20	0.3 to 1.8	36
VSP-D3-20R□-4		4						11.2	17.8				37
VSP-D3-20R□-6		6						11.9	19.1				38
VSP-D4R□-2	4	1.8	M8x0.75	40	4	24	13	8.4	12.7	12.5	3	0.9 to 1.9	13
VSP-D4R□-4		4						11.2	16.8				14
VSP-D4R□-6		6						11.9	18.6				15
VSP-D4-10R□-2		1.8	M12x1	55.6		35	17.5	8.4	13.7	21	10	0.6 to 1.7	29
VSP-D4-10R□-4		4						11.2	17.8				30
VSP-D4-10R□-6		6						11.9	19.1				31
VSP-D4-15R□-2		1.8		66.6		40	23.5	8.4	13.7	26	15	0.4 to 1.7	33
VSP-D4-15R□-4		4						11.2	17.8				34
VSP-D4-15R□-6		6						11.9	19.1				35
VSP-D4-20R□-2		1.8		76.6		45	28.5	8.4	13.7	31	20	0.3 to 1.8	36
VSP-D4-20R□-4		4						11.2	17.8				37
VSP-D4-20R□-6		6						11.9	19.1				38

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D6, 8R□-2/4/6
●VSP-D6, 8-□R□-2/4/6



●VSP-D10R□-4/6
●VSP-D10-□R□-4/6
●VSP-D15R(A)□-4/6
●VSP-D15-□R(A)□-4/6



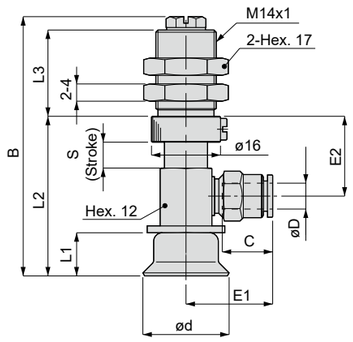
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	øP	Tube End C	E1	E2	Width Across Flats H1	Width Across Flats H2	□F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D6R□-2	6	1.8	M8x0.75	41	7	25	13	10	8.4	12.7	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D6R□-4		4							11.2	16.8								14
VSP-D6R□-6		6							11.9	18.6								15
VSP-D6-10R□-2		1.8	M12x1	56.1		35.5	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D6-10R□-4		4							11.2	18.8								34
VSP-D6-10R□-6		6							11.9	20.1								35
VSP-D6-15R□-2		1.8		67.1		40.5	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D6-15R□-4		4							11.2	18.8								38
VSP-D6-15R□-6		6							11.9	20.1								39
VSP-D6-20R□-2		1.8		77.1		45.5	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D6-20R□-4		4							11.2	18.8								41
VSP-D6-20R□-6		6							11.9	20.1								42
VSP-D8R□-2	8	1.8	M8x0.75	39.5	5.5	23.5	13	10	8.4	12.7	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D8R□-4		4							11.2	16.8								14
VSP-D8R□-6		6							11.9	18.6								15
VSP-D8-10R□-2		1.8	M12x1	54.6		34	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D8-10R□-4		4							11.2	18.8								34
VSP-D8-10R□-6		6							11.9	20.1								35
VSP-D8-15R□-2		1.8		65.6		39	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D8-15R□-4		4							11.2	18.8								38
VSP-D8-15R□-6		6							11.9	20.1								39
VSP-D8-20R□-2		1.8		75.6		44	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D8-20R□-4		4							11.2	18.8								41
VSP-D8-20R□-6		6							11.9	20.1								42
VSP-D10R□-4	10	4	M14x1	58.1	8	35	20	16	11.2	18.8	18.5	17	12	-	4	6	4.0 to 7.1	47
VSP-D10R□-6		6							11.9	20.1								48
VSP-D10-10R□-4		4		63.1		40			11.2	18.8	25					10	2.0 to 5.2	50
VSP-D10-10R□-6		6							11.9	20.1								51
VSP-D10-15R□-4		4		73.1		45	25		11.2	18.8	30					15	2.0 to 5.9	56
VSP-D10-15R□-6		6							11.9	20.1								57
VSP-D10-20R□-4		4		89.1		52	34		11.2	18.8	37					20	1.1 to 4.8	66
VSP-D10-20R□-6		6							11.9	20.1								67
VSP-D15R(A)□-4	15	4	M14x1	59.1 (60.1)	9 (10)	36 (37)	20	16	11.2	18.8	18.5	17	12	-	4	6	4.0 to 7.1	47 (47)
VSP-D15R(A)□-6		6							11.9	20.1								48 (48)
VSP-D15-10R(A)□-4		4		64.1 (65.1)		41 (42)			11.2	18.8	25					10	2.0 to 5.2	50 (50)
VSP-D15-10R(A)□-6		6							11.9	20.1								51 (51)
VSP-D15-15R(A)□-4		4		74.1 (75.1)		46 (47)	25		11.2	18.8	30					15	2.0 to 5.9	56 (56)
VSP-D15-15R(A)□-6		6							11.9	20.1								57 (57)
VSP-D15-20R(A)□-4		4		90.1 (91.1)		53 (54)	34		11.2	18.8	37					20	1.1 to 4.8	66 (66)
VSP-D15-20R(A)□-6		6							11.9	20.1								67 (67)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D20 to 50R(A)□-4/6
●VSP-D20 to 50-□R(A)□-4/6



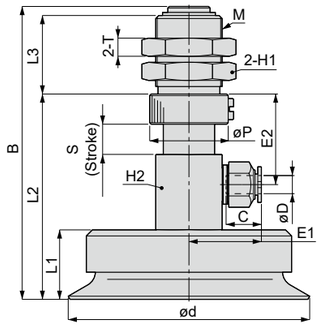
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D20R(A)□-4	20	4	60.1 (61.1)	10 (11)	37 (38)	20	11.2	18.8	18.5	6	7.0 to 12.6	51 (52)
VSP-D20R(A)□-6		6					11.9	20.1				52 (53)
VSP-D20-10R(A)□-4		4	66.1 (67.1)		43 (44)		11.2	18.8	24.5	10	3.3 to 10.0	54 (55)
VSP-D20-10R(A)□-6		6					11.9	20.1				55 (56)
VSP-D20-15R(A)□-4		4	76.1 (77.1)		48 (49)	25	11.2	18.8	29.5	15	3.3 to 10.4	61 (62)
VSP-D20-15R(A)□-6		6					11.9	20.1				62 (63)
VSP-D20-20R(A)□-4		4	92.1 (93.1)		55 (56)	34	11.2	18.8	36.5	20	2.0 to 8.7	71 (72)
VSP-D20-20R(A)□-6		6					11.9	20.1				72 (73)
VSP-D25R(A)□-4	25	4	61.1 (62.1)	11 (12)	38 (39)	20	11.2	18.8	18.5	6	7.0 to 12.6	51 (52)
VSP-D25R(A)□-6		6					11.9	20.1				52 (53)
VSP-D25-10R(A)□-4		4	67.1 (68.1)		44 (45)		11.2	18.8	24.5	10	3.3 to 10.0	55 (56)
VSP-D25-10R(A)□-6		6					11.9	20.1				56 (57)
VSP-D25-15R(A)□-4		4	77.1 (78.1)		49 (50)	25	11.2	18.8	29.5	15	3.3 to 10.4	61 (62)
VSP-D25-15R(A)□-6		6					11.9	20.1				62 (63)
VSP-D25-20R(A)□-4		4	93.1 (94.1)		56 (57)	34	11.2	18.8	36.5	20	2.0 to 8.7	71 (72)
VSP-D25-20R(A)□-6		6					11.9	20.1				72 (73)
VSP-D30R(A)□-4	30	4	61.1 (64.1)	11 (14)	38 (41)	20	11.2	18.8	18.5	6	7.0 to 12.6	53 (54)
VSP-D30R(A)□-6		6					11.9	20.1				54 (55)
VSP-D30-10R(A)□-4		4	67.1 (70.1)		44 (47)		11.2	18.8	24.5	10	3.3 to 10.0	57 (58)
VSP-D30-10R(A)□-6		6					11.9	20.1				58 (59)
VSP-D30-15R(A)□-4		4	77.1 (80.1)		49 (52)	25	11.2	18.8	29.5	15	3.3 to 10.4	63 (64)
VSP-D30-15R(A)□-6		6					11.9	20.1				64 (65)
VSP-D30-20R(A)□-4		4	93.1 (96.1)		56 (59)	34	11.2	18.8	36.5	20	2.0 to 8.7	73 (74)
VSP-D30-20R(A)□-6		6					11.9	20.1				74 (75)
VSP-D40R(A)□-4	40	4	64.1 (67.6)	14 (17.5)	41 (44.5)	20	11.2	18.8	18.5	6	7.0 to 12.6	60 (61)
VSP-D40R(A)□-6		6					11.9	20.1				61 (62)
VSP-D40-10R(A)□-4		4	70.1 (73.6)		47 (50.5)		11.2	18.8	24.5	10	3.3 to 10.0	64 (65)
VSP-D40-10R(A)□-6		6					11.9	20.1				65 (66)
VSP-D40-15R(A)□-4		4	80.1 (83.6)		52 (55.5)	25	11.2	18.8	29.5	15	3.3 to 10.4	70 (71)
VSP-D40-15R(A)□-6		6					11.9	20.1				71 (72)
VSP-D40-20R(A)□-4		4	96.1 (99.6)		59 (62.5)	34	11.2	18.8	36.5	20	2.0 to 8.7	80 (81)
VSP-D40-20R(A)□-6		6					11.9	20.1				81 (82)
VSP-D50R(A)□-4	50	4	65.1 (68.1)	15 (18)	42 (45)	20	11.2	18.8	18.5	6	7.0 to 12.6	66 (68)
VSP-D50R(A)□-6		6					11.9	20.1				67 (69)
VSP-D50-10R(A)□-4		4	71.1 (74.1)		48 (51)		11.2	18.8	24.5	10	3.3 to 10.0	70 (71)
VSP-D50-10R(A)□-6		6					11.9	20.1				71 (72)
VSP-D50-15R(A)□-4		4	81.1 (84.1)		53 (56)	25	11.2	18.8	29.5	15	3.3 to 10.4	80 (81)
VSP-D50-15R(A)□-6		6					11.9	20.1				81 (82)
VSP-D50-20R(A)□-4		4	97.1 (100.1)		60 (63)	34	11.2	18.8	36.5	20	2.0 to 8.7	86 (88)
VSP-D50-20R(A)□-6		6					11.9	20.1				87 (89)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D60 to 100R(A)□-4/6/8
●VSP-D150, 200R□-6/8/10



Unit: mm

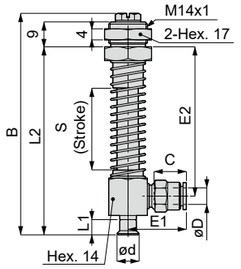
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	øP	Tube End C	E1	E2	Width Across Flats H1	Width Across Flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D60R(A)□-4	60	4	M22x1	94.6 (101.6)	18 (25)	65.6 (72.6)	26	26	11.2	21.5	30	27	22	6	10	10.1 to 15.8	252 (251)
VSP-D60R(A)□-6		6							11.9	23.7							253 (252)
VSP-D60R(A)□-8		8							18.2	32.1							258 (257)
VSP-D80R(A)□-4	80	4	M22x1	97 (107)	23 (33)	68 (78)	26	26	11.2	21.5	30	27	22	6	10	10.1 to 15.8	332 (344)
VSP-D80R(A)□-6		6							11.9	23.7							333 (345)
VSP-D80R(A)□-8		8							18.2	32.1							338 (350)
VSP-D100R(A)□-4	100	4	M22x1	99 (108)	25 (34)	70 (79)	26	26	11.2	21.5	30	27	22	6	10	10.1 to 15.8	425 (431)
VSP-D100R(A)□-6		6							11.9	23.7							426 (432)
VSP-D100R(A)□-8		8							18.2	32.1							431 (437)
VSP-D150R□-6	150	6	M30x2	168.3	45	112.1	48	35	17	30.9	42.1	36	30	10	20.1	14.0 to 25.5	1,205
VSP-D150R□-8		8							18.2	31.6							1,210
VSP-D150R□-10		10							20.7	38.6							1,215
VSP-D200R□-6	200	6	M30x2	173.3	50	117.1	48	35	17	30.9	42.1	36	30	10	20.1	14.0 to 25.5	1,684
VSP-D200R□-8		8							18.2	31.6							1,689
VSP-D200R□-10		10							20.7	38.6							1,694

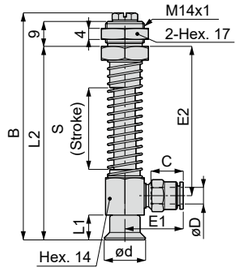
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D6, 8-□R□-4C/6C

●VSP-D10-□R□-4C/6C
●VSP-D15-□R(A)□-4C/6C





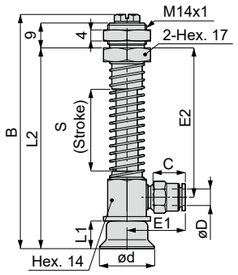
Unit: mm

Model No.	Pad Diameter□d	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20R□-4C	6	4	67.1	7	55	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D6-20R□-6C		6				11.9	21.1				63
VSP-D6-30R□-4C		4	80.1		68	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D6-30R□-6C		6				11.9	21.1				69
VSP-D6-40R□-4C		4	93.1		81	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D6-40R□-6C		6				11.9	21.1				76
VSP-D6-50R□-4C		4	106.1		94	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D6-50R□-6C		6				11.9	21.1				83
VSP-D8-20R□-4C	8	4	65.6	5.5	53.5	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D8-20R□-6C		6				11.9	21.1				63
VSP-D8-30R□-4C		4	78.6		56.5	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D8-30R□-6C		6				11.9	21.1				69
VSP-D8-40R□-4C		4	91.6		69.5	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D8-40R□-6C		6				11.9	21.1				76
VSP-D8-50R□-4C		4	104.6		82.5	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D8-50R□-6C		6				11.9	21.1				83
VSP-D10-20R□-4C	10	4	68.1	8	56	11.2	19.8	40.5	20	1.5 to 4.9	69
VSP-D10-20R□-6C		6				11.9	21.1				70
VSP-D10-30R□-4C		4	81.1		69	11.2	19.8	53.5	30	1.1 to 4.8	75
VSP-D10-30R□-6C		6				11.9	21.1				76
VSP-D10-40R□-4C		4	94.1		82	11.2	19.8	66.5	40	1.0 to 4.5	82
VSP-D10-40R□-6C		6				11.9	21.1				83
VSP-D10-50R□-4C		4	107.1		95	11.2	19.8	79.5	50	0.9 to 4.5	89
VSP-D10-50R□-6C		6				11.9	21.1				90
VSP-D15-20R(A)□-4C	15	4	69.1 (70.1)	9 (10)	57 (58)	11.2	19.8	40.5	20	1.5 to 4.9	69 (69)
VSP-D15-20R(A)□-6C		6				11.9	21.1				70 (70)
VSP-D15-30R(A)□-4C		4	82.1 (83.1)		70 (71)	11.2	19.8	53.5	30	1.1 to 4.8	75 (75)
VSP-D15-30R(A)□-6C		6				11.9	21.1				76 (76)
VSP-D15-40R(A)□-4C		4	95.1 (96.1)		83 (84)	11.2	19.8	66.5	40	1.0 to 4.5	82 (82)
VSP-D15-40R(A)□-6C		6				11.9	21.1				83 (83)
VSP-D15-50R(A)□-4C		4	108.1 (109.1)		106 (107)	11.2	19.8	79.5	50	0.9 to 4.5	89 (89)
VSP-D15-50R(A)□-6C		6				11.9	21.1				90 (90)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D20 to 50-□R(A)□-4C/6C



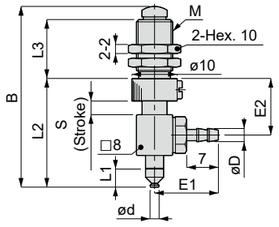
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D20-20R(A)□-4C	20	4	71.6 (72.6)	10 (11)	59.5 (60.5)	11.2	19.8	41	20	1.5 to 4.9	69 (70)
VSP-D20-20R(A)□-6C		6				11.9	21.1				70 (71)
VSP-D20-30R(A)□-4C		4	84.6 (85.6)		72.5 (73.5)	11.2	19.8	54	30	1.1 to 4.8	76 (77)
VSP-D20-30R(A)□-6C		6				11.9	21.1				77 (78)
VSP-D20-40R(A)□-4C		4	97.6 (98.6)		85.5 (86.5)	11.2	19.8	67	40	1.0 to 4.5	82 (83)
VSP-D20-40R(A)□-6C		6				11.9	21.1				83 (84)
VSP-D20-50R(A)□-4C		4	110.6 (111.6)		98.5 (99.5)	11.2	19.8	80	50	0.9 to 4.5	89 (90)
VSP-D20-50R(A)□-6C		6				11.9	21.1				90 (91)
VSP-D25-20R(A)□-4C	25	4	72.6 (73.6)	11 (12)	60.5 (61.5)	11.2	19.8	41	20	1.5 to 4.9	69 (70)
VSP-D25-20R(A)□-6C		6				11.9	21.1				70 (71)
VSP-D25-30R(A)□-4C		4	85.6 (86.6)		73.5 (74.5)	11.2	19.8	54	30	1.1 to 4.8	76 (77)
VSP-D25-30R(A)□-6C		6				11.9	21.1				77 (78)
VSP-D25-40R(A)□-4C		4	98.6 (99.6)		86.5 (87.5)	11.2	19.8	67	40	1.0 to 4.5	83 (84)
VSP-D25-40R(A)□-6C		6				11.9	21.1				84 (85)
VSP-D25-50R(A)□-4C		4	111.6 (112.6)		99.5 (100.5)	11.2	19.8	80	50	0.9 to 4.5	90 (91)
VSP-D25-50R(A)□-6C		6				11.9	21.1				91 (92)
VSP-D30-20R(A)□-4C	30	4	72.6 (75.6)	11 (14)	60.5 (63.5)	11.2	19.8	41	20	1.5 to 4.9	71 (72)
VSP-D30-20R(A)□-6C		6				11.9	21.1				72 (73)
VSP-D30-30R(A)□-4C		4	85.6 (88.6)		73.5 (76.5)	11.2	19.8	54	30	1.1 to 4.8	78 (79)
VSP-D30-30R(A)□-6C		6				11.9	21.1				79 (80)
VSP-D30-40R(A)□-4C		4	98.6 (101.6)		86.5 (89.5)	11.2	19.8	67	40	1.0 to 4.5	85 (86)
VSP-D30-40R(A)□-6C		6				11.9	21.1				86 (87)
VSP-D30-50R(A)□-4C		4	111.6 (114.6)		99.5 (102.5)	11.2	19.8	80	50	0.9 to 4.5	92 (93)
VSP-D30-50R(A)□-6C		6				11.9	21.1				93 (94)
VSP-D40-20R(A)□-4C	40	4	75.6 (79.1)	14 (17.5)	63.5 (67)	11.2	19.8	41	20	1.5 to 4.9	78 (79)
VSP-D40-20R(A)□-6C		6				11.9	21.1				79 (80)
VSP-D40-30R(A)□-4C		4	88.6 (92.1)		76.5 (80)	11.2	19.8	54	30	1.1 to 4.8	85 (86)
VSP-D40-30R(A)□-6C		6				11.9	21.1				86 (87)
VSP-D40-40R(A)□-4C		4	101.6 (105.1)		89.5 (93)	11.2	19.8	67	40	1.0 to 4.5	92 (93)
VSP-D40-40R(A)□-6C		6				11.9	21.1				93 (94)
VSP-D40-50R(A)□-4C		4	114.6 (118.1)		102.5 (106)	11.2	19.8	80	50	0.9 to 4.5	99 (100)
VSP-D40-50R(A)□-6C		6				11.9	21.1				100 (101)
VSP-D50-20R(A)□-4C	50	4	76.6 (79.6)	15 (18)	64.5 (67.5)	11.2	19.8	41	20	1.5 to 4.9	84 (85)
VSP-D50-20R(A)□-6C		6				11.9	21.1				85 (86)
VSP-D50-30R(A)□-4C		4	89.6 (92.6)		77.5 (80.5)	11.2	19.8	54	30	1.1 to 4.8	91 (92)
VSP-D50-30R(A)□-6C		6				11.9	21.1				92 (93)
VSP-D50-40R(A)□-4C		4	102.6 (105.6)		90.5 (93.5)	11.2	19.8	67	40	1.0 to 4.5	98 (99)
VSP-D50-40R(A)□-6C		6				11.9	21.1				99 (100)
VSP-D50-50R(A)□-4C		4	115.6 (118.6)		103.5 (106.5)	11.2	19.8	80	50	0.9 to 4.5	105 (107)
VSP-D50-50R(A)□-6C		6				11.9	21.1				106 (108)

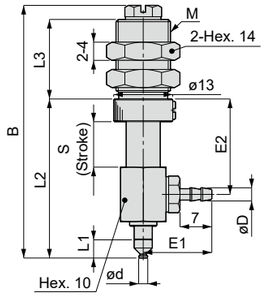
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D1 to 4R□-4T/6T



●VSP-D1 to 4-□R□-4T/6T

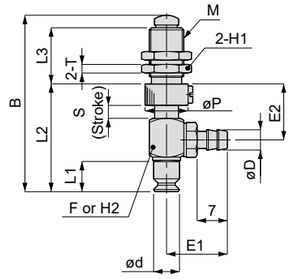


Unit: mm

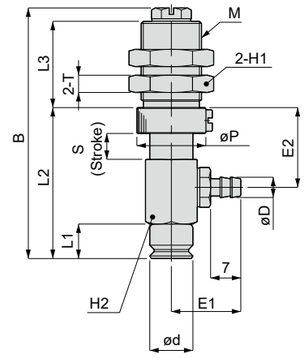
Model No.	Pad Diameter □d	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D1R□-4T	1	2.5	M8x0.75	40	4	24	13	13.9	12.5	3	0.9 to 1.9	12
VSP-D1R□-6T		4										
VSP-D1-10R□-4T		2.5	M12x1	55.6		35	17.5	14.9	21	10	0.6 to 1.7	27
VSP-D1-10R□-6T		4										
VSP-D1-15R□-4T		2.5		66.6		40	23.5		26	15	0.4 to 1.7	32
VSP-D1-15R□-6T		4										
VSP-D1-20R□-4T		2.5		76.6		45	28.5		31	20	0.3 to 1.8	35
VSP-D1-20R□-6T		4										
VSP-D2R□-4T	2	2.5	M8x0.75	40	4	24	13	13.9	12.5	3	0.9 to 1.9	12
VSP-D2R□-6T		4										
VSP-D2-10R□-4T		2.5	M12x1	55.6		35	17.5	14.9	21	10	0.6 to 1.7	27
VSP-D2-10R□-6T		4										
VSP-D2-15R□-4T		2.5		66.6		40	23.5		26	15	0.4 to 1.7	32
VSP-D2-15R□-6T		4										
VSP-D2-20R□-4T		2.5		76.6		45	28.5		31	20	0.3 to 1.8	35
VSP-D2-20R□-6T		4										
VSP-D3R□-4T	3	2.5	M8x0.75	40	4	24	13	13.9	12.5	3	0.9 to 1.9	12
VSP-D3R□-6T		4										
VSP-D3-10R□-4T		2.5	M12x1	55.6		35	17.5	14.9	21	10	0.6 to 1.7	27
VSP-D3-10R□-6T		4										
VSP-D3-15R□-4T		2.5		66.6		40	23.5		26	15	0.4 to 1.7	32
VSP-D3-15R□-6T		4										
VSP-D3-20R□-4T		2.5		76.6		45	28.5		31	20	0.3 to 1.8	35
VSP-D3-20R□-6T		4										
VSP-D4R□-4T	4	2.5	M8x0.75	40	4	24	13	13.9	12.5	3	0.9 to 1.9	12
VSP-D4R□-6T		4										
VSP-D4-10R□-4T		2.5	M12x1	55.6		35	17.5	14.9	21	10	0.6 to 1.7	27
VSP-D4-10R□-6T		4										
VSP-D4-15R□-4T		2.5		66.6		40	23.5		26	15	0.4 to 1.7	32
VSP-D4-15R□-6T		4										
VSP-D4-20R□-4T		2.5		76.6		45	28.5		31	20	0.3 to 1.8	35
VSP-D4-20R□-6T		4										

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D6, 8R□-4T/6T
●VSP-D6, 8-□R□-4T/6T



●VSP-D10R□-4T/6T
●VSP-D10-□R□-4T/6T
●VSP-D15R(A)□-4T/6T
●VSP-D15-□R(A)□-4T/6T



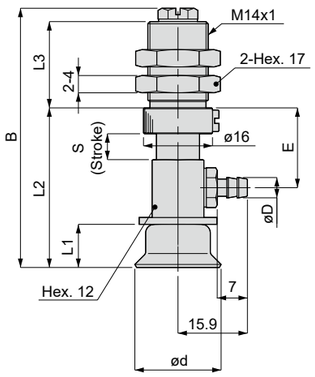
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	E1	E2	Width Across Flats H1	Width Across Flats H2	□F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D6R□-4T	6	2.5	M8x0.75	41	7	25	13	10	13.9	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D6R□-6T		4															
VSP-D6-10R□-4T		2.5	M12x1	56.1		35.5	17.5	13	15.9	21	14	12	-	4	10	0.8 to 2.7	32
VSP-D6-10R□-6T		4															
VSP-D6-15R□-4T		2.5		67.1		40.5	23.5			26					15	0.7 to 3.0	36
VSP-D6-15R□-6T		4															
VSP-D6-20R□-4T		2.5		77.1		45.5	28.5			31					20	0.9 to 3.4	39
VSP-D6-20R□-6T		4															
VSP-D8R□-4T	8	2.5	M8x0.75	39.5	5.5	23.5	13	10	13.9	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D8R□-6T		4															
VSP-D8-10R□-4T		2.5	M12x1	54.6		34	17.5	13	15.9	21	14	12	-	4	10	0.8 to 2.7	32
VSP-D8-10R□-6T		4															
VSP-D8-15R□-4T		2.5		65.6		39	23.5			26					15	0.7 to 3.0	36
VSP-D8-15R□-6T		4															
VSP-D8-20R□-4T		2.5		75.6		44	28.5			31					20	0.9 to 3.4	39
VSP-D8-20R□-6T		4															
VSP-D10R□-4T	10	2.5	M14x1	58.1	8	35	20	16	15.9	18.5	17	12	-	4	6	4.0 to 7.1	46
VSP-D10R□-6T		4															
VSP-D10-10R□-4T		2.5		63.1		40				25					10	2.0 to 5.2	49
VSP-D10-10R□-6T		4															
VSP-D10-15R□-4T		2.5		73.1		45	25			30					15	2.0 to 5.9	54
VSP-D10-15R□-6T		4															
VSP-D10-20R□-4T		2.5		89.1		52	34			37					20	1.1 to 4.8	65
VSP-D10-20R□-6T		4															
VSP-D15R(A)□-4T	15	2.5	M14x1	59.1 (60.1)	9 (10)	36 (37)	20	16	15.9	18.5	17	12	-	4	6	4.0 to 7.1	46
VSP-D15R(A)□-6T		4															
VSP-D15-10R(A)□-4T		2.5		64.1 (65.1)		41 (42)				25					10	2.0 to 5.2	49
VSP-D15-10R(A)□-6T		4															
VSP-D15-15R(A)□-4T		2.5		74.1 (75.1)		46 (47)	25			30					15	2.0 to 5.9	55
VSP-D15-15R(A)□-6T		4															
VSP-D15-20R(A)□-4T		2.5		90.1 (91.1)		53 (54)	34			37					20	1.1 to 4.8	65
VSP-D15-20R(A)□-6T		4															

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D20 to 50R(A)□-4T/6T



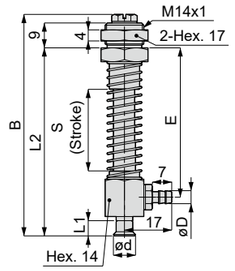
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D20R(A)□-4T	20	2.5	60.1 (61.1)	10 (11)	37 (38)	20	18.5	6	7.0 to 12.6	49 (49)
VSP-D20R(A)□-6T		4								
VSP-D20-10R(A)□-4T		2.5	66.1 (67.1)		43 (44)		24.5	10	3.3 to 10.0	53 (53)
VSP-D20-10R(A)□-6T		4								
VSP-D20-15R(A)□-4T		2.5	76.1 (77.1)		48 (49)	25	29.5	15	3.3 to 10.4	60 (60)
VSP-D20-15R(A)□-6T		4								
VSP-D20-20R(A)□-4T		2.5	92.1 (93.1)		55 (56)	34	36.5	20	2.0 to 8.7	70 (70)
VSP-D20-20R(A)□-6T		4								
VSP-D25R(A)□-4T	25	2.5	61.1 (62.1)	11 (12)	38 (39)	20	18.5	6	7.0 to 12.6	50 (50)
VSP-D25R(A)□-6T		4								
VSP-D25-10R(A)□-4T		2.5	67.1 (68.1)		44 (45)		24.5	10	3.3 to 10.0	54 (54)
VSP-D25-10R(A)□-6T		4								
VSP-D25-15R(A)□-4T		2.5	77.1 (78.1)		49 (50)	25	29.5	15	3.3 to 10.4	60 (60)
VSP-D25-15R(A)□-6T		4								
VSP-D25-20R(A)□-4T		2.5	93.1 (94.1)		56 (57)	34	36.5	20	2.0 to 8.7	70 (70)
VSP-D25-20R(A)□-6T		4								
VSP-D30R(A)□-4T	30	2.5	61.1 (64.1)	11 (14)	38 (41)	20	18.5	6	7.0 to 12.6	52 (52)
VSP-D30R(A)□-6T		4								
VSP-D30-10R(A)□-4T		2.5	67.1 (70.1)		44 (47)		24.5	10	3.3 to 10.0	54 (54)
VSP-D30-10R(A)□-6T		4								
VSP-D30-15R(A)□-4T		2.5	77.1 (80.1)		49 (52)	25	29.5	15	3.3 to 10.4	61 (61)
VSP-D30-15R(A)□-6T		4								
VSP-D30-20R(A)□-4T		2.5	93.1 (96.1)		56 (59)	34	36.5	20	2.0 to 8.7	71 (71)
VSP-D30-20R(A)□-6T		4								
VSP-D40R(A)□-4T	40	2.5	64.1 (67.6)	14 (17.5)	41 (44.5)	20	18.5	6	7.0 to 12.6	59 (60)
VSP-D40R(A)□-6T		4								
VSP-D40-10R(A)□-4T		2.5	70.1 (73.6)		47 (50.5)		24.5	10	3.3 to 10.0	63 (64)
VSP-D40-10R(A)□-6T		4								
VSP-D40-15R(A)□-4T		2.5	80.1 (83.6)		52 (55.5)	25	29.5	15	3.3 to 10.4	69 (70)
VSP-D40-15R(A)□-6T		4								
VSP-D40-20R(A)□-4T		2.5	96.1 (99.6)		59 (62.5)	34	36.5	20	2.0 to 8.7	79 (80)
VSP-D40-20R(A)□-6T		4								
VSP-D50R(A)□-4T	50	2.5	65.1 (68.1)	15 (18)	42 (45)	20	18.5	6	7.0 to 12.6	65 (66)
VSP-D50R(A)□-6T		4								
VSP-D50-10R(A)□-4T		2.5	71.1 (74.1)		48 (51)		24.5	10	3.3 to 10.0	69 (70)
VSP-D50-10R(A)□-6T		4								
VSP-D50-15R(A)□-4T		2.5	81.1 (84.1)		53 (56)	25	29.5	15	3.3 to 10.4	75 (77)
VSP-D50-15R(A)□-6T		4								
VSP-D50-20R(A)□-4T		2.5	97.1 (100.1)		60 (63)	34	36.5	20	2.0 to 8.7	85 (87)
VSP-D50-20R(A)□-6T		4								

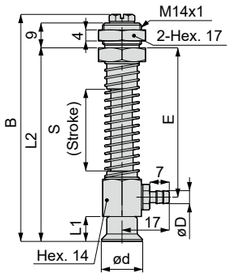
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D6, 8-□R□-4TC/6TC



●VSP-D10-□R□-4TC/6TC
●VSP-D15-□R(A)□-4TC/6TC



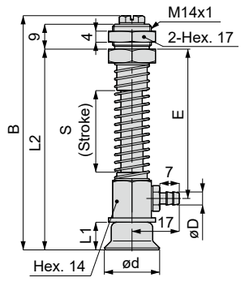
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20R□-4TC	6	2.5	67.1	7	55	40.5	20	1.5 to 4.9	60
VSP-D6-20R□-6TC		4							
VSP-D6-30R□-4TC		2.5	80.1		68	53.5	30	1.1 to 4.8	67
VSP-D6-30R□-6TC		4							
VSP-D6-40R□-4TC		2.5	93.1		81	66.5	40	1.0 to 4.5	74
VSP-D6-40R□-6TC		4							
VSP-D6-50R□-4TC		2.5	106.1		94	79.5	50	0.9 to 4.5	80
VSP-D6-50R□-6TC		4							
VSP-D8-20R□-4TC	8	2.5	65.6	5.5	53.5	40.5	20	1.5 to 4.9	60
VSP-D8-20R□-6TC		4							
VSP-D8-30R□-4TC		2.5	78.6		56.5	53.5	30	1.1 to 4.8	67
VSP-D8-30R□-6TC		4							
VSP-D8-40R□-4TC		2.5	91.6		69.5	66.5	40	1.0 to 4.5	74
VSP-D8-40R□-6TC		4							
VSP-D8-50R□-4TC		2.5	104.6		82.5	79.5	50	0.9 to 4.5	80
VSP-D8-50R□-6TC		4							
VSP-D10-20R□-4TC	10	2.5	68.1	8	56	40.5	20	1.5 to 4.9	60
VSP-D10-20R□-6TC		4							
VSP-D10-30R□-4TC		2.5	81.1		69	53.5	30	1.1 to 4.8	67
VSP-D10-30R□-6TC		4							
VSP-D10-40R□-4TC		2.5	94.1		82	66.5	40	1.0 to 4.5	74
VSP-D10-40R□-6TC		4							
VSP-D10-50R□-4TC		2.5	107.1		95	79.5	50	0.9 to 4.5	80
VSP-D10-50R□-6TC		4							
VSP-D15-20R(A)□-4TC	15	2.5	69.1 (70.1)	9 (10)	57 (58)	40.5	20	1.5 to 4.9	60 (61)
VSP-D15-20R(A)□-6TC		4							
VSP-D15-30R(A)□-4TC		2.5	82.1 (83.1)		70 (71)	53.5	30	1.1 to 4.8	67 (68)
VSP-D15-30R(A)□-6TC		4							
VSP-D15-40R(A)□-4TC		2.5	95.1 (96.1)		83 (84)	66.5	40	1.0 to 4.5	74 (75)
VSP-D15-40R(A)□-6TC		4							
VSP-D15-50R(A)□-4TC		2.5	108.1 (109.1)		106 (107)	79.5	50	0.9 to 4.5	80 (81)
VSP-D15-50R(A)□-6TC		4							

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D20 to 50-□R(A)□-4TC/6TC



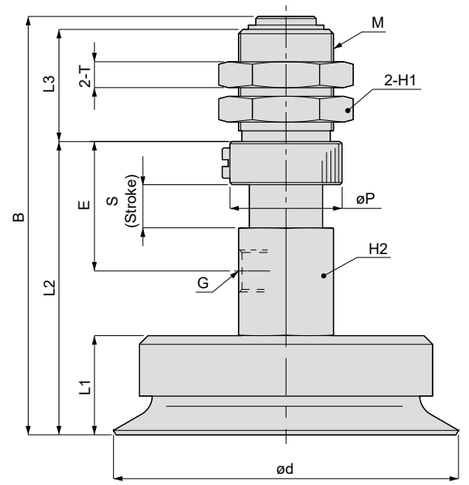
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D20-20R(A)□-4TC	20	4	71.6 (72.6)	10 (11)	59.5 (60.5)	41	20	1.5 to 4.9	68 (69)
VSP-D20-20R(A)□-6TC		6							
VSP-D20-30R(A)□-4TC		4	84.6 (85.6)		72.5 (73.5)	54	30	1.1 to 4.8	75 (76)
VSP-D20-30R(A)□-6TC		6							
VSP-D20-40R(A)□-4TC		4	97.6 (98.6)		85.5 (86.5)	67	40	1.0 to 4.5	81 (82)
VSP-D20-40R(A)□-6TC		6							
VSP-D20-50R(A)□-4TC		4	110.6 (111.6)		98.5 (99.5)	80	50	0.9 to 4.5	88 (89)
VSP-D20-50R(A)□-6TC		6							
VSP-D25-20R(A)□-4TC	25	4	72.6 (73.6)	11 (12)	60.5 (61.5)	41	20	1.5 to 4.9	68 (69)
VSP-D25-20R(A)□-6TC		6							
VSP-D25-30R(A)□-4TC		4	85.6 (86.6)		73.5 (74.5)	54	30	1.1 to 4.8	75 (76)
VSP-D25-30R(A)□-6TC		6							
VSP-D25-40R(A)□-4TC		4	98.6 (99.6)		86.5 (87.5)	67	40	1.0 to 4.5	82 (83)
VSP-D25-40R(A)□-6TC		6							
VSP-D25-50R(A)□-4TC		4	111.6 (112.6)		99.5 (100.5)	80	50	0.9 to 4.5	89 (90)
VSP-D25-50R(A)□-6TC		6							
VSP-D30-20R(A)□-4TC	30	4	72.6 (75.6)	11 (14)	60.5 (63.5)	41	20	1.5 to 4.9	69 (70)
VSP-D30-20R(A)□-6TC		6							
VSP-D30-30R(A)□-4TC		4	85.6 (88.6)		73.5 (76.5)	54	30	1.1 to 4.8	76 (77)
VSP-D30-30R(A)□-6TC		6							
VSP-D30-40R(A)□-4TC		4	98.6 (101.6)		86.5 (89.5)	67	40	1.0 to 4.5	82 (83)
VSP-D30-40R(A)□-6TC		6							
VSP-D30-50R(A)□-4TC		4	111.6 (114.6)		99.5 (102.5)	80	50	0.9 to 4.5	89 (90)
VSP-D30-50R(A)□-6TC		6							
VSP-D40-20R(A)□-4TC	40	4	75.6 (79.1)	14 (17.5)	63.5 (67)	41	20	1.5 to 4.9	77 (78)
VSP-D40-20R(A)□-6TC		6							
VSP-D40-30R(A)□-4TC		4	88.6 (92.1)		76.5 (80)	54	30	1.1 to 4.8	84 (85)
VSP-D40-30R(A)□-6TC		6							
VSP-D40-40R(A)□-4TC		4	101.6 (105.1)		89.5 (93)	67	40	1.0 to 4.5	91 (92)
VSP-D40-40R(A)□-6TC		6							
VSP-D40-50R(A)□-4TC		4	114.6 (118.1)		102.5 (106)	80	50	0.9 to 4.5	98 (99)
VSP-D40-50R(A)□-6TC		6							
VSP-D50-20R(A)□-4TC	50	4	76.6 (79.6)	15 (18)	64.5 (67.5)	41	20	1.5 to 4.9	83 (85)
VSP-D50-20R(A)□-6TC		6							
VSP-D50-30R(A)□-4TC		4	89.6 (92.6)		77.5 (80.5)	54	30	1.1 to 4.8	90 (92)
VSP-D50-30R(A)□-6TC		6							
VSP-D50-40R(A)□-4TC		4	102.6 (105.6)		90.5 (93.5)	67	40	1.0 to 4.5	97 (98)
VSP-D50-40R(A)□-6TC		6							
VSP-D50-50R(A)□-4TC		4	115.6 (118.6)		103.5 (106.5)	80	50	0.9 to 4.5	104 (105)
VSP-D50-50R(A)□-6TC		6							

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Female Thread)

●VSP-D60 to 100R(A)□-6A
●VSP-D150, 200R□-8A



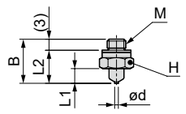
Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	Mounting screw M	B	L1	L2	L3	øP	E	Width Across Flats H1	Width Across Flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D60R(A)□-6A	60	G1/8	M22x1	94.6 (101.6)	18 (25)	65.6 (72.6)	26	26	30	27	22	6	10	10.1 to 15.8	244 (243)
VSP-D80R(A)□-6A	80	G1/8	M22x1	97 (107)	23 (33)	68 (78)	26	26	30	27	22	6	10	10.1 to 15.8	328 (336)
VSP-D100R(A)□-6A	100	G1/8	M22x1	99 (108)	25 (34)	70 (79)	26	26	30	27	22	6	10	10.1 to 15.8	417 (423)
VSP-D150R□-8A	150	G1/4	M30x2	168.3	45	112.1	48	35	42.1	36	30	10	20.1	14.0 to 25.5	1,196
VSP-D200R□-8A	200	G1/4	M30x2	173.3	50	117.1	48	35	42.1	36	30	10	20.1	14.0 to 25.5	1,675

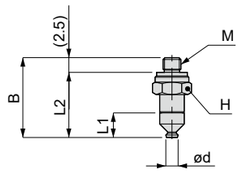
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Fixed Type, Direct Mount, VSP-E, Male Thread)

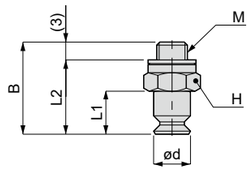
●VSP-E0.7 to 4RM□



●VSP-E1 to 4R□



●VSP-E6, 8R□

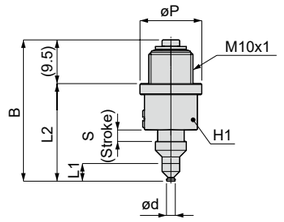


Unit: mm

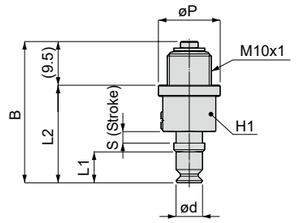
Model No.	Pad Diameter ød	M	B	L1	L2	Width Across Flats H	Weight (g)
VSP-E0.7RM□	0.7	M5x0.8	12	4	9	8	1
VSP-E1RM□	1	M5x0.8	12	4	9	8	1
VSP-E1.5RM□	1.5	M5x0.8	12	4	9	8	1
VSP-E2RM□	2	M5x0.8	12	4	9	8	1
VSP-E3RM□	3	M5x0.8	12	4	9	8	1
VSP-E4RM□	4	M5x0.8	12	4	9	8	1
VSP-E1R□	1	M3x0.5	13	4	10.5	5.5	1.5
VSP-E2R□	2	M3x0.5	13	4	10.5	5.5	1.5
VSP-E3R□	3	M3x0.5	13	4	10.5	5.5	1.5
VSP-E4R□	4	M3x0.5	13	4	10.5	5.5	1.5
VSP-E6R□	6	M5x0.8	15	7	12	8	3
VSP-E8R□	8	M5x0.8	13.5	5.5	10.5	8	3

Outline Dimension Drawing (Buffer Type, Direct Mount, VSP-F, Male Thread)

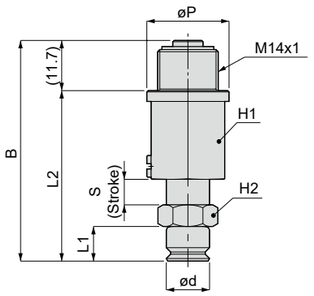
●VSP-F1 to 4R□



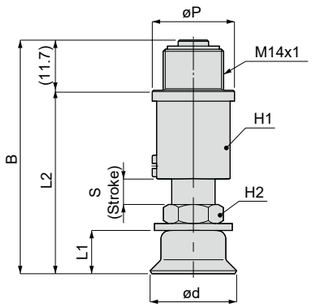
●VSP-F6, 8R□



●VSP-F10R□



●VSP-F15 to 50R(A)□



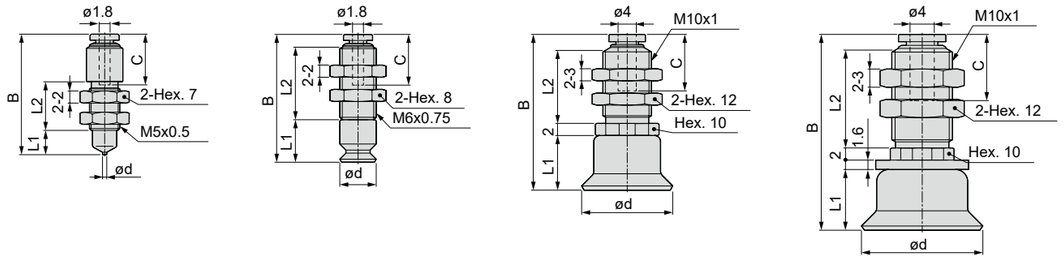
Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	øP	Stroke S	Width Across Flats H1	Width Across Flats H2	Spring Force (N)	Weight (g)
VSP-F1R□	1	32	4	22.5	14	3	12	-	2.3 to 3.9	15
VSP-F2R□	2	32	4	22.5	14	3	12	-	2.3 to 3.9	15
VSP-F3R□	3	32	4	22.5	14	3	12	-	2.3 to 3.9	15
VSP-F4R□	4	32	4	22.5	14	3	12	-	2.3 to 3.9	15
VSP-F6R□	6	32	7	22.5	14	3	12	-	2.3 to 3.9	15
VSP-F8R□	8	30.5	5.5	21	14	3	12	-	2.3 to 3.9	15
VSP-F10R□	10	51	8	39.3	19	5.8	17	12	7.9 to 15	56 (56)
VSP-F15R(A)□	15	52 (53)	9 (10)	40.3 (41.3)	19	5.8	17	12	7.9 to 15	56 (56)
VSP-F20R(A)□	20	54 (55)	10 (11)	42.3 (43.3)	19	5.8	17	12	7.9 to 15	59 (59)
VSP-F25R(A)□	25	55 (56)	11 (12)	43.3 (44.3)	19	5.8	17	12	7.9 to 15	59 (59)
VSP-F30R(A)□	30	55 (58)	11 (14)	43.3 (46.3)	19	5.8	17	12	7.9 to 15	61 (61)
VSP-F40R(A)□	40	58 (61.5)	14 (17.5)	46.3 (49.8)	19	5.8	17	12	7.9 to 15	68 (69)
VSP-F50R(A)□	50	59 (62)	15 (18)	47.3 (50.3)	19	5.8	17	12	7.9 to 15	74 (76)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA0.7 to 4RM□-2 ●VSP-MA6, 8R□-2 ●VSP-MA10R□-4 ●VSP-MA15R(A)□-4 ●VSP-MA20 to 50R(A)□-4



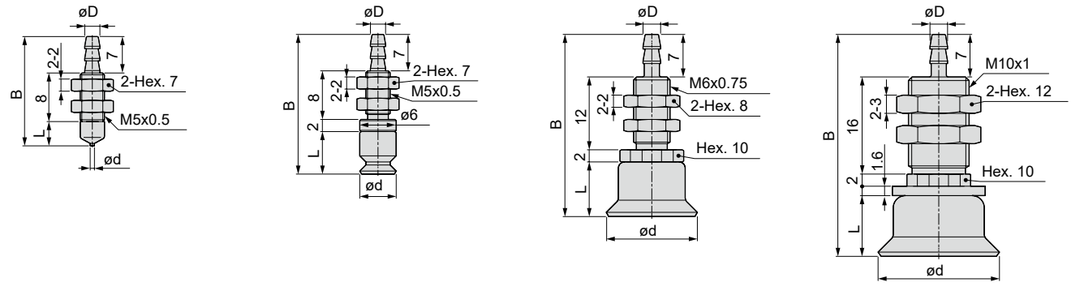
Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	Tube End C	Weight (g)
VSP-MA0.7RM□-2	0.7	19.9	4	8	8.4	1.8
VSP-MA1RM□-2	1	19.9	4	8	8.4	1.8
VSP-MA1.5RM□-2	1.5	19.9	4	8	8.4	1.8
VSP-MA2RM□-2	2	19.9	4	8	8.4	1.8
VSP-MA3RM□-2	3	19.9	4	8	8.4	1.8
VSP-MA4RM□-2	4	19.9	4	8	8.4	1.8
VSP-MA6R□-2	6	21.1	7	12	8.4	2
VSP-MA8R□-2	8	19.6	5.5	12	8.4	2
VSP-MA10R□-4	10	29	8	16.4	11.2	6.4
VSP-MA15R(A)□-4	15	30 (31)	9 (10)	16.4	11.2	6.7 (6.8)
VSP-MA20R(A)□-4	20	32.6 (33.6)	10 (11)	16.4	11.2	12 (12)
VSP-MA25R(A)□-4	25	33.6 (34.6)	11 (12)	16.4	11.2	13 (13)
VSP-MA30R(A)□-4	30	33.6 (36.6)	11 (14)	16.4	11.2	15 (15)
VSP-MA40R(A)□-4	40	36.6 (40.1)	14 (17.5)	16.4	11.2	22 (23)
VSP-MA50R(A)□-4	50	37.6 (40.6)	15 (18)	16.4	11.2	28 (30)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA0.7 to 4RM□-4T ●VSP-MA6, 8R□-4T ●VSP-MA10R□-4T ●VSP-MA15R(A)□-4T ●VSP-MA20 to 50R(A)□-4T/6T



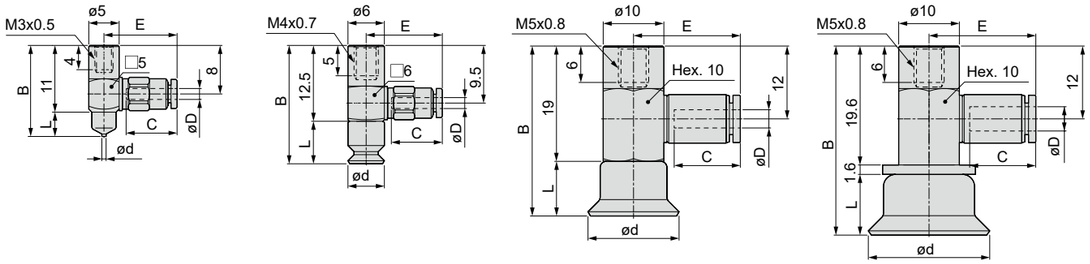
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MA0.7RM□-4T	0.7	2.5	19	4	1.3
VSP-MA1RM□-4T	1	2.5	19	4	1.3
VSP-MA1.5RM□-4T	1.5	2.5	19	4	1.3
VSP-MA2RM□-4T	2	2.5	19	4	1.3
VSP-MA3RM□-4T	3	2.5	19	4	1.3
VSP-MA4RM□-4T	4	2.5	19	4	1.3
VSP-MA6R□-4T	6	2.5	24	7	1.6
VSP-MA8R□-4T	8	2.5	22.5	5.5	1.6
VSP-MA10R□-4T	10	2.5	29	8	3.6
VSP-MA15R(A)□-4T	15	2.5	30 (31)	9 (10)	3.9 (4)
VSP-MA20R(A)□-4T	20	2.5	36.6 (37.6)	10 (11)	12 (12)
VSP-MA20R(A)□-6T		4			
VSP-MA25R(A)□-4T	25	2.5	37.6 (38.6)	11 (12)	13 (13)
VSP-MA25R(A)□-6T		4			
VSP-MA30R(A)□-4T	30	2.5	37.6 (40.6)	11 (14)	15 (15)
VSP-MA30R(A)□-6T		4			
VSP-MA40R(A)□-4T	40	2.5	40.6 (44.1)	14 (17.5)	22 (23)
VSP-MA40R(A)□-6T		4			
VSP-MA50R(A)□-4T	50	2.5	41.6 (44.6)	15 (18)	28 (30)
VSP-MA50R(A)□-6T		4			

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB0.7 to 4RM□-2/4 ●VSP-MB6, 8R□-2/4 ●VSP-MB10R□-2/4/6 ●VSP-MB15R(A)□-2/4/6 ●VSP-MB20 to 50R(A)□-2/4/6



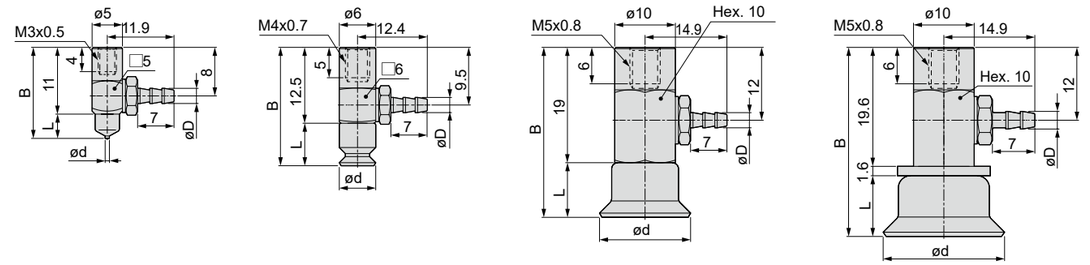
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB0.7RM□-2	0.7	1.8	15	4	8.4	12	1.5
VSP-MB0.7RM□-4		4			11.2	15.3	2.9
VSP-MB1RM□-2	1	1.8	15	4	8.4	12	1.5
VSP-MB1RM□-4		4			11.2	15.3	2.9
VSP-MB1.5RM□-2	1.5	1.8	15	4	8.4	12	1.5
VSP-MB1.5RM□-4		4			11.2	15.3	2.9
VSP-MB2RM□-2	2	1.8	15	4	8.4	12	1.5
VSP-MB2RM□-4		4			11.2	15.3	2.9
VSP-MB3RM□-2	3	1.8	15	4	8.4	12	1.5
VSP-MB3RM□-4		4			11.2	15.3	2.9
VSP-MB4RM□-2	4	1.8	15	4	8.4	12	1.5
VSP-MB4RM□-4		4			11.2	15.3	2.9
VSP-MB6R□-2	6	1.8	19.5	7	8.4	12.5	2
VSP-MB6R□-4		4			11.2	15.8	3.4
VSP-MB8R□-2	8	1.8	18	5.5	8.4	12.5	2
VSP-MB8R□-4		4			11.2	15.8	3.4
VSP-MB10R□-2	10	1.8	27	8	8.4	13.7	7.4
VSP-MB10R□-4		4			11.2	17.8	8.1
VSP-MB10R□-6		6			11.9	19.6	9.5
VSP-MB15R(A)□-2	15	1.8	28 (29)	9 (10)	8.4	13.7	7.8 (7.8)
VSP-MB15R(A)□-4		4			11.2	17.8	8.5 (8.5)
VSP-MB15R(A)□-6		6			11.9	19.6	9.9 (9.9)
VSP-MB20R(A)□-2	20	1.8	31.2 (32.2)	10 (11)	8.4	13.7	12 (12)
VSP-MB20R(A)□-4		4			11.2	17.8	13 (13)
VSP-MB20R(A)□-6		6			11.9	19.6	14 (14)
VSP-MB25R(A)□-2	25	1.8	32.2 (33.2)	11 (12)	8.4	13.7	13 (13)
VSP-MB25R(A)□-4		4			11.2	17.8	14 (14)
VSP-MB25R(A)□-6		6			11.9	19.6	15 (15)
VSP-MB30R(A)□-2	30	1.8	32.2 (35.2)	11 (14)	8.4	13.7	15 (15)
VSP-MB30R(A)□-4		4			11.2	17.8	16 (16)
VSP-MB30R(A)□-6		6			11.9	19.6	17 (17)
VSP-MB40R(A)□-2	40	1.8	35.2 (38.7)	14 (17.5)	8.4	13.7	22 (22)
VSP-MB40R(A)□-4		4			11.2	17.8	23 (23)
VSP-MB40R(A)□-6		6			11.9	19.6	24 (24)
VSP-MB50R(A)□-2	50	1.8	36.2 (39.2)	15 (18)	8.4	13.7	28 (28)
VSP-MB50R(A)□-4		4			11.2	17.8	29 (29)
VSP-MB50R(A)□-6		6			11.9	19.6	30 (30)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB0.7 to 4RM□-4T/6T ●VSP-MB6, 8R□-4T/6T ●VSP-MB10R□-4T/6T ●VSP-MB15R(A)□-4T/6T ●VSP-MB20 to 50R(A)□-4T/6T



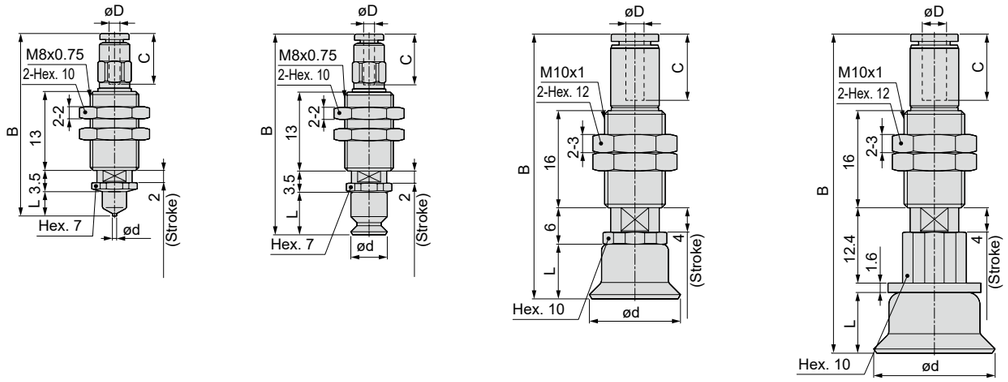
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Weight (g)
VSP-MB0.7RM□-4T	0.7	1.8	15	4	1.7
VSP-MB0.7RM□-6T		4			
VSP-MB1RM□-4T	1	1.8	15	4	1.7
VSP-MB1RM□-6T		4			
VSP-MB1.5RM□-4T	1.5	1.8	15	4	1.7
VSP-MB1.5RM□-6T		4			
VSP-MB2RM□-4T	2	1.8	15	4	1.7
VSP-MB2RM□-6T		4			
VSP-MB3RM□-4T	3	1.8	15	4	1.7
VSP-MB3RM□-6T		4			
VSP-MB4RM□-4T	4	1.8	15	4	1.7
VSP-MB4RM□-6T		4			
VSP-MB6R□-4T	6	1.8	19.5	7	2.1
VSP-MB6R□-6T		4			
VSP-MB8R□-4T	8	1.8	18	5.5	2.1
VSP-MB8R□-6T		4			
VSP-MB10R□-4T	10	6.2	27	8	6.9
VSP-MB10R□-6T		8.4			
VSP-MB15R(A)□-4T	15	10.6	28 (29)	9 (10)	7.4 (7.4)
VSP-MB15R(A)□-6T		12.8			
VSP-MB20R(A)□-4T	20	15	31.2 (32.2)	10 (11)	12 (12)
VSP-MB20R(A)□-6T		17.2			
VSP-MB25R(A)□-4T	25	19.4	32.2 (33.2)	11 (12)	13 (13)
VSP-MB25R(A)□-6T		21.6			
VSP-MB30R(A)□-4T	30	23.8	32.2 (35.2)	11 (14)	15 (15)
VSP-MB30R(A)□-6T		26			
VSP-MB40R(A)□-4T	40	28.2	35.2 (38.7)	14 (17.5)	23 (23)
VSP-MB40R(A)□-6T		30.4			
VSP-MB50R(A)□-4T	50	32.6	36.2 (39.2)	15 (18)	30 (30)
VSP-MB50R(A)□-6T		34.8			

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in Fitting)

●VSP-MC0.7 to 4RM□-2 ●VSP-MC6, 8R□-2 ●VSP-MC10R□-2/4 ●VSP-MC20 to 50R(A)□-2/4
●VSP-MC15R(A)□-2/4



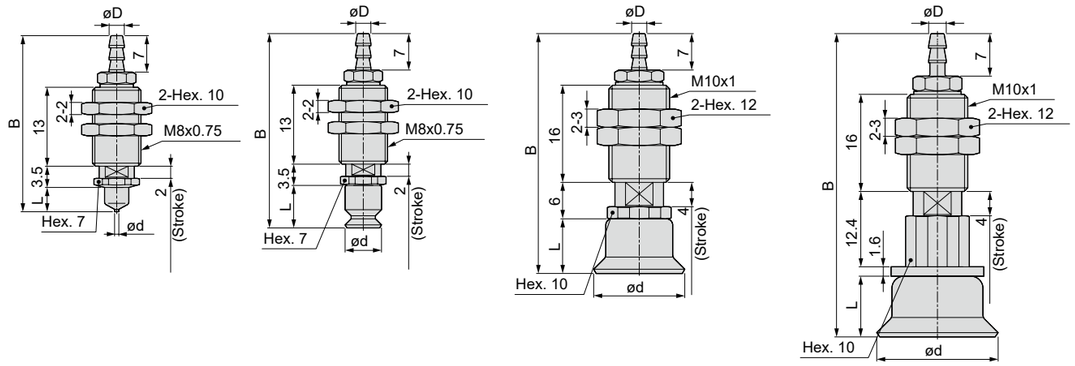
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC0.7RM□-2	0.7	1.8	30.2	4	8.4	0.2 to 0.3	6.5
VSP-MC1RM□-2	1	1.8	30.2	4	8.4	0.2 to 0.3	6.5
VSP-MC1.5RM□-2	1.5	1.8	30.2	4	8.4	0.2 to 0.3	6.5
VSP-MC2RM□-2	2	1.8	30.2	4	8.4	0.2 to 0.3	6.5
VSP-MC3RM□-2	3	1.8	30.2	4	8.4	0.2 to 0.3	6.5
VSP-MC4RM□-2	4	1.8	30.2	4	8.4	0.2 to 0.3	6.5
VSP-MC6R□-2	6	1.8	33.2	7	8.4	0.2 to 0.3	6.8
VSP-MC8R□-2	8	1.8	31.7	5.5	8.4	0.2 to 0.3	6.8
VSP-MC10R□-2	10	1.8	38.9	8	8.4	0.5 to 0.6	15
VSP-MC10R□-4		4	43		11.2		16
VSP-MC15R(A)□-2	15	1.8	39.9 (49.9)	9 (10)	8.4	0.5 to 0.6	15 (15)
VSP-MC15R(A)□-4		4	44 (45)		11.2		16 (16)
VSP-MC20R(A)□-2	20	1.8	48.9 (49.9)	10 (11)	8.4	1 to 1.3	23 (23)
VSP-MC20R(A)□-4		4	53 (54)		11.2		24 (24)
VSP-MC25R(A)□-2	25	1.8	49.9 (50.9)	11 (12)	8.4	1 to 1.3	24 (24)
VSP-MC25R(A)□-4		4	54 (55)		11.2		25 (25)
VSP-MC30R(A)□-2	30	1.8	49.9 (52.9)	11 (14)	8.4	1 to 1.3	26 (26)
VSP-MC30R(A)□-4		4	54 (57)		11.2		27 (27)
VSP-MC40R(A)□-2	40	1.8	52.9 (56.4)	14 (17.5)	8.4	1 to 1.3	33 (33)
VSP-MC40R(A)□-4		4	57 (60.5)		11.2		34 (34)
VSP-MC50R(A)□-2	50	1.8	53.9 (56.9)	15 (18)	8.4	1 to 1.3	39 (39)
VSP-MC50R(A)□-4		4	58 (61)		11.2		40 (40)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC0.7 to 4RM□-4T/6T ●VSP-MC6, 8R□-4T/6T ●VSP-MC10R□-4T/6T ●VSP-MC20 to 50R(A)□-4T/6T
●VSP-MC15R(A)□-4T/6T



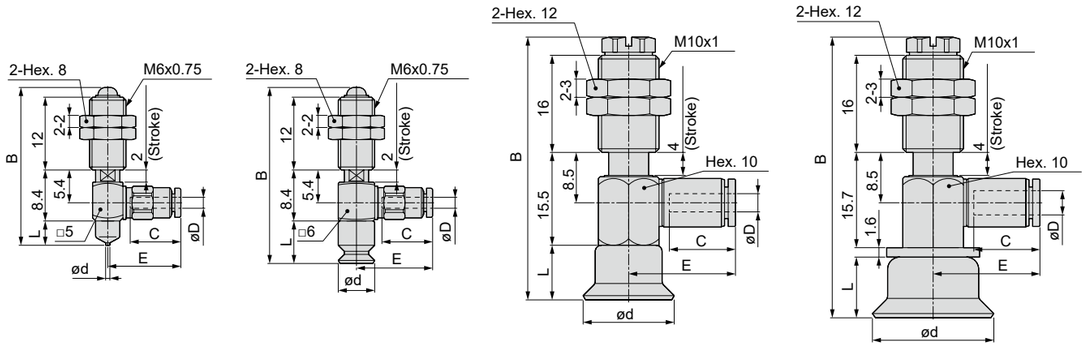
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC0.7RM□-4T	0.7	2.5	30.1	4	0.2 to 0.3	6.6
VSP-MC0.7RM□-6T		4				
VSP-MC1RM□-4T	1	2.5	30.1	4	0.2 to 0.3	6.7
VSP-MC1RM□-6T		4				
VSP-MC1.5RM□-4T	1.5	2.5	30.1	4	0.2 to 0.3	6.7
VSP-MC1.5RM□-6T		4				
VSP-MC2RM□-4T	2	2.5	30.1	4	0.2 to 0.3	6.7
VSP-MC2RM□-6T		4				
VSP-MC3RM□-4T	3	2.5	30.1	4	0.2 to 0.3	6.6
VSP-MC3RM□-6T		4				
VSP-MC4RM□-4T	4	2.5	30.1	4	0.2 to 0.3	6.7
VSP-MC4RM□-6T		4				
VSP-MC6R□-4T	6	2.5	33.1	7	0.2 to 0.3	6.9
VSP-MC6R□-6T		4				
VSP-MC8R□-4T	8	2.5	31.6	5.5	0.2 to 0.3	6.9
VSP-MC8R□-6T		4				
VSP-MC10R□-4T	10	2.5	40.1	8	0.5 to 0.6	14
VSP-MC10R□-6T		4				
VSP-MC15R(A)□-4T	15	2.5	41.1 (42.1)	9 (10)	0.5 to 0.6	15 (15)
VSP-MC15R(A)□-6T		4				
VSP-MC20R(A)□-4T	20	2.5	50.1 (51.1)	10 (11)	1 to 1.3	23 (23)
VSP-MC20R(A)□-6T		4				
VSP-MC25R(A)□-4T	25	2.5	51.1 (52.1)	11 (12)	1 to 1.3	24 (24)
VSP-MC25R(A)□-6T		4				
VSP-MC30R(A)□-4T	30	2.5	51.1 (54.1)	11 (14)	1 to 1.3	25 (25)
VSP-MC30R(A)□-6T		4				
VSP-MC40R(A)□-4T	40	2.5	54.1 (57.6)	14 (17.5)	1 to 1.3	33 (33)
VSP-MC40R(A)□-6T		4				
VSP-MC50R(A)□-4T	50	2.5	55.1 (58.1)	15 (18)	1 to 1.3	40 (40)
VSP-MC50R(A)□-6T		4				

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in Fitting)

●VSP-MD0.7 to 4RM□2/4 ●VSP-MD6, 8R□2/4 ●VSP-MD10R□-2/4/6 ●VSP-MD20 to 50R(A)□-2/4/6
●VSP-MD15R(A)□-2/4/6



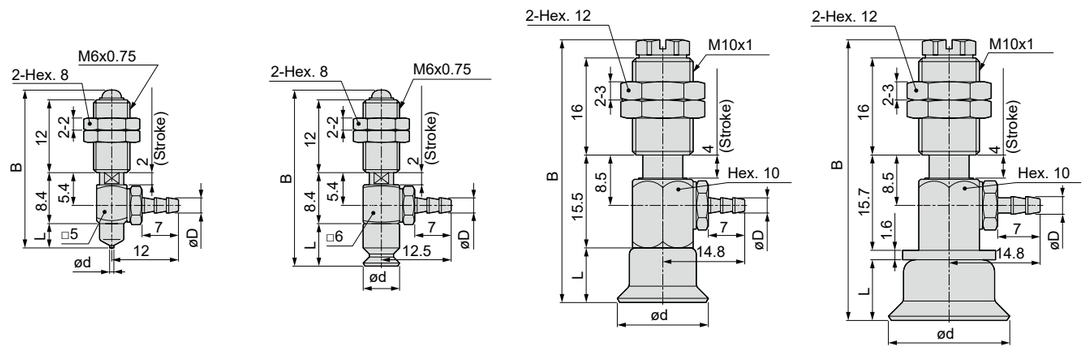
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD0.7RM□-2	0.7	1.8	26	4	8.4	12.1	0.2 to 0.3	5.3
VSP-MD0.7RM□-4		4			11.2	15.4		6.7
VSP-MD1RM□-2	1	1.8	26	4	8.4	12.1	0.2 to 0.3	5.3
VSP-MD1RM□-4		4			11.2	15.4		6.7
VSP-MD1.5RM□-2	1.5	1.8	26	4	8.4	12.1	0.2 to 0.3	5.3
VSP-MD1.5RM□-4		4			11.2	15.4		6.7
VSP-MD2RM□-2	2	1.8	26	4	8.4	12.1	0.2 to 0.3	5.3
VSP-MD2RM□-4		4			11.2	15.4		6.7
VSP-MD3RM□-2	3	1.8	26	4	8.4	12.1	0.2 to 0.3	5.3
VSP-MD3RM□-4		4			11.2	15.4		6.7
VSP-MD4RM□-2	4	1.8	26	4	8.4	12.1	0.2 to 0.3	5.3
VSP-MD4RM□-4		4			11.2	15.4		6.7
VSP-MD6R□-2	6	1.8	29	7	8.4	12.6	0.5 to 0.6	6.1
VSP-MD6R□-4		4			11.2	15.9		7.5
VSP-MD8R□-2	8	1.8	27.5	5.5	8.4	12.6	0.5 to 0.6	6.1
VSP-MD8R□-4		4			11.2	15.9		7.5
VSP-MD10R□-2	10	1.8	42.5	8	8.4	13.6	1 to 1.3	22
VSP-MD10R□-4		4			11.2	17.7		23
VSP-MD10R□-6		6			11.9	19.5		25
VSP-MD15R(A)□-2	15	1.8	43.5 (44.5)	9 (10)	8.4	13.6	1 to 1.3	23 (23)
VSP-MD15R(A)□-4		4			11.2	17.7		24 (24)
VSP-MD15R(A)□-6		6			11.9	19.5		26 (26)
VSP-MD20R(A)□-2	20	1.8	46.3 (47.3)	10 (11)	8.4	13.6	1 to 1.3	27 (27)
VSP-MD20R(A)□-4		4			11.2	17.7		28 (28)
VSP-MD20R(A)□-6		6			11.9	19.5		30 (30)
VSP-MD25R(A)□-2	25	1.8	47.3 (48.3)	11 (12)	8.4	13.6	1 to 1.3	27 (27)
VSP-MD25R(A)□-4		4			11.2	17.7		28 (28)
VSP-MD25R(A)□-6		6			11.9	19.5		30 (30)
VSP-MD30R(A)□-2	30	1.8	47.3 (50.3)	11 (14)	8.4	13.6	1 to 1.3	29 (29)
VSP-MD30R(A)□-4		4			11.2	17.7		30 (30)
VSP-MD30R(A)□-6		6			11.9	19.5		32 (32)
VSP-MD40R(A)□-2	40	1.8	50.3 (53.8)	14 (17.5)	8.4	13.6	1 to 1.3	36 (36)
VSP-MD40R(A)□-4		4			11.2	17.7		37 (37)
VSP-MD40R(A)□-6		6			11.9	19.5		39 (39)
VSP-MD50R(A)□-2	50	1.8	51.3 (54.3)	15 (18)	8.4	13.6	1 to 1.3	42 (42)
VSP-MD50R(A)□-4		4			11.2	17.7		43 (43)
VSP-MD50R(A)□-6		6			11.9	19.5		45 (45)

*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD0.7 to 4RM□-4T/6T ●VSP-MD6, 8R□-4T/6T ●VSP-MD10R□-4T/6T ●VSP-MD20 to 50R(A)□-4T/6T
●VSP-MD15R(A)□-4T/6T



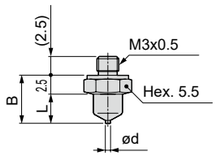
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD0.7RM□-4T	0.7	2.5	26	4	0.2 to 0.3	5.5
VSP-MD0.7RM□-6T		4				
VSP-MD1RM□-4T	1	2.5	26	4	0.2 to 0.3	5.5
VSP-MD1RM□-6T		4				
VSP-MD1.5RM□-4T	1.5	2.5	26	4	0.2 to 0.3	5.5
VSP-MD1.5RM□-6T		4				
VSP-MD2RM□-4T	2	2.5	26	4	0.2 to 0.3	5.5
VSP-MD2RM□-6T		4				
VSP-MD3RM□-4T	3	2.5	26	4	0.2 to 0.3	5.5
VSP-MD3RM□-6T		4				
VSP-MD4RM□-4T	4	2.5	26	4	0.2 to 0.3	5.5
VSP-MD4RM□-6T		4				
VSP-MD6R□-4T	6	2.5	29	7	0.5 to 0.6	6.2
VSP-MD6R□-6T		4				
VSP-MD8R□-4T	8	2.5	27.5	5.5	0.5 to 0.6	6.2
VSP-MD8R□-6T		4				
VSP-MD10R□-4T	10	2.5	42.5	8	1 to 1.3	22
VSP-MD10R□-6T		4				
VSP-MD15R(A)□-4T	15	2.5	43.5 (44.5)	9 (10)	1 to 1.3	22 (22)
VSP-MD15R(A)□-6T		4				
VSP-MD20R(A)□-4T	20	2.5	46.3 (47.3)	10 (11)	1 to 1.3	26 (26)
VSP-MD20R(A)□-6T		4				
VSP-MD25R(A)□-4T	25	2.5	47.3 (48.3)	11 (12)	1 to 1.3	27 (27)
VSP-MD25R(A)□-6T		4				
VSP-MD30R(A)□-4T	30	2.5	47.3 (50.3)	11 (14)	1 to 1.3	29 (29)
VSP-MD30R(A)□-6T		4				
VSP-MD40R(A)□-4T	40	2.5	50.3 (53.8)	14 (17.5)	1 to 1.3	37 (37)
VSP-MD40R(A)□-6T		4				
VSP-MD50R(A)□-4T	50	2.5	51.3 (54.3)	15 (18)	1 to 1.3	44 (44)
VSP-MD50R(A)□-6T		4				

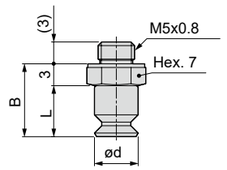
*Dimensions in ( ) are for deep type pads.

Outline Dimension Drawing (Compact Fixed Type, Direct Mount, VSP-ME, Male Thread)

●VSP-ME0.7 to 4RM□-M3



●VSP-ME6, 8R□-M5

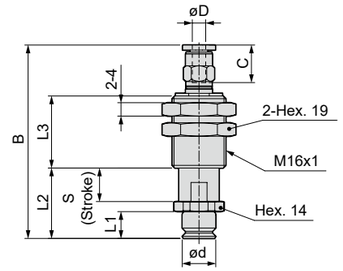


Unit: mm

Model No.	Pad Diameter ød	B	L	Weight (g)
VSP-ME0.7RM□-M3	0.7	6.5	4	0.6
VSP-ME1RM□-M3	1	6.5	4	0.6
VSP-ME1.5RM□-M3	1.5	6.5	4	0.6
VSP-ME2RM□-M3	2	6.5	4	0.6
VSP-ME3RM□-M3	3	6.5	4	0.6
VSP-ME4RM□-M3	4	6.5	4	0.6
VSP-ME6R□-M5	6	10	7	1.6
VSP-ME8R□-M5	8	8.5	5.5	1.6

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10-□R□-2/4/6
●VSP-HC15-□R(A)□-2/4/6



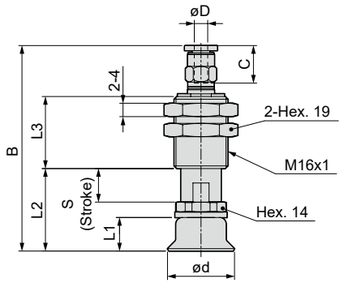
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10R□-2	10	1.8	53.6	8	21	21.5	8.4	10	1.0 to 2.4	22
VSP-HC10-10R□-4		4	57.7				11.2			23
VSP-HC10-10R□-6		6	59				11.9			24
VSP-HC10-15R□-2		1.8	63.6		26	26.5	8.4	15	1.0 to 2.7	24
VSP-HC10-15R□-4		4	67.7				11.2			25
VSP-HC10-15R□-6		6	69				11.9			26
VSP-HC10-20R□-2		1.8	73.6		31	31.5	8.4	20	1.0 to 3.0	26
VSP-HC10-20R□-4		4	77.7				11.2			27
VSP-HC10-20R□-6		6	79				11.9			28
VSP-HC10-25R□-2		1.8	84.1		36	37	8.4	25	1.0 to 3.0	28
VSP-HC10-25R□-4		4	88.2				11.2			29
VSP-HC10-25R□-6		6	89.5				11.9			30
VSP-HC10-30R□-2		1.8	95.1		41	43	8.4	30	1.0 to 3.0	30
VSP-HC10-30R□-4		4	99.2				11.2			31
VSP-HC10-30R□-6		6	100.5				11.9			32
VSP-HC10-40R□-2		1.8	117.1		51	55	8.4	40	1.0 to 3.0	34
VSP-HC10-40R□-4		4	121.2				11.2			35
VSP-HC10-40R□-6		6	122.5				11.9			36
VSP-HC10-50R□-2		1.8	138.6		61	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50R□-4		4	142.7				11.2			40
VSP-HC10-50R□-6		6	144				11.9			41
VSP-HC15-10R(A)□-2	15	1.8	54.6 (55.6)	9 (10)	22 (23)	21.5	8.4	10	1.0 to 2.4	22 (22)
VSP-HC15-10R(A)□-4		4	58.7 (59.7)				11.2			23 (23)
VSP-HC15-10R(A)□-6		6	60 (61)				11.9			24 (24)
VSP-HC15-15R(A)□-2		1.8	64.6 (65.6)		27 (28)	26.5	8.4	15	1.0 to 2.7	24 (24)
VSP-HC15-15R(A)□-4		4	68.7 (69.7)				11.2			25 (25)
VSP-HC15-15R(A)□-6		6	70 (71)				11.9			26 (26)
VSP-HC15-20R(A)□-2		1.8	74.6 (75.6)		32 (33)	31.5	8.4	20	1.0 to 3.0	26 (26)
VSP-HC15-20R(A)□-4		4	78.7 (79.7)				11.2			27 (27)
VSP-HC15-20R(A)□-6		6	80 (81)				11.9			28 (28)
VSP-HC15-25R(A)□-2		1.8	85.1 (86.1)		37 (38)	37	8.4	25	1.0 to 3.0	28 (28)
VSP-HC15-25R(A)□-4		4	89.2 (90.2)				11.2			29 (29)
VSP-HC15-25R(A)□-6		6	90.5 (91.5)				11.9			30 (30)
VSP-HC15-30R(A)□-2		1.8	96.1 (97.1)		42 (43)	43	8.4	30	1.0 to 3.0	30 (30)
VSP-HC15-30R(A)□-4		4	100.2 (101.2)				11.2			31 (31)
VSP-HC15-30R(A)□-6		6	101.5 (102.5)				11.9			32 (32)
VSP-HC15-40R(A)□-2		1.8	118.1 (119.1)		52 (53)	55	8.4	40	1.0 to 3.0	34 (34)
VSP-HC15-40R(A)□-4		4	122.2 (123.2)				11.2			35 (35)
VSP-HC15-40R(A)□-6		6	123.5 (124.5)				11.9			36 (36)
VSP-HC15-50R(A)□-2		1.8	139.6 (140.6)		62 (63)	66.5	8.4	50	1.0 to 3.1	39 (39)
VSP-HC15-50R(A)□-4		4	143.7 (144.7)				11.2			40 (40)
VSP-HC15-50R(A)□-6		6	145 (146)				11.9			41 (41)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 25-□R(A)□-2/4/6



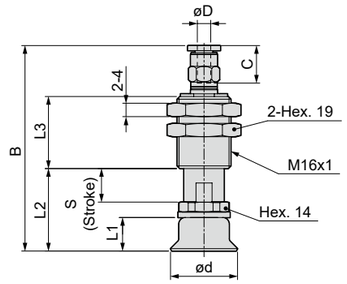
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10R(A)□-2		1.8	57.2 (58.2)				8.4			27 (27)
VSP-HC20-10R(A)□-4		4	61.3 (62.3)		24.6 (25.6)	21.5	11.2	10	1.0 to 2.4	28 (28)
VSP-HC20-10R(A)□-6		6	62.6 (63.6)				11.9			29 (29)
VSP-HC20-15R(A)□-2		1.8	67.2 (68.2)				8.4			29 (29)
VSP-HC20-15R(A)□-4		4	71.3 (72.3)		29.6 (30.6)	26.5	11.2	15	1.0 to 2.7	30 (30)
VSP-HC20-15R(A)□-6		6	72.6 (73.6)				11.9			31 (31)
VSP-HC20-20R(A)□-2		1.8	77.2 (78.2)				8.4			31 (31)
VSP-HC20-20R(A)□-4		4	81.3 (82.3)		34.6 (35.6)	31.5	11.2	20	1.0 to 3.0	32 (32)
VSP-HC20-20R(A)□-6		6	82.6 (83.6)				11.9			33 (33)
VSP-HC20-25R(A)□-2		1.8	87.7 (88.7)				8.4			33 (33)
VSP-HC20-25R(A)□-4	20	4	91.8 (92.8)	10 (11)	39.6 (40.6)	37	11.2	25	1.0 to 3.0	34 (34)
VSP-HC20-25R(A)□-6		6	93.1 (94.1)				11.9			35 (35)
VSP-HC20-30R(A)□-2		1.8	98.7 (99.7)				8.4			35 (35)
VSP-HC20-30R(A)□-4		4	102.8 (103.8)		44.6 (45.6)	43	11.2	30	1.0 to 3.0	36 (36)
VSP-HC20-30R(A)□-6		6	104.1 (105.1)				11.9			37 (37)
VSP-HC20-40R(A)□-2		1.8	120.7 (121.7)				8.4			39 (39)
VSP-HC20-40R(A)□-4		4	124.8 (125.8)		54.6 (55.6)	55	11.2	40	1.0 to 3.0	40 (40)
VSP-HC20-40R(A)□-6		6	126.1 (127.1)				11.9			41 (41)
VSP-HC20-50R(A)□-2		1.8	142.2 (143.2)				8.4			43 (43)
VSP-HC20-50R(A)□-4		4	146.3 (147.3)		64.6 (65.6)	66.5	11.2	50	1.0 to 3.1	44 (44)
VSP-HC20-50R(A)□-6		6	147.6 (148.6)				11.9			45 (45)
VSP-HC25-10R(A)□-2		1.8	58.2 (59.2)				8.4			27 (27)
VSP-HC25-10R(A)□-4		4	62.3 (63.3)		24.6 (25.6)	21.5	11.2	10	1.0 to 2.4	28 (28)
VSP-HC25-10R(A)□-6		6	63.6 (64.6)				11.9			29 (29)
VSP-HC25-15R(A)□-2		1.8	68.2 (69.2)				8.4			29 (29)
VSP-HC25-15R(A)□-4		4	72.3 (73.3)		29.6 (30.6)	26.5	11.2	15	1.0 to 2.7	30 (30)
VSP-HC25-15R(A)□-6		6	73.6 (74.6)				11.9			31 (31)
VSP-HC25-20R(A)□-2		1.8	78.2 (79.2)				8.4			31 (31)
VSP-HC25-20R(A)□-4		4	82.3 (83.3)		34.6 (35.6)	31.5	11.2	20	1.0 to 3.0	32 (32)
VSP-HC25-20R(A)□-6		6	83.6 (84.6)				11.9			33 (33)
VSP-HC25-25R(A)□-2		1.8	88.7 (89.7)				8.4			33 (33)
VSP-HC25-25R(A)□-4	25	4	92.8 (93.8)	11 (12)	39.6 (40.6)	37	11.2	25	1.0 to 3.0	34 (34)
VSP-HC25-25R(A)□-6		6	94.1 (95.1)				11.9			35 (35)
VSP-HC25-30R(A)□-2		1.8	99.7 (100.7)				8.4			35 (35)
VSP-HC25-30R(A)□-4		4	103.8 (104.8)		44.6 (45.6)	43	11.2	30	1.0 to 3.0	36 (36)
VSP-HC25-30R(A)□-6		6	105.1 (106.1)				11.9			37 (37)
VSP-HC25-40R(A)□-2		1.8	121.7 (122.7)				8.4			39 (39)
VSP-HC25-40R(A)□-4		4	125.8 (126.8)		54.6 (55.6)	55	11.2	40	1.0 to 3.0	40 (40)
VSP-HC25-40R(A)□-6		6	127.1 (128.1)				11.9			41 (41)
VSP-HC25-50R(A)□-2		1.8	143.2 (144.2)				8.4			43 (43)
VSP-HC25-50R(A)□-4		4	147.3 (148.3)		64.6 (65.6)	66.5	11.2	50	1.0 to 3.1	44 (44)
VSP-HC25-50R(A)□-6		6	148.6 (149.6)				11.9			45 (45)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC30, 40-□R(A)□-2/4/6



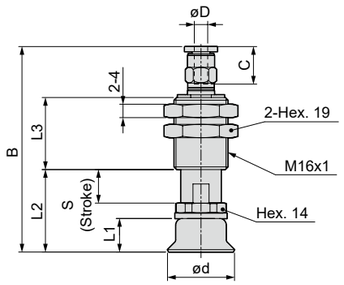
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC30-10R(A)□-2		1.8	58.2 (61.2)				8.4			29 (30)
VSP-HC30-10R(A)□-4		4	62.3 (65.3)		25.6 (28.6)	21.5	11.2	10	1.0 to 2.4	30 (31)
VSP-HC30-10R(A)□-6		6	63.6 (66.6)				11.9			31 (32)
VSP-HC30-15R(A)□-2		1.8	68.2 (71.2)				8.4			31 (32)
VSP-HC30-15R(A)□-4		4	72.3 (75.3)		30.6 (33.6)	26.5	11.2	15	1.0 to 2.7	32 (33)
VSP-HC30-15R(A)□-6		6	73.6 (76.6)				11.9			33 (34)
VSP-HC30-20R(A)□-2		1.8	78.2 (81.2)				8.4			33 (34)
VSP-HC30-20R(A)□-4		4	82.3 (85.3)		35.6 (38.6)	31.5	11.2	20	1.0 to 3.0	34 (35)
VSP-HC30-20R(A)□-6		6	83.6 (86.6)				11.9			35 (36)
VSP-HC30-25R(A)□-2		1.8	88.7 (91.7)				8.4			35 (36)
VSP-HC30-25R(A)□-4	30	4	92.8 (95.8)	11 (14)	40.6 (43.6)	37	11.2	25	1.0 to 3.0	36 (37)
VSP-HC30-25R(A)□-6		6	94.1 (97.1)				11.9			37 (38)
VSP-HC30-30R(A)□-2		1.8	99.7 (102.7)				8.4			37 (38)
VSP-HC30-30R(A)□-4		4	103.8 (106.8)		45.6 (48.6)	43	11.2	30	1.0 to 3.0	38 (39)
VSP-HC30-30R(A)□-6		6	105.1 (108.1)				11.9			39 (40)
VSP-HC30-40R(A)□-2		1.8	121.7 (124.7)				8.4			41 (42)
VSP-HC30-40R(A)□-4		4	125.8 (128.8)		55.6 (58.6)	55	11.2	40	1.0 to 3.0	42 (43)
VSP-HC30-40R(A)□-6		6	127.1 (130.1)				11.9			43 (44)
VSP-HC30-50R(A)□-2		1.8	143.2 (146.2)				8.4			45 (46)
VSP-HC30-50R(A)□-4		4	147.3 (150.3)		65.6 (68.6)	66.5	11.2	50	1.0 to 3.1	46 (47)
VSP-HC30-50R(A)□-6		6	148.6 (151.6)				11.9			47 (48)
VSP-HC40-10R(A)□-2		1.8	61.2 (64.7)				8.4			34 (35)
VSP-HC40-10R(A)□-4		4	65.3 (68.8)		28.6 (32.1)	21.5	11.2	10	1.0 to 2.4	35 (36)
VSP-HC40-10R(A)□-6		6	66.6 (70.1)				11.9			36 (37)
VSP-HC40-15R(A)□-2		1.8	68.2 (71.7)				8.4			36 (37)
VSP-HC40-15R(A)□-4		4	72.3 (75.8)		33.6 (37.1)	26.5	11.2	15	1.0 to 2.7	37 (38)
VSP-HC40-15R(A)□-6		6	73.6 (77.1)				11.9			38 (39)
VSP-HC40-20R(A)□-2		1.8	78.2 (81.7)				8.4			38 (39)
VSP-HC40-20R(A)□-4		4	82.3 (85.8)		38.6 (42.1)	31.5	11.2	20	1.0 to 3.0	39 (40)
VSP-HC40-20R(A)□-6		6	83.6 (87.1)				11.9			40 (41)
VSP-HC40-25R(A)□-2		1.8	88.7 (92.2)				8.4			40 (41)
VSP-HC40-25R(A)□-4	40	4	92.8 (96.3)	14 (17.5)	43.6 (47.1)	37	11.2	25	1.0 to 3.0	41 (42)
VSP-HC40-25R(A)□-6		6	94.1 (97.6)				11.9			42 (43)
VSP-HC40-30R(A)□-2		1.8	99.7 (103.2)				8.4			42 (43)
VSP-HC40-30R(A)□-4		4	103.8 (107.3)		48.6 (52.1)	43	11.2	30	1.0 to 3.0	43 (44)
VSP-HC40-30R(A)□-6		6	105.1 (108.6)				11.9			44 (45)
VSP-HC40-40R(A)□-2		1.8	121.7 (125.2)				8.4			46 (47)
VSP-HC40-40R(A)□-4		4	125.8 (129.3)		58.6 (62.1)	55	11.2	40	1.0 to 3.0	47 (48)
VSP-HC40-40R(A)□-6		6	127.1 (130.6)				11.9			48 (49)
VSP-HC40-50R(A)□-2		1.8	143.2 (146.7)				8.4			50 (51)
VSP-HC40-50R(A)□-4		4	147.3 (150.8)		68.6 (72.1)	66.5	11.2	50	1.0 to 3.1	51 (52)
VSP-HC40-50R(A)□-6		6	148.6 (152.1)				11.9			52 (53)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC50-□R(A)□-2/4/6



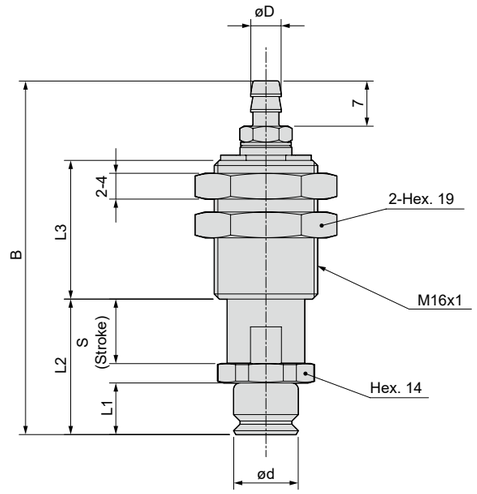
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC50-10R(A)□-2	50	1.8	62.2 (65.2)	15 (18)	29.6 (32.6)	21.5	8.4	10	1.0 to 2.4	46 (47)
VSP-HC50-10R(A)□-4		4	66.3 (69.3)				11.2			47 (48)
VSP-HC50-10R(A)□-6		6	67.6 (70.6)				11.9			48 (49)
VSP-HC50-15R(A)□-2		1.8	72.2 (75.2)		34.6 (37.6)	26.5	8.4	15	1.0 to 2.7	48 (49)
VSP-HC50-15R(A)□-4		4	76.3 (79.3)				11.2			49 (50)
VSP-HC50-15R(A)□-6		6	77.6 (80.6)				11.9			50 (51)
VSP-HC50-20R(A)□-2		1.8	82.2 (85.2)		39.6 (42.6)	31.5	8.4	20	1.0 to 3.0	50 (51)
VSP-HC50-20R(A)□-4		4	86.3 (89.3)				11.2			51 (52)
VSP-HC50-20R(A)□-6		6	87.6 (90.6)				11.9			52 (53)
VSP-HC50-25R(A)□-2		1.8	92.7 (95.7)		44.6 (47.6)	37	8.4	25	1.0 to 3.0	52 (53)
VSP-HC50-25R(A)□-4		4	96.8 (99.8)				11.2			53 (54)
VSP-HC50-25R(A)□-6		6	98.1 (101.1)				11.9			54 (55)
VSP-HC50-30R(A)□-2		1.8	103.7 (106.7)		49.6 (52.6)	43	8.4	30	1.0 to 3.0	54 (55)
VSP-HC50-30R(A)□-4		4	107.8 (110.8)				11.2			55 (56)
VSP-HC50-30R(A)□-6		6	109.1 (112.1)				11.9			56 (57)
VSP-HC50-40R(A)□-2		1.8	125.7 (128.7)		59.6 (62.6)	55	8.4	40	1.0 to 3.0	58 (59)
VSP-HC50-40R(A)□-4		4	129.8 (132.8)				11.2			59 (60)
VSP-HC50-40R(A)□-6		6	131.1 (134.1)				11.9			60 (61)
VSP-HC50-50R(A)□-2		1.8	147.2 (150.2)		69.6 (72.6)	66.5	8.4	50	1.0 to 3.1	62 (63)
VSP-HC50-50R(A)□-4		4	151.3 (154.3)				11.2			63 (64)
VSP-HC50-50R(A)□-6		6	152.6 (155.6)				11.9			64 (65)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10-□R□-4T/6T
●VSP-HC15-□R(A)□-4T/6T



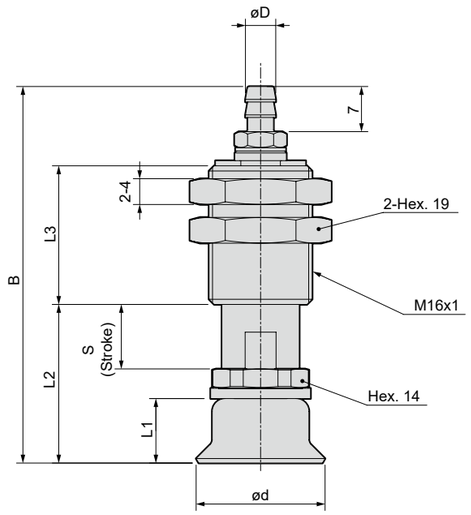
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10R□-4T	10	2.5	54.8	8	21	21.5	10	1.0 to 2.4	21
VSP-HC10-10R□-6T		4							
VSP-HC10-15R□-4T		2.5	64.8		26	26.5	15	1.0 to 2.7	23
VSP-HC10-15R□-6T		4							
VSP-HC10-20R□-4T		2.5	74.8		31	31.5	20	1.0 to 3.0	25
VSP-HC10-20R□-6T		4							
VSP-HC10-25R□-4T		2.5	85.3		36	37	25	1.0 to 3.0	28
VSP-HC10-25R□-6T		4							
VSP-HC10-30R□-4T		2.5	96.3		41	43	30	1.0 to 3.0	30
VSP-HC10-30R□-6T		4							
VSP-HC10-40R□-4T		2.5	118.3		51	55	40	1.0 to 3.0	34
VSP-HC10-40R□-6T		4							
VSP-HC10-50R□-4T		2.5	139.8		61	66.5	50	1.0 to 3.1	38
VSP-HC10-50R□-6T		4							
VSP-HC15-10R(A)□-4T	15	2.5	55.8 (56.8)	9 (10)	22 (23)	21.5	10	1.0 to 2.4	21 (22)
VSP-HC15-10R(A)□-6T		4							
VSP-HC15-15R(A)□-4T		2.5	65.8 (66.8)		27 (28)	26.5	15	1.0 to 2.7	23 (24)
VSP-HC15-15R(A)□-6T		4							
VSP-HC15-20R(A)□-4T		2.5	75.8 (76.8)		32 (33)	31.5	20	1.0 to 3.0	25 (26)
VSP-HC15-20R(A)□-6T		4							
VSP-HC15-25R(A)□-4T		2.5	86.3 (87.3)		37 (38)	37	25	1.0 to 3.0	28 (29)
VSP-HC15-25R(A)□-6T		4							
VSP-HC15-30R(A)□-4T		2.5	97.3 (98.3)		42 (43)	43	30	1.0 to 3.0	30 (31)
VSP-HC15-30R(A)□-6T		4							
VSP-HC15-40R(A)□-4T		2.5	119.3 (120.3)		52 (53)	55	40	1.0 to 3.0	34 (35)
VSP-HC15-40R(A)□-6T		4							
VSP-HC15-50R(A)□-4T		2.5	140.8 (141.8)		62 (63)	66.5	50	1.0 to 3.1	38 (39)
VSP-HC15-50R(A)□-6T		4							

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20, 25-□R(A)□-4T/6T



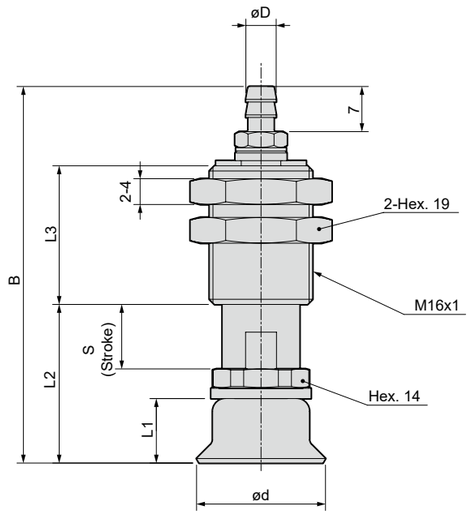
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10R(A)□-4T	20	2.5	58.4 (59.4)	10 (11)	24.6 (25.6)	21.5	10	1.0 to 2.4	25 (26)
VSP-HC20-10R(A)□-6T		4							
VSP-HC20-15R(A)□-4T		2.5	68.4 (69.4)		29.6 (30.6)	26.5	15	1.0 to 2.7	27 (28)
VSP-HC20-15R(A)□-6T		4							
VSP-HC20-20R(A)□-4T		2.5	78.4 (79.4)		34.6 (35.6)	31.5	20	1.0 to 3.0	29 (30)
VSP-HC20-20R(A)□-6T		4							
VSP-HC20-25R(A)□-4T		2.5	88.9 (89.9)		39.6 (40.6)	37	25	1.0 to 3.0	31 (32)
VSP-HC20-25R(A)□-6T		4							
VSP-HC20-30R(A)□-4T		2.5	99.9 (100.9)		44.6 (45.6)	43	30	1.0 to 3.0	34 (35)
VSP-HC20-30R(A)□-6T		4							
VSP-HC20-40R(A)□-4T		2.5	121.9 (122.9)		54.6 (55.6)	55	40	1.0 to 3.0	38 (39)
VSP-HC20-40R(A)□-6T		4							
VSP-HC20-50R(A)□-4T		2.5	143.4 (144.4)		64.6 (65.6)	66.5	50	1.0 to 3.1	42 (41)
VSP-HC20-50R(A)□-6T		4							
VSP-HC25-10R(A)□-4T	25	2.5	59.4 (60.4)	11 (12)	25.6 (26.6)	21.5	10	1.0 to 2.4	26 (27)
VSP-HC25-10R(A)□-6T		4							
VSP-HC25-15R(A)□-4T		2.5	69.4 (70.4)		30.6 (31.6)	26.5	15	1.0 to 2.7	28 (29)
VSP-HC25-15R(A)□-6T		4							
VSP-HC25-20R(A)□-4T		2.5	79.4 (80.4)		35.6 (36.6)	31.5	20	1.0 to 3.0	30 (31)
VSP-HC25-20R(A)□-6T		4							
VSP-HC25-25R(A)□-4T		2.5	89.9 (90.9)		40.6 (41.6)	37	25	1.0 to 3.0	32 (33)
VSP-HC25-25R(A)□-6T		4							
VSP-HC25-30R(A)□-4T		2.5	100.9 (101.9)		45.6 (46.6)	43	30	1.0 to 3.0	35 (36)
VSP-HC25-30R(A)□-6T		4							
VSP-HC25-40R(A)□-4T		2.5	122.9 (123.9)		55.6 (56.6)	55	40	1.0 to 3.0	39 (40)
VSP-HC25-40R(A)□-6T		4							
VSP-HC25-50R(A)□-4T		2.5	144.4 (145.4)		65.6 (66.6)	66.5	50	1.0 to 3.1	43 (44)
VSP-HC25-50R(A)□-6T		4							

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC30, 40-□R(A)□-4T/6T



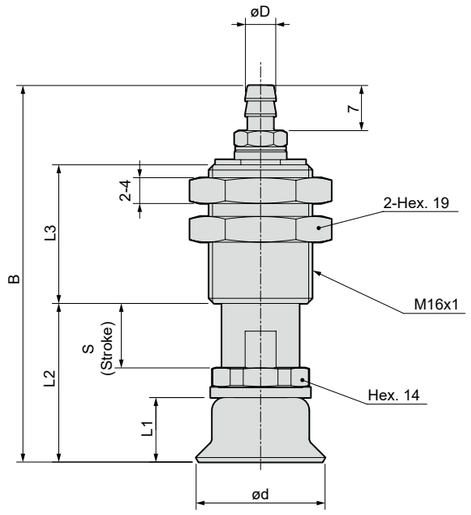
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC30-10R(A)□-4T	30	2.5	59.4 (62.4)	11 (14)	25.6 (28.6)	21.5	10	1.0 to 2.4	28 (29)
VSP-HC30-10R(A)□-6T		4							
VSP-HC30-15R(A)□-4T		2.5	69.4 (72.4)		30.6 (33.6)	26.5	15	1.0 to 2.7	30 (31)
VSP-HC30-15R(A)□-6T		4							
VSP-HC30-20R(A)□-4T		2.5	79.4 (82.4)		35.6 (38.6)	31.5	20	1.0 to 3.0	32 (33)
VSP-HC30-20R(A)□-6T		4							
VSP-HC30-25R(A)□-4T		2.5	89.9 (92.9)		40.6 (43.6)	37	25	1.0 to 3.0	34 (35)
VSP-HC30-25R(A)□-6T		4							
VSP-HC30-30R(A)□-4T		2.5	100.9 (103.9)		45.6 (48.6)	43	30	1.0 to 3.0	37 (38)
VSP-HC30-30R(A)□-6T		4							
VSP-HC30-40R(A)□-4T		2.5	122.9 (125.9)		55.6 (58.6)	55	40	1.0 to 3.0	41 (42)
VSP-HC30-40R(A)□-6T		4							
VSP-HC30-50R(A)□-4T		2.5	144.4 (147.4)		65.6 (68.6)	66.5	50	1.0 to 3.1	46 (47)
VSP-HC30-50R(A)□-6T		4							
VSP-HC40-10R(A)□-4T	40	2.5	62.4 (65.9)	14 (17.5)	28.6 (32.1)	21.5	10	1.0 to 2.4	29 (30)
VSP-HC40-10R(A)□-6T		4							
VSP-HC40-15R(A)□-4T		2.5	72.4 (75.9)		33.6 (37.1)	26.5	15	1.0 to 2.7	31 (32)
VSP-HC40-15R(A)□-6T		4							
VSP-HC40-20R(A)□-4T		2.5	82.4 (85.9)		38.6 (42.1)	31.5	20	1.0 to 3.0	33 (34)
VSP-HC40-20R(A)□-6T		4							
VSP-HC40-25R(A)□-4T		2.5	92.9 (96.4)		43.6 (47.1)	37	25	1.0 to 3.0	35 (36)
VSP-HC40-25R(A)□-6T		4							
VSP-HC40-30R(A)□-4T		2.5	103.9 (107.4)		48.6 (52.1)	43	30	1.0 to 3.0	38 (39)
VSP-HC40-30R(A)□-6T		4							
VSP-HC40-40R(A)□-4T		2.5	125.9 (129.4)		58.6 (62.1)	55	40	1.0 to 3.0	42 (41)
VSP-HC40-40R(A)□-6T		4							
VSP-HC40-50R(A)□-4T		2.5	147.4 (150.9)		68.6 (72.1)	66.5	50	1.0 to 3.1	47 (46)
VSP-HC40-50R(A)□-6T		4							

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC50-□R(A)□-4T/6T



Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC50-10R(A)□-4T	50	2.5	60.6 (63.6)	15 (18)	29.6 (32.6)	21.5	10	1.0 to 2.4	54 (55)
VSP-HC50-10R(A)□-6T		4							
VSP-HC50-15R(A)□-4T		2.5	70.6 (73.6)		34.6 (37.6)	26.5	15	1.0 to 2.7	56 (57)
VSP-HC50-15R(A)□-6T		4							
VSP-HC50-20R(A)□-4T		2.5	80.6 (83.6)		39.6 (42.6)	31.5	20	1.0 to 3.0	58 (59)
VSP-HC50-20R(A)□-6T		4							
VSP-HC50-25R(A)□-4T		2.5	91.1 (94.1)		44.6 (47.6)	37	25	1.0 to 3.0	60 (61)
VSP-HC50-25R(A)□-6T		4							
VSP-HC50-30R(A)□-4T		2.5	102.1 (105.1)		49.6 (52.6)	43	30	1.0 to 3.0	63 (64)
VSP-HC50-30R(A)□-6T		4							
VSP-HC50-40R(A)□-4T		2.5	124.1 (127.1)		59.6 (62.6)	55	40	1.0 to 3.0	67 (68)
VSP-HC50-40R(A)□-6T		4							
VSP-HC50-50R(A)□-4T		2.5	145.6 (148.6)		69.6 (72.6)	66.5	50	1.0 to 3.1	71 (72)
VSP-HC50-50R(A)□-6T		4							

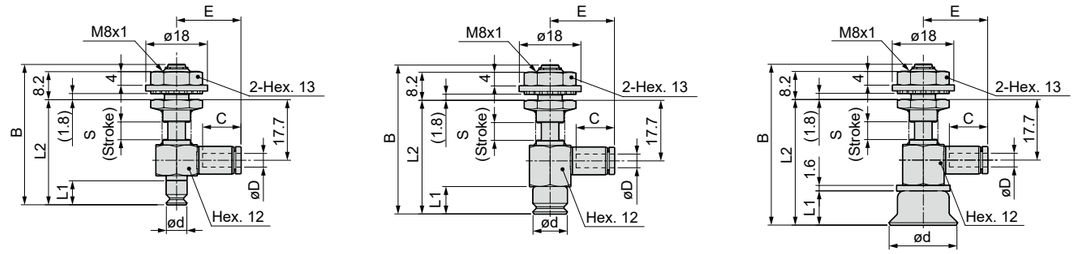
*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing(Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD6, 8R□-2/4/6

●VSP-HD10R□-2/4/6
●VSP-HD15R(A)□-2/4/6

●VSP-HD20 to 50R(A)□-2/4/6



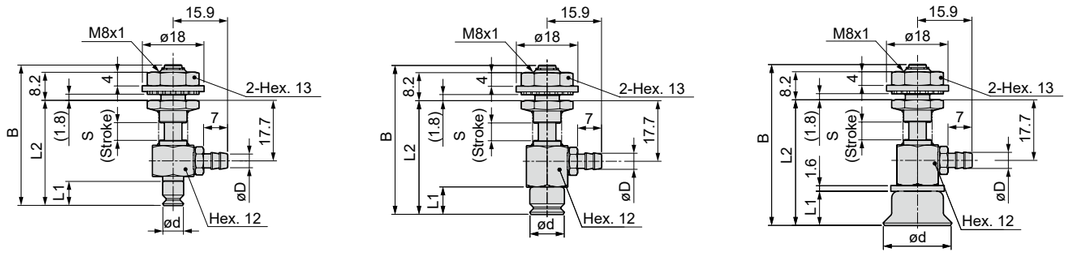
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6R□-2	6	1.8	41	7	30.7	8.4	14.7	5.2	1.6 to 2.9	28
VSP-HD6R□-4		4				11.2	18.8			29
VSP-HD6R□-6		6				11.9	20.6			30
VSP-HD8R□-2	8	1.8	39.5	5.5	29.2	8.4	14.7	5.2	1.6 to 2.9	28
VSP-HD8R□-4		4				11.2	18.8			29
VSP-HD8R□-6		6				11.9	20.6			30
VSP-HD10R□-2	10	1.8	43.5	8	33.2	8.4	14.7	5.2	1.6 to 2.9	32
VSP-HD10R□-4		4				11.2	18.8			33
VSP-HD10R□-6		6				11.9	20.6			34
VSP-HD15R(A)□-2	15	1.8	44.5 (45.5)	9 (10)	34.2 (35.2)	8.4	14.7	5.2	1.6 to 2.9	33 (34)
VSP-HD15R(A)□-4		4				11.2	18.8			34 (35)
VSP-HD15R(A)□-6		6				11.9	20.6			35 (36)
VSP-HD20R(A)□-2	20	1.8	47 (48)	10 (11)	36.7 (37.7)	8.4	14.7	5.2	1.6 to 2.9	36 (37)
VSP-HD20R(A)□-4		4				11.2	18.8			37 (38)
VSP-HD20R(A)□-6		6				11.9	20.6			38 (39)
VSP-HD25R(A)□-2	25	1.8	48 (49)	11 (12)	37.7 (38.7)	8.4	14.7	5.2	1.6 to 2.9	37 (38)
VSP-HD25R(A)□-4		4				11.2	18.8			38 (39)
VSP-HD25R(A)□-6		6				11.9	20.6			39 (40)
VSP-HD30R(A)□-2	30	1.8	48 (51)	11 (14)	37.7 (40.7)	8.4	14.7	5.2	1.6 to 2.9	39 (40)
VSP-HD30R(A)□-4		4				11.2	18.8			40 (41)
VSP-HD30R(A)□-6		6				11.9	20.6			41 (42)
VSP-HD40R(A)□-2	40	1.8	51 (54.5)	14 (17.5)	40.7 (44.2)	8.4	14.7	5.2	1.6 to 2.9	44 (43)
VSP-HD40R(A)□-4		4				11.2	18.8			45 (44)
VSP-HD40R(A)□-6		6				11.9	20.6			46 (45)
VSP-HD50R(A)□-2	50	1.8	52 (55)	15 (18)	41.7 (44.7)	8.4	14.7	5.2	1.6 to 2.9	54 (55)
VSP-HD50R(A)□-4		4				11.2	18.8			55 (56)
VSP-HD50R(A)□-6		6				11.9	20.6			56 (57)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD6, 8R□-4T/6T
●VSP-HD10R□-4T/6T
●VSP-HD15R(A)□-4T/6T
●VSP-HD20 to 50R(A)□-4T/6T



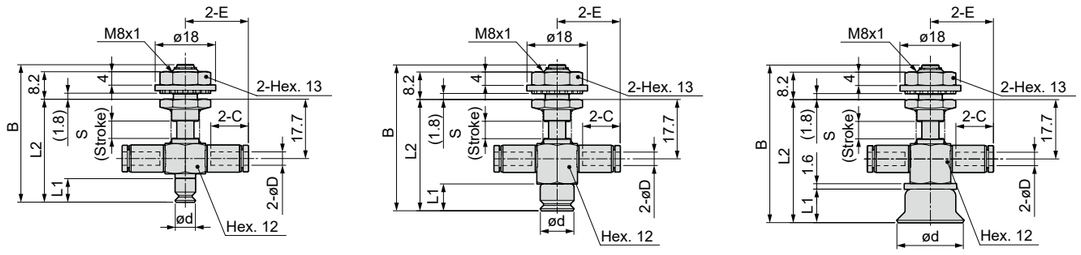
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6R□-4T	6	2.5	41	7	30.7	5.2	1.6 to 2.9	28
VSP-HD6R□-6T		4						
VSP-HD8R□-4T	8	2.5	39.5	5.5	29.2	5.2	1.6 to 2.9	28
VSP-HD8R□-6T		4						
VSP-HD10R□-4T	10	2.5	43.5	8	33.2	5.2	1.6 to 2.9	31
VSP-HD10R□-6T		4						
VSP-HD15R(A)□-4T	15	2.5	44.5 (45.5)	9 (10)	34.2 (35.2)	5.2	1.6 to 2.9	32
VSP-HD15R(A)□-6T		4						
VSP-HD20R(A)□-4T	20	2.5	47 (48)	10 (11)	36.7 (37.7)	5.2	1.6 to 2.9	36
VSP-HD20R(A)□-6T		4						
VSP-HD25R(A)□-4T	25	2.5	48 (49)	11 (12)	37.7 (38.7)	5.2	1.6 to 2.9	37
VSP-HD25R(A)□-6T		4						
VSP-HD30R(A)□-4T	30	2.5	48 (51)	11 (14)	37.7 (40.7)	5.2	1.6 to 2.9	38
VSP-HD30R(A)□-6T		4						
VSP-HD40R(A)□-4T	40	2.5	51 (54.5)	14 (17.5)	40.7 (44.2)	5.2	1.6 to 2.9	45
VSP-HD40R(A)□-6T		4						
VSP-HD50R(A)□-4T	50	2.5	52 (55)	15 (18)	41.7 (44.7)	5.2	1.6 to 2.9	51
VSP-HD50R(A)□-6T		4						

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW6, 8R□-2/4/6
●VSP-HDW10R□-2/4/6
●VSP-HDW15R(A)□-2/4/6
●VSP-HDW20R(A)□-2/4/6



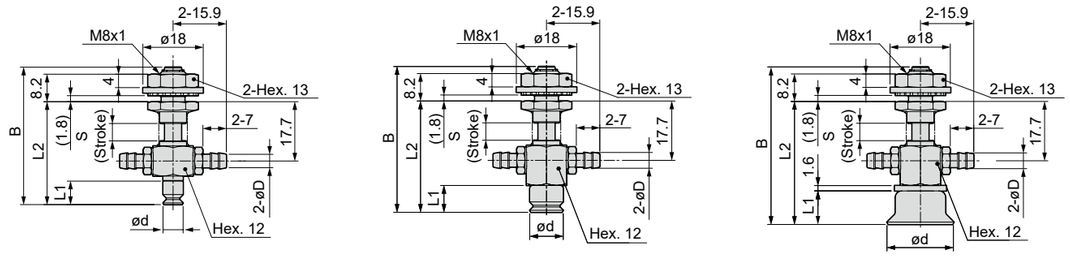
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6R□-2	6	1.8	41	7	30.7	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW6R□-4		4				11.2	18.8			32
VSP-HDW6R□-6		6				11.9	20.6			34
VSP-HDW8R□-2	8	1.8	39.5	5.5	29.2	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW8R□-4		4				11.2	18.8			32
VSP-HDW8R□-6		6				11.9	20.6			34
VSP-HDW10R□-2	10	1.8	43.5	8	33.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW10R□-4		4				11.2	18.8			35
VSP-HDW10R□-6		6				11.9	20.6			37
VSP-HDW15R(A)□-2	15	1.8	44.5 (45.5)	9 (10)	34.2 (35.2)	8.4	14.7	5.2	1.6 to 2.9	34
VSP-HDW15R(A)□-4		4				11.2	18.8			36
VSP-HDW15R(A)□-6		6				11.9	20.6			38
VSP-HDW20R(A)□-2	20	1.8	47 (48)	10 (11)	36.7 (37.7)	8.4	14.7	5.2	1.6 to 2.9	38
VSP-HDW20R(A)□-4		4				11.2	18.8			40
VSP-HDW20R(A)□-6		6				11.9	20.6			42
VSP-HDW25R(A)□-2	25	1.8	48 (49)	11 (12)	37.7 (38.7)	8.4	14.7	5.2	1.6 to 2.9	39
VSP-HDW25R(A)□-4		4				11.2	18.8			41
VSP-HDW25R(A)□-6		6				11.9	20.6			43
VSP-HDW30R(A)□-2	30	1.8	48 (51)	11 (14)	37.7 (40.7)	8.4	14.7	5.2	1.6 to 2.9	40
VSP-HDW30R(A)□-4		4				11.2	18.8			42
VSP-HDW30R(A)□-6		6				11.9	20.6			44
VSP-HDW40R(A)□-2	40	1.8	51 (54.5)	14 (17.5)	40.7 (44.2)	8.4	14.7	5.2	1.6 to 2.9	49
VSP-HDW40R(A)□-4		4				11.2	18.8			51
VSP-HDW40R(A)□-6		6				11.9	20.6			53
VSP-HDW50R(A)□-2	50	1.8	52 (55)	15 (18)	41.7 (44.7)	8.4	14.7	5.2	1.6 to 2.9	55
VSP-HDW50R(A)□-4		4				11.2	18.8			57
VSP-HDW50R(A)□-6		6				11.9	20.6			59

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW6, 8R□-4T/6T
●VSP-HDW10R□-4T/6T
●VSP-HDW15R(A)□-4T/6T
●VSP-HDW20 to 50R(A)□-4T/6T



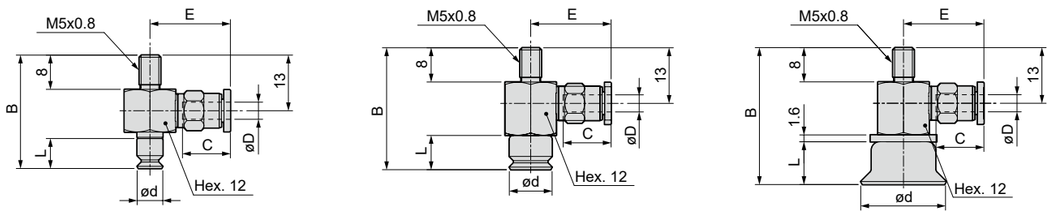
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6R□-4T	6	2.5	41	7	30.7	5.2	1.6 to 2.9	28
VSP-HDW6R□-6T		4						
VSP-HDW8R□-4T	8	2.5	39.5	5.5	29.2	5.2	1.6 to 2.9	28
VSP-HDW8R□-6T		4						
VSP-HDW10R□-4T	10	2.5	43.5	8	33.2	5.2	1.6 to 2.9	32
VSP-HDW10R□-6T		4						
VSP-HDW15R(A)□-4T	15	2.5	44.5 (45.5)	9 (10)	34.2 (35.2)	5.2	1.6 to 2.9	33
VSP-HDW15R(A)□-6T		4						
VSP-HDW20R(A)□-4T	20	2.5	47 (48)	10 (11)	36.7 (37.7)	5.2	1.6 to 2.9	37
VSP-HDW20R(A)□-6T		4						
VSP-HDW25R(A)□-4T	25	2.5	48 (49)	11 (12)	37.7 (38.7)	5.2	1.6 to 2.9	38
VSP-HDW25R(A)□-6T		4						
VSP-HDW30R(A)□-4T	30	2.5	48 (51)	11 (14)	37.7 (40.7)	5.2	1.6 to 2.9	41
VSP-HDW30R(A)□-6T		4						
VSP-HDW40R(A)□-4T	40	2.5	51 (54.5)	14 (17.5)	40.7 (44.2)	5.2	1.6 to 2.9	48
VSP-HDW40R(A)□-6T		4						
VSP-HDW50R(A)□-4T	50	2.5	52 (55)	15 (18)	41.7 (44.7)	5.2	1.6 to 2.9	54
VSP-HDW50R(A)□-6T		4						

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE6, 8R□-2/4/6
●VSP-HE10R□-2/4/6
●VSP-HE15R(A)□-2/4/6
●VSP-HE20 to 50R(A)□-2/4/6



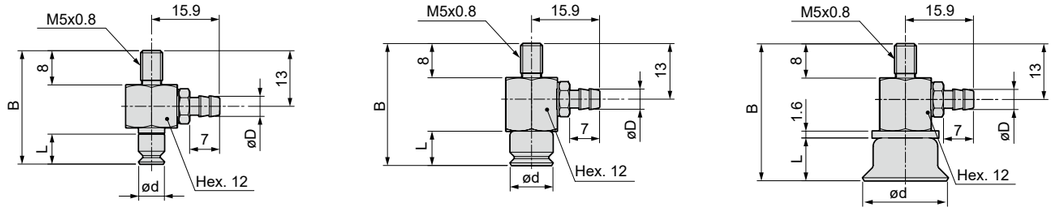
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE6R□-2	6	1.8	26.5	7	8.4	14.7	14
VSP-HE6R□-4		4			11.2	18.8	15
VSP-HE6R□-6		6			11.9	20.6	16
VSP-HE8R□-2	8	1.8	25	5.5	8.4	14.7	14
VSP-HE8R□-4		4			11.2	18.8	15
VSP-HE8R□-6		6			11.9	20.6	16
VSP-HE10R□-2	10	1.8	28.5	8	8.4	14.7	17
VSP-HE10R□-4		4			11.2	18.8	18
VSP-HE10R□-6		6			11.9	20.6	19
VSP-HE15R(A)□-2	15	1.8	29.5 (30.5)	9 (10)	8.4	14.7	17 (18)
VSP-HE15R(A)□-4		4			11.2	18.8	18 (19)
VSP-HE15R(A)□-6		6			11.9	20.6	19 (20)
VSP-HE20R(A)□-2	20	1.8	32 (33)	10 (11)	8.4	14.7	22 (23)
VSP-HE20R(A)□-4		4			11.2	18.8	23 (24)
VSP-HE20R(A)□-6		6			11.9	20.6	24 (25)
VSP-HE25R(A)□-2	25	1.8	33 (34)	11 (12)	8.4	14.7	22 (23)
VSP-HE25R(A)□-4		4			11.2	18.8	23 (24)
VSP-HE25R(A)□-6		6			11.9	20.6	24 (25)
VSP-HE30R(A)□-2	30	1.8	33 (36)	11 (14)	8.4	14.7	24 (25)
VSP-HE30R(A)□-4		4			11.2	18.8	25 (26)
VSP-HE30R(A)□-6		6			11.9	20.6	26 (27)
VSP-HE40R(A)□-2	40	1.8	36 (39.5)	14 (17.5)	8.4	14.7	31 (32)
VSP-HE40R(A)□-4		4			11.2	18.8	32 (33)
VSP-HE40R(A)□-6		6			11.9	20.6	33 (34)
VSP-HE50R(A)□-2	50	1.8	37 (40)	15 (18)	8.4	14.7	41 (42)
VSP-HE50R(A)□-4		4			11.2	18.8	42 (43)
VSP-HE50R(A)□-6		6			11.9	20.6	43 (44)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE6, 8R□-4T/6T
●VSP-HE10R□-4T/6T
●VSP-HE15R(A)□-4T/6T
●VSP-HE20 to 50R(A)□-4T/6T



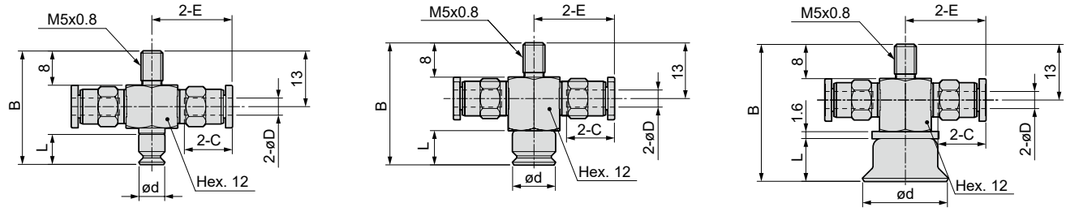
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE6R□-4T	6	2.5	26.5	7	13
VSP-HE6R□-6T		4			
VSP-HE8R□-4T	8	2.5	25	5.5	13
VSP-HE8R□-6T		4			
VSP-HE10R□-4T	10	2.5	28.5	8	16
VSP-HE10R□-6T		4			
VSP-HE15R(A)□-4T	15	2.5	29.5 (30.5)	9 (10)	16 (17)
VSP-HE15R(A)□-6T		4			
VSP-HE20R(A)□-4T	20	2.5	32 (33)	10 (11)	20 (21)
VSP-HE20R(A)□-6T		4			
VSP-HE25R(A)□-4T	25	2.5	33 (34)	11 (12)	21 (22)
VSP-HE25R(A)□-6T		4			
VSP-HE30R(A)□-4T	30	2.5	33 (36)	11 (14)	23 (24)
VSP-HE30R(A)□-6T		4			
VSP-HE40R(A)□-4T	40	2.5	36 (39.5)	14 (17.5)	29 (30)
VSP-HE40R(A)□-6T		4			
VSP-HE50R(A)□-4T	50	2.5	37 (40)	15 (18)	39 (40)
VSP-HE50R(A)□-6T		4			

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet Both Sides, VSP-HE, Push-in fitting)

●VSP-HEW6, 8R□-2/4/6
●VSP-HEW10R□-2/4/6
●VSP-HEW15R(A)□-2/4/6
●VSP-HEW20 to 50R(A)□-2/4/6



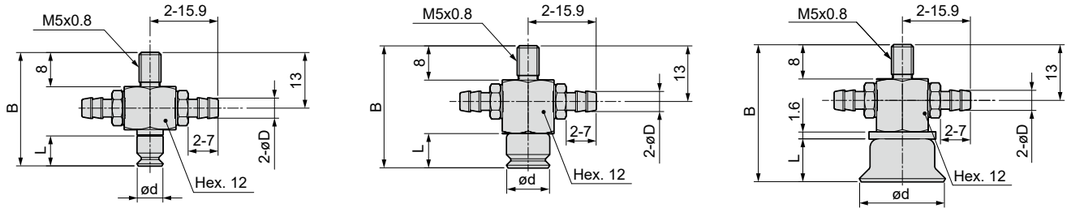
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW6R□-2	6	1.8	26.5	7	8.4	14.7	16
VSP-HEW6R□-4		4			11.2	18.8	18
VSP-HEW6R□-6		6			11.9	20.6	20
VSP-HEW8R□-2	8	1.8	25	5.5	8.4	14.7	16
VSP-HEW8R□-4		4			11.2	18.8	18
VSP-HEW8R□-6		6			11.9	20.6	20
VSP-HEW10R□-2	10	1.8	28.5	8	8.4	14.7	19
VSP-HEW10R□-4		4			11.2	18.8	21
VSP-HEW10R□-6		6			11.9	20.6	23
VSP-HEW15R(A)□-2	15	1.8	29.5 (30.5)	9 (10)	8.4	14.7	20
VSP-HEW15R(A)□-4		4			11.2	18.8	22
VSP-HEW15R(A)□-6		6			11.9	20.6	24
VSP-HEW20R(A)□-2	20	1.8	32 (33)	10 (11)	8.4	14.7	22 (23)
VSP-HEW20R(A)□-4		4			11.2	18.8	24 (25)
VSP-HEW20R(A)□-6		6			11.9	20.6	26 (27)
VSP-HEW25R(A)□-2	25	1.8	33 (34)	11 (12)	8.4	14.7	23 (24)
VSP-HEW25R(A)□-4		4			11.2	18.8	25 (26)
VSP-HEW25R(A)□-6		6			11.9	20.6	27 (28)
VSP-HEW30R(A)□-2	30	1.8	33 (36)	11 (14)	8.4	14.7	24 (25)
VSP-HEW30R(A)□-4		4			11.2	18.8	26 (27)
VSP-HEW30R(A)□-6		6			11.9	20.6	28 (29)
VSP-HEW40R(A)□-2	40	1.8	36 (39.5)	14 (17.5)	8.4	14.7	31 (32)
VSP-HEW40R(A)□-4		4			11.2	18.8	33 (34)
VSP-HEW40R(A)□-6		6			11.9	20.6	35 (36)
VSP-HEW50R(A)□-2	50	1.8	37 (40)	15 (18)	8.4	14.7	41 (42)
VSP-HEW50R(A)□-4		4			11.2	18.8	43 (44)
VSP-HEW50R(A)□-6		6			11.9	20.6	45 (46)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Profile Buffer Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW6, 8R□-4T/6T
●VSP-HEW10R□-4T/6T
●VSP-HEW15R(A)□-4T/6T
●VSP-HEW20 to 50R(A)□-4T/6T



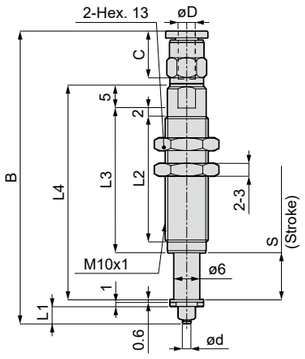
Unit: mm

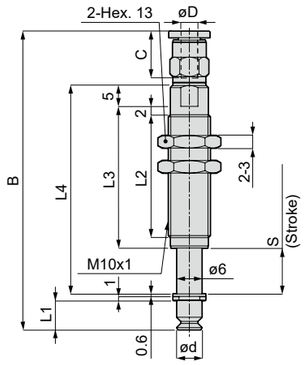
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Weight (g)
VSP-HEW6R□-4T	6	2.5	26.5	7	14
VSP-HEW6R□-6T		4			
VSP-HEW8R□-4T	8	2.5	25	5.5	14
VSP-HEW8R□-6T		4			
VSP-HEW10R□-4T	10	2.5	28.5	8	17
VSP-HEW10R□-6T		4			
VSP-HEW15R(A)□-4T	15	2.5	29.5 (30.5)	9 (10)	17 (18)
VSP-HEW15R(A)□-6T		4			
VSP-HEW20R(A)□-4T	20	2.5	32 (33)	10 (11)	21 (22)
VSP-HEW20R(A)□-6T		4			
VSP-HEW25R(A)□-4T	25	2.5	33 (34)	11 (12)	22 (23)
VSP-HEW25R(A)□-6T		4			
VSP-HEW30R(A)□-4T	30	2.5	33 (36)	11 (14)	24 (25)
VSP-HEW30R(A)□-6T		4			
VSP-HEW40R(A)□-4T	40	2.5	36 (39.5)	14 (17.5)	31 (32)
VSP-HEW40R(A)□-6T		4			
VSP-HEW50R(A)□-4T	50	2.5	37 (40)	15 (18)	40 (41)
VSP-HEW50R(A)□-6T		4			

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC0.7 to 4-□RM□-4
●VSP-LFC6, 8-□R□-4





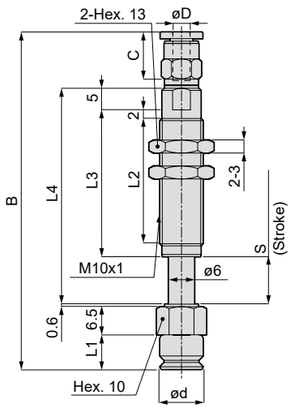
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC0.7-2RM□-4	0.7	4	52.6	4	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC0.7-5RM□-4			58.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC0.7-10RM□-4			68.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC0.7-15RM□-4			78.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC0.7-20RM□-4			88.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC1-2RM□-4	1	4	52.6	4	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC1-5RM□-4			58.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC1-10RM□-4			68.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC1-15RM□-4			78.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC1-20RM□-4			88.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC1.5-2RM□-4	1.5	4	52.6	4	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC1.5-5RM□-4			58.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC1.5-10RM□-4			68.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC1.5-15RM□-4			78.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC1.5-20RM□-4			88.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC2-2RM□-4	2	4	52.6	4	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC2-5RM□-4			58.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC2-10RM□-4			68.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC2-15RM□-4			78.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC2-20RM□-4			88.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC3-2RM□-4	3	4	52.6	4	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC3-5RM□-4			58.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC3-10RM□-4			68.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC3-15RM□-4			78.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC3-20RM□-4			88.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC4-2RM□-4	4	4	52.6	4	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC4-5RM□-4			58.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC4-10RM□-4			68.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC4-15RM□-4			78.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC4-20RM□-4			88.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC6-2R□-4	6	4	55.6	7	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC6-5R□-4			61.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC6-10R□-4			71.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC6-15R□-4			81.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC6-20R□-4			91.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC8-2R□-4	8	4	55.6	5.5	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC8-5R□-4			61.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC8-10R□-4			71.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC8-15R□-4			81.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC8-20R□-4			91.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33

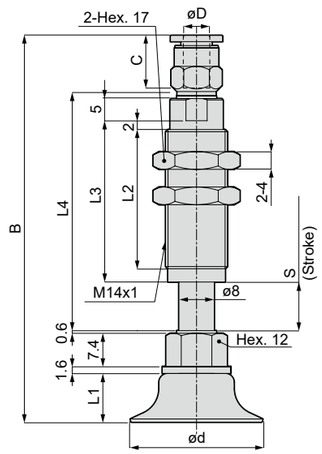
*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC10-□R□-4
●VSP-LFC15R-□(A)□-4



●VSP-LFC20 to 25-□R(A)□-4/6



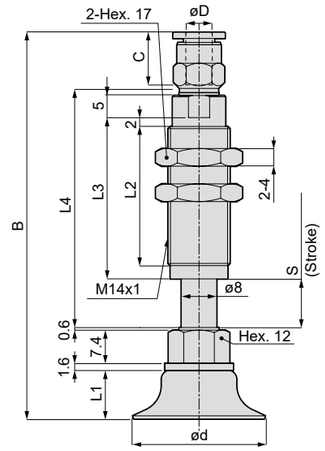
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2R□-4	10	4	62.1	8	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC10-5R□-4			68.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-10R□-4			78.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-15R□-4			88.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-20R□-4			98.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	35
VSP-LFC15-2R(A)□-4	15	4	63.1 (64.1)	9 (10)	21.5	26	34	11.2	2	1.3 to 1.8	28 (29)
VSP-LFC15-5R(A)□-4			69.1 (70.1)		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30 (31)
VSP-LFC15-10R(A)□-4			79.1 (80.1)		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32 (33)
VSP-LFC15-15R(A)□-4			89.1 (90.1)		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34 (35)
VSP-LFC15-20R(A)□-4			99.1 (100.1)		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	35 (36)
VSP-LFC20-5R(A)□-4	20	4	75.1 (76.1)	10 (11)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57 (58)
VSP-LFC20-5R(A)□-6		6	76.4 (77.4)					11.9			58 (59)
VSP-LFC20-10R(A)□-4		4	85.1 (86.1)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59 (60)
VSP-LFC20-10R(A)□-6		6	86.4 (87.4)					11.9			60 (61)
VSP-LFC20-15R(A)□-4		4	95.1 (96.1)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62 (63)
VSP-LFC20-15R(A)□-6		6	96.4 (97.4)					11.9			63 (64)
VSP-LFC20-20R(A)□-4		4	105.1 (106.1)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65 (66)
VSP-LFC20-20R(A)□-6		6	106.4 (107.4)					11.9			66 (67)
VSP-LFC25-5R(A)□-4	25	4	76.1 (77.1)	11 (12)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	58 (59)
VSP-LFC25-5R(A)□-6		6	77.4 (78.4)					11.9			59 (60)
VSP-LFC25-10R(A)□-4		4	86.1 (87.1)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	60 (61)
VSP-LFC25-10R(A)□-6		6	87.4 (88.4)					11.9			61 (62)
VSP-LFC25-15R(A)□-4		4	96.1 (97.1)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	63 (64)
VSP-LFC25-15R(A)□-6		6	97.4 (98.4)					11.9			64 (65)
VSP-LFC25-20R(A)□-4		4	106.1 (107.1)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	66 (67)
VSP-LFC25-20R(A)□-6		6	107.4 (108.4)					11.9			67 (68)

*1: Dimensions in ( ) are for the deep type pad.
*2: Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC30 to 50-□R(A)□-4/6



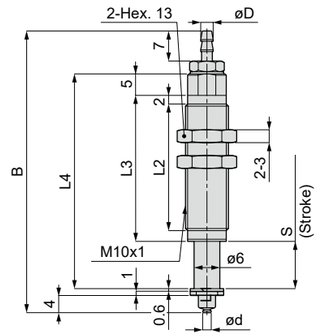
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC30-5R(A)□-4	30	4	76.1 (79.1)	11 (14)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	60 (61)
VSP-LFC30-5R(A)□-6		6	77.4 (80.4)					11.9			61 (62)
VSP-LFC30-10R(A)□-4		4	86.1 (89.1)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	62 (63)
VSP-LFC30-10R(A)□-6		6	87.4 (90.4)					11.9			63 (64)
VSP-LFC30-15R(A)□-4		4	96.1 (99.1)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	65 (66)
VSP-LFC30-15R(A)□-6		6	97.4 (100.4)					11.9			66 (67)
VSP-LFC30-20R(A)□-4		4	106.1 (109.1)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	68 (69)
VSP-LFC30-20R(A)□-6		6	107.4 (110.4)					11.9			69 (70)
VSP-LFC40-5R(A)□-4	40	4	79.1 (82.6)	14 (17.5)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	71 (72)
VSP-LFC40-5R(A)□-6		6	80.4 (83.9)					11.9			72 (73)
VSP-LFC40-10R(A)□-4		4	89.1 (92.6)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	73 (74)
VSP-LFC40-10R(A)□-6		6	90.4 (93.9)					11.9			74 (75)
VSP-LFC40-15R(A)□-4		4	99.1 (102.6)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	76 (77)
VSP-LFC40-15R(A)□-6		6	100.4 (103.9)					11.9			77 (78)
VSP-LFC40-20R(A)□-4		4	109.1 (112.6)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	79 (80)
VSP-LFC40-20R(A)□-6		6	110.4 (113.9)					11.9			80 (81)
VSP-LFC50-5R(A)□-4	50	4	80.1 (83.1)	15 (18)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	77 (78)
VSP-LFC50-5R(A)□-6		6	81.4 (84.4)					11.9			78 (79)
VSP-LFC50-10R(A)□-4		4	90.1 (93.1)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	79 (80)
VSP-LFC50-10R(A)□-6		6	91.4 (94.4)					11.9			80 (81)
VSP-LFC50-15R(A)□-4		4	100.1 (103.1)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	82 (83)
VSP-LFC50-15R(A)□-6		6	101.4 (104.4)					11.9			83 (84)
VSP-LFC50-20R(A)□-4		4	110.1 (113.1)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	85 (86)
VSP-LFC50-20R(A)□-6		6	111.4 (114.4)					11.9			86 (87)

*1: Dimensions in ( ) are for the deep type pad.
*2: Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC0.7 to 4-□RM□-4T/6T



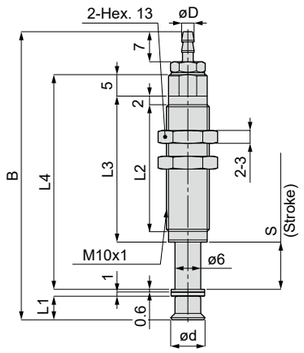
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC0.7-2RM□-4T	0.7	2.5	49.7	4	21.5	26	34	2	1.3 to 1.8	23
VSP-LFC0.7-2RM□-6T		4								
VSP-LFC0.7-5RM□-4T		2.5	55.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	25
VSP-LFC0.7-5RM□-6T		4								
VSP-LFC0.7-10RM□-4T		2.5	65.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	27
VSP-LFC0.7-10RM□-6T		4								
VSP-LFC0.7-15RM□-4T		2.5	75.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	29
VSP-LFC0.7-15RM□-6T		4								
VSP-LFC0.7-20RM□-4T		2.5	85.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC0.7-20RM□-6T		4								
VSP-LFC1-2RM□-4T	1	2.5	49.7	4	21.5	26	34	2	1.3 to 1.8	23
VSP-LFC1-2RM□-6T		4								
VSP-LFC1-5RM□-4T		2.5	55.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	25
VSP-LFC1-5RM□-6T		4								
VSP-LFC1-10RM□-4T		2.5	65.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	27
VSP-LFC1-10RM□-6T		4								
VSP-LFC1-15RM□-4T		2.5	75.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	29
VSP-LFC1-15RM□-6T		4								
VSP-LFC1-20RM□-4T		2.5	85.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC1-20RM□-6T		4								
VSP-LFC1.5-2RM□-4T	1.5	2.5	49.7	4	21.5	26	34	2	1.3 to 1.8	23
VSP-LFC1.5-2RM□-6T		4								
VSP-LFC1.5-5RM□-4T		2.5	55.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	25
VSP-LFC1.5-5RM□-6T		4								
VSP-LFC1.5-10RM□-4T		2.5	65.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	27
VSP-LFC1.5-10RM□-6T		4								
VSP-LFC1.5-15RM□-4T		2.5	75.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	29
VSP-LFC1.5-15RM□-6T		4								
VSP-LFC1.5-20RM□-4T		2.5	85.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC1.5-20RM□-6T		4								
VSP-LFC2-2RM□-4T	2	2.5	49.7	4	21.5	26	34	2	1.3 to 1.8	23
VSP-LFC2-2RM□-6T		4								
VSP-LFC2-5RM□-4T		2.5	55.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	25
VSP-LFC2-5RM□-6T		4								
VSP-LFC2-10RM□-4T		2.5	65.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	27
VSP-LFC2-10RM□-6T		4								
VSP-LFC2-15RM□-4T		2.5	75.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	29
VSP-LFC2-15RM□-6T		4								
VSP-LFC2-20RM□-4T		2.5	85.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC2-20RM□-6T		4								
VSP-LFC3-2RM□-4T	3	2.5	49.7	4	21.5	26	34	2	1.3 to 1.8	23
VSP-LFC3-2RM□-6T		4								
VSP-LFC3-5RM□-4T		2.5	55.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	25
VSP-LFC3-5RM□-6T		4								
VSP-LFC3-10RM□-4T		2.5	65.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	27
VSP-LFC3-10RM□-6T		4								
VSP-LFC3-15RM□-4T		2.5	75.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	29
VSP-LFC3-15RM□-6T		4								
VSP-LFC3-20RM□-4T		2.5	85.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC3-20RM□-6T		4								
VSP-LFC4-2RM□-4T	4	2.5	49.7	4	21.5	26	34	2	1.3 to 1.8	23
VSP-LFC4-2RM□-6T		4								
VSP-LFC4-5RM□-4T		2.5	55.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	25
VSP-LFC4-5RM□-6T		4								
VSP-LFC4-10RM□-4T		2.5	65.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	27
VSP-LFC4-10RM□-6T		4								
VSP-LFC4-15RM□-4T		2.5	75.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	29
VSP-LFC4-15RM□-6T		4								
VSP-LFC4-20RM□-4T		2.5	85.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC4-20RM□-6T		4								

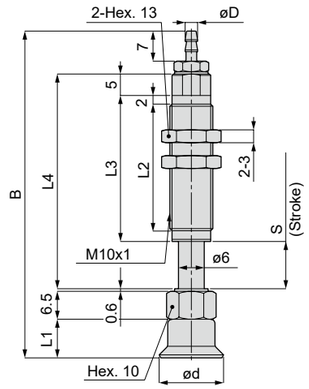
*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC6, 8-□R□-4T/6T



●VSP-LFC10-□R□-4T/6T
●VSP-LFC15R-□(A)□-4T/6T



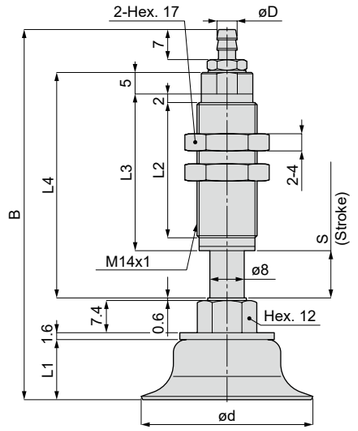
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2R□-4T	6	2.5	52.7	7	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC6-2R□-6T		4								
VSP-LFC6-5R□-4T		2.5	58.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC6-5R□-6T		4								
VSP-LFC6-10R□-4T		2.5	68.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC6-10R□-6T		4								
VSP-LFC6-15R□-4T		2.5	78.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC6-15R□-6T		4								
VSP-LFC6-20R□-4T		2.5	88.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC6-20R□-6T		4								
VSP-LFC8-2R□-4T	8	2.5	51.2	5.5	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC8-2R□-6T		4								
VSP-LFC8-5R□-4T		2.5	57.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC8-5R□-6T		4								
VSP-LFC8-10R□-4T		2.5	67.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC8-10R□-6T		4								
VSP-LFC8-15R□-4T		2.5	77.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC8-15R□-6T		4								
VSP-LFC8-20R□-4T		2.5	87.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC8-20R□-6T		4								
VSP-LFC10-2R□-4T	10	2.5	59.2	8	21.5	26	34	2	1.3 to 1.8	26
VSP-LFC10-2R□-6T		4								
VSP-LFC10-5R□-4T		2.5	65.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	28
VSP-LFC10-5R□-6T		4								
VSP-LFC10-10R□-4T		2.5	75.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	30
VSP-LFC10-10R□-6T		4								
VSP-LFC10-15R□-4T		2.5	85.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	32
VSP-LFC10-15R□-6T		4								
VSP-LFC10-20R□-4T		2.5	95.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	34
VSP-LFC10-20R□-6T		4								
VSP-LFC15-2R(A)□-4T	15	2.5	60.2 (61.2)	9 (10)	21.5	26	34	2	1.3 to 1.8	26 (27)
VSP-LFC15-2R(A)□-6T		4								
VSP-LFC15-5R(A)□-4T		2.5	66.2 (67.2)		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	28 (29)
VSP-LFC15-5R(A)□-6T		4								
VSP-LFC15-10R(A)□-4T		2.5	76.2 (77.2)		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	30 (31)
VSP-LFC15-10R(A)□-6T		4								
VSP-LFC15-15R(A)□-4T		2.5	86.2 (87.2)		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	32 (33)
VSP-LFC15-15R(A)□-6T		4								
VSP-LFC15-20R(A)□-4T		2.5	96.2 (97.2)		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	34 (35)
VSP-LFC15-20R(A)□-6T		4								

*1: Dimensions in ( ) are for the deep type pad.
*2: Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC20 to 50-□R(A)□-4T/6T



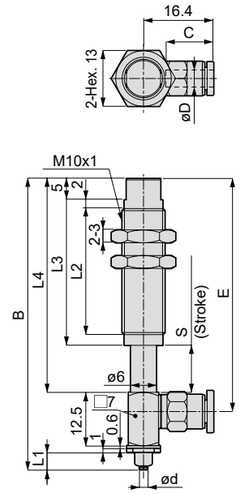
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5R(A)□-4T	20	2.5	72.2 (73.2)	10 (11)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	52 (53)
VSP-LFC20-5R(A)□-6T		4								
VSP-LFC20-10R(A)□-4T		2.5	82.2 (83.2)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	54 (55)
VSP-LFC20-10R(A)□-6T		4								
VSP-LFC20-15R(A)□-4T		2.5	92.2 (93.2)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	57 (58)
VSP-LFC20-15R(A)□-6T		4								
VSP-LFC20-20R(A)□-4T		2.5	102.2 (103.2)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	60 (61)
VSP-LFC20-20R(A)□-6T		4								
VSP-LFC25-5R(A)□-4T	25	2.5	73.2 (74.2)	11 (12)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	53 (54)
VSP-LFC25-5R(A)□-6T		4								
VSP-LFC25-10R(A)□-4T		2.5	83.2 (84.2)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	55 (56)
VSP-LFC25-10R(A)□-6T		4								
VSP-LFC25-15R(A)□-4T		2.5	93.2 (94.2)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	58 (59)
VSP-LFC25-15R(A)□-6T		4								
VSP-LFC25-20R(A)□-4T		2.5	103.2 (104.2)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	61 (62)
VSP-LFC25-20R(A)□-6T		4								
VSP-LFC30-5R(A)□-4T	30	2.5	73.2 (76.2)	11 (14)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	54 (55)
VSP-LFC30-5R(A)□-6T		4								
VSP-LFC30-10R(A)□-4T		2.5	83.2 (86.2)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	56 (57)
VSP-LFC30-10R(A)□-6T		4								
VSP-LFC30-15R(A)□-4T		2.5	93.2 (96.2)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	59 (60)
VSP-LFC30-15R(A)□-6T		4								
VSP-LFC30-20R(A)□-4T		2.5	103.2 (106.2)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	62 (63)
VSP-LFC30-20R(A)□-6T		4								
VSP-LFC40-5R(A)□-4T	40	2.5	76.2 (79.7)	14 (17.5)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	65 (66)
VSP-LFC40-5R(A)□-6T		4								
VSP-LFC40-10R(A)□-4T		2.5	86.2 (89.7)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	67 (68)
VSP-LFC40-10R(A)□-6T		4								
VSP-LFC40-15R(A)□-4T		2.5	96.2 (99.7)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	70 (71)
VSP-LFC40-15R(A)□-6T		4								
VSP-LFC40-20R(A)□-4T		2.5	106.2 (109.7)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	73 (74)
VSP-LFC40-20R(A)□-6T		4								
VSP-LFC50-5R(A)□-4T	50	2.5	77.2 (80.2)	15 (18)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	71 (72)
VSP-LFC50-5R(A)□-6T		4								
VSP-LFC50-10R(A)□-4T		2.5	87.2 (90.2)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	73 (74)
VSP-LFC50-10R(A)□-6T		4								
VSP-LFC50-15R(A)□-4T		2.5	97.2 (100.2)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	76 (77)
VSP-LFC50-15R(A)□-6T		4								
VSP-LFC50-20R(A)□-4T		2.5	107.2 (110.2)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	79 (80)
VSP-LFC50-20R(A)□-6T		4								

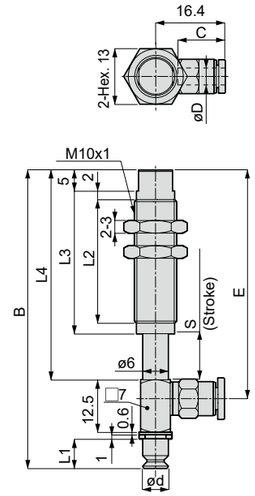
*1: Dimensions in ( ) are for the deep type pad.
*2: Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD0.7 to 4-□RM□-4



●VSP-LFD6, 8-□R□-4

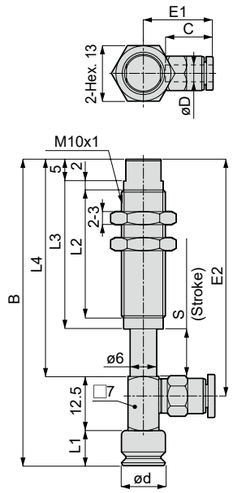


Unit: mm

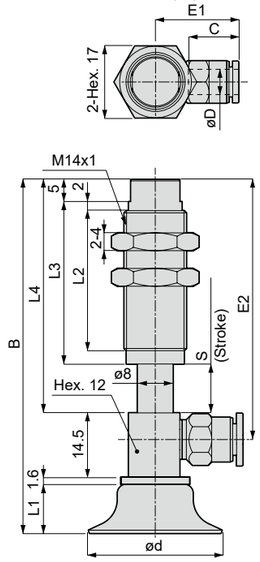
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD0.7-5RM□-4	0.7	4	58.1	4	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD0.7-10RM□-4			68.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD0.7-15RM□-4			78.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD0.7-20RM□-4			88.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD1-5RM□-4	1	4	58.1	4	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD1-10RM□-4			68.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD1-15RM□-4			78.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD1-20RM□-4			88.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD1.5-5RM□-4	1.5	4	58.1	4	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD1.5-10RM□-4			68.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD1.5-15RM□-4			78.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD1.5-20RM□-4			88.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD2-5RM□-4	2	4	58.1	4	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD2-10RM□-4			68.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD2-15RM□-4			78.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD2-20RM□-4			88.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD3-5RM□-4	3	4	58.1	4	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD3-10RM□-4			68.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD3-15RM□-4			78.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD3-20RM□-4			88.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD4-5RM□-4	4	4	58.1	4	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD4-10RM□-4			68.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD4-15RM□-4			78.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD4-20RM□-4			88.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD6-5R□-4	6	4	61.1	7	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD6-10R□-4			71.1		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD6-15R□-4			81.1		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD6-20R□-4			91.1		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD8-5R□-4	8	4	59.6	5.5	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD8-10R□-4			69.6		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD8-15R□-4			79.6		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD8-20R□-4			89.6		39.5	44	70		74.5	20	1.3 to 5.1	37

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD10-□R□-4
●VSP-LFD15-□R(A)□-4



●VSP-LFD20 to 50-□R(A)□-4/6



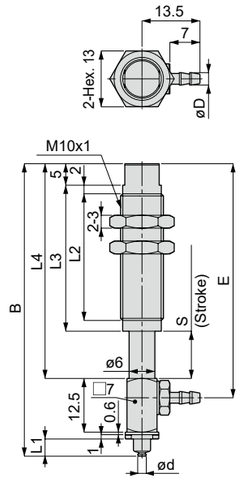
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5R□-4	10	4	60.5	8	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	26
VSP-LFD10-10R□-4			70.5		29.5	34	50			54.5	10	1.3 to 3.3	28
VSP-LFD10-15R□-4			80.5		34.5	39	60			64.5	15	1.3 to 4.2	30
VSP-LFD10-20R□-4			90.5		39.5	44	70			74.5	20	1.3 to 5.1	32
VSP-LFD15-5R(A)□-4	15	4	61.5 (62.5)	9 (10)	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	26 (27)
VSP-LFD15-10R(A)□-4			71.5 (72.5)		29.5	34	50			54.5	10	1.3 to 3.3	28 (29)
VSP-LFD15-15R(A)□-4			81.5 (82.5)		34.5	39	60			64.5	15	1.3 to 4.2	30 (31)
VSP-LFD15-20R(A)□-4			91.5 (92.5)		39.5	44	70			74.5	20	1.3 to 5.1	32 (33)
VSP-LFD20-5R(A)□-4	20	4	68.5	10 (11)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58 (59)
VSP-LFD20-5R(A)□-6		6	(69.5)					11.9	19.7				59 (60)
VSP-LFD20-10R(A)□-4		4	78.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62 (63)
VSP-LFD20-10R(A)□-6		6	(79.5)					11.9	19.7				63 (64)
VSP-LFD20-15R(A)□-4		4	88.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66 (67)
VSP-LFD20-15R(A)□-6		6	(89.5)					11.9	19.7				67 (68)
VSP-LFD20-20R(A)□-4		4	98.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70 (71)
VSP-LFD20-20R(A)□-6		6	(99.5)					11.9	19.7				71 (72)
VSP-LFD25-5R(A)□-4	25	4	69.5	11 (12)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	59 (60)
VSP-LFD25-5R(A)□-6		6	(70.5)					11.9	19.7				60 (61)
VSP-LFD25-10R(A)□-4		4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	63 (64)
VSP-LFD25-10R(A)□-6		6	(80.5)					11.9	19.7				64 (65)
VSP-LFD25-15R(A)□-4		4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	67 (68)
VSP-LFD25-15R(A)□-6		6	(90.5)					11.9	19.7				68 (69)
VSP-LFD25-20R(A)□-4		4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	71 (72)
VSP-LFD25-20R(A)□-6		6	(100.5)					11.9	19.7				72 (73)
VSP-LFD30-5R(A)□-4	30	4	69.5	11 (14)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	60 (61)
VSP-LFD30-5R(A)□-6		6	(72.5)					11.9	19.7				61 (62)
VSP-LFD30-10R(A)□-4		4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	64 (65)
VSP-LFD30-10R(A)□-6		6	(82.5)					11.9	19.7				65 (66)
VSP-LFD30-15R(A)□-4		4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	68 (69)
VSP-LFD30-15R(A)□-6		6	(92.5)					11.9	19.7				69 (70)
VSP-LFD30-20R(A)□-4		4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	72 (73)
VSP-LFD30-20R(A)□-6		6	(102.5)					11.9	19.7				73 (74)
VSP-LFD40-5R(A)□-4	40	4	72.5 (76)	14 (17.5)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	71 (72)
VSP-LFD40-5R(A)□-6		6						11.9	19.7				72 (73)
VSP-LFD40-10R(A)□-4		4	82.5 (86)		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	75 (76)
VSP-LFD40-10R(A)□-6		6						11.9	19.7				76 (77)
VSP-LFD40-15R(A)□-4		4	92.5 (96)		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	79 (80)
VSP-LFD40-15R(A)□-6		6						11.9	19.7				80 (81)
VSP-LFD40-20R(A)□-4		4	102.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	83 (84)
VSP-LFD40-20R(A)□-6		6	(106)					11.9	19.7				84 (85)
VSP-LFD50-5R(A)□-4	50	4	73.5	15 (18)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	76 (77)
VSP-LFD50-5R(A)□-6		6	(76.5)					11.9	19.7				77 (78)
VSP-LFD50-10R(A)□-4		4	83.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	81 (82)
VSP-LFD50-10R(A)□-6		6	(86.5)					11.9	19.7				82 (83)
VSP-LFD50-15R(A)□-4		4	93.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	85 (86)
VSP-LFD50-15R(A)□-6		6	(96.5)					11.9	19.7				86 (87)
VSP-LFD50-20R(A)□-4		4	103.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	89 (90)
VSP-LFD50-20R(A)□-6		6	(106.5)					11.9	19.7				90 (91)

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD0.7 to 4-□RM□-4T/6T

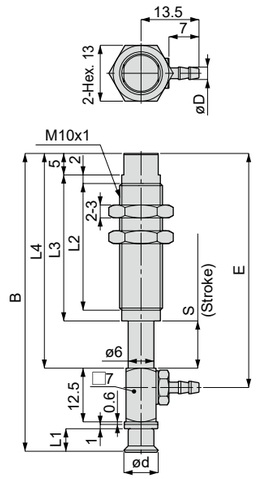


Unit: mm

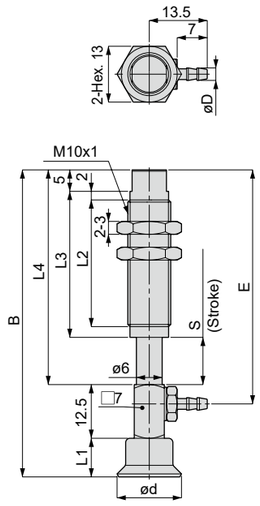
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD0.7-5RM□-4T	0.7	2.5	58.1	4	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD0.7-5RM□-6T		4									
VSP-LFD0.7-10RM□-4T		2.5	68.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD0.7-10RM□-6T		4									
VSP-LFD0.7-15RM□-4T		2.5	78.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD0.7-15RM□-6T		4									
VSP-LFD0.7-20RM□-4T		2.5	88.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD0.7-20RM□-6T		4									
VSP-LFD1-5RM□-4T	1	2.5	58.1	4	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD1-5RM□-6T		4									
VSP-LFD1-10RM□-4T		2.5	68.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD1-10RM□-6T		4									
VSP-LFD1-15RM□-4T		2.5	78.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD1-15RM□-6T		4									
VSP-LFD1-20RM□-4T		2.5	88.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD1-20RM□-6T		4									
VSP-LFD1.5-5RM□-4T	1.5	2.5	58.1	4	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD1.5-5RM□-6T		4									
VSP-LFD1.5-10RM□-4T		2.5	68.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD1.5-10RM□-6T		4									
VSP-LFD1.5-15RM□-4T		2.5	78.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD1.5-15RM□-6T		4									
VSP-LFD1.5-20RM□-4T		2.5	88.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD1.5-20RM□-6T		4									
VSP-LFD2-5RM□-4T	2	2.5	58.1	4	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD2-5RM□-6T		4									
VSP-LFD2-10RM□-4T		2.5	68.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD2-10RM□-6T		4									
VSP-LFD2-15RM□-4T		2.5	78.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD2-15RM□-6T		4									
VSP-LFD2-20RM□-4T		2.5	88.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD2-20RM□-6T		4									
VSP-LFD3-5RM□-4T	3	2.5	58.1	4	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD3-5RM□-6T		4									
VSP-LFD3-10RM□-4T		2.5	68.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD3-10RM□-6T		4									
VSP-LFD3-15RM□-4T		2.5	78.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD3-15RM□-6T		4									
VSP-LFD3-20RM□-4T		2.5	88.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD3-20RM□-6T		4									
VSP-LFD4-5RM□-4T	4	2.5	58.1	4	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD4-5RM□-6T		4									
VSP-LFD4-10RM□-4T		2.5	68.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD4-10RM□-6T		4									
VSP-LFD4-15RM□-4T		2.5	78.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD4-15RM□-6T		4									
VSP-LFD4-20RM□-4T		2.5	88.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD4-20RM□-6T		4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD6, 8-□R□-4T/6T



●VSP-LFD10-□R□-4T/6T
●VSP-LFD15-□R(A)□-4T/6T



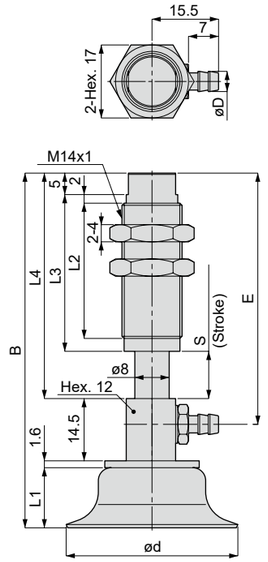
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5R□-4T	6	2.5	61.1	7	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD6-5R□-6T		4									
VSP-LFD6-10R□-4T		2.5	71.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD6-10R□-6T		4									
VSP-LFD6-15R□-4T		2.5	81.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD6-15R□-6T		4									
VSP-LFD6-20R□-4T		2.5	91.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD6-20R□-6T		4									
VSP-LFD8-5R□-4T	8	2.5	59.6	5.5	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD8-5R□-6T		4									
VSP-LFD8-10R□-4T		2.5	69.6		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD8-10R□-6T		4									
VSP-LFD8-15R□-4T		2.5	79.6		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD8-15R□-6T		4									
VSP-LFD8-20R□-4T		2.5	89.6		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD8-20R□-6T		4									
VSP-LFD10-5R□-4T	10	2.5	60.5	8	24.5	29	40	44.5	5	1.3 to 2.4	25
VSP-LFD10-5R□-6T		4									
VSP-LFD10-10R□-4T		2.5	70.5		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD10-10R□-6T		4									
VSP-LFD10-15R□-4T		2.5	80.5		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD10-15R□-6T		4									
VSP-LFD10-20R□-4T		2.5	90.5		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD10-20R□-6T		4									
VSP-LFD15-5R(A)□-4T	15	2.5	61.5 (62.5)	9 (10)	24.5	29	40	44.5	5	1.3 to 2.4	25 (26)
VSP-LFD15-5R(A)□-6T		4									
VSP-LFD15-10R(A)□-4T		2.5	71.5 (72.5)		29.5	34	50	54.5	10	1.3 to 3.3	27 (28)
VSP-LFD15-10R(A)□-6T		4									
VSP-LFD15-15R(A)□-4T		2.5	81.5 (82.5)		34.5	39	60	64.5	15	1.3 to 4.2	29 (30)
VSP-LFD15-15R(A)□-6T		4									
VSP-LFD15-20R(A)□-4T		2.5	91.5 (92.5)		39.5	44	70	74.5	20	1.3 to 5.1	31 (32)
VSP-LFD15-20R(A)□-6T		4									

*Dimensions in ( ) are for Deep type pads.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD20 to 50-□R(A)□-4T/6T



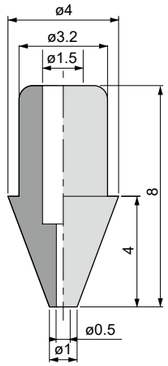
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5R(A)□-4T	20	2.5	68.5 (69.5)	10 (11)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	54 (55)
VSP-LFD20-5R(A)□-6T		4									
VSP-LFD20-10R(A)□-4T		2.5	78.5 (79.5)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57 (58)
VSP-LFD20-10R(A)□-6T		4									
VSP-LFD20-15R(A)□-4T		2.5	88.5 (89.5)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61 (62)
VSP-LFD20-15R(A)□-6T		4									
VSP-LFD20-20R(A)□-4T		2.5	98.5 (99.5)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65 (66)
VSP-LFD20-20R(A)□-6T		4									
VSP-LFD25-5R(A)□-4T	25	2.5	69.5 (70.5)	11 (12)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	55 (56)
VSP-LFD25-5R(A)□-6T		4									
VSP-LFD25-10R(A)□-4T		2.5	79.5 (80.5)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	58 (59)
VSP-LFD25-10R(A)□-6T		4									
VSP-LFD25-15R(A)□-4T		2.5	89.5 (90.5)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	62 (63)
VSP-LFD25-15R(A)□-6T		4									
VSP-LFD25-20R(A)□-4T		2.5	99.5 (100.5)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	66 (67)
VSP-LFD25-20R(A)□-6T		4									
VSP-LFD30-5R(A)□-4T	30	2.5	69.5 (72.5)	11 (14)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	56 (57)
VSP-LFD30-5R(A)□-6T		4									
VSP-LFD30-10R(A)□-4T		2.5	79.5 (82.5)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	59 (60)
VSP-LFD30-10R(A)□-6T		4									
VSP-LFD30-15R(A)□-4T		2.5	89.5 (92.5)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	63 (64)
VSP-LFD30-15R(A)□-6T		4									
VSP-LFD30-20R(A)□-4T		2.5	99.5 (102.5)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	67 (68)
VSP-LFD30-20R(A)□-6T		4									
VSP-LFD40-5R(A)□-4T	40	2.5	72.5 (76)	14 (17.5)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	67 (68)
VSP-LFD40-5R(A)□-6T		4									
VSP-LFD40-10R(A)□-4T		2.5	82.5 (86)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	70 (71)
VSP-LFD40-10R(A)□-6T		4									
VSP-LFD40-15R(A)□-4T		2.5	92.5 (96)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	74 (75)
VSP-LFD40-15R(A)□-6T		4									
VSP-LFD40-20R(A)□-4T		2.5	102.5 (106)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	78 (79)
VSP-LFD40-20R(A)□-6T		4									
VSP-LFD50-5R(A)□-4T	50	2.5	73.5 (76.5)	15 (18)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	73 (74)
VSP-LFD50-5R(A)□-6T		4									
VSP-LFD50-10R(A)□-4T		2.5	83.5 (86.5)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	76 (77)
VSP-LFD50-10R(A)□-6T		4									
VSP-LFD50-15R(A)□-4T		2.5	93.5 (96.5)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	80 (81)
VSP-LFD50-15R(A)□-6T		4									
VSP-LFD50-20R(A)□-4T		2.5	103.5 (106.5)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	84 (85)
VSP-LFD50-20R(A)□-6T		4									

*Dimensions in ( ) are for Deep type pads.

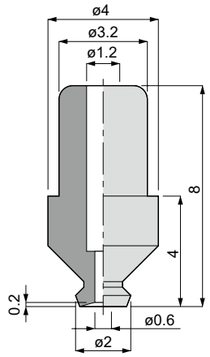
Pad Rubber Only Outline Dimension Drawing (General-type)

●VSPG-1R□



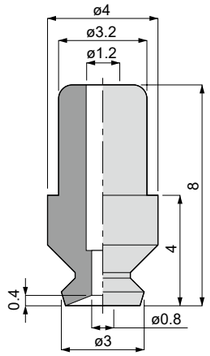
Weight: 0.1 g [0.2 g]

●VSPG-2R□



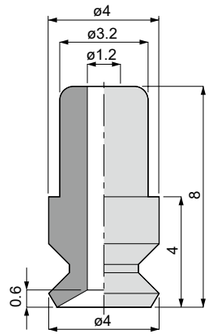
Weight: 0.1 g [0.2 g]

●VSPG-3R□



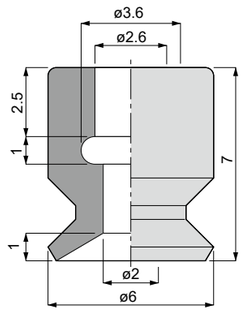
Weight: 0.1 g [0.2 g]

●VSPG-4R□



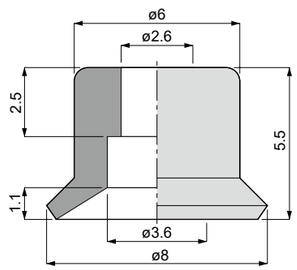
Weight: 0.1 g [0.2 g]

●VSPG-6R□



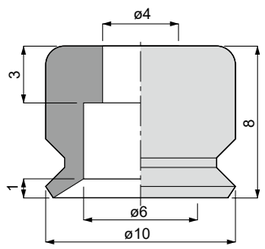
Weight: 0.2 g [0.3 g]

●VSPG-8R□



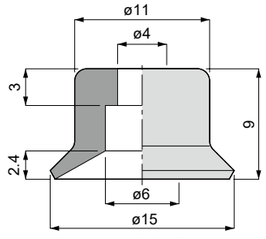
Weight: 0.2 g [0.3 g]

●VSPG-10R□



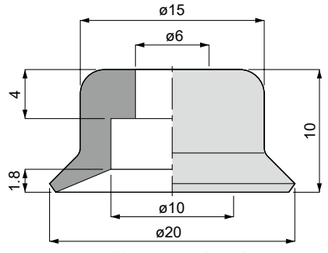
Weight: 0.5 g [0.9 g]

●VSPG-15R□



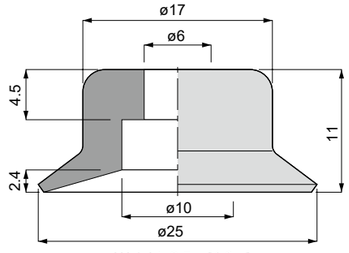
Weight: 0.9 [1.5 g]

●VSPG-20R□



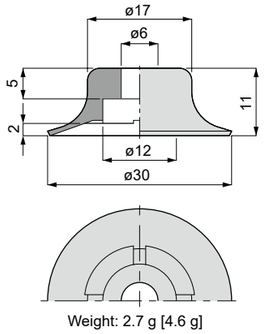
Weight: 1.6 g [2.8 g]

●VSPG-25R□



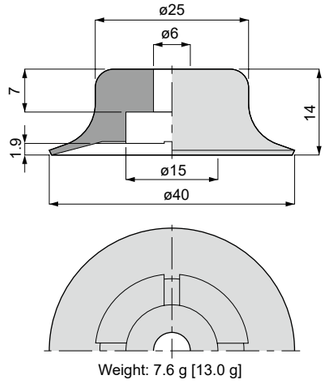
Weight: 2.5 g [4.3 g]

●VSPG-30R□



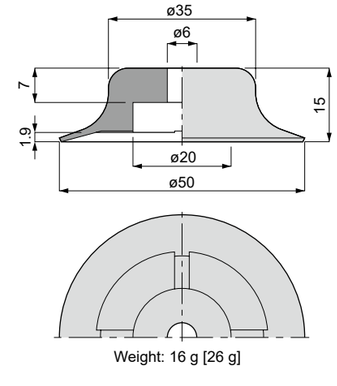
Weight: 2.7 g [4.6 g]

●VSPG-40R□



Weight: 7.6 g [13.0 g]

●VSPG-50R□

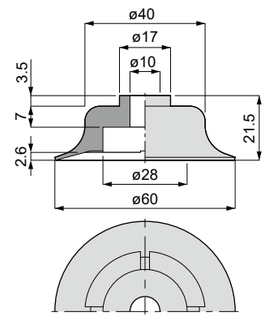


Weight: 16 g [26 g]

Weight: Only for fluoro rubber, values are inside [ ].

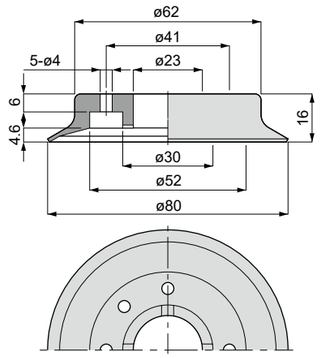
Pad Rubber Only Outline Dimension Drawing (General-type)

●VSPG-60R□



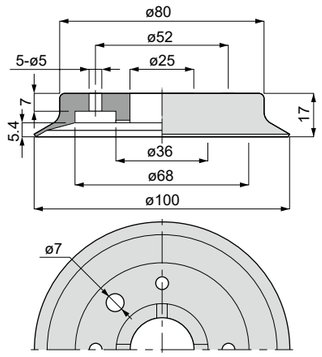
Weight: 22 g [38 g]

●VSPG-80R□



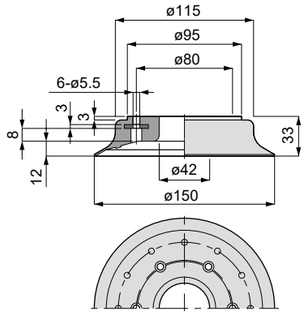
Weight: 33 g [57 g]

●VSPG-100R□



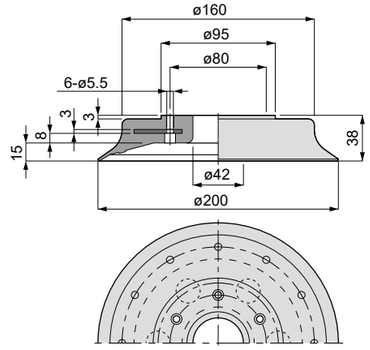
Weight: 60 g [104 g]

●VSPG-150R□



Weight: 393 g [630 g]

●VSPG-200R□

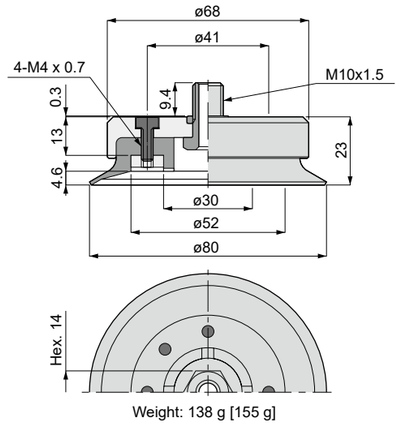


Weight: 919 g [1476 g]

Weight: Only for fluoro rubber, values are inside [ ].

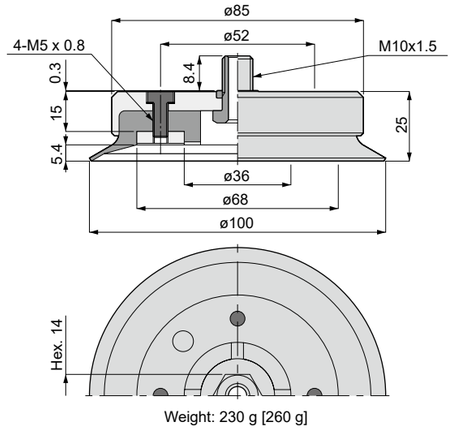
Pad Rubber + Set with Fixing Screw Outline Dimension Drawing (General-type)

●VSPG-80RøA



Weight: 138 g [155 g]

●VSPG-100RøA



Weight: 230 g [260 g]

●VSPG-150RøA

Weight: 762 g [999 g]

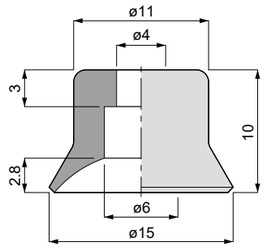
●VSPG-200RøA

Weight: 1288 g [1845 g]

Weight: Only for fluoro rubber, values are inside [ ].

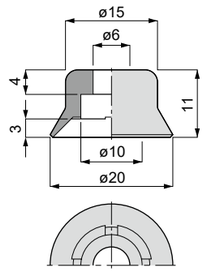
Pad Rubber Only Outline Dimension Drawing (Deep)

●VSPG-15A□



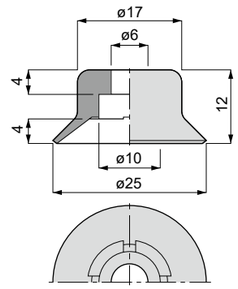
Weight: 1 g [1.6 g]

●VSPG-20A□



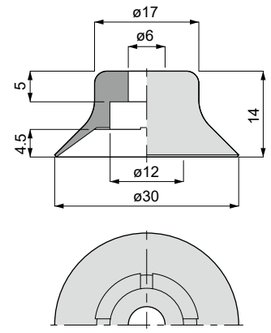
Weight: 1.7 g [2.7 g]

●VSPG-25A□



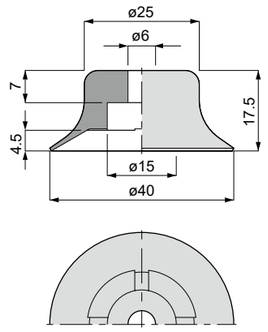
Weight: 2.5 g [3.9 g]

●VSPG-30A□



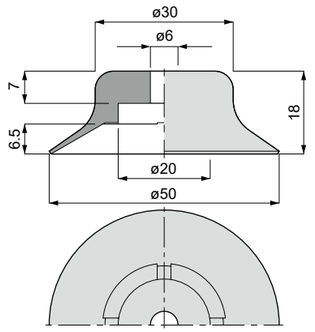
Weight: 3.1 g [5.0 g]

●VSPG-40A□



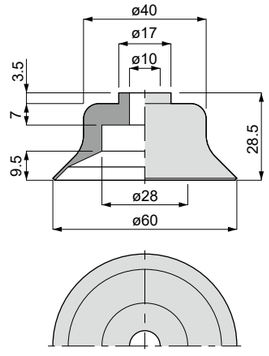
Weight: 9.1 g [14.6 g]

●VSPG-50A□



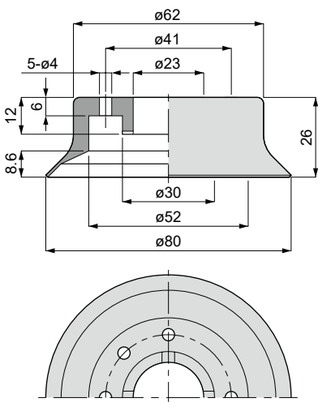
Weight: 14 g [22 g]

●VSPG-60A□



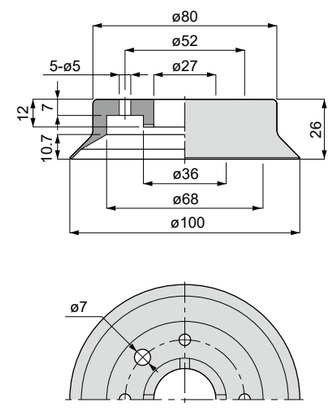
Weight: 24 g [38 g]

●VSPG-80A□



Weight: 46 g [74 g]

●VSPG-100A□

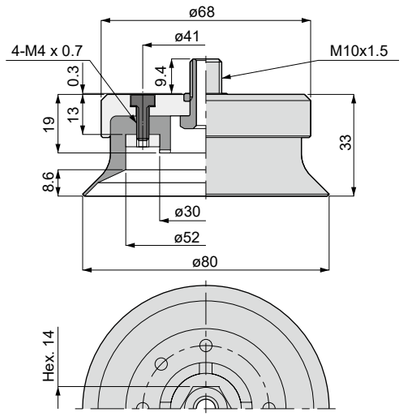


Weight: 72 g [116 g]

Weight: Only for fluoro rubber, values are inside [ ].

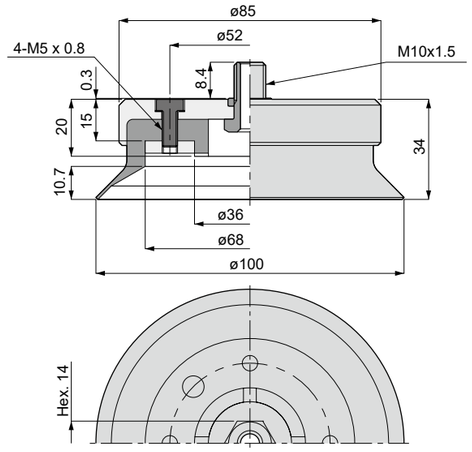
Pad Rubber + Set with Fixing Screw Outline Dimension Drawing (Deep)

●VSPG-80AøA



Weight: 140 g [168 g]

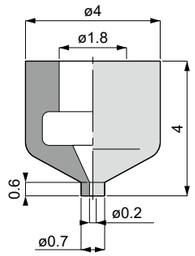
●VSPG-100AøA



Weight: 240 g [284 g]

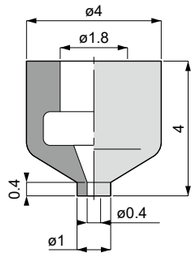
Pad Rubber Only Outline Dimension Drawing (Compact)

●VSPG-0.7RM□



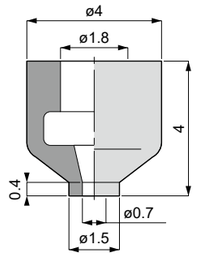
Weight: 0.1 g [0.1 g]

●VSPG-1RM□



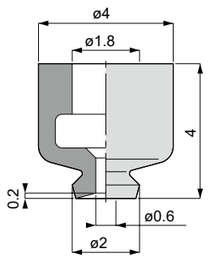
Weight: 0.1 g [0.1 g]

●VSPG-1.5RM□



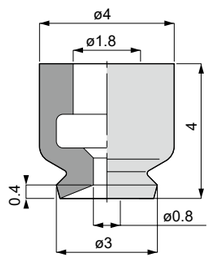
Weight: 0.1 g [0.1 g]

●VSPG-2RM□



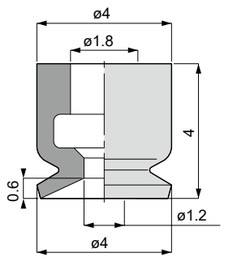
Weight: 0.1 g [0.1 g]

●VSPG-3RM□



Weight: 0.1 g [0.1 g]

●VSPG-4RM□

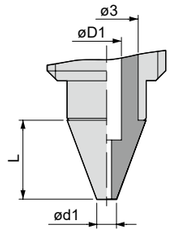


Weight: 0.1 g [0.1 g]

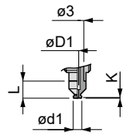
Weight: Only for fluoro rubber, values are inside [ ].

Detail Drawing of Pad and Holder Connection Part(General-type)

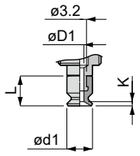
●VSPG-1R□



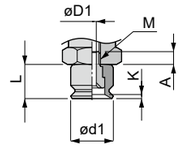
●VSPG-2 to 4R□



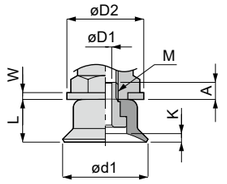
●VSPG-6, 8R□



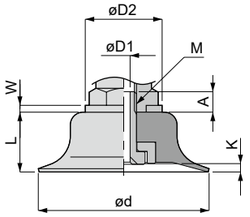
●VSPG-10, 15RøA



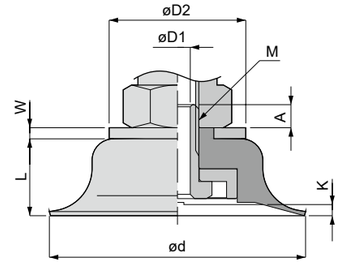
●VSPG-20 to 30RøA



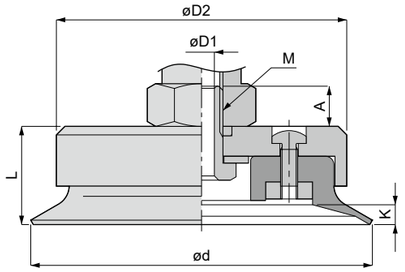
●VSPG-40, 50R□



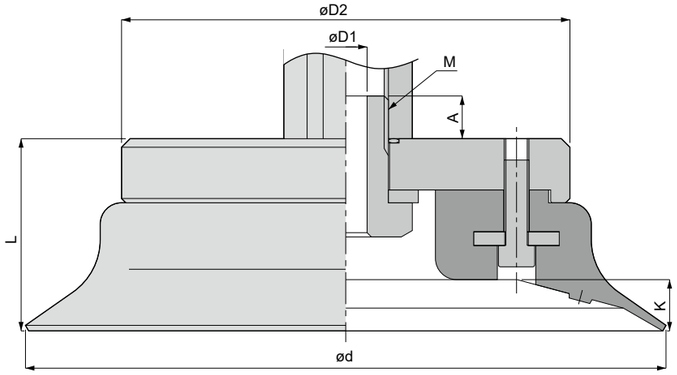
●VSPG-60RøA



●VSPG-80, 100RøA



●VSPG-150, 200RøA

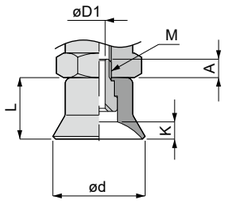


Unit: mm

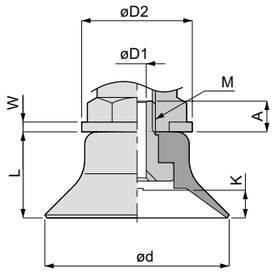
Model No.	Pad Diameter ød	L	Lip Inner Height K	Fixing Screw M	A	øD1	øD2	W
VSPG-1R□	1	4	-	-	-	0.5	-	-
VSPG-2R□	2	4	0.2	-	-	0.6	-	-
VSPG-3R□	3	4	0.2	-	-	0.8	-	-
VSPG-4R□	4	4	0.6	-	-	1.2	-	-
VSPG-6R□	6	7	1	-	-	2	-	-
VSPG-8R□	8	5.5	1.1	-	-	2	-	-
VSPG-10R□A	10	8	1	M4x0.7	3	2	-	-
VSPG-15R□A	15	9	2.4	M4x0.7	3	2	-	-
VSPG-20R□A	20	10	1.8	M6x1	4	4.5	15.5	1.6
VSPG-25R□A	25	11	2.6	M6x1	3.5	4.5	15.5	1.6
VSPG-30R□A	30	11	2	M6x1	5	4.5	15.5	1.6
VSPG-40R□A	40	14	1.9	M6x1	5	4.1	22	1.6
VSPG-50R□A	50	15	1.9	M6x1	5	4.1	22	1.6
VSPG-60R□A	60	18	2.6	M10x1.5	5.4	6	32	2.6
VSPG-80R□A	80	23	4.6	M10x1.5	9.4	6	68	-
VSPG-100R□A	100	25	5.4	M10x1.5	8.4	6	85	-
VSPG-150R□A	150	45	12	M20x2	11	10	105	-
VSPG-200R□A	200	50	15	M20x2	11	10	105	-

Detail Drawing of Pad and Holder Fixing Part (Deep)

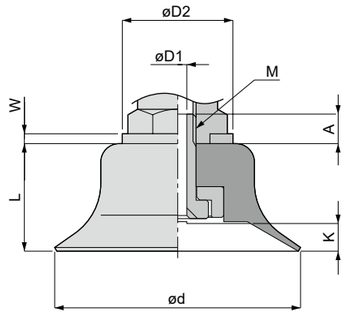
●VSPG-15AøA



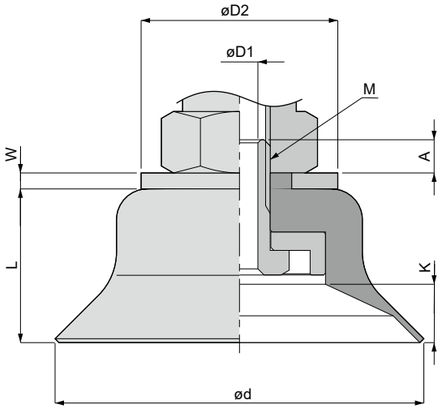
●VSPG-20 to 30AøA



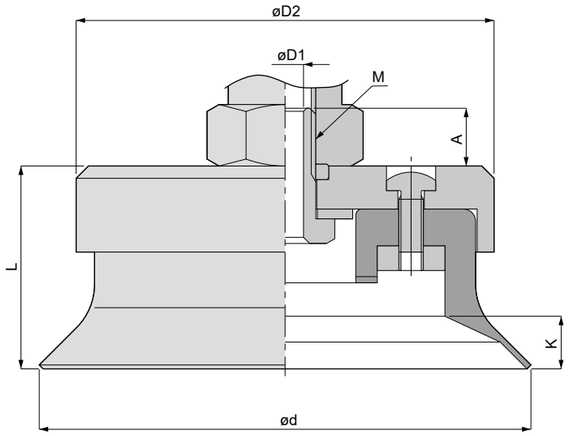
●VSPG-40, 50AøA



●VSPG-60AøA



●VSPG-80, 100AøA

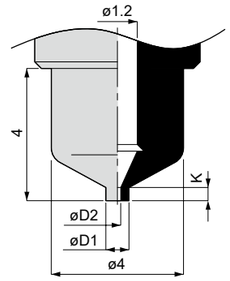


Unit: mm

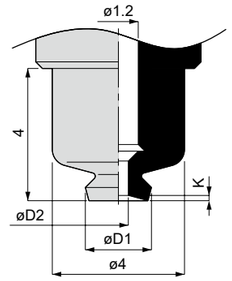
Model No.	Pad Diameter ød	L	Lip Inner Height K	Fixing Screw M	A	øD1	øD2	W
VSPG-15A□A	15	10	2.8	M4x0.7	3	2	-	-
VSPG-20A□A	20	11	3	M6x1	4	4.5	15.5	1.6
VSPG-25A□A	25	12	4	M6x1	4	4.5	15.5	1.6
VSPG-30A□A	30	14	4.5	M6x1	5	4.5	15.5	1.6
VSPG-40A□A	40	17.5	4.5	M6x1	5	4.1	22	1.6
VSPG-50A□A	50	18	6.5	M6x1	5	4.1	22	1.6
VSPG-60A□A	60	25	9.5	M10x1.5	5.4	6	32	2.6
VSPG-80A□A	80	33	8.6	M10x1.5	9.4	6	68	-
VSPG-100A□A	100	34	10.7	M10x1.5	8.4	6	85	-

Detail Drawing of Pad and Holder Fixing Part (Compact)

●VSPG-0.7RM□, VSPG-1RM□, VSPG-1.5RM□



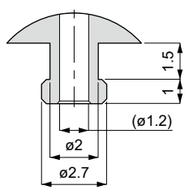
●VSPG-2RM□, VSPG-3RM□, VSPG-4RM□



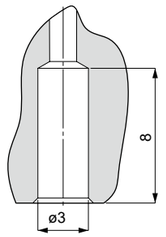
Model No.	Pad Outer Diameter øD1	Pad Inner Diameter øD2	K
VSPG-0.7RM□	0.7	0.2	0.6
VSPG-1RM□	1	0.4	0.4
VSPG-1.5RM□	1.5	0.7	0.4
VSPG-2RM□	2	0.6	0.2
VSPG-3RM□	3	0.8	0.4
VSPG-4RM□	4	1.2	0.6

Pad Rubber Fitting Part Dimensions(General-type Compact)

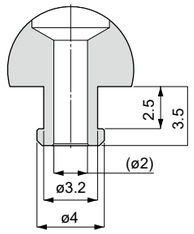
●VSPG-0.7 to 4RM□



●VSPG-1 to 4R□



●VSPG-6 to 8R□



Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, refer to Intro 15 for details.

Individual Precautions: Suction Pad Standard Type (General-type, Deep Type, Compact) VSP-□R□,□A□, □RM□ Series

Design / Selection

Caution

■Standard general-type suction pads VSP-□1R□ to □4R□ cannot be mounted on compact suction pad holders. These pads are compatible with standard suction pad holders.

■For mounting compact suction pads with pad diameters ø0.7, ø1, ø1.5 mm, set so that a load of 0.4 (N) or more is not applied to the lip part during suction. Applying excessive load to the lip part may cause the pad inner diameter to collapse due to rubber elasticity, preventing workpiece suction and potentially causing suction confirmation signal malfunction.

■Pad frames with pad outer diameter ø80 mm or more are not conductive. When using suction pads made of static dissipative rubber, conductive rubber (low resistance-type), or conductive NBR (low resistance-type), take measures to discharge electricity directly from the pad rubber.

■When replacing pad rubber for standard type pads with diameters ø80, ø100 mm, confirm the configuration diagram in the main text, use appropriate tools referring to the recommended tightening torque below, and use the holder outer diameter hexagonal part to confirm there is no loosening after tightening.

●Recommended Tightening Torque

Screw Size (mm)	Tightening Torque
M4x0.7	0.5 to 0.7 N·m
M5x0.8	

MEMO

Suction Pad Sponge-type

VSP-□S□ Series

Sponge-like suction pad with countless pores inside

RoHS

Single-cell sponge part absorbs workpiece unevenness, optimal for transporting workpieces like building exterior materials, small stones, or shells.

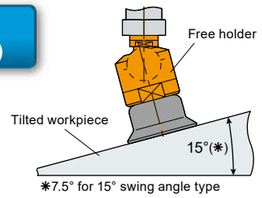
Abundant holder variations

Shape	16 types	Piping Connection	7 types	Stroke	10 types
●Standard5 types ●CompactClass 4 ●Low dust generation ..... 2 types	●Lightweight3 types ●Low back2 types	●Push-in fitting (ø1.8 to ø8)4 types ●Barbed fitting (ø4, ø6) ..... 2 types ●Screw-in (G1/8) ..... 1 type		4 mm to 50 mm (Depends on pad diameter, holder)	

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

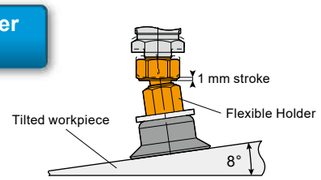
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

Free holder (F1:30°, F2:15°)



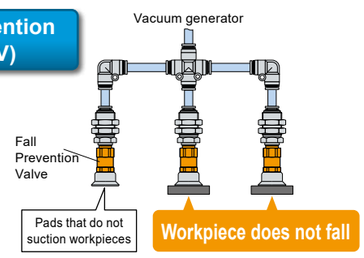
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

Drop Prevention Valve (V)

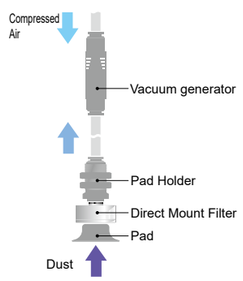


Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area

T1: 1.7 cm², T2: 7 cm²



Pad Shape

Chloroprene

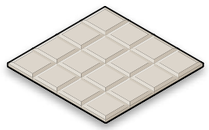
Soft cushioning allows flexible following of uneven workpieces.

Silicone (s)

High sponge density provides relatively high strength and suppresses distortion under compression

Recommended Workpiece

Building exterior materials, small stones, shells, etc.



Pad Diameter

9 types	10	15	20	25	30	35	50	70	100

Pad Material

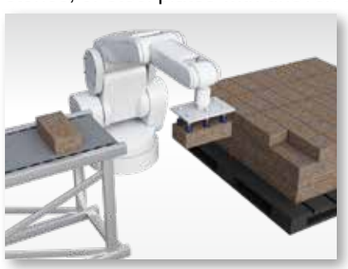
2 types	Silicone	Chloroprene

*Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Workpieces with uneven surfaces

Can flexibly follow and adhere to building materials like bricks and stones, or steel plates with uneven surfaces.



Frozen foods, etc.

By selecting silicone rubber, it can also be used for handling food products.

Model No. Notation

●Sponge-type

Suction Pad

VSP – C – 30 – -20 – S – S – 6 – [ ] – F1 – V – T1

VSP	C	30	-20	S	S	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Connection Size/Shape	❼ Buffer Load	❽ Pad Swinging	❾ Drop Prevention Valve	❿ Direct Mount Filter

Pad Rubber Only

VSPG – 30 – S – S

VSPG	30	S	S
Model No.	❷	❹	❺

Pad Rubber + Set with Fixing Screw

VSPG – 30 – S – S – A

VSPG	30	S	S	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
			HD	
	Light-weight	Both Sides Direction	HDW	
	Stan-dard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
10	ø10
15	ø15
20	ø20
25	ø25
30	ø30
35	ø35
50	ø50
70	ø70
100	ø100

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code
Specified Stroke, or No Buffer	●	●				Blank *2
Stroke 5 mm				●	●	-5
Stroke 10 mm	●	●	●	●	●	-10
Stroke 15 mm	●	●	●	●	●	-15
Stroke 20 mm	●	●	●	●	●	-20
Stroke 25 mm			●			-25
Stroke 30 mm	●	●	●			-30
Stroke 40 mm	●	●	●			-40
Stroke 50 mm	●	●	●			-50

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 10 to 50, -30, -40, and -50 can be selected for ❸.
*4: When ❷ Pad Diameter is 70 or 100, ❸ is 'Blank'.

❹ Pad Shape

Code	Content	
S	Sponge-type	

❺ Pad Material

Code	Content	
Blank	Chloroprene Rubber	
S	Silicone Rubber	

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP – ..... – P4*

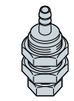
*Please inquire for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP – ..... – FP*

❻ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8, Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø8, Push-in fitting	●	●	●	●												8	
ø4, Push-in fitting, without spring cover			●	●												4C	
ø6, Push-in fitting, without spring cover			●	●												6C	
ø4 Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6 Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4 Barb fitting, without spring cover			●	●												4TC	
ø6 Barb fitting, without spring cover			●	●												6TC	
G1/8	●	●	●	●												6A	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❻. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❻.
*2: SThe selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

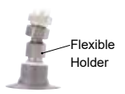
❼ Buffer Load

*1

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1: For ❶ Holder Shape other than LFC, ❼ is 'Blank'.

❽ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
*1 CF	With flexible holder (Angle 8°)	 Flexible Holder

*1: ❽CF can be selected when ❷ Pad Diameter is 10 to 50.
*2: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❾ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*1: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

❿ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1: ❿ T1 and T2 can be selected when ❷ Pad Diameter is 10 to 50.
*2: For dimensions with the direct mount filter, please refer to P. 1064.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

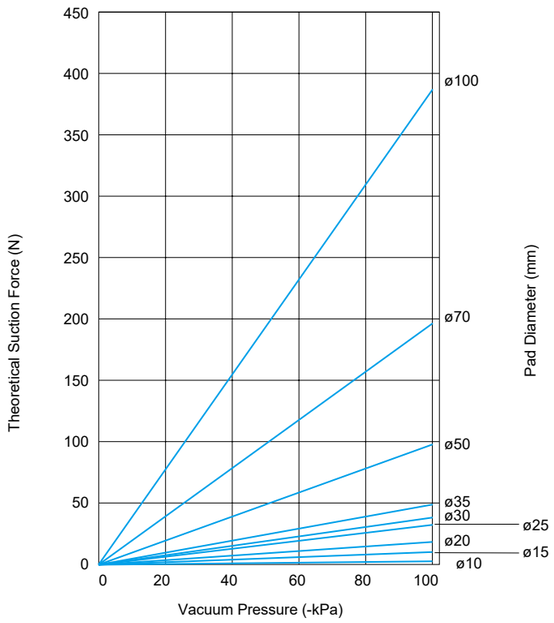
Holder Shape	Pad Diameter	Push-in fitting ø4 4	4C	ø6 6	6C	ø8 8	Barb fitting ø4 4T	4TC	ø6 6T	6TC	Thread G1/8 6A
A	ø10 to ø50	●		●			●		●		
	ø70, ø100	●		●		●					●
B	ø10 to ø50	●		●			●		●		
	ø70, ø100	●		●		●					●
C	ø10 to ø50	●	●	●	●		●	●	●	●	
	ø70, ø100	●		●		●					●
D	ø10 to ø50	●	●	●	●		●	●	●	●	
	ø70, ø100	●		●		●					●

Holder Shape	Pad Diameter	Thread M14 Blank
F	ø10 to ø50	●

Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø10 to ø50		●		●	●
MB	ø10 to ø50	●	●	●	●	●
MC	ø10 to ø50	●	●		●	●
MD	ø10 to ø50	●	●	●	●	●
LFC	ø10 to ø50		●	●	●	●
LFD	ø10 to ø50		●	●	●	●
HC	ø10 to ø50	●	●	●	●	●
HD	ø10 to ø50	●	●	●	●	●
HDW	ø10 to ø50	●	●	●	●	●
HE	ø10 to ø50	●	●	●	●	●
HEW	ø10 to ø50	●	●	●	●	●

Theoretical Suction Force

●Pad Diameter: ø10 mm to ø100 mm



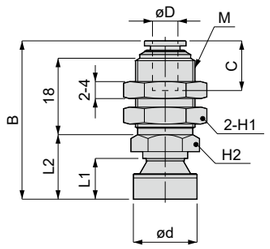
Theoretical suction force is a value under static conditions. For actual use, consider a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting. Regarding the suction force of the sponge-type, due to the characteristics of the pad, the calculated suction force (theoretical suction force x safety factor) may not be secured due to the influence of vacuum level, pad material, adsorbed object, etc. Refer to "Suction Pads selection method" (P. 412) Use the suction force obtained with this formula as a guide, and make sure that there is no problem with the suction capacity on the actual machine.

MEMO

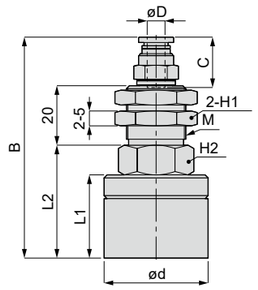
Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A10 to 50S□-4/6



●VSP-A70, 100S□-4/6/8

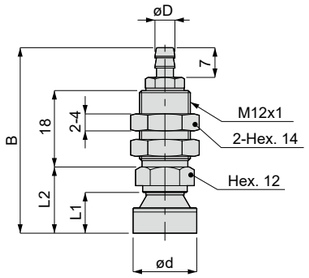


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10S□-4	10	4	M12x1	46.4	9.5	15.5	11.2	14	12	26
VSP-A10S□-6		6	M14x1	37.4		15.1	11.9			32
VSP-A15S□-4	15	4	M12x1	46.4	9.5	15.5	11.2	14	12	26
VSP-A15S□-6		6	M14x1	37.4		15.1	11.9			32
VSP-A20S□-4	20	4	M12x1	52.4	15.5	21.5	11.2	17	12	28
VSP-A20S□-6		6	M14x1	43.4		21.1	11.9			34
VSP-A25S□-4	25	4	M12x1	52.4	15.5	21.5	11.2	17	12	29
VSP-A25S□-6		6	M14x1	43.4		21.1	11.9			35
VSP-A30S□-4	30	4	M12x1	52.4	15.5	21.5	11.2	17	12	29
VSP-A30S□-6		6	M14x1	43.4		21.1	11.9			35
VSP-A35S□-4	35	4	M12x1	64.9	28	34	11.2	17	12	65
VSP-A35S□-6		6	M14x1	55.9		33.6	11.9			71
VSP-A50S□-4	50	4	M12x1	64.9	28	34	11.2	17	12	108
VSP-A50S□-6		6	M14x1	55.9		33.6	11.9			114
VSP-A70S□-4	70	4	M20x1	70.6	30	40	11.2	24	22	252
VSP-A70S□-6		6		72.8			11.9			253
VSP-A70S□-8		8		81.2			18.2			258
VSP-A100S□-4	100	4	M20x1	70.6	30	40	11.2	24	22	383
VSP-A100S□-6		6		72.8			11.9			384
VSP-A100S□-8		8		81.2			18.2			389

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb Fitting)

●VSP-A10 to 50S□-4T/6T

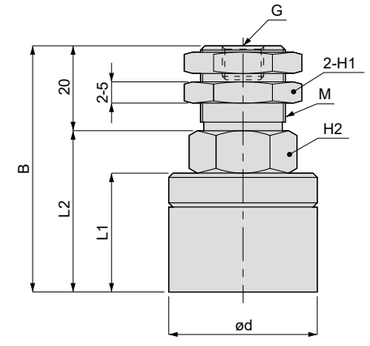


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Weight (g)
VSP-A10S□-4T	10	2.5	43.5	9.5	15.5	25
VSP-A10S□-6T		4				
VSP-A15S□-4T	15	2.5	43.5	9.5	15.5	26
VSP-A15S□-6T		4				
VSP-A20S□-4T	20	2.5	49.5	15.5	21.5	27
VSP-A20S□-6T		4				
VSP-A25S□-4T	25	2.5	49.5	15.5	21.5	29
VSP-A25S□-6T		4				
VSP-A30S□-4T	30	2.5	49.5	15.5	21.5	29
VSP-A30S□-6T		4				
VSP-A35S□-4T	35	2.5	62	28	34	65
VSP-A35S□-6T		4				
VSP-A50S□-4T	50	2.5	62	28	34	108
VSP-A50S□-6T		4				

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Female Thread)

●VSP-A70, 100S□-6A

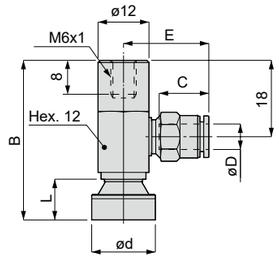


Unit: mm

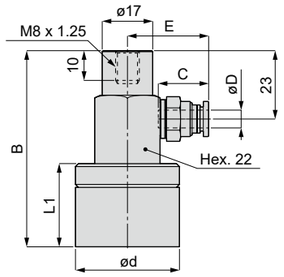
Model No.	Pad Diameter ød	Vacuum Outlet Size G	Mounting screw M	B	L1	L2	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A70S□-6A	70	G1/8	M20x1	60	30	40	24	22	244
VSP-A100S□-6A	100	G1/8	M20x1	60	30	40	24	22	375

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B10 to 50S□-4/6



●VSP-B70, 100S□-4/6/8

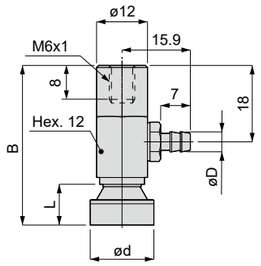


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B10S□-4	10	4	37.5	9.5	11.2	18.8	28
VSP-B10S□-6		6			11.9	20.1	29
VSP-B15S□-4	15	4	37.5	9.5	11.2	18.8	29
VSP-B15S□-6		6			11.9	20.1	30
VSP-B20S□-4	20	4	43.5	15.5	11.2	18.8	30
VSP-B20S□-6		6			11.9	20.1	31
VSP-B25S□-4	25	4	43.5	15.5	11.2	18.8	32
VSP-B25S□-6		6			11.9	20.1	33
VSP-B30S□-4	30	4	43.5	15.5	11.2	18.8	32
VSP-B30S□-6		6			11.9	20.1	33
VSP-B35S□-4	35	4	56	28	11.2	18.8	68
VSP-B35S□-6		6			11.9	20.1	69
VSP-B50S□-4	50	4	56	28	11.2	18.8	111
VSP-B50S□-6		6			11.9	20.1	112
VSP-B70S□-4	70	4	68	30	11.2	21.5	259
VSP-B70S□-6		6			11.9	23.7	260
VSP-B70S□-8		8			18.2	32.1	265
VSP-B100S□-4	100	4	68	30	11.2	21.5	389
VSP-B100S□-6		6			11.9	23.7	390
VSP-B100S□-8		8			18.2	32.1	395

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B10 to 50S□-4T/6T

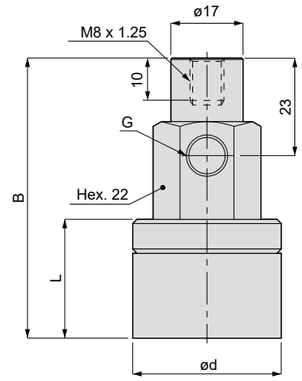


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B10S□-4	10	2.5	37.5	9.5	25
VSP-B10S□-6		4			
VSP-B15S□-4	15	2.5	37.5	9.5	26
VSP-B15S□-6		4			
VSP-B20S□-4	20	2.5	43.5	15.5	27
VSP-B20S□-6		4			
VSP-B25S□-4	25	2.5	43.5	15.5	29
VSP-B25S□-6		4			
VSP-B30S□-4	30	2.5	43.5	15.5	29
VSP-B30S□-6		4			
VSP-B35S□-4	35	2.5	56	28	65
VSP-B35S□-6		4			
VSP-B50S□-4	50	2.5	56	28	108
VSP-B50S□-6		4			

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Female Thread)

●VSP-B70, 100S□-6A

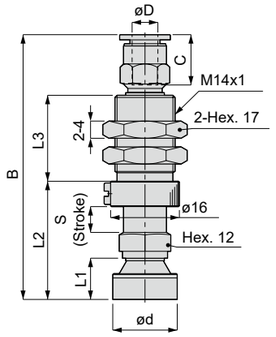


Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	B	L	Weight (g)
VSP-B70S□-6A	70	G1/8	68	30	251
VSP-B100S□-6A	100	G1/8	68	30	381

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10 to 30S□-4/6
●VSP-C10 to 30-□S□-4/6

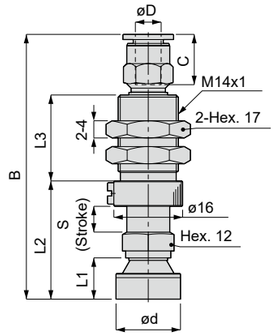


Unit: mm

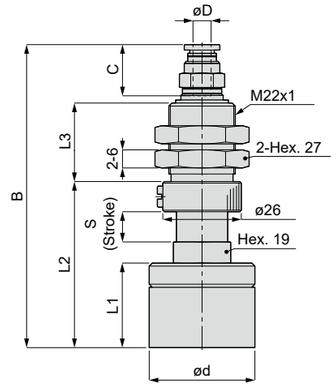
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10S□-4	10	4	60.5	9.5	27.5	20	11.2	6	7.0 to 12.6	34
VSP-C10S□-6		6	61.8				11.9			35
VSP-C10-10S□-4		4	66.5		33.5		11.2	10	3.3 to 10.0	37
VSP-C10-10S□-6		6	67.8				11.9			38
VSP-C10-15S□-4		4	76.5		38.5	25	11.2	15	3.3 to 10.4	41
VSP-C10-15S□-6		6	77.8				11.9			42
VSP-C10-20S□-4		4	92.5		45.5	34	11.2	20	2.0 to 8.7	48
VSP-C10-20S□-6		6	93.8				11.9			49
VSP-C15S□-4	15	4	60.5	9.5	27.5	20	11.2	6	7.0 to 12.6	35
VSP-C15S□-6		6	61.8				11.9			36
VSP-C15-10S□-4		4	66.5		33.5		11.2	10	3.3 to 10.0	37
VSP-C15-10S□-6		6	67.8				11.9			38
VSP-C15-15S□-4		4	76.5		38.5	25	11.2	15	3.3 to 10.4	42
VSP-C15-15S□-6		6	77.8				11.9			43
VSP-C15-20S□-4		4	92.5		45.5	34	11.2	20	2.0 to 8.7	49
VSP-C15-20S□-6		6	93.8				11.9			50
VSP-C20S□-4	20	4	66.5	15.5	33.5	20	11.2	6	7.0 to 12.6	36
VSP-C20S□-6		6	67.8				11.9			37
VSP-C20-10S□-4		4	72.5		39.5		11.2	10	3.3 to 10.0	39
VSP-C20-10S□-6		6	73.8				11.9			40
VSP-C20-15S□-4		4	82.5		44.5	25	11.2	15	3.3 to 10.4	43
VSP-C20-15S□-6		6	83.8				11.9			44
VSP-C20-20S□-4		4	98.5		51.5	34	11.2	20	2.0 to 8.7	50
VSP-C20-20S□-6		6	99.8				11.9			51
VSP-C25S□-4	25	4	66.5	15.5	33.5	20	11.2	6	7.0 to 12.6	38
VSP-C25S□-6		6	67.8				11.9			39
VSP-C25-10S□-4		4	72.5		39.5		11.2	10	3.3 to 10.0	40
VSP-C25-10S□-6		6	73.8				11.9			41
VSP-C25-15S□-4		4	82.5		44.5	25	11.2	15	3.3 to 10.4	45
VSP-C25-15S□-6		6	83.8				11.9			46
VSP-C25-20S□-4		4	98.5		51.5	34	11.2	20	2.0 to 8.7	52
VSP-C25-20S□-6		6	99.8				11.9			53
VSP-C30S□-4	30	4	66.5	15.5	33.5	20	11.2	6	7.0 to 12.6	38
VSP-C30S□-6		6	67.8				11.9			39
VSP-C30-10S□-4		4	72.5		39.5		11.2	10	3.3 to 10.0	40
VSP-C30-10S□-6		6	73.8				11.9			41
VSP-C30-15S□-4		4	82.5		44.5	25	11.2	15	3.3 to 10.4	45
VSP-C30-15S□-6		6	83.8				11.9			46
VSP-C30-20S□-4		4	98.5		51.5	34	11.2	20	2.0 to 8.7	52
VSP-C30-20S□-6		6	99.8				11.9			53

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C35, 50S□4/6
●VSP-C35, 50-□S□-4/6



●VSP-C70, 100S□-4/6/8

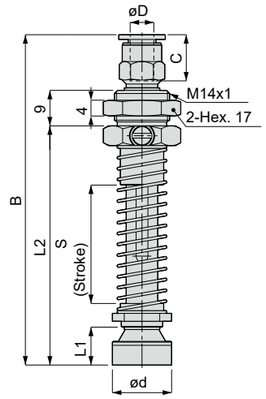


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C35S□-4	35	4	79	28	46	20	11.2	6	7.0 to 12.6	73
VSP-C35S□-6		6	80.3				11.9			74
VSP-C35-10S□-4		4	85		52		11.2	10	3.3 to 10.0	76
VSP-C35-10S□-6		6	86.3				11.9			77
VSP-C35-15S□-4		4	95		57	25	11.2	15	3.3 to 10.4	81
VSP-C35-15S□-6		6	96.3				11.9			82
VSP-C35-20S□-4		4	111		64	34	11.2	20	2.0 to 8.7	87
VSP-C35-20S□-6		6	112.3				11.9			88
VSP-C50S□-4	50	4	79	28	46	20	11.2	6	7.0 to 12.6	73
VSP-C50S□-6		6	80.3				11.9			74
VSP-C50-10S□-4		4	85		52		11.2	10	3.3 to 10.0	76
VSP-C50-10S□-6		6	86.3				11.9			77
VSP-C50-15S□-4		4	95		57	25	11.2	15	3.3 to 10.4	81
VSP-C50-15S□-6		6	96.3				11.9			82
VSP-C50-20S□-4		4	111		64	34	11.2	20	2.0 to 8.7	87
VSP-C50-20S□-6		6	112.3				11.9			88
VSP-C70S□-4	70	4	96.6	30	57	26	11.2	10	10.1 to 15.8	280
VSP-C70S□-6		6	98.8				11.9			281
VSP-C70S□-8		8	107.2				18.2			286
VSP-C100S□-4	100	4	96.6	30	57	26	11.2	10	10.1 to 15.8	411
VSP-C100S□-6		6	98.8				11.9			412
VSP-C100S□-8		8	107.2				18.2			417

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C10 to 30-□S□-4C/6C

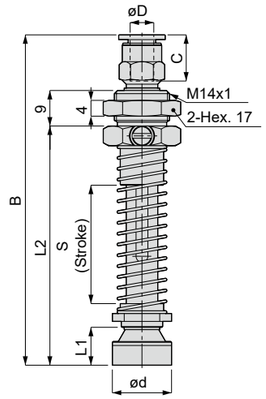


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20S□-4C	10	4	69.5	9.5	47.5	11.2	20	1.5 to 4.9	44
VSP-C10-20S□-6C		6	70.8			11.9			45
VSP-C10-30S□-4C		4	82.5		60.5	11.2	30	1.1 to 4.8	49
VSP-C10-30S□-6C		6	83.8			11.9			50
VSP-C10-40S□-4C		4	95.5		73.5	11.2	40	1.0 to 4.5	54
VSP-C10-40S□-6C		6	96.8			11.9			55
VSP-C10-50S□-4C		4	108.5		86.5	11.2	50	0.9 to 4.5	60
VSP-C10-50S□-6C		6	109.8			11.9			61
VSP-C15-20S□-4C	15	4	69.5	9.5	47.5	11.2	20	1.5 to 4.9	44
VSP-C15-20S□-6C		6	70.8			11.9			45
VSP-C15-30S□-4C		4	82.5		60.5	11.2	30	1.1 to 4.8	50
VSP-C15-30S□-6C		6	83.8			11.9			51
VSP-C15-40S□-4C		4	95.5		73.5	11.2	40	1.0 to 4.5	55
VSP-C15-40S□-6C		6	96.8			11.9			56
VSP-C15-50S□-4C		4	108.5		86.5	11.2	50	0.9 to 4.5	60
VSP-C15-50S□-6C		6	109.8			11.9			61
VSP-C20-20S□-4C	20	4	75.5	15.5	53.5	11.2	20	1.5 to 4.9	46
VSP-C20-20S□-6C		6	76.8			11.9			47
VSP-C20-30S□-4C		4	88.5		66.5	11.2	30	1.1 to 4.8	51
VSP-C20-30S□-6C		6	89.8			11.9			52
VSP-C20-40S□-4C		4	101.5		79.5	11.2	40	1.0 to 4.5	56
VSP-C20-40S□-6C		6	102.8			11.9			57
VSP-C20-50S□-4C		4	114.5		92.5	11.2	50	0.9 to 4.5	62
VSP-C20-50S□-6C		6	115.8			11.9			63
VSP-C25-20S□-4C	25	4	75.5	15.5	53.5	11.2	20	1.5 to 4.9	47
VSP-C25-20S□-6C		6	76.8			11.9			48
VSP-C25-30S□-4C		4	88.5		66.5	11.2	30	1.1 to 4.8	53
VSP-C25-30S□-6C		6	89.8			11.9			54
VSP-C25-40S□-4C		4	101.5		79.5	11.2	40	1.0 to 4.5	58
VSP-C25-40S□-6C		6	102.8			11.9			59
VSP-C25-50S□-4C		4	114.5		92.5	11.2	50	0.9 to 4.5	63
VSP-C25-50S□-6C		6	115.8			11.9			64
VSP-C30-20S□-4C	30	4	75.5	15.5	53.5	11.2	20	1.5 to 4.9	47
VSP-C30-20S□-6C		6	76.8			11.9			48
VSP-C30-30S□-4C		4	88.5		66.5	11.2	30	1.1 to 4.8	53
VSP-C30-30S□-6C		6	89.8			11.9			54
VSP-C30-40S□-4C		4	101.5		79.5	11.2	40	1.0 to 4.5	58
VSP-C30-40S□-6C		6	102.8			11.9			59
VSP-C30-50S□-4C		4	114.5		92.5	11.2	50	0.9 to 4.5	63
VSP-C30-50S□-6C		6	115.8			11.9			64

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting Type without Spring Cover)

●VSP-C35, 50-□S□-4C/6C

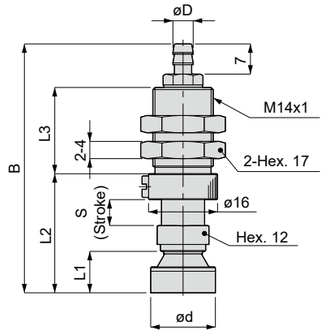


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C35-20S□-4C	35	4	89	28	66	11.2	20	1.5 to 4.9	83
VSP-C35-20S□-6C		6	89.3			11.9			84
VSP-C35-30S□-4C		4	101		79	11.2	30	1.1 to 4.8	88
VSP-C35-30S□-6C		6	102.3			11.9			89
VSP-C35-40S□-4C		4	114		92	11.2	40	1.0 to 4.5	94
VSP-C35-40S□-6C		6	115.3			11.9			95
VSP-C35-50S□-4C		4	127		105	11.2	50	0.9 to 4.5	99
VSP-C35-50S□-6C		6	128.3			11.9			100
VSP-C50-20S□-4C	50	4	88	28	66	11.2	20	1.5 to 4.9	126
VSP-C50-20S□-6C		6	89.3			11.9			127
VSP-C50-30S□-4C		4	101		79	11.2	30	1.1 to 4.8	131
VSP-C50-30S□-6C		6	102.3			11.9			132
VSP-C50-40S□-4C		4	114		92	11.2	40	1.0 to 4.5	137
VSP-C50-40S□-6C		6	115.3			11.9			138
VSP-C50-50S□-4C		4	127		105	11.2	50	0.9 to 4.5	142
VSP-C50-50S□-6C		6	128.3			11.9			143

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C10 to 30S□-4T/6T
●VSP-C10 to 30-□S□-4T/6T

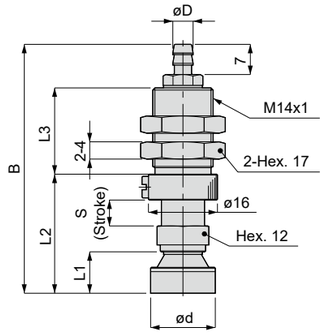


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C10S□-4T	10	2.5	57.6	9.5	27.5	20	6	7.0 to 12.6	35
VSP-C10S□-6T		4							
VSP-C10-10S□-4T		2.5	63.6		33.5		10	3.3 to 10.0	38
VSP-C10-10S□-6T		4							
VSP-C10-15S□-4T		2.5	73.6		38.5	25	15	3.3 to 10.4	42
VSP-C10-15S□-6T		4							
VSP-C10-20S□-4T		2.5	89.6		45.5	34	20	2.0 to 8.7	49
VSP-C10-20S□-6T		4							
VSP-C15S□-4T	15	4	57.6	9.5	27.5	20	6	7.0 to 12.6	36
VSP-C15S□-6T		6							
VSP-C15-10S□-4T		4	63.6		33.5		10	3.3 to 10.0	38
VSP-C15-10S□-6T		6							
VSP-C15-15S□-4T		4	73.6		38.5	25	15	3.3 to 10.4	43
VSP-C15-15S□-6T		6							
VSP-C15-20S□-4T		4	89.6		45.5	34	20	2.0 to 8.7	50
VSP-C15-20S□-6T		6							
VSP-C20S□-4T	20	4	63.6	15.5	33.5	20	6	7.0 to 12.6	37
VSP-C20S□-6T		6							
VSP-C20-10S□-4T		4	69.6		39.5		10	3.3 to 10.0	40
VSP-C20-10S□-6T		6							
VSP-C20-15S□-4T		4	79.6		44.5	25	15	3.3 to 10.4	44
VSP-C20-15S□-6T		6							
VSP-C20-20S□-4T		4	95.6		51.5	34	20	2.0 to 8.7	51
VSP-C20-20S□-6T		6							
VSP-C25S□-4T	25	4	63.6	15.5	33.5	20	6	7.0 to 12.6	39
VSP-C25S□-6T		6							
VSP-C25-10S□-4T		4	69.6		39.5		10	3.3 to 10.0	41
VSP-C25-10S□-6T		6							
VSP-C25-15S□-4T		4	79.6		44.5	25	15	3.3 to 10.4	46
VSP-C25-15S□-6T		6							
VSP-C25-20S□-4T		4	95.6		51.5	34	20	2.0 to 8.7	53
VSP-C25-20S□-6T		6							
VSP-C30S□-4T	30	4	63.6	15.5	33.5	20	6	7.0 to 12.6	39
VSP-C30S□-6T		6							
VSP-C30-10S□-4T		4	69.6		39.5		10	3.3 to 10.0	41
VSP-C30-10S□-6T		6							
VSP-C30-15S□-4T		4	79.6		44.5	25	15	3.3 to 10.4	46
VSP-C30-15S□-6T		6							
VSP-C30-20S□-4T		4	95.6		51.5	34	20	2.0 to 8.7	53
VSP-C30-20S□-6T		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C35, 50S□-4T/6T
●VSP-C35, 50-□S□-4T/6T

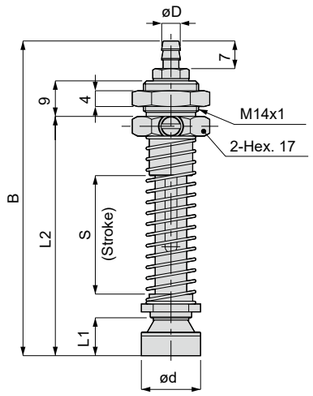


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C35S□-4T	35	2.5	76.1	28	46	20	6	7.0 to 12.6	74
VSP-C35S□-6T		4							
VSP-C35-10S□-4T		2.5	82.1		52		10	3.3 to 10.0	77
VSP-C35-10S□-6T		4							
VSP-C35-15S□-4T		2.5	92.1		57	25	15	3.3 to 10.4	82
VSP-C35-15S□-6T		4							
VSP-C35-20S□-4T		2.5	108.1		64	34	20	2.0 to 8.7	88
VSP-C35-20S□-6T		4							
VSP-C50S□-4T	50	2.5	76.1	28	46	20	6	7.0 to 12.6	74
VSP-C50S□-6T		4							
VSP-C50-10S□-4T		2.5	82.1		52		10	3.3 to 10.0	77
VSP-C50-10S□-6T		4							
VSP-C50-15S□-4T		2.5	92.1		57	25	15	3.3 to 10.4	82
VSP-C50-15S□-6T		4							
VSP-C50-20S□-4T		2.5	108.1		64	34	20	2.0 to 8.7	88
VSP-C50-20S□-6T		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C Barb Fitting without Spring Cover)

●VSP-C10 to 30-□S□-4TC/6TC

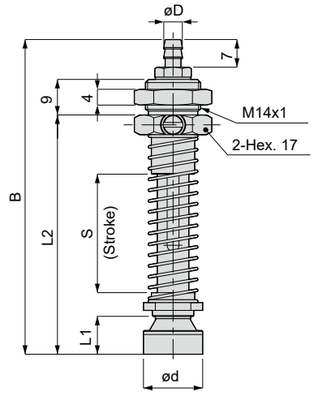


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20S□-4TC	10	2.5	66.6	9.5	47.5	20	1.5 to 4.9	43
VSP-C10-20S□-6TC		4						
VSP-C10-30S□-4TC		2.5	79.6		60.5	30	1.1 to 4.8	48
VSP-C10-30S□-6TC		4						
VSP-C10-40S□-4TC		2.5	92.6		73.5	40	1.0 to 4.5	53
VSP-C10-40S□-6TC		4						
VSP-C10-50S□-4TC		2.5	105.6		86.5	50	0.9 to 4.5	59
VSP-C10-50S□-6TC		4						
VSP-C15-20S□-4TC	15	2.5	66.6	9.5	47.5	20	1.5 to 4.9	43
VSP-C15-20S□-6TC		4						
VSP-C15-30S□-4TC		2.5	79.6		60.5	30	1.1 to 4.8	49
VSP-C15-30S□-6TC		4						
VSP-C15-40S□-4TC		2.5	92.6		73.5	40	1.0 to 4.5	54
VSP-C15-40S□-6TC		4						
VSP-C15-50S□-4TC		2.5	105.6		86.5	50	0.9 to 4.5	59
VSP-C15-50S□-6TC		4						
VSP-C20-20S□-4TC	20	2.5	72.6	15.5	53.5	20	1.5 to 4.9	45
VSP-C20-20S□-6TC		4						
VSP-C20-30S□-4TC		2.5	85.6		66.5	30	1.1 to 4.8	50
VSP-C20-30S□-6TC		4						
VSP-C20-40S□-4TC		2.5	98.6		79.5	40	1.0 to 4.5	55
VSP-C20-40S□-6TC		4						
VSP-C20-50S□-4TC		2.5	111.6		92.5	50	0.9 to 4.5	61
VSP-C20-50S□-6TC		4						
VSP-C25-20S□-4TC	25	2.5	72.6	15.5	53.5	20	1.5 to 4.9	46
VSP-C25-20S□-6TC		4						
VSP-C25-30S□-4TC		2.5	85.6		66.5	30	1.1 to 4.8	52
VSP-C25-30S□-6TC		4						
VSP-C25-40S□-4TC		2.5	98.6		79.5	40	1.0 to 4.5	57
VSP-C25-40S□-6TC		4						
VSP-C25-50S□-4TC		2.5	111.6		92.5	50	0.9 to 4.5	62
VSP-C25-50S□-6TC		4						
VSP-C30-20S□-4TC	30	2.5	72.6	15.5	53.5	20	1.5 to 4.9	46
VSP-C30-20S□-6TC		4						
VSP-C30-30S□-4TC		2.5	85.6		66.5	30	1.1 to 4.8	52
VSP-C30-30S□-6TC		4						
VSP-C30-40S□-4TC		2.5	98.6		79.5	40	1.0 to 4.5	57
VSP-C30-40S□-6TC		4						
VSP-C30-50S□-4TC		2.5	111.6		92.5	50	0.9 to 4.5	62
VSP-C30-50S□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C Barb Fitting without Spring Cover)

●VSP-C35, 50-□S□-4TC/6TC

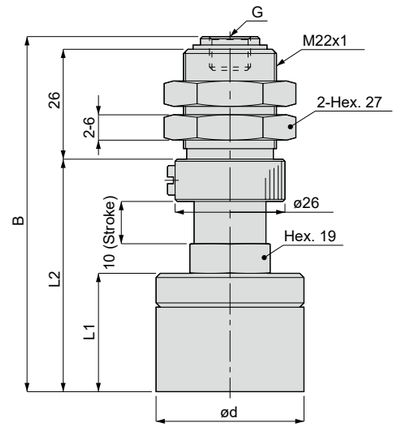


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C35-20S□-4TC	35	2.5	85.1	28	66	20	1.5 to 4.9	82
VSP-C35-20S□-6TC		4						
VSP-C35-30S□-4TC		2.5	98.1		79	30	1.1 to 4.8	87
VSP-C35-30S□-6TC		4						
VSP-C35-40S□-4TC		2.5	111.1		92	40	1.0 to 4.5	92
VSP-C35-40S□-6TC		4						
VSP-C35-50S□-4TC		2.5	124.1		105	50	0.9 to 4.5	90
VSP-C35-50S□-6TC		4						
VSP-C50-20S□-4TC	50	2.5	85.1	28	66	20	1.5 to 4.9	125
VSP-C50-20S□-6TC		4						
VSP-C50-30S□-4TC		2.5	98.1		79	30	1.1 to 4.8	130
VSP-C50-30S□-6TC		4						
VSP-C50-40S□-4TC		2.5	111.1		92	40	1.0 to 4.5	135
VSP-C50-40S□-6TC		4						
VSP-C50-50S□-4TC		2.5	124.1		105	50	0.9 to 4.5	133
VSP-C50-50S□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C Female Thread)

●VSP-C70, 100S□-6A

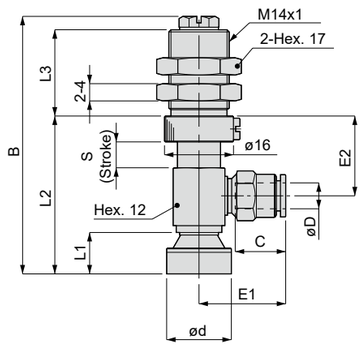


Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	B	L1	L2	Spring Force (N)	Weight (g)
VSP-C70S□-6A	70	G1/8	86	30	57	10.1 to 15.8	272
VSP-C100S□-6A	100	G1/8	86	30	57	10.1 to 15.8	403

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10 to 30S□-4/6
●VSP-D10 to 30-□S□-4/6

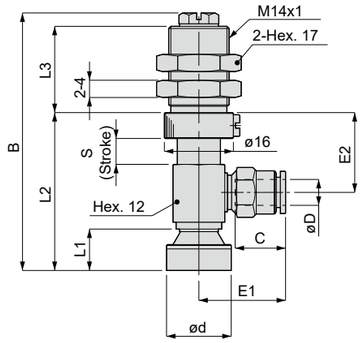


Unit: mm

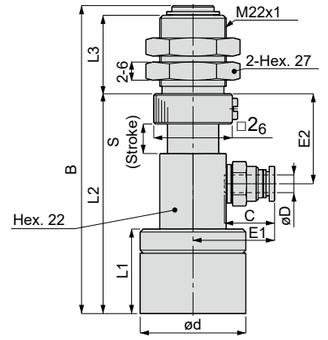
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10S□-4	10	4	59.6	9.5	36.5	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D10S□-6		6					11.9	20.1				47
VSP-D10-10S□-4		4	65.6		42.5		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D10-10S□-6		6					11.9	20.1				51
VSP-D10-15S□-4		4	75.6		47.5	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D10-15S□-6		6					11.9	20.1				57
VSP-D10-20S□-4		4	91.6		54.5	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D10-20S□-6		6					11.9	20.1				67
VSP-D15S□-4	15	4	59.6	9.5	36.5	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D15S□-6		6					11.9	20.1				47
VSP-D15-10S□-4		4	65.6		42.5		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D15-10S□-6		6					11.9	20.1				51
VSP-D15-15S□-4		4	75.6		47.5	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D15-15S□-6		6					11.9	20.1				57
VSP-D15-20S□-4		4	91.6		54.5	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D15-20S□-6		6					11.9	20.1				67
VSP-D20S□-4	20	4	65.6	15.5	42.5	20	11.2	18.8	18.5	6	7.0 to 12.6	48
VSP-D20S□-6		6					11.9	20.1				49
VSP-D20-10S□-4		4	71.6		48.5		11.2	18.8	24.5	10	3.3 to 10.0	52
VSP-D20-10S□-6		6					11.9	20.1				53
VSP-D20-15S□-4		4	81.6		53.5	25	11.2	18.8	29.5	15	3.3 to 10.4	58
VSP-D20-15S□-6		6					11.9	20.1				59
VSP-D20-20S□-4		4	97.6		60.5	34	11.2	18.8	36.5	20	2.0 to 8.7	68
VSP-D20-20S□-6		6					11.9	20.1				69
VSP-D25S□-4	25	4	65.6	15.5	42.5	20	11.2	18.8	18.5	6	7.0 to 12.6	49
VSP-D25S□-6		6					11.9	20.1				50
VSP-D25-10S□-4		4	71.6		48.5		11.2	18.8	24.5	10	3.3 to 10.0	53
VSP-D25-10S□-6		6					11.9	20.1				54
VSP-D25-15S□-4		4	81.6		53.5	25	11.2	18.8	29.5	15	3.3 to 10.4	59
VSP-D25-15S□-6		6					11.9	20.1				60
VSP-D25-20S□-4		4	97.6		60.5	34	11.2	18.8	36.5	20	2.0 to 8.7	69
VSP-D25-20S□-6		6					11.9	20.1				70
VSP-D30S□-4	30	4	65.6	15.5	42.5	20	11.2	18.8	18.5	6	7.0 to 12.6	49
VSP-D30S□-6		6					11.9	20.1				50
VSP-D30-10S□-4		4	71.6		48.5		11.2	18.8	24.5	10	3.3 to 10.0	53
VSP-D30-10S□-6		6					11.9	20.1				54
VSP-D30-15S□-4		4	81.6		53.5	25	11.2	18.8	29.5	15	3.3 to 10.4	59
VSP-D30-15S□-6		6					11.9	20.1				60
VSP-D30-20S□-4		4	97.6		60.5	34	11.2	18.8	36.5	20	2.0 to 8.7	69
VSP-D30-20S□-6		6					11.9	20.1				70

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D35, 50S□4/6
●VSP-D35, 50-□S□-4/6



●VSP-D70, 100S□-4/6/8

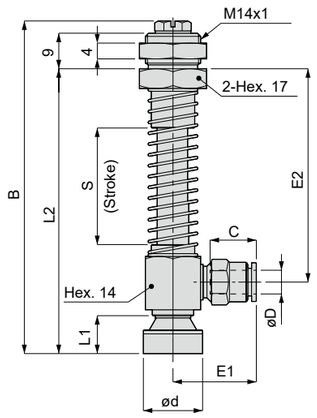


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D35S□-4	35	4	78.1	28	55	20	11.2	18.8	18.5	6	7.0 to 12.6	73
VSP-D35S□-6		6					11.9	20.1				74
VSP-D35-10S□-4		4	84.1		61		11.2	18.8	24.5	10	3.3 to 10.0	89
VSP-D35-10S□-6		6					11.9	20.1				90
VSP-D35-15S□-4		4	94.1		66	25	11.2	18.8	29.5	15	3.3 to 10.4	95
VSP-D35-15S□-6		6					11.9	20.1				96
VSP-D35-20S□-4		4	110.1		73	34	11.2	18.8	36.5	20	2.0 to 8.7	105
VSP-D35-20S□-6		6					11.9	20.1				106
VSP-D50S□-4	50	4	78.1	28	55	20	11.2	18.8	18.5	6	7.0 to 12.6	116
VSP-D50S□-6		6					11.9	20.1				117
VSP-D50-10S□-4		4	84.1		61		11.2	18.8	24.5	10	3.3 to 10.0	132
VSP-D50-10S□-6		6					11.9	20.1				133
VSP-D50-15S□-4		4	94.1		66	25	11.2	18.8	29.5	15	3.3 to 10.4	138
VSP-D50-15S□-6		6					11.9	20.1				139
VSP-D50-20S□-4		4	110.1		73	34	11.2	18.8	36.5	20	2.0 to 8.7	148
VSP-D50-20S□-6		6					11.9	20.1				149
VSP-D70S□-4	70	4	104	30	75	26	11.2	21.5	30	10	10.1 to 15.8	363
VSP-D70S□-6		6					11.9	23.7				364
VSP-D70S□-8		8					18.2	32.1				369
VSP-D100S□-4	100	4	104	30	75	26	11.2	21.5	30	10	10.1 to 15.8	493
VSP-D100S□-6		6					11.9	23.7				494
VSP-D100S□-8		8					18.2	32.1				499

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D10 to 30-□S□-4C/6C

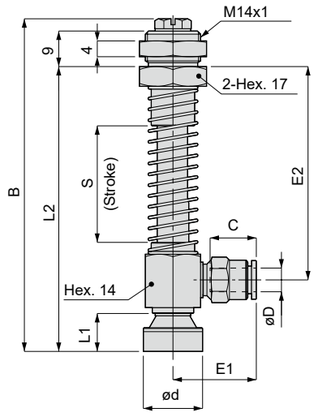


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20S□-4C	10	4	71.1	9.5	59	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D10-20S□-6C		6				11.9	21.1				65
VSP-D10-30S□-4C		4	84.1		72	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D10-30S□-6C		6				11.9	21.1				72
VSP-D10-40S□-4C		4	97.1		85	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D10-40S□-6C		6				11.9	21.1				79
VSP-D10-50S□-4C		4	110.1		98	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D10-50S□-6C		6				11.9	21.1				85
VSP-D15-20S□-4C	15	4	71.1	9.5	59	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D15-20S□-6C		6				11.9	21.1				66
VSP-D15-30S□-4C		4	84.1		72	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D15-30S□-6C		6				11.9	21.1				72
VSP-D15-40S□-4C		4	97.1		85	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D15-40S□-6C		6				11.9	21.1				79
VSP-D15-50S□-4C		4	110.1		98	11.2	19.8	80	50	0.9 to 4.5	85
VSP-D15-50S□-6C		6				11.9	21.1				86
VSP-D20-20S□-4C	20	4	77.1	15.5	65	11.2	19.8	41	20	1.5 to 4.9	66
VSP-D20-20S□-6C		6				11.9	21.1				67
VSP-D20-30S□-4C		4	90.1		78	11.2	19.8	54	30	1.1 to 4.8	73
VSP-D20-30S□-6C		6				11.9	21.1				74
VSP-D20-40S□-4C		4	103.1		91	11.2	19.8	67	40	1.0 to 4.5	80
VSP-D20-40S□-6C		6				11.9	21.1				81
VSP-D20-50S□-4C		4	116.1		104	11.2	19.8	80	50	0.9 to 4.5	86
VSP-D20-50S□-6C		6				11.9	21.1				87
VSP-D25-20S□-4C	25	4	77.1	15.5	65	11.2	19.8	41	20	1.5 to 4.9	68
VSP-D25-20S□-6C		6				11.9	21.1				69
VSP-D25-30S□-4C		4	90.1		78	11.2	19.8	54	30	1.1 to 4.8	74
VSP-D25-30S□-6C		6				11.9	21.1				75
VSP-D25-40S□-4C		4	103.1		91	11.2	19.8	67	40	1.0 to 4.5	81
VSP-D25-40S□-6C		6				11.9	21.1				82
VSP-D25-50S□-4C		4	116.1		104	11.2	19.8	80	50	0.9 to 4.5	88
VSP-D25-50S□-6C		6				11.9	21.1				89
VSP-D30-20S□-4C	30	4	77.1	15.5	65	11.2	19.8	41	20	1.5 to 4.9	68
VSP-D30-20S□-6C		6				11.9	21.1				69
VSP-D30-30S□-4C		4	90.1		78	11.2	19.8	54	30	1.1 to 4.8	74
VSP-D30-30S□-6C		6				11.9	21.1				75
VSP-D30-40S□-4C		4	103.1		91	11.2	19.8	67	40	1.0 to 4.5	81
VSP-D30-40S□-6C		6				11.9	21.1				82
VSP-D30-50S□-4C		4	116.1		104	11.2	19.8	80	50	0.9 to 4.5	88
VSP-D30-50S□-6C		6				11.9	21.1				89

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D35, 50-□S□-4C/6C

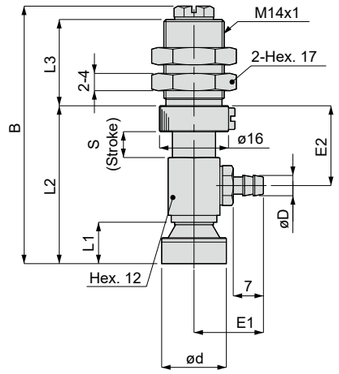


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D35-20S□-4C	35	4	89.6	28	77.5	11.2	19.8	41	20	1.5 to 4.9	103
VSP-D35-20S□-6C		6				11.9	21.1				104
VSP-D35-30S□-4C		4	102.6		90.5	11.2	19.8	54	30	1.1 to 4.8	110
VSP-D35-30S□-6C		6				11.9	21.1				111
VSP-D35-40S□-4C		4	115.6		103.5	11.2	19.8	67	40	1.0 to 4.5	117
VSP-D35-40S□-6C		6				11.9	21.1				118
VSP-D35-50S□-4C		4	128.6		116.5	11.2	19.8	80	50	0.9 to 4.5	124
VSP-D35-50S□-6C		6				11.9	21.1				125
VSP-D50-20S□-4C	50	4	89.6	28	77.5	11.2	19.8	41	20	1.5 to 4.9	146
VSP-D50-20S□-6C		6				11.9	21.1				147
VSP-D50-30S□-4C		4	102.6		90.5	11.2	19.8	54	30	1.1 to 4.8	153
VSP-D50-30S□-6C		6				11.9	21.1				154
VSP-D50-40S□-4C		4	115.6		103.5	11.2	19.8	67	40	1.0 to 4.5	160
VSP-D50-40S□-6C		6				11.9	21.1				161
VSP-D50-50S□-4C		4	128.6		116.5	11.2	19.8	80	50	0.9 to 4.5	167
VSP-D50-50S□-6C		6				11.9	21.1				168

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10 to 30S□-4T/6T
●VSP-D10 to 30-□S□-4T/6T

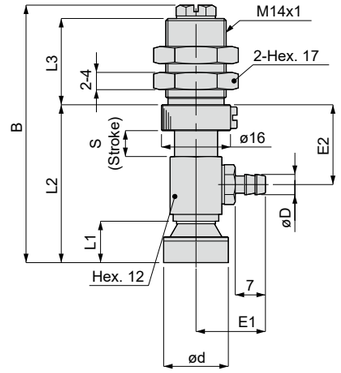


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10S□-4T	10	4	59.6	9.5	36.5	20	15.9	18.5	6	7.0 to 12.6	45
VSP-D10S□-6T		6									
VSP-D10-10S□-4T		4	65.6		42.5			24.5	10	3.3 to 10.0	51
VSP-D10-10S□-6T		6									
VSP-D10-15S□-4T		4	75.6		47.5	25		29.5	15	3.3 to 10.4	57
VSP-D10-15S□-6T		6									
VSP-D10-20S□-4T		4	91.6		54.5	34		36.5	20	2.0 to 8.7	67
VSP-D10-20S□-6T		6									
VSP-D15S□-4T	15	4	59.6	9.5	36.5	20	15.9	18.5	6	7.0 to 12.6	45
VSP-D15S□-6T		6									
VSP-D15-10S□-4T		4	65.6		42.5			24.5	10	3.3 to 10.0	51
VSP-D15-10S□-6T		6									
VSP-D15-15S□-4T		4	75.6		47.5	25		29.5	15	3.3 to 10.4	57
VSP-D15-15S□-6T		6									
VSP-D15-20S□-4T		4	91.6		54.5	34		36.5	20	2.0 to 8.7	67
VSP-D15-20S□-6T		6									
VSP-D20S□-4T	20	4	65.6	15.5	42.5	20	15.9	18.5	6	7.0 to 12.6	47
VSP-D20S□-6T		6									
VSP-D20-10S□-4T		4	71.6		48.5			24.5	10	3.3 to 10.0	53
VSP-D20-10S□-6T		6									
VSP-D20-15S□-4T		4	81.6		53.5	25		29.5	15	3.3 to 10.4	59
VSP-D20-15S□-6T		6									
VSP-D20-20S□-4T		4	97.6		60.5	34		36.5	20	2.0 to 8.7	69
VSP-D20-20S□-6T		6									
VSP-D25S□-4T	25	4	65.6	15.5	42.5	20	15.9	18.5	6	7.0 to 12.6	48
VSP-D25S□-6T		6									
VSP-D25-10S□-4T		4	71.6		48.5			24.5	10	3.3 to 10.0	54
VSP-D25-10S□-6T		6									
VSP-D25-15S□-4T		4	81.6		53.5	25		29.5	15	3.3 to 10.4	60
VSP-D25-15S□-6T		6									
VSP-D25-20S□-4T		4	97.6		60.5	34		36.5	20	2.0 to 8.7	70
VSP-D25-20S□-6T		6									
VSP-D30S□-4T	30	4	65.6	15.5	42.5	20	15.9	18.5	6	7.0 to 12.6	48
VSP-D30S□-6T		6									
VSP-D30-10S□-4T		4	71.6		48.5			24.5	10	3.3 to 10.0	54
VSP-D30-10S□-6T		6									
VSP-D30-15S□-4T		4	81.6		53.5	25		29.5	15	3.3 to 10.4	60
VSP-D30-15S□-6T		6									
VSP-D30-20S□-4T		4	97.6		60.5	34		36.5	20	2.0 to 8.7	70
VSP-D30-20S□-6T		6									

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D35, 50S□-4T/6T
●VSP-D35, 50-□S□-4T/6T

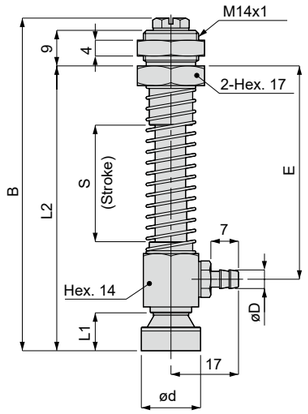


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D35S□-4T	35	4	78.1	28	55	20	15.9	18.5	6	7.0 to 12.6	84
VSP-D35S□-6T		6									
VSP-D35-10S□-4T		4	84.1		61			24.5	10	3.3 to 10.0	88
VSP-D35-10S□-6T		6									
VSP-D35-15S□-4T		4	94.1		66	25		29.5	15	3.3 to 10.4	94
VSP-D35-15S□-6T		6									
VSP-D35-20S□-4T		4	110.1		73	34		36.5	20	2.0 to 8.7	95
VSP-D35-20S□-6T		6									
VSP-D50S□-4T	50	4	78.1	28	55	20	15.9	18.5	6	7.0 to 12.6	127
VSP-D50S□-6T		6									
VSP-D50-10S□-4T		4	84.1		61			24.5	10	3.3 to 10.0	131
VSP-D50-10S□-6T		6									
VSP-D50-15S□-4T		4	94.1		66	25		29.5	15	3.3 to 10.4	137
VSP-D50-15S□-6T		6									
VSP-D50-20S□-4T		4	110.1		73	34		36.5	20	2.0 to 8.7	139
VSP-D50-20S□-6T		6									

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D10 to 30-□S□-4TC/6TC

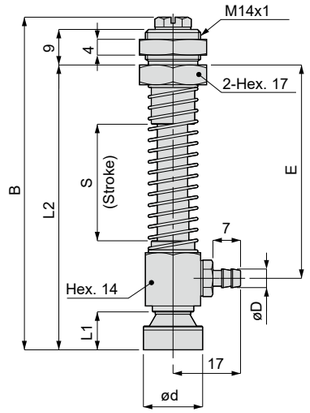


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20S□-4TC	10	4	71.1	9.5	59	41	20	1.5 to 4.9	63
VSP-D10-20S□-6TC		6							
VSP-D10-30S□-4TC		4	84.1		72	54	30	1.1 to 4.8	70
VSP-D10-30S□-6TC		6							
VSP-D10-40S□-4TC		4	97.1		85	67	40	1.0 to 4.5	77
VSP-D10-40S□-6TC		6							
VSP-D10-50S□-4TC		4	110.1		98	80	50	0.9 to 4.5	83
VSP-D10-50S□-6TC		6							
VSP-D15-20S□-4TC	15	4	71.1	9.5	59	41	20	1.5 to 4.9	64
VSP-D15-20S□-6TC		6							
VSP-D15-30S□-4TC		4	84.1		72	54	30	1.1 to 4.8	70
VSP-D15-30S□-6TC		6							
VSP-D15-40S□-4TC		4	97.1		85	67	40	1.0 to 4.5	77
VSP-D15-40S□-6TC		6							
VSP-D15-50S□-4TC		4	110.1		98	80	50	0.9 to 4.5	84
VSP-D15-50S□-6TC		6							
VSP-D20-20S□-4TC	20	4	77.1	15.5	65	41	20	1.5 to 4.9	65
VSP-D20-20S□-6TC		6							
VSP-D20-30S□-4TC		4	90.1		78	54	30	1.1 to 4.8	72
VSP-D20-30S□-6TC		6							
VSP-D20-40S□-4TC		4	103.1		91	67	40	1.0 to 4.5	79
VSP-D20-40S□-6TC		6							
VSP-D20-50S□-4TC		4	116.1		104	80	50	0.9 to 4.5	85
VSP-D20-50S□-6TC		6							
VSP-D25-20S□-4TC	25	4	77.1	15.5	65	41	20	1.5 to 4.9	67
VSP-D25-20S□-6TC		6							
VSP-D25-30S□-4TC		4	90.1		78	54	30	1.1 to 4.8	73
VSP-D25-30S□-6TC		6							
VSP-D25-40S□-4TC		4	103.1		91	67	40	1.0 to 4.5	80
VSP-D25-40S□-6TC		6							
VSP-D25-50S□-4TC		4	116.1		104	80	50	0.9 to 4.5	87
VSP-D25-50S□-6TC		6							
VSP-D30-20S□-4TC	30	4	77.1	15.5	65	41	20	1.5 to 4.9	67
VSP-D30-20S□-6TC		6							
VSP-D30-30S□-4TC		4	90.1		78	54	30	1.1 to 4.8	73
VSP-D30-30S□-6TC		6							
VSP-D30-40S□-4TC		4	103.1		91	67	40	1.0 to 4.5	80
VSP-D30-40S□-6TC		6							
VSP-D30-50S□-4TC		4	116.1		104	80	50	0.9 to 4.5	87
VSP-D30-50S□-6TC		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D35, 50-□S□-4TC/6TC

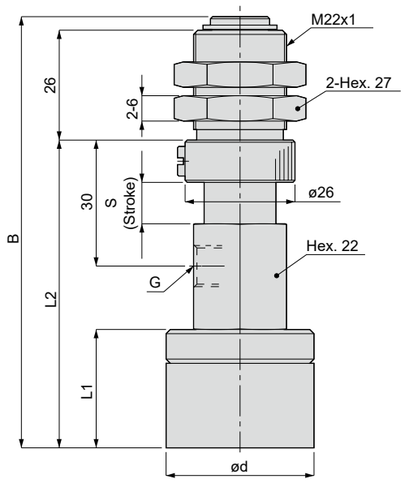


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D35-20S□-4TC	35	4	89.6	28	77.5	41	20	1.5 to 4.9	102
VSP-D35-20S□-6TC		6							
VSP-D35-30S□-4TC		4	102.6		90.5	54	30	1.1 to 4.8	109
VSP-D35-30S□-6TC		6							
VSP-D35-40S□-4TC		4	115.6		103.5	67	40	1.0 to 4.5	116
VSP-D35-40S□-6TC		6							
VSP-D35-50S□-4TC		4	128.6		116.5	80	50	0.9 to 4.5	123
VSP-D35-50S□-6TC		6							
VSP-D50-20S□-4TC	50	4	89.6	28	77.5	41	20	1.5 to 4.9	145
VSP-D50-20S□-6TC		6							
VSP-D50-30S□-4TC		4	102.6		90.5	54	30	1.1 to 4.8	152
VSP-D50-30S□-6TC		6							
VSP-D50-40S□-4TC		4	115.6		103.5	67	40	1.0 to 4.5	159
VSP-D50-40S□-6TC		6							
VSP-D50-50S□-4TC		4	128.6		116.5	80	50	0.9 to 4.5	167
VSP-D50-50S□-6TC		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Female Thread)

●VSP-D70, 100S□-6A

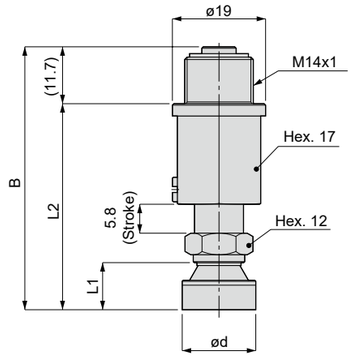


Unit: mm

Model No.	Pad Diameter ød	Vacuum Outlet Size G	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-D70S□-6A	70	G1/8	104	30	75	10	10.1 to 15.8	355
VSP-D100S□-6A	100	G1/8	104	30	75	10	10.1 to 15.8	485

Outline Dimension Drawing (Buffer Type, Direct Mount, VSP-F, Male Thread)

●VSP-F10 to 50S□

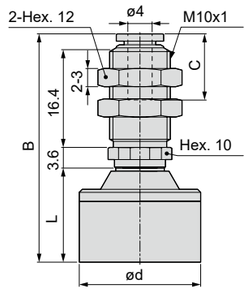


Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F10S□	10	53.5	9.5	41.8	7.9 to 15	54
VSP-F15S□	15	53.5	9.5	41.8	7.9 to 15	55
VSP-F20S□	20	59.5	15.5	47.8	7.9 to 15	56
VSP-F25S□	25	59.5	15.5	47.8	7.9 to 15	58
VSP-F30S□	30	59.5	15.5	47.8	7.9 to 15	58
VSP-F35S□	35	72	28	60.3	7.9 to 15	93
VSP-F50S□	50	72	28	60.3	7.9 to 15	136

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA10 to 50S□-4

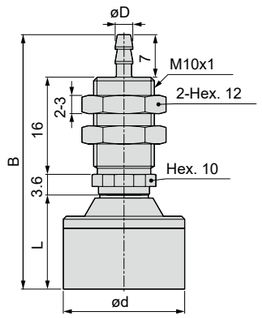


Unit: mm

Model No.	Pad Diameter ød	B	L	Tube End C	Weight (g)
VSP-MA10S□-4	10	32.1	9.5	11.2	7.6
VSP-MA15S□-4	15	32.1	9.5	11.2	7.9
VSP-MA20S□-4	20	38.1	15.5	11.2	9.5
VSP-MA25S□-4	25	38.1	15.5	11.2	11
VSP-MA30S□-4	30	38.1	15.5	11.2	11
VSP-MA35S□-4	35	50.6	28	11.2	45
VSP-MA50S□-4	50	50.6	28	11.2	90

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA10 to 50S□-4T/6T

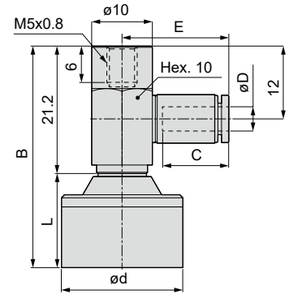


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MA10S□-4T	10	2.5	36.1	9.5	7.6
VSP-MA10S□-6T		4			
VSP-MA15S□-4T	15	2.5	36.1	9.5	7.9
VSP-MA15S□-6T		4			
VSP-MA20S□-4T	20	2.5	42.1	15.5	9.5
VSP-MA20S□-6T		4			
VSP-MA25S□-4T	25	2.5	42.1	15.5	11
VSP-MA25S□-6T		4			
VSP-MA30S□-4T	30	2.5	42.1	15.5	11
VSP-MA30S□-6T		4			
VSP-MA35S□-4T	35	2.5	54.6	28	45
VSP-MA35S□-6T		4			
VSP-MA50S□-4T	50	2.5	54.6	28	90
VSP-MA50S□-6T		4			

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB10 to 50S□-2/4/6

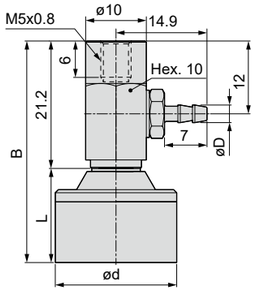


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB10S□-2	10	1.8	30.7	9.5	8.4	13.7	7.8
VSP-MB10S□-4		4			11.2	17.8	8.5
VSP-MB10S□-6		6			11.9	19.6	9.9
VSP-MB15S□-2	15	1.8	30.7	9.5	8.4	13.7	8.1
VSP-MB15S□-4		4			11.2	17.8	8.8
VSP-MB15S□-6		6			11.9	19.6	10.2
VSP-MB20S□-2	20	1.8	36.7	15.5	8.4	13.7	10
VSP-MB20S□-4		4			11.2	17.8	11
VSP-MB20S□-6		6			11.9	19.6	12
VSP-MB25S□-2	25	1.8	36.7	15.5	8.4	13.7	11
VSP-MB25S□-4		4			11.2	17.8	12
VSP-MB25S□-6		6			11.9	19.6	13
VSP-MB30S□-2	30	1.8	36.7	15.5	8.4	13.7	11
VSP-MB30S□-4		4			11.2	17.8	12
VSP-MB30S□-6		6			11.9	19.6	13
VSP-MB35S□-2	35	1.8	49.2	28	8.4	13.7	44
VSP-MB35S□-4		4			11.2	17.8	45
VSP-MB35S□-6		6			11.9	19.6	46
VSP-MB50S□-2	50	1.8	49.2	28	8.4	13.7	90
VSP-MB50S□-4		4			11.2	17.8	91
VSP-MB50S□-6		6			11.9	19.6	92

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB10 to 50S□-4T/6T

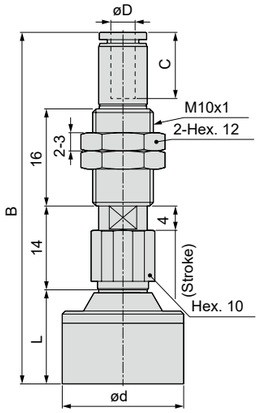


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. D	B	L	Weight (g)
VSP-MB10S□-4T	10	2.5	30.7	9.5	7.3
VSP-MB10S□-6T		4			
VSP-MB15S□-4T	15	2.5	30.7	9.5	7.6
VSP-MB15S□-6T		4			
VSP-MB20S□-4T	20	2.5	36.7	15.5	9.3
VSP-MB20S□-6T		4			
VSP-MB25S□-4T	25	2.5	36.7	15.5	11
VSP-MB25S□-6T		4			
VSP-MB30S□-4T	30	2.5	36.7	15.5	11
VSP-MB30S□-6T		4			
VSP-MB35S□-4T	35	2.5	49.2	28	45
VSP-MB35S□-6T		4			
VSP-MB50S□-4T	50	2.5	49.2	28	90
VSP-MB50S□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC10 to 50S□-2/4

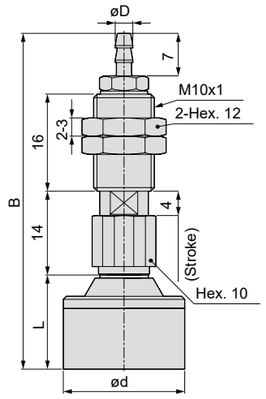


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC10S□-2	10	1.8	48.4	9.5	8.4	1 to 1.3	19
VSP-MC10S□-4		4	52.5		11.2		20
VSP-MC15S□-2	15	1.8	48.4	9.5	8.4	1 to 1.3	19
VSP-MC15S□-4		4	52.5		11.2		20
VSP-MC20S□-2	20	1.8	54.4	15.5	8.4	1 to 1.3	21
VSP-MC20S□-4		4	58.5		11.2		22
VSP-MC25S□-2	25	1.8	54.4	15.5	8.4	1 to 1.3	22
VSP-MC25S□-4		4	58.5		11.2		23
VSP-MC30S□-2	30	1.8	54.4	15.5	8.4	1 to 1.3	22
VSP-MC30S□-4		4	58.5		11.2		23
VSP-MC35S□-2	35	1.8	66.9	28	8.4	1 to 1.3	56
VSP-MC35S□-4		4	71		11.2		57
VSP-MC50S□-2	50	1.8	66.9	28	8.4	1 to 1.3	101
VSP-MC50S□-4		4	71		11.2		102

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC10 to 50S□-4T/6T

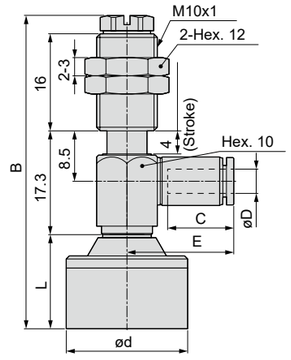


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC10S□-4T	10	2.5	49.6	9.5	1 to 1.3	19
VSP-MC10S□-6T		4				
VSP-MC15S□-4T	15	2.5	49.6	9.5	1 to 1.3	19
VSP-MC15S□-6T		4				
VSP-MC20S□-4T	20	2.5	55.6	15.5	1 to 1.3	21
VSP-MC20S□-6T		4				
VSP-MC25S□-4T	25	2.5	55.6	15.5	1 to 1.3	22
VSP-MC25S□-6T		4				
VSP-MC30S□-4T	30	2.5	55.6	15.5	1 to 1.3	23
VSP-MC30S□-6T		4				
VSP-MC35S□-4T	35	2.5	68.1	28	1 to 1.3	57
VSP-MC35S□-6T		4				
VSP-MC50S□-4T	50	2.5	68.1	28	1 to 1.3	102
VSP-MC50S□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD10 to 50S□-2/4/6

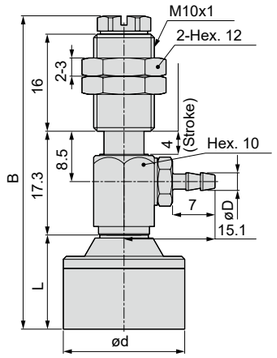


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD10S□-2	10	1.8	45.8	9.5	8.4	13.6	1 to 1.3	22
VSP-MD10S□-4		4			11.2	17.7		23
VSP-MD10S□-6		6			11.9	19.5		24
VSP-MD15S□-2	15	1.8	45.8	9.5	8.4	13.6	1 to 1.3	23
VSP-MD15S□-4		4			11.2	17.7		24
VSP-MD15S□-6		6			11.9	19.5		25
VSP-MD20S□-2	20	1.8	51.8	15.5	8.4	13.6	1 to 1.3	24
VSP-MD20S□-4		4			11.2	17.7		25
VSP-MD20S□-6		6			11.9	19.5		26
VSP-MD25S□-2	25	1.8	51.8	15.5	8.4	13.6	1 to 1.3	26
VSP-MD25S□-4		4			11.2	17.7		27
VSP-MD25S□-6		6			11.9	19.5		28
VSP-MD30S□-2	30	1.8	51.8	15.5	8.4	13.6	1 to 1.3	26
VSP-MD30S□-4		4			11.2	17.7		27
VSP-MD30S□-6		6			11.9	19.5		28
VSP-MD35S□-2	35	1.8	64.3	28	8.4	13.6	1 to 1.3	60
VSP-MD35S□-4		4			11.2	17.7		61
VSP-MD35S□-6		6			11.9	19.5		62
VSP-MD50S□-2	50	1.8	64.3	28	8.4	13.6	1 to 1.3	105
VSP-MD50S□-4		4			11.2	17.7		106
VSP-MD50S□-6		6			11.9	19.5		107

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD10 to 50S□-4T/6T

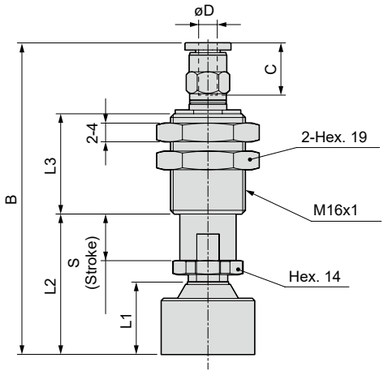


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD10S□-4T	10	2.5	45.8	9.5	1 to 1.3	22
VSP-MD10S□-6T		4				
VSP-MD15S□-4T	15	2.5	45.8	9.5	1 to 1.3	23
VSP-MD15S□-6T		4				
VSP-MD20S□-4T	20	2.5	51.8	15.5	1 to 1.3	24
VSP-MD20S□-6T		4				
VSP-MD25S□-4T	25	2.5	51.8	15.5	1 to 1.3	26
VSP-MD25S□-6T		4				
VSP-MD30S□-4T	30	2.5	51.8	15.5	1 to 1.3	26
VSP-MD30S□-6T		4				
VSP-MD35S□-4T	35	2.5	64.3	28	1 to 1.3	60
VSP-MD35S□-6T		4				
VSP-MD50S□-4T	50	2.5	64.3	28	1 to 1.3	105
VSP-MD50S□-6T		4				

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10, 15-□S□-2/4/6

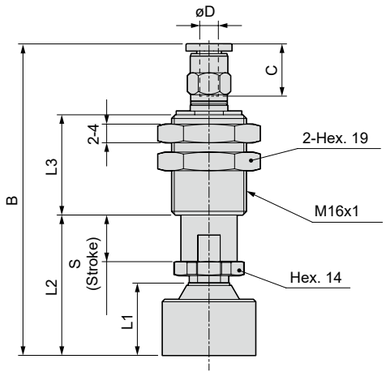


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10S□-2	10	1.8	56.7	9.5	24.1	21.5	8.4	10	1.0 to 2.4	26
VSP-HC10-10S□-4		4	60.8				11.2			27
VSP-HC10-10S□-6		6	62.1				11.9			28
VSP-HC10-15S□-2		1.8	66.7		29.1	26.5	8.4	15	1.0 to 2.7	28
VSP-HC10-15S□-4		4	70.8				11.2			29
VSP-HC10-15S□-6		6	72.1				11.9			30
VSP-HC10-20S□-2		1.8	76.7		34.1	31.5	8.4	20	1.0 to 3.0	30
VSP-HC10-20S□-4		4	80.8				11.2			31
VSP-HC10-20S□-6		6	82.1				11.9			32
VSP-HC10-25S□-2		1.8	87.2		39.1	37	8.4	25	1.0 to 3.0	32
VSP-HC10-25S□-4		4	91.3				11.2			33
VSP-HC10-25S□-6		6	92.6				11.9			34
VSP-HC10-30S□-2		1.8	98.2		44.1	43	8.4	30	1.0 to 3.0	34
VSP-HC10-30S□-4		4	102.3				11.2			35
VSP-HC10-30S□-6		6	103.6				11.9			36
VSP-HC10-40S□-2		1.8	120.2		54.1	55	8.4	40	1.0 to 3.0	38
VSP-HC10-40S□-4		4	124.3				11.2			39
VSP-HC10-40S□-6		6	125.6				11.9			40
VSP-HC10-50S□-2		1.8	141.7		64.1	66.5	8.4	50	1.0 to 3.1	42
VSP-HC10-50S□-4		4	145.8				11.2			43
VSP-HC10-50S□-6		6	147.1				11.9			44
VSP-HC15-10S□-2	15	1.8	56.7	9.5	24.1	21.5	8.4	10	1.0 to 2.4	26
VSP-HC15-10S□-4		4	60.8				11.2			27
VSP-HC15-10S□-6		6	62.1				11.9			28
VSP-HC15-15S□-2		1.8	66.7		29.1	26.5	8.4	15	1.0 to 2.7	28
VSP-HC15-15S□-4		4	70.8				11.2			29
VSP-HC15-15S□-6		6	72.1				11.9			30
VSP-HC15-20S□-2		1.8	76.7		34.1	31.5	8.4	20	1.0 to 3.0	30
VSP-HC15-20S□-4		4	80.8				11.2			31
VSP-HC15-20S□-6		6	82.1				11.9			32
VSP-HC15-25S□-2		1.8	87.2		39.1	37	8.4	25	1.0 to 3.0	32
VSP-HC15-25S□-4		4	91.3				11.2			33
VSP-HC15-25S□-6		6	92.6				11.9			34
VSP-HC15-30S□-2		1.8	98.2		44.1	43	8.4	30	1.0 to 3.0	34
VSP-HC15-30S□-4		4	102.3				11.2			35
VSP-HC15-30S□-6		6	103.6				11.9			36
VSP-HC15-40S□-2		1.8	120.2		54.1	55	8.4	40	1.0 to 3.0	38
VSP-HC15-40S□-4		4	124.3				11.2			39
VSP-HC15-40S□-6		6	125.6				11.9			40
VSP-HC15-50S□-2		1.8	141.7		64.1	66.5	8.4	50	1.0 to 3.1	42
VSP-HC15-50S□-4		4	145.8				11.2			43
VSP-HC15-50S□-6		6	147.1				11.9			44

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 25-□S□-2/4/6

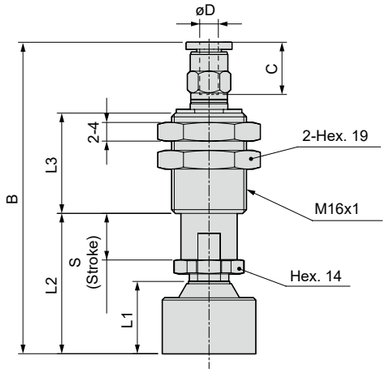


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10S□-2	20	1.8	62.7	15.5	30.1	21.5	8.4	10	1.0 to 2.4	28
VSP-HC20-10S□-4		4	66.8				11.2			29
VSP-HC20-10S□-6		6	68.1				11.9			30
VSP-HC20-15S□-2		1.8	72.7		35.1	26.5	8.4	15	1.0 to 2.7	30
VSP-HC20-15S□-4		4	76.8				11.2			31
VSP-HC20-15S□-6		6	78.1				11.9			32
VSP-HC20-20S□-2		1.8	82.7		40.1	31.5	8.4	20	1.0 to 3.0	32
VSP-HC20-20S□-4		4	86.8				11.2			33
VSP-HC20-20S□-6		6	88.1				11.9			34
VSP-HC20-25S□-2		1.8	93.2		45.1	37	8.4	25	1.0 to 3.0	34
VSP-HC20-25S□-4		4	97.3				11.2			35
VSP-HC20-25S□-6		6	98.6				11.9			36
VSP-HC20-30S□-2		1.8	104.2		50.1	43	8.4	30	1.0 to 3.0	36
VSP-HC20-30S□-4		4	108.3				11.2			37
VSP-HC20-30S□-6		6	109.6				11.9			38
VSP-HC20-40S□-2		1.8	126.2		60.1	55	8.4	40	1.0 to 3.0	40
VSP-HC20-40S□-4		4	130.3				11.2			41
VSP-HC20-40S□-6		6	131.6				11.9			42
VSP-HC20-50S□-2		1.8	147.7		70.1	66.5	8.4	50	1.0 to 3.1	44
VSP-HC20-50S□-4		4	151.8				11.2			45
VSP-HC20-50S□-6		6	153.1				11.9			46
VSP-HC25-10S□-2	25	1.8	62.7	15.5	30.1	21.5	8.4	10	1.0 to 2.4	29
VSP-HC25-10S□-4		4	66.8				11.2			30
VSP-HC25-10S□-6		6	68.1				11.9			31
VSP-HC25-15S□-2		1.8	72.7		35.1	26.5	8.4	15	1.0 to 2.7	31
VSP-HC25-15S□-4		4	76.8				11.2			32
VSP-HC25-15S□-6		6	78.1				11.9			33
VSP-HC25-20S□-2		1.8	82.7		40.1	31.5	8.4	20	1.0 to 3.0	33
VSP-HC25-20S□-4		4	86.8				11.2			34
VSP-HC25-20S□-6		6	88.1				11.9			35
VSP-HC25-25S□-2		1.8	93.2		45.1	37	8.4	25	1.0 to 3.0	35
VSP-HC25-25S□-4		4	97.3				11.2			36
VSP-HC25-25S□-6		6	98.6				11.9			37
VSP-HC25-30S□-2		1.8	104.2		50.1	43	8.4	30	1.0 to 3.0	37
VSP-HC25-30S□-4		4	108.3				11.2			38
VSP-HC25-30S□-6		6	109.6				11.9			39
VSP-HC25-40S□-2		1.8	126.2		60.1	55	8.4	40	1.0 to 3.0	41
VSP-HC25-40S□-4		4	130.3				11.2			42
VSP-HC25-40S□-6		6	131.6				11.9			43
VSP-HC25-50S□-2		1.8	147.7		70.1	66.5	8.4	50	1.0 to 3.1	45
VSP-HC25-50S□-4		4	151.8				11.2			46
VSP-HC25-50S□-6		6	153.1				11.9			47

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC30-□S□-2/4/6

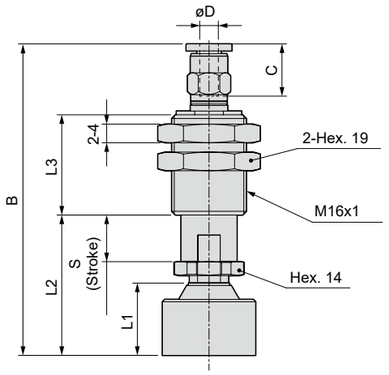


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC30-10S□-2	30	1.8	62.7	15.5	30.1	21.5	8.4	10	1.0 to 2.4	30
VSP-HC30-10S□-4		4	66.8				11.2			31
VSP-HC30-10S□-6		6	68.1				11.9			32
VSP-HC30-15S□-2		1.8	72.7		35.1	26.5	8.4	15	1.0 to 2.7	32
VSP-HC30-15S□-4		4	76.8				11.2			33
VSP-HC30-15S□-6		6	78.1				11.9			34
VSP-HC30-20S□-2		1.8	82.7		40.1	31.5	8.4	20	1.0 to 3.0	34
VSP-HC30-20S□-4		4	86.8				11.2			35
VSP-HC30-20S□-6		6	88.1				11.9			36
VSP-HC30-25S□-2		1.8	93.2		45.1	37	8.4	25	1.0 to 3.0	36
VSP-HC30-25S□-4		4	97.3				11.2			37
VSP-HC30-25S□-6		6	98.6				11.9			38
VSP-HC30-30S□-2		1.8	104.2		50.1	43	8.4	30	1.0 to 3.0	38
VSP-HC30-30S□-4		4	108.3				11.2			39
VSP-HC30-30S□-6		6	109.6				11.9			40
VSP-HC30-40S□-2		1.8	126.2		60.1	55	8.4	40	1.0 to 3.0	42
VSP-HC30-40S□-4		4	130.3				11.2			43
VSP-HC30-40S□-6		6	131.6				11.9			44
VSP-HC30-50S□-2		1.8	147.7		70.1	66.5	8.4	50	1.0 to 3.1	46
VSP-HC30-50S□-4		4	151.8				11.2			47
VSP-HC30-50S□-6		6	153.1				11.9			48

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC35, 50-□S□-2/4/6

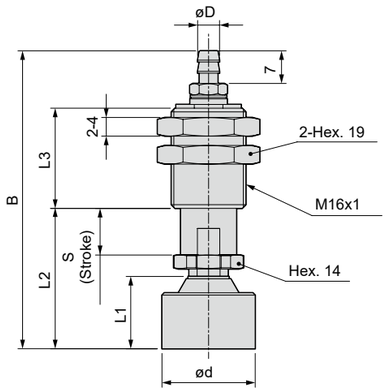


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC35-10S□-2	35	1.8	75.2	28	42.6	21.5	8.4	10	1.0 to 2.4	59
VSP-HC35-10S□-4		4	79.3				11.2			60
VSP-HC35-10S□-6		6	80.6				11.9			61
VSP-HC35-15S□-2		1.8	85.2		47.6	26.5	8.4	15	1.0 to 2.7	61
VSP-HC35-15S□-4		4	89.3				11.2			62
VSP-HC35-15S□-6		6	90.6				11.9			63
VSP-HC35-20S□-2		1.8	95.2		52.6	31.5	8.4	20	1.0 to 3.0	63
VSP-HC35-20S□-4		4	99.3				11.2			64
VSP-HC35-20S□-6		6	100.6				11.9			65
VSP-HC35-25S□-2		1.8	105.7		57.6	37	8.4	25	1.0 to 3.0	65
VSP-HC35-25S□-4		4	109.8				11.2			66
VSP-HC35-25S□-6		6	111.1				11.9			67
VSP-HC35-30S□-2		1.8	116.7		62.6	43	8.4	30	1.0 to 3.0	67
VSP-HC35-30S□-4		4	120.8				11.2			68
VSP-HC35-30S□-6		6	122.1				11.9			69
VSP-HC35-40S□-2		1.8	138.7		72.6	55	8.4	40	1.0 to 3.0	71
VSP-HC35-40S□-4		4	142.8				11.2			72
VSP-HC35-40S□-6		6	144.1				11.9			73
VSP-HC35-50S□-2		1.8	160.2		82.6	66.5	8.4	50	1.0 to 3.1	75
VSP-HC35-50S□-4		4	164.3				11.2			76
VSP-HC35-50S□-6		6	165.6				11.9			77
VSP-HC50-10S□-2	50	1.8	75.2	28	42.6	21.5	8.4	10	1.0 to 2.4	100
VSP-HC50-10S□-4		4	79.3				11.2			101
VSP-HC50-10S□-6		6	80.6				11.9			102
VSP-HC50-15S□-2		1.8	85.2		47.6	26.5	8.4	15	1.0 to 2.7	102
VSP-HC50-15S□-4		4	89.3				11.2			103
VSP-HC50-15S□-6		6	90.6				11.9			104
VSP-HC50-20S□-2		1.8	95.2		52.6	31.5	8.4	20	1.0 to 3.0	104
VSP-HC50-20S□-4		4	99.3				11.2			105
VSP-HC50-20S□-6		6	100.6				11.9			106
VSP-HC50-25S□-2		1.8	105.7		57.6	37	8.4	25	1.0 to 3.0	106
VSP-HC50-25S□-4		4	109.8				11.2			107
VSP-HC50-25S□-6		6	111.1				11.9			108
VSP-HC50-30S□-2		1.8	116.7		62.6	43	8.4	30	1.0 to 3.0	108
VSP-HC50-30S□-4		4	120.8				11.2			109
VSP-HC50-30S□-6		6	122.1				11.9			110
VSP-HC50-40S□-2		1.8	138.7		72.6	55	8.4	40	1.0 to 3.0	112
VSP-HC50-40S□-4		4	142.8				11.2			113
VSP-HC50-40S□-6		6	144.1				11.9			114
VSP-HC50-50S□-2		1.8	160.2		82.6	66.5	8.4	50	1.0 to 3.1	116
VSP-HC50-50S□-4		4	164.3				11.2			117
VSP-HC50-50S□-6		6	165.6				11.9			118

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10, 15-□S□-4T/6T

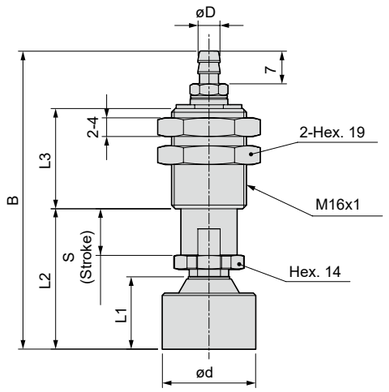


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10S□-4T	10	2.5	56.3	9.5	22.5	21.5	10	1.0 to 2.4	22
VSP-HC10-10S□-6T		4							
VSP-HC10-15S□-4T		2.5	66.3		27.5	26.5	15	1.0 to 2.7	24
VSP-HC10-15S□-6T		4							
VSP-HC10-20S□-4T		2.5	76.3		32.5	31.5	20	1.0 to 3.0	26
VSP-HC10-20S□-6T		4							
VSP-HC10-25S□-4T		2.5	86.8		37.5	37	25	1.0 to 3.0	29
VSP-HC10-25S□-6T		4							
VSP-HC10-30S□-4T		2.5	97.8		42.5	43	30	1.0 to 3.0	31
VSP-HC10-30S□-6T		4							
VSP-HC10-40S□-4T		2.5	119.8		52.5	55	40	1.0 to 3.0	35
VSP-HC10-40S□-6T		4							
VSP-HC10-50S□-4T		2.5	141.3		62.5	66.5	50	1.0 to 3.1	39
VSP-HC10-50S□-6T		4							
VSP-HC15-10S□-4T	15	2.5	56.3	9.5	22.5	21.5	10	1.0 to 2.4	22
VSP-HC15-10S□-6T		4							
VSP-HC15-15S□-4T		2.5	66.3		27.5	26.5	15	1.0 to 2.7	24
VSP-HC15-15S□-6T		4							
VSP-HC15-20S□-4T		2.5	76.3		32.5	31.5	20	1.0 to 3.0	26
VSP-HC15-20S□-6T		4							
VSP-HC15-25S□-4T		2.5	86.8		37.5	37	25	1.0 to 3.0	29
VSP-HC15-25S□-6T		4							
VSP-HC15-30S□-4T		2.5	97.8		42.5	43	30	1.0 to 3.0	31
VSP-HC15-30S□-6T		4							
VSP-HC15-40S□-4T		2.5	119.8		52.5	55	40	1.0 to 3.0	35
VSP-HC15-40S□-6T		4							
VSP-HC15-50S□-4T		2.5	141.3		62.5	66.5	50	1.0 to 3.1	39
VSP-HC15-50S□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20 to 30-□S□-4T/6T

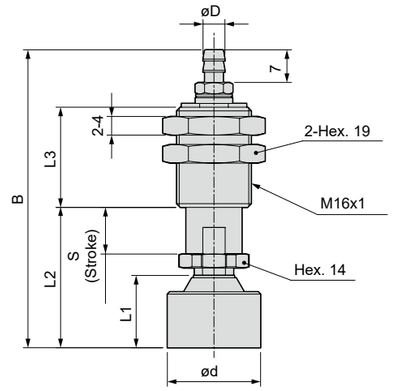


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10S□-4T	20	2.5	63.9	15.5	30.1	21.5	10	1.0 to 2.4	26
VSP-HC20-10S□-6T		4							
VSP-HC20-15S□-4T		2.5	73.9		35.1	26.5	15	1.0 to 2.7	28
VSP-HC20-15S□-6T		4							
VSP-HC20-20S□-4T		2.5	83.9		40.1	31.5	20	1.0 to 3.0	30
VSP-HC20-20S□-6T		4							
VSP-HC20-25S□-4T		2.5	94.4		45.1	37	25	1.0 to 3.0	32
VSP-HC20-25S□-6T		4							
VSP-HC20-30S□-4T		2.5	105.4		50.1	43	30	1.0 to 3.0	35
VSP-HC20-30S□-6T		4							
VSP-HC20-40S□-4T		2.5	127.4		60.1	55	40	1.0 to 3.0	39
VSP-HC20-40S□-6T		4							
VSP-HC20-50S□-4T		2.5	148.9		70.1	66.5	50	1.0 to 3.1	43
VSP-HC20-50S□-6T		4							
VSP-HC25-10S□-4T	25	2.5	63.9	15.5	30.1	21.5	10	1.0 to 2.4	27
VSP-HC25-10S□-6T		4							
VSP-HC25-15S□-4T		2.5	73.9		35.1	26.5	15	1.0 to 2.7	29
VSP-HC25-15S□-6T		4							
VSP-HC25-20S□-4T		2.5	83.9		40.1	31.5	20	1.0 to 3.0	31
VSP-HC25-20S□-6T		4							
VSP-HC25-25S□-4T		2.5	94.4		45.1	37	25	1.0 to 3.0	33
VSP-HC25-25S□-6T		4							
VSP-HC25-30S□-4T		2.5	105.4		50.1	43	30	1.0 to 3.0	36
VSP-HC25-30S□-6T		4							
VSP-HC25-40S□-4T		2.5	127.4		60.1	55	40	1.0 to 3.0	40
VSP-HC25-40S□-6T		4							
VSP-HC25-50S□-4T		2.5	148.9		70.1	66.5	50	1.0 to 3.1	44
VSP-HC25-50S□-6T		4							
VSP-HC30-10S□-4T	30	2.5	63.9	15.5	30.1	21.5	10	1.0 to 2.4	28
VSP-HC30-10S□-6T		4							
VSP-HC30-15S□-4T		2.5	73.9		35.1	26.5	15	1.0 to 2.7	30
VSP-HC30-15S□-6T		4							
VSP-HC30-20S□-4T		2.5	83.9		40.1	31.5	20	1.0 to 3.0	32
VSP-HC30-20S□-6T		4							
VSP-HC30-25S□-4T		2.5	94.4		45.1	37	25	1.0 to 3.0	34
VSP-HC30-25S□-6T		4							
VSP-HC30-30S□-4T		2.5	105.4		50.1	43	30	1.0 to 3.0	37
VSP-HC30-30S□-6T		4							
VSP-HC30-40S□-4T		2.5	127.4		60.1	55	40	1.0 to 3.0	41
VSP-HC30-40S□-6T		4							
VSP-HC30-50S□-4T		2.5	148.9		70.1	66.5	50	1.0 to 3.1	45
VSP-HC30-50S□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC35, 50-□S□-4T/6T

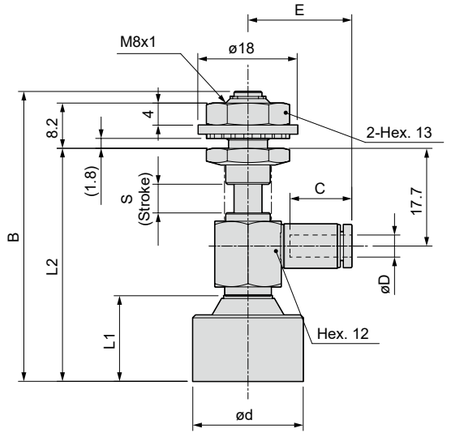


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC35-10S□-4T	35	2.5	76.4	28	42.6	21.5	10	1.0 to 2.4	47
VSP-HC35-10S□-6T		4							
VSP-HC35-15S□-4T		2.5	86.4		47.6	26.5	15	1.0 to 2.7	49
VSP-HC35-15S□-6T		4							
VSP-HC35-20S□-4T		2.5	96.4		52.6	31.5	20	1.0 to 3.0	52
VSP-HC35-20S□-6T		4							
VSP-HC35-25S□-4T		2.5	106.9		57.6	37	25	1.0 to 3.0	54
VSP-HC35-25S□-6T		4							
VSP-HC35-30S□-4T		2.5	117.9		62.6	43	30	1.0 to 3.0	57
VSP-HC35-30S□-6T		4							
VSP-HC35-40S□-4T		2.5	139.9		72.6	55	40	1.0 to 3.0	61
VSP-HC35-40S□-6T		4							
VSP-HC35-50S□-4T		2.5	161.4		82.6	66.5	50	1.0 to 3.1	66
VSP-HC35-50S□-6T		4							
VSP-HC50-10S□-4T	50	2.5	76.4	28	42.6	21.5	10	1.0 to 2.4	88
VSP-HC50-10S□-6T		4							
VSP-HC50-15S□-4T		2.5	86.4		47.6	26.5	15	1.0 to 2.7	90
VSP-HC50-15S□-6T		4							
VSP-HC50-20S□-4T		2.5	96.4		52.6	31.5	20	1.0 to 3.0	92
VSP-HC50-20S□-6T		4							
VSP-HC50-25S□-4T		2.5	106.9		57.6	37	25	1.0 to 3.0	94
VSP-HC50-25S□-6T		4							
VSP-HC50-30S□-4T		2.5	117.9		62.6	43	30	1.0 to 3.0	97
VSP-HC50-30S□-6T		4							
VSP-HC50-40S□-4T		2.5	139.9		72.6	55	40	1.0 to 3.0	101
VSP-HC50-40S□-6T		4							
VSP-HC50-50S□-4T		2.5	161.4		82.6	66.5	50	1.0 to 3.1	106
VSP-HC50-50S□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD10 to 50S□-2/4/6

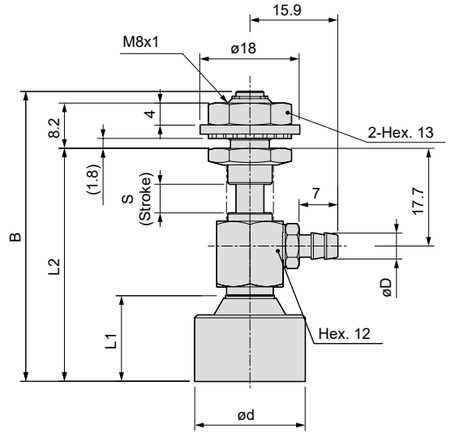


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10S□-2	10	1.8	46.5	9.5	36.2	8.4	14.7	5.2	1.6 to 2.9	35
VSP-HD10S□-4		4				11.2	18.8			36
VSP-HD10S□-6		6				11.9	20.6			37
VSP-HD15S□-2	15	1.8	46.5	9.5	36.2	8.4	14.7	5.2	1.6 to 2.9	35
VSP-HD15S□-4		4				11.2	18.8			36
VSP-HD15S□-6		6				11.9	20.6			37
VSP-HD20S□-2	20	1.8	52.5	15.5	42.2	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HD20S□-4		4				11.2	18.8			38
VSP-HD20S□-6		6				11.9	20.6			39
VSP-HD25S□-2	25	1.8	52.5	15.5	42.2	8.4	14.7	5.2	1.6 to 2.9	38
VSP-HD25S□-4		4				11.2	18.8			39
VSP-HD25S□-6		6				11.9	20.6			40
VSP-HD30S□-2	30	1.8	52.5	15.5	42.2	8.4	14.7	5.2	1.6 to 2.9	39
VSP-HD30S□-4		4				11.2	18.8			40
VSP-HD30S□-6		6				11.9	20.6			41
VSP-HD35S□-2	35	1.8	65	28	54.7	8.4	14.7	5.2	1.6 to 2.9	68
VSP-HD35S□-4		4				11.2	18.8			69
VSP-HD35S□-6		6				11.9	20.6			70
VSP-HD50S□-2	50	1.8	65	28	54.7	8.4	14.7	5.2	1.6 to 2.9	109
VSP-HD50S□-4		4				11.2	18.8			110
VSP-HD50S□-6		6				11.9	20.6			112

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD10 to 50S□-4T/6T

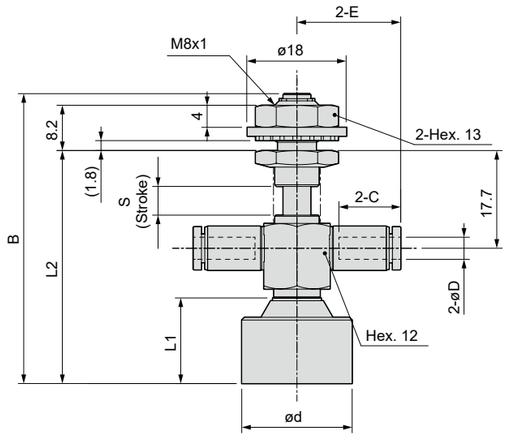


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10S□-4T	10	1.8	46.5	9.5	36.2	5.2	1.6 to 2.9	35
VSP-HD10S□-6T		4						
VSP-HD15S□-4T	15	1.8	46.5	9.5	36.2	5.2	1.6 to 2.9	35
VSP-HD15S□-6T		4						
VSP-HD20S□-4T	20	1.8	52.5	15.5	42.2	5.2	1.6 to 2.9	37
VSP-HD20S□-6T		4						
VSP-HD25S□-4T	25	1.8	52.5	15.5	42.2	5.2	1.6 to 2.9	38
VSP-HD25S□-6T		4						
VSP-HD30S□-4T	30	1.8	52.5	15.5	42.2	5.2	1.6 to 2.9	39
VSP-HD30S□-6T		4						
VSP-HD35S□-4T	35	1.8	65	28	54.7	5.2	1.6 to 2.9	68
VSP-HD35S□-6T		4						
VSP-HD50S□-4T	50	1.8	65	28	54.7	5.2	1.6 to 2.9	119
VSP-HD50S□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW10 to 50S□-2/4/6

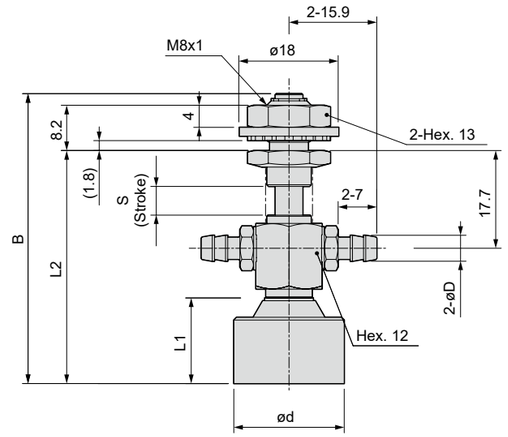


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10S□-2	10	1.8	46.5	9.5	36.2	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HDW10S□-4		4				11.2	18.8			39
VSP-HDW10S□-6		6				11.9	20.6			41
VSP-HDW15S□-2	15	1.8	46.5	9.5	36.2	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HDW15S□-4		4				11.2	18.8			39
VSP-HDW15S□-6		6				11.9	20.6			41
VSP-HDW20S□-2	20	1.8	52.5	15.5	42.2	8.4	14.7	5.2	1.6 to 2.9	39
VSP-HDW20S□-4		4				11.2	18.8			41
VSP-HDW20S□-6		6				11.9	20.6			43
VSP-HDW25S□-2	25	1.8	52.5	15.5	42.2	8.4	14.7	5.2	1.6 to 2.9	40
VSP-HDW25S□-4		4				11.2	18.8			42
VSP-HDW25S□-6		6				11.9	20.6			44
VSP-HDW30S□-2	30	1.8	52.5	15.5	42.2	8.4	14.7	5.2	1.6 to 2.9	41
VSP-HDW30S□-4		4				11.2	18.8			43
VSP-HDW30S□-6		6				11.9	20.6			45
VSP-HDW35S□-2	35	1.8	65	28	54.7	8.4	14.7	5.2	1.6 to 2.9	70
VSP-HDW35S□-4		4				11.2	18.8			72
VSP-HDW35S□-6		6				11.9	20.6			74
VSP-HDW50S□-2	50	1.8	65	28	54.7	8.4	14.7	5.2	1.6 to 2.9	111
VSP-HDW50S□-4		4				11.2	18.8			113
VSP-HDW50S□-6		6				11.9	20.6			115

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW10 to 50S□-4T/6T

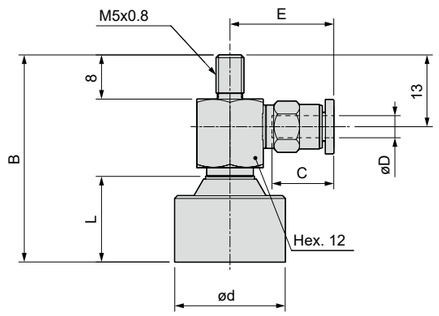


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10S□-4T	10	1.8	46.5	9.5	36.2	5.2	1.6 to 2.9	36
VSP-HDW10S□-6T		4						
VSP-HDW15S□-4T	15	1.8	46.5	9.5	36.2	5.2	1.6 to 2.9	36
VSP-HDW15S□-6T		4						
VSP-HDW20S□-4T	20	1.8	52.5	15.5	42.2	5.2	1.6 to 2.9	38
VSP-HDW20S□-6T		4						
VSP-HDW25S□-4T	25	1.8	52.5	15.5	42.2	5.2	1.6 to 2.9	38
VSP-HDW25S□-6T		4						
VSP-HDW30S□-4T	30	1.8	52.5	15.5	42.2	5.2	1.6 to 2.9	39
VSP-HDW30S□-6T		4						
VSP-HDW35S□-4T	35	1.8	65	28	54.7	5.2	1.6 to 2.9	71
VSP-HDW35S□-6T		4						
VSP-HDW50S□-4T	50	1.8	65	28	54.7	5.2	1.6 to 2.9	112
VSP-HDW50S□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE10 to 50S□-2/4/6

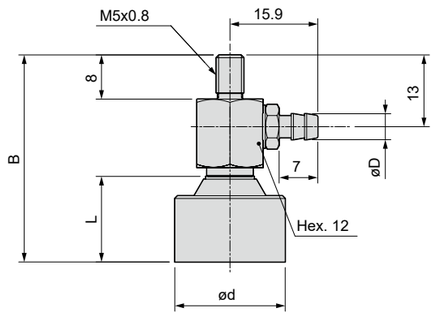


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE10S□-2	10	1.8	31.5	9.5	8.4	14.7	21
VSP-HE10S□-4		4			11.2	18.8	22
VSP-HE10S□-6		6			11.9	20.6	23
VSP-HE15S□-2	15	1.8	31.5	9.5	8.4	14.7	21
VSP-HE15S□-4		4			11.2	18.8	22
VSP-HE15S□-6		6			11.9	20.6	23
VSP-HE20S□-2	20	1.8	37.5	15.5	8.4	14.7	23
VSP-HE20S□-4		4			11.2	18.8	24
VSP-HE20S□-6		6			11.9	20.6	25
VSP-HE25S□-2	25	1.8	37.5	15.5	8.4	14.7	24
VSP-HE25S□-4		4			11.2	18.8	25
VSP-HE25S□-6		6			11.9	20.6	26
VSP-HE30S□-2	30	1.8	37.5	15.5	8.4	14.7	25
VSP-HE30S□-4		4			11.2	18.8	26
VSP-HE30S□-6		6			11.9	20.6	27
VSP-HE35S□-2	35	1.8	50	28	8.4	14.7	54
VSP-HE35S□-4		4			11.2	18.8	55
VSP-HE35S□-6		6			11.9	20.6	56
VSP-HE50S□-2	50	1.8	50	28	8.4	14.7	95
VSP-HE50S□-4		4			11.2	18.8	96
VSP-HE50S□-6		6			11.9	20.6	97

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE10 to 50S□-4T/6T

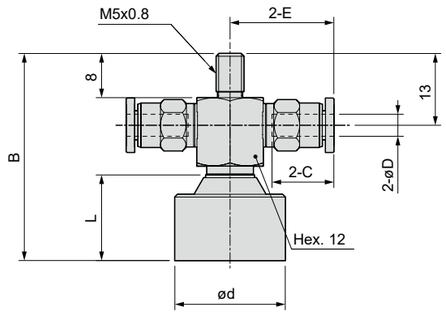


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Weight (g)
VSP-HE10S□-4T	10	1.8	31.5	9.5	16
VSP-HE10S□-6T		4			
VSP-HE15S□-4T	15	1.8	31.5	9.5	16
VSP-HE15S□-6T		4			
VSP-HE20S□-4T	20	1.8	37.5	15.5	22
VSP-HE20S□-6T		4			
VSP-HE25S□-4T	25	1.8	37.5	15.5	23
VSP-HE25S□-6T		4			
VSP-HE30S□-4T	30	1.8	37.5	15.5	24
VSP-HE30S□-6T		4			
VSP-HE35S□-4T	35	1.8	50	28	53
VSP-HE35S□-6T		4			
VSP-HE50S□-4T	50	1.8	50	28	94
VSP-HE50S□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW10 to 50S□-2/4/6

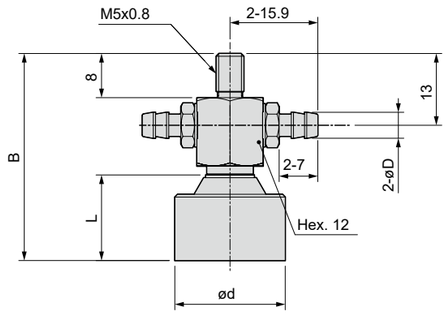


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW10S□-2	10	1.8	31.5	9.5	8.4	14.7	15
VSP-HEW10S□-4		4			11.2	18.8	17
VSP-HEW10S□-6		6			11.9	20.6	19
VSP-HEW15S□-2	15	1.8	31.5	9.5	8.4	14.7	15
VSP-HEW15S□-4		4			11.2	18.8	17
VSP-HEW15S□-6		6			11.9	20.6	19
VSP-HEW20S□-2	20	1.8	37.5	15.5	8.4	14.7	17
VSP-HEW20S□-4		4			11.2	18.8	19
VSP-HEW20S□-6		6			11.9	20.6	21
VSP-HEW25S□-2	25	1.8	37.5	15.5	8.4	14.7	18
VSP-HEW25S□-4		4			11.2	18.8	20
VSP-HEW25S□-6		6			11.9	20.6	22
VSP-HEW30S□-2	30	1.8	37.5	15.5	8.4	14.7	19
VSP-HEW30S□-4		4			11.2	18.8	21
VSP-HEW30S□-6		6			11.9	20.6	23
VSP-HEW35S□-2	35	1.8	50	28	8.4	14.7	48
VSP-HEW35S□-4		4			11.2	18.8	50
VSP-HEW35S□-6		6			11.9	20.6	52
VSP-HEW50S□-2	50	1.8	50	28	8.4	14.7	89
VSP-HEW50S□-4		4			11.2	18.8	91
VSP-HEW50S□-6		6			11.9	20.6	93

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW10 to 50S□-4T/6T

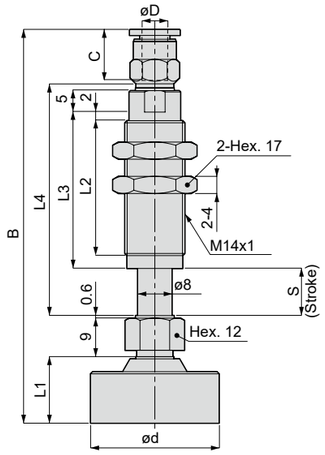


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW10S□-4T	10	1.8	31.5	9.5	16
VSP-HEW10S□-6T		4			
VSP-HEW15S□-4T	15	1.8	31.5	9.5	16
VSP-HEW15S□-6T		4			
VSP-HEW20S□-4T	20	1.8	37.5	15.5	22
VSP-HEW20S□-6T		4			
VSP-HEW25S□-4T	25	1.8	37.5	15.5	23
VSP-HEW25S□-6T		4			
VSP-HEW30S□-4T	30	1.8	37.5	15.5	24
VSP-HEW30S□-6T		4			
VSP-HEW35S□-4T	35	1.8	50	28	53
VSP-HEW35S□-6T		4			
VSP-HEW50S□-4T	50	1.8	50	28	94
VSP-HEW50S□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC10 to 30-□S□-4/6



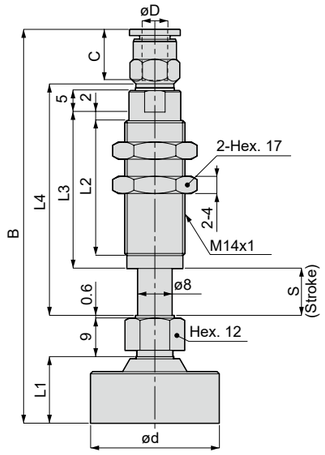
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-5S□-4	10	4	74.6	9.5	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC10-5S□-6		6	75.9					11.9			54
VSP-LFC10-10S□-4		4	84.6		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC10-10S□-6		6	85.9					11.9			56
VSP-LFC10-15S□-4		4	94.6		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC10-15S□-6		6	95.9					11.9			59
VSP-LFC10-20S□-4		4	104.6		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC10-20S□-6		6	105.9					11.9			62
VSP-LFC15-5S□-4	15	4	74.6	9.5	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC15-5S□-6		6	75.9					11.9			55
VSP-LFC15-10S□-4		4	84.6		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC15-10S□-6		6	85.9					11.9			57
VSP-LFC15-15S□-4		4	94.6		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC15-15S□-6		6	95.9					11.9			60
VSP-LFC15-20S□-4		4	104.6		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC15-20S□-6		6	105.9					11.9			63
VSP-LFC20-5S□-4	20	4	80.6	15.5	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	55
VSP-LFC20-5S□-6		6	81.9					11.9			56
VSP-LFC20-10S□-4		4	90.6		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	57
VSP-LFC20-10S□-6		6	91.9					11.9			58
VSP-LFC20-15S□-4		4	100.6		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	60
VSP-LFC20-15S□-6		6	101.9					11.9			61
VSP-LFC20-20S□-4		4	110.6		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	63
VSP-LFC20-20S□-6		6	111.9					11.9			64
VSP-LFC25-5S□-4	25	4	80.6	15.5	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	56
VSP-LFC25-5S□-6		6	81.9					11.9			57
VSP-LFC25-10S□-4		4	90.6		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	58
VSP-LFC25-10S□-6		6	91.9					11.9			59
VSP-LFC25-15S□-4		4	100.6		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	61
VSP-LFC25-15S□-6		6	101.9					11.9			62
VSP-LFC25-20S□-4		4	110.6		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	64
VSP-LFC25-20S□-6		6	111.9					11.9			65
VSP-LFC30-5S□-4	30	4	80.6	15.5	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57
VSP-LFC30-5S□-6		6	81.9					11.9			58
VSP-LFC30-10S□-4		4	90.6		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59
VSP-LFC30-10S□-6		6	91.9					11.9			60
VSP-LFC30-15S□-4		4	100.6		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62
VSP-LFC30-15S□-6		6	101.9					11.9			63
VSP-LFC30-20S□-4		4	110.6		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65
VSP-LFC30-20S□-6		6	111.9					11.9			66

*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC35, 50-□S□-4/6



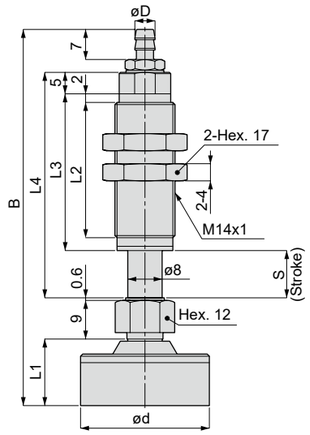
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC35-5S□-4	35	4	93.1	28	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	86
VSP-LFC35-5S□-6		6	94.4					11.9			87
VSP-LFC35-10S□-4		4	103.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	88
VSP-LFC35-10S□-6		6	104.4					11.9			89
VSP-LFC35-15S□-4		4	113.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	91
VSP-LFC35-15S□-6		6	114.4					11.9			92
VSP-LFC35-20S□-4		4	123.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	94
VSP-LFC35-20S□-6		6	124.4					11.9			95
VSP-LFC50-5S□-4	50	4	93.1	28	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	127
VSP-LFC50-5S□-6		6	94.4					11.9			128
VSP-LFC50-10S□-4		4	103.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	129
VSP-LFC50-10S□-6		6	104.4					11.9			130
VSP-LFC50-15S□-4		4	113.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	132
VSP-LFC50-15S□-6		6	114.4					11.9			133
VSP-LFC50-20S□-4		4	123.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	135
VSP-LFC50-20S□-6		6	124.4					11.9			136

*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC10 to 30-□S□-4T/6T



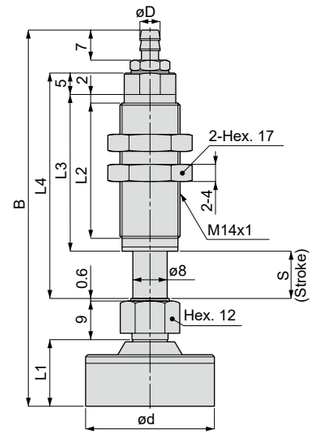
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-5S□-4T	10	2.5	71.7	9.5	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	48
VSP-LFC10-5S□-6T		4								
VSP-LFC10-10S□-4T		2.5	81.7		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	50
VSP-LFC10-10S□-6T		4								
VSP-LFC10-15S□-4T		2.5	91.7		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	53
VSP-LFC10-15S□-6T		4								
VSP-LFC10-20S□-4T		2.5	101.7		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	56
VSP-LFC10-20S□-6T		4								
VSP-LFC15-5S□-4T	15	2.5	71.7	9.5	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC15-5S□-6T		4								
VSP-LFC15-10S□-4T		2.5	81.7		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC15-10S□-6T		4								
VSP-LFC15-15S□-4T		2.5	91.7		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC15-15S□-6T		4								
VSP-LFC15-20S□-4T		2.5	101.7		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC15-20S□-6T		4								
VSP-LFC20-5S□-4T	20	2.5	77.7	15.5	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	50
VSP-LFC20-5S□-6T		4								
VSP-LFC20-10S□-4T		2.5	87.7		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	52
VSP-LFC20-10S□-6T		4								
VSP-LFC20-15S□-4T		2.5	97.7		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	55
VSP-LFC20-15S□-6T		4								
VSP-LFC20-20S□-4T		2.5	107.7		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	58
VSP-LFC20-20S□-6T		4								
VSP-LFC25-5S□-4T	25	2.5	77.7	15.5	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	51
VSP-LFC25-5S□-6T		4								
VSP-LFC25-10S□-4T		2.5	87.7		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	53
VSP-LFC25-10S□-6T		4								
VSP-LFC25-15S□-4T		2.5	97.7		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	56
VSP-LFC25-15S□-6T		4								
VSP-LFC25-20S□-4T		2.5	107.7		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	59
VSP-LFC25-20S□-6T		4								
VSP-LFC30-5S□-4T	30	2.5	77.7	15.5	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	52
VSP-LFC30-5S□-6T		4								
VSP-LFC30-10S□-4T		2.5	87.7		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	54
VSP-LFC30-10S□-6T		4								
VSP-LFC30-15S□-4T		2.5	97.7		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	57
VSP-LFC30-15S□-6T		4								
VSP-LFC30-20S□-4T		2.5	107.7		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	60
VSP-LFC30-20S□-6T		4								

*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC35, 50-□S□-4T/6T



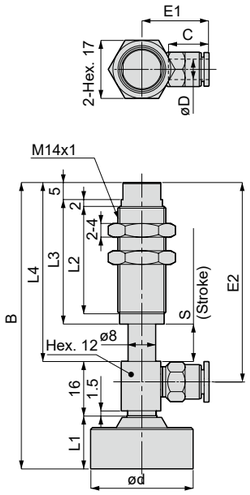
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC35-5S□-4T	35	2.5	90.2	28	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	81
VSP-LFC35-5S□-6T		4								
VSP-LFC35-10S□-4T		2.5	100.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	83
VSP-LFC35-10S□-6T		4								
VSP-LFC35-15S□-4T		2.5	110.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	86
VSP-LFC35-15S□-6T		4								
VSP-LFC35-20S□-4T		2.5	120.1		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	89
VSP-LFC35-20S□-6T		4								
VSP-LFC50-5S□-4T	50	2.5	90.2	28	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	122
VSP-LFC50-5S□-6T		4								
VSP-LFC50-10S□-4T		2.5	100.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	124
VSP-LFC50-10S□-6T		4								
VSP-LFC50-15S□-4T		2.5	110.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	127
VSP-LFC50-15S□-6T		4								
VSP-LFC50-20S□-4T		2.5	120.1		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	130
VSP-LFC50-20S□-6T		4								

*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD10 to 30-□S□-4/6

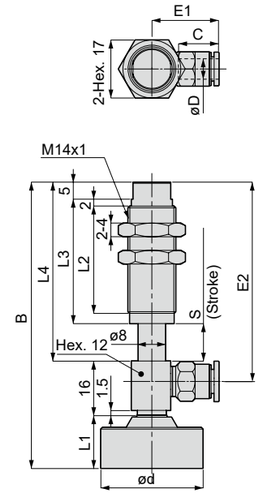


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5S□-4	10	4	68	9.5	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	54
VSP-LFD10-5S□-6		6						11.9	19.7				55
VSP-LFD10-10S□-4		4	78		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	58
VSP-LFD10-10S□-6		6						11.9	19.7				59
VSP-LFD10-15S□-4		4	88		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	62
VSP-LFD10-15S□-6		6						11.9	19.7				63
VSP-LFD10-20S□-4		4	98		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	66
VSP-LFD10-20S□-6		6						11.9	19.7				67
VSP-LFD15-5S□-4	15	4	68	9.5	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	55
VSP-LFD15-5S□-6		6						11.9	19.7				56
VSP-LFD15-10S□-4		4	78		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	59
VSP-LFD15-10S□-6		6						11.9	19.7				60
VSP-LFD15-15S□-4		4	88		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	63
VSP-LFD15-15S□-6		6						11.9	19.7				64
VSP-LFD15-20S□-4		4	98		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	67
VSP-LFD15-20S□-6		6						11.9	19.7				68
VSP-LFD20-5S□-4	20	4	74	15.5	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	56
VSP-LFD20-5S□-6		6						11.9	19.7				57
VSP-LFD20-10S□-4		4	84		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	60
VSP-LFD20-10S□-6		6						11.9	19.7				61
VSP-LFD20-15S□-4		4	94		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	64
VSP-LFD20-15S□-6		6						11.9	19.7				65
VSP-LFD20-20S□-4		4	104		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	68
VSP-LFD20-20S□-6		6						11.9	19.7				69
VSP-LFD25-5S□-4	25	4	74	15.5	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	57
VSP-LFD25-5S□-6		6						11.9	19.7				58
VSP-LFD25-10S□-4		4	84		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	61
VSP-LFD25-10S□-6		6						11.9	19.7				62
VSP-LFD25-15S□-4		4	94		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	65
VSP-LFD25-15S□-6		6						11.9	19.7				66
VSP-LFD25-20S□-4		4	104		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	69
VSP-LFD25-20S□-6		6						11.9	19.7				70
VSP-LFD30-5S□-4	30	4	74	15.5	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58
VSP-LFD30-5S□-6		6						11.9	19.7				59
VSP-LFD30-10S□-4		4	84		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62
VSP-LFD30-10S□-6		6						11.9	19.7				63
VSP-LFD30-15S□-4		4	94		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66
VSP-LFD30-15S□-6		6						11.9	19.7				67
VSP-LFD30-20S□-4		4	104		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70
VSP-LFD30-20S□-6		6						11.9	19.7				71

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD35, 50-□S□-4/6

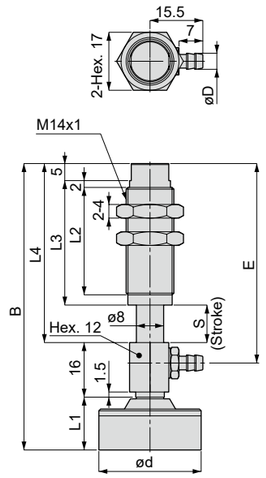


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD35-5S□-4	35	4	86.5	28	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	87
VSP-LFD35-5S□-6		6						11.9	19.7				88
VSP-LFD35-10S□-4		4	96.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	91
VSP-LFD35-10S□-6		6						11.9	19.7				92
VSP-LFD35-15S□-4		4	106.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	95
VSP-LFD35-15S□-6		6						11.9	19.7				96
VSP-LFD35-20S□-4		4	116.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	99
VSP-LFD35-20S□-6		6						11.9	19.7				100
VSP-LFD50-5S□-4	50	4	86.5	28	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	128
VSP-LFD50-5S□-6		6						11.9	19.7				129
VSP-LFD50-10S□-4		4	96.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	132
VSP-LFD50-10S□-6		6						11.9	19.7				133
VSP-LFD50-15S□-4		4	106.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	136
VSP-LFD50-15S□-6		6						11.9	19.7				137
VSP-LFD50-20S□-4		4	116.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	140
VSP-LFD50-20S□-6		6						11.9	19.7				141

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD10 to 30-□S□-4T/6T

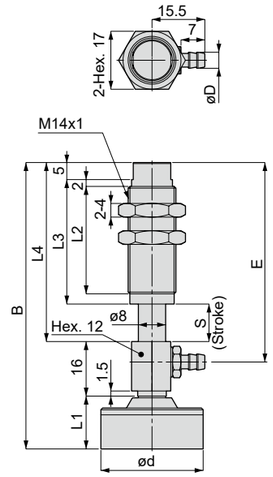


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5S□-4T	10	2.5	68	9.5	26.5	31.5	42.5	48.5	5	4.5 to 6.5	50
VSP-LFD10-5S□-6T		4									
VSP-LFD10-10S□-4T		2.5	78		31.5	36.5	52.5	58.5	10	4.5 to 8.2	53
VSP-LFD10-10S□-6T		4									
VSP-LFD10-15S□-4T		2.5	88		36.5	41.5	62.5	68.5	15	4.5 to 9.9	57
VSP-LFD10-15S□-6T		4									
VSP-LFD10-20S□-4T		2.5	98		41.5	46.5	72.5	78.5	20	4.5 to 14.9	61
VSP-LFD10-20S□-6T		4									
VSP-LFD15-5S□-4T	15	2.5	68	9.5	26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD15-5S□-6T		4									
VSP-LFD15-10S□-4T		2.5	78		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD15-10S□-6T		4									
VSP-LFD15-15S□-4T		2.5	88		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD15-15S□-6T		4									
VSP-LFD15-20S□-4T		2.5	98		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD15-20S□-6T		4									
VSP-LFD20-5S□-4T	20	2.5	74	15.5	26.5	31.5	42.5	48.5	5	4.5 to 6.5	52
VSP-LFD20-5S□-6T		4									
VSP-LFD20-10S□-4T		2.5	84		31.5	36.5	52.5	58.5	10	4.5 to 8.2	55
VSP-LFD20-10S□-6T		4									
VSP-LFD20-15S□-4T		2.5	94		36.5	41.5	62.5	68.5	15	4.5 to 9.9	59
VSP-LFD20-15S□-6T		4									
VSP-LFD20-20S□-4T		2.5	104		41.5	46.5	72.5	78.5	20	4.5 to 14.9	63
VSP-LFD20-20S□-6T		4									
VSP-LFD25-5S□-4T	25	2.5	74	15.5	26.5	31.5	42.5	48.5	5	4.5 to 6.5	53
VSP-LFD25-5S□-6T		4									
VSP-LFD25-10S□-4T		2.5	84		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57
VSP-LFD25-10S□-6T		4									
VSP-LFD25-15S□-4T		2.5	94		36.5	41.5	62.5	68.5	15	4.5 to 9.9	60
VSP-LFD25-15S□-6T		4									
VSP-LFD25-20S□-4T		2.5	104		41.5	46.5	72.5	78.5	20	4.5 to 14.9	64
VSP-LFD25-20S□-6T		4									
VSP-LFD30-5S□-4T	30	2.5	74	15.5	26.5	31.5	42.5	48.5	5	4.5 to 6.5	57
VSP-LFD30-5S□-6T		4									
VSP-LFD30-10S□-4T		2.5	84		31.5	36.5	52.5	58.5	10	4.5 to 8.2	58
VSP-LFD30-10S□-6T		4									
VSP-LFD30-15S□-4T		2.5	94		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61
VSP-LFD30-15S□-6T		4									
VSP-LFD30-20S□-4T		2.5	104		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65
VSP-LFD30-20S□-6T		4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD35, 50-□S□-4T/6T



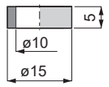
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD35-5S□-4T	35	2.5	86.5	28	26.5	31.5	42.5	48.5	5	4.5 to 6.5	83
VSP-LFD35-5S□-6T		4									
VSP-LFD35-10S□-4T		2.5	96.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	87
VSP-LFD35-10S□-6T		4									
VSP-LFD35-15S□-4T		2.5	106.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	90
VSP-LFD35-15S□-6T		4									
VSP-LFD35-20S□-4T		2.5	116.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	94
VSP-LFD35-20S□-6T		4									
VSP-LFD50-5S□-4T	50	2.5	86.5	28	26.5	31.5	42.5	48.5	5	4.5 to 6.5	124
VSP-LFD50-5S□-6T		4									
VSP-LFD50-10S□-4T		2.5	96.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	128
VSP-LFD50-10S□-6T		4									
VSP-LFD50-15S□-4T		2.5	106.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	131
VSP-LFD50-15S□-6T		4									
VSP-LFD50-20S□-4T		2.5	116.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	135
VSP-LFD50-20S□-6T		4									

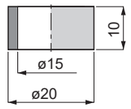
Pad Rubber Only External Dimension Diagram

●VSPG-10S□ Weight: 0.1 g [0.2 g]

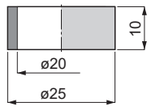
●VSPG-15S□ Weight: 0.2 g [0.3 g]



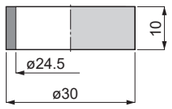
●VSPG-20S□ Weight: 0.3 g [0.8 g]



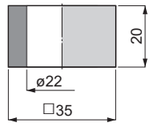
●VSPG-25S□ Weight: 0.4 g [1.0 g]



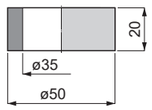
●VSPG-30S□ Weight: 0.5 g [1.4 g]



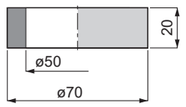
●VSPG-35S□ Weight: 2.1 g [5.1 g]



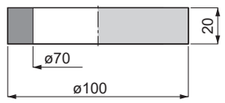
●VSPG-50S□ Weight: 3.6 g [8.1 g]



●VSPG-70S□ Weight: 6.3 g [17 g]



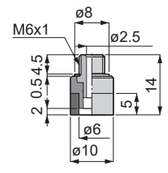
●VSPG-100S□ Weight: 14.0 g [32 g]



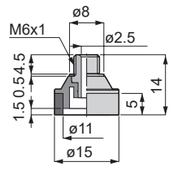
Weight: Values in [ ] are for silicone rubber only.

Pad Rubber + Set with Fixing Screw External Dimension Diagram

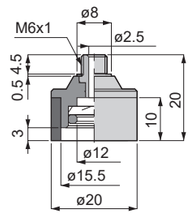
●VSPG-10S□A Weight: 1.9 g [1.9 g]



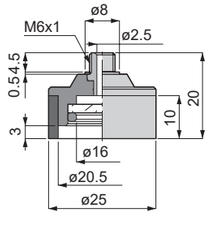
●VSPG-15S□A Weight: 2.1 g [2.3 g]



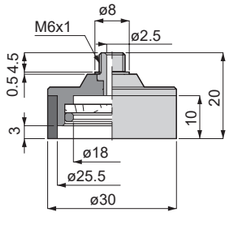
●VSPG-20S□A Weight: 3.9 g [4.4 g]



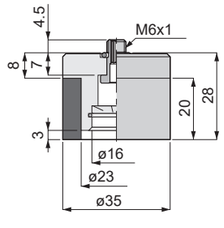
●VSPG-25S□A Weight: 5.2 g [5.9 g]



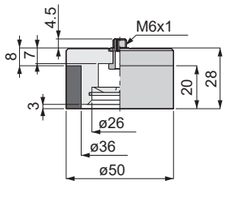
●VSPG-30S□A Weight: 6.2 g [7.1 g]



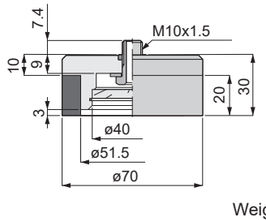
●VSPG-35S□A Weight: 35 g [38 g]



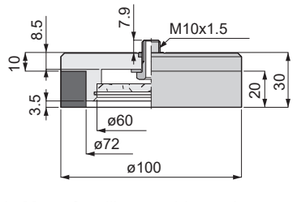
●VSPG-50S□A Weight: 76 g [80 g]



●VSPG-70S□A Weight: 142 g [152 g]



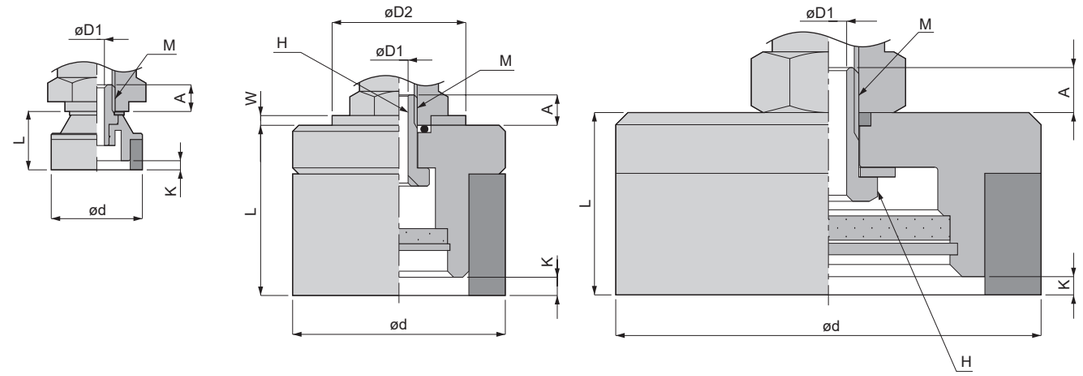
●VSPG-100S□A Weight: 272 g [290 g]



Weight: Values in [ ] are for silicone rubber only.

Detailed Diagram of Pad and Holder Connection Part

●VSPG-10 to 30S□A ●VSPG-35, 50S□A ●VSPG-70, 100S□A



Unit: mm

Model No.	Pad Diameter ød	L	Lip Internal Height K	Fixing Screw M	A	Width Across Flats H	øD1	øD2	W
VSPG-10S□A	10	9.5	1.5	M6x1	4.5	-	3	-	-
VSPG-15S□A	15	9.5	1.5	M6x1	4.5	-	3	-	-
VSPG-20S□A	20	15.5	3	M6x1	4.5	-	3	-	-
VSPG-25S□A	25	15.5	3	M6x1	4.5	-	3	-	-
VSPG-30S□A	30	15.5	3	M6x1	4.5	-	3	-	-
VSPG-35S□A	35	28	3	M6x1	4.5	3	-	22	1.6
VSPG-50S□A	50	28	3	M6x1	4.5	3	-	22	1.6
VSPG-70S□A	70	30	3	M10x1.5	6	14	6	-	-
VSPG-100S□A	100	30	3.5	M10x1.5	6	14	6	-	-

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, refer to Intro 15 for details.

Individual Precautions: Suction Pad Sponge-type VSP-□S□ Series

Design / Selection

Caution

■When replacing the suction pad, for pad diameters ø10 to ø30 mm, hand-tighten firmly until it bottoms out against the end face. For pad diameters ø35 to ø100 mm, use an appropriate tool to tighten according to the torque specified in the “Common Precautions for Suction Pads” (from Intro 20) and confirm that it is not loose.

■When installing the pad frame (for pad diameters ø10 to ø30 mm), use an appropriate tool to tighten to a torque of 0.45 to 0.55 N·m and confirm that it is not loose.

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad Bellows Type

VSP-□B□ Series

Suction pad with bellows structure that softly conforms to the workpiece

RoHS

The bellows (bellows) part follows curved workpieces, making it ideal for transporting bags containing retort pouches, food, etc.

Abundant holder variations

Shape 18 types
- Standard .... 6 types
- Compact..... Class 5
- Low dust generation 2 types
- Lightweight 3 types
- Low back ...2 types

Piping Connection 9 types
- Push-in fitting (ø1.8 to ø8) .....4 types
- Barbed fitting (ø4, ø6)..... 2 types
- Screw-in (M3, M5, G1/8)..... 3 types

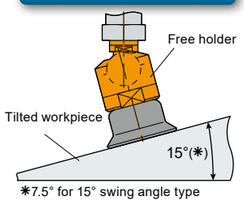
Stroke 12 types

2 mm to 50 mm
(Depends on pad diameter, holder)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

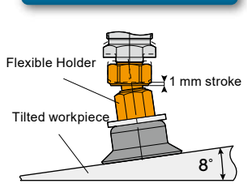
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces

Free holder (F1:30°, F2:15°)



✳7.5° for 15° swing angle type

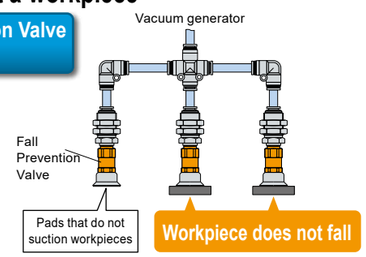
Flexible Holder (CF)



After removing the workpiece, returns to the normal position (vertical)

Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece

Drop Prevention Valve (V)



Simply attach a dedicated resin attachment to the bellows pad to handle workpieces sensitive to suction marks.

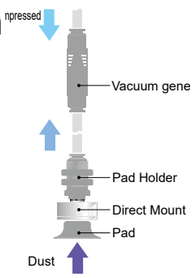
Size 5 types ø10 to ø30

Material 3 types
- PEEK
- POM
- Conductive PEEK

Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



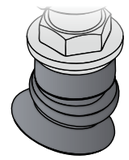
Pad surface treatment (option) with special processing to reduce adsorption marks is available

	-NF	-SF	-DL	-ER	-FG
Surface Treatment	Fiber Raised		Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
	Nylon	Silk			
Compatible Material	Silicone Fluorine	Silicone Fluorine	Silicone Fluorine Conductive Silicone	Nitrile Conductive NBR (Low Resistance-type)	Silicone Conductive Silicone Ultra Soft Silicone
Features	Fibers(nylon or silk) on the pad surface prevent direct contact with the workpiece, thus preventing rubber material transfer.		Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

1-Stage Bellows

Can follow changes in the height of the contacting workpiece and surface inclination.



Recommended Workpiece

Bags containing retort pouches, food items, etc.

Pad Diameter

14 types

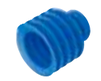
2 | 4 | 6 | 8 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100

Pad Material

10 types

Nitrile | Silicone | Urethane | Fluorine | Conductive Silicone | Conductive NBR (Low Resistance-type) | HNBR | EPDM | Ultra Soft Silicone Hardness 20° | Ultra Soft Silicone Hardness 40°

Hardness 20° Type


Hardness 40° Type

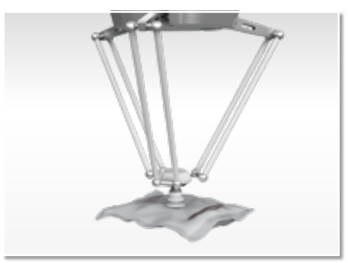
Ultra Soft Silicone

*Ultra soft silicone (YS2, YS4) conforms to the Food Sanitation Act, FDA compliant. Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

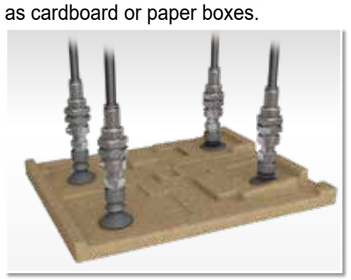
Workpieces with uneven suction surfaces

Flexibly follows workpieces with irregularities such as retort pouches.



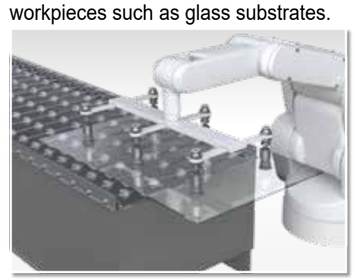
Workpieces with variations in suction surface height

Can follow and adsorb workpieces with changing suction surface heights, such as cardboard or paper boxes.



Workpieces sensitive to suction marks

By using the optional suction mark prevention attachment, it also supports workpieces such as glass substrates.



Model No. Notation

●Bellows Type

Suction Pad

VSP - C - 30 - -20 - B - N - -ER - 6 - [ ] - F1 - V - T1

VSP	C	30	-20	B	N	-ER	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Size/Shape	❽ Buffer Load	❾ Pad Swinging	❿ Drop Prevention Valve	⓫ Direct Mount Filter

Pad Rubber Only

VSPG - 30 - B - N - -ER

VSPG	30	B	N	-ER
Model No.	❷	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment

Pad Rubber + Set with Fixing Screw

VSPG - 30 - B - N - -ER A

VSPG	30	B	N	-ER	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	

*1: For ❷ Pad Diameter 10 to 100, the "Pad Rubber + Set Screw Set" can be selected.

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code
Fixed Type	Standard	Top Direction	A
	Compact		MA
	Standard	Side Direction	B
	Compact		MB
	Low Profile		HE
	Low Profile	Both Sides Direction	HEW
	Standard	Direct Mount Type	E
	Compact		ME

Buffer Present/Absent	Type	Vacuum Outlet	Code
Buffer Type	Standard	Top Direction	C
	Compact		MC
	Low Particle Generation		LFC
	Lightweight		HC
	Standard	Side Direction	D
	Compact		MD
	Low Particle Generation		LFD
	Lightweight	Both Sides Direction	HDW
	Standard	Direct Mount Type	F

❷ Pad Diameter

Pad Shape	B										Code
Pad Material	N	S	YS2	YS4	U	F	SE	NE	HN	EP	
Pad Diameter											
ø2	●	●									2
ø4	●	●					●				4
ø6	●	●			●	●	●	●	●	●	6
ø8	●	●			●	●	●	●	●	●	8
ø10	●	●	*1	*1	●	●	●	●	●	●	10
ø15	●	●	*1	●	●	●	●	●	●	●	15
ø20	●	●	●	●	●	●	●	●	●	●	20
ø25	●	●	●	●	●	●	●	●	●	●	25
ø30	●	●	●	●	●	●	●	●	●	●	30
ø40	●	●	●	●	●	●	●	●	●	●	40
ø50	●	●	●	●	●	●	●	●	●	●	50
ø60	●	●			●	●	●	●	●	●	60
ø80	●	●			●	●	●	●	●	●	80
ø100	●	●			●	●	●	●	●	●	100

*1: ❺ Pad Material YS2 and YS4 for ❷ 10, and ❺ Pad Material YS2 for ❷ 15, can only be selected when ❻ Surface Treatment is -FG.

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code
Specified Stroke, or No Buffer	●	●				Blank
Stroke 2 mm				●		-2
Stroke 5 mm				●	●	-5
Stroke 10 mm	●	●	●	●	●	-10
Stroke 15 mm	●	●	●	●	●	-15
Stroke 20 mm	●	●	●	●	●	-20
Stroke 25 mm			●			-25
Stroke 30 mm	●	●	●			-30
Stroke 40 mm	●	●	●			-40
Stroke 50 mm	●	●	●			-50

*1, *2

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 6 to 15, -2 can be selected for ❸.
*4: When ❷ Pad Diameter is 6 to 50, -30, -40, and -50 can be selected for ❸.
*5: When ❷ Pad Diameter is 60 to 100, ❸ is 'Blank'.

❹ Pad Shape

Code	Content	
B	Bellows Type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
YS2	Ultra Soft Silicone Rubber (Hardness 20°)
YS4	Ultra Soft Silicone Rubber (Hardness 40°)
U	Urethane rubber
F	Fluororubber
SE	Conductive Silicone Rubber
NE	Conductive NBR (Low Resistance-type)
HN	HNBR
EP	EPDM

❻ Surface Treatment

Content	Compatible Pad Material N	S	YS2	YS4	F	SE	NE	Compatible Pad Diameter Bellows (B)	Code
No surface treatment	All pad materials, all pad diameters								Blank
Fiber Raised (Nylon)		●			●			ø15 to ø80	-NF
Fiber Raised (Silk)		●			●			ø15 to ø80	-SF
Anti-Adhesion Special Coating		●			●	●		ø6 to ø50	-DL
Suction Mark Reduction Surface Modification	●						●	ø6 to ø60	-ER
Fluorine Coating		●	●	●		●		ø6 to ø100	-FG

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

● Structure usable in rechargeable battery manufacturing processes

VSP - ..... - P4*

*Please inquire for details.

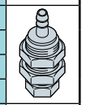
Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

● Uses food-grade lubricant usable in food manufacturing processes, and resin/rubber materials conforming to the Food Sanitation Act

VSP - ..... - FP*

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	ME	LFC	LFD	HC	HD	HDW	HE	HEW	Code
(❶: For E and F)																	Blank
ø1.8, Push-in fitting		●	●	●	●	●	●	●				●	●	●	●	●	2
ø4, Push-in fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	4
ø6, Push-in fitting	●	●	●	●		●		●		●	●	●	●	●	●	●	6
ø8, Push-in fitting	●	●	●	●													8
ø4, Push-in fitting, without spring cover			●	●													4C
ø6, Push-in fitting, without spring cover			●	●													6C
ø4 Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	4T
ø6 Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	6T
ø4 Barb fitting, without spring cover			●	●													4TC
ø6 Barb fitting, without spring cover			●	●													6TC
M5×0.8									●								M5
G1/8	●	●	●	●													6A



*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❼. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of standard load)

*1
*2

*1: For ❶ Holder Shape other than LFC, (8) is 'Blank'.
*2: For ❸ Stroke Option -2, (8) is 'Blank'.

❾ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
CF	With flexible holder (Angle 8°)	Flexible Holder

*1
*1
*2

*1: ❾ F1 and F2 can be selected when ❷ Pad Diameter is 10 to 100.
*2: ❾ CF can be selected in the following cases: with ❶ Holder Shape E and ❷ Pad Diameter 6 or 8; with ❶ Holder Shape ME; and with ❷ Pad Diameter 10 to 50.
*3: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❿ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*2
*1

*1: ❿ V can only be selected for ❶ Holder Shape E and ME, and for ❷ Pad Diameter 10 to 100.
*2: For ❻ -NF and -SF, ❿ is 'Blank'.
*3: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

⓫ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1
*2

*1: ⓫ T1 can be selected when ❷ Pad Diameter is 10 to 50.
*2: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.
*3: For dimensions with the direct mount filter, please refer to P. 1064.

⓬ Resin Attachment Material

Code	Content	
K	PEEK	
M	POM	
KE	Conductive PEEK	

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

Holder Shape	Pad Diameter	Push-in fitting ø1.8	ø4		ø6		ø8	Barb fitting ø4		ø6		Thread G1/8
		2	4	4C	6	6C	8	4T	4TC	6T	6TC	6A
A	ø2 to ø4		●					●				
	ø6 to ø8		●		●			●		●		
	ø10 to ø15				●					●		
	ø20 to ø50		●		●			●		●		
	ø60 to ø100		●		●		●					●
B	ø2 to ø4	●	●					●		●		
	ø6 to ø8	●	●		●			●		●		
	ø10 to ø50		●		●			●		●		
	ø60 to ø100		●		●		●					●
C	ø2 to ø4	●	●		●			●		●		
	ø6 to ø8	●	●	●	●	●		●	●	●	●	
	ø10 to ø50		●	●	●	●		●	●	●	●	
	ø60 to ø100		●		●		●					●
D	ø2 to ø4	●	●		●			●		●		
	ø6 to ø8	●	●	●	●	●		●	●	●	●	
	ø10 to ø50		●	●	●	●		●	●	●	●	
	ø60 to ø100		●		●		●					●

Holder Shape	Pad Diameter	Push-in fitting ø1.8	ø4	ø6	Barb fitting ø4	ø6
		2	4	6	4T	6T
MA	ø6 to ø8	●			●	
	ø10 to ø15		●		●	
	ø20 to ø50		●		●	●
MB	ø6 to ø8	●	●		●	●
	ø10 to ø50	●	●	●	●	●
MC	ø6 to ø8	●			●	●
	ø10 to ø50	●	●		●	●
MD	ø6 to ø8	●	●		●	●
	ø10 to ø50	●	●	●	●	●

Holder Shape	Pad Diameter	Push-in fitting ø1.8	ø4	ø6	Barb fitting ø4	ø6
		2	4	6	4T	6T
LFC	ø6 to ø15		●		●	●
	ø20 to ø50		●	●	●	●
LFD	ø6 to ø15		●		●	●
	ø20 to ø50		●	●	●	●
HC	ø10 to ø50	●	●	●	●	●
HD	ø6 to ø50	●	●	●	●	●
HDW	ø6 to ø50	●	●	●	●	●
HE	ø6 to ø50	●	●	●	●	●
HEW	ø6 to ø50	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M3	M5
		Blank	
E	ø2 to ø4	●	
	ø6 to ø8		●

Holder Shape	Pad Diameter	Thread M10	M14
		Blank	
F	ø2 to ø8	●	
	ø10 to ø50		●

Holder Shape	Pad Diameter	Thread M5
		M5
ME	ø6 to ø8	●

●Suction mark prevention resin attachment for bellows pad only

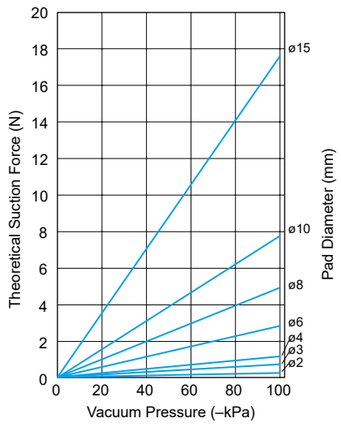
VSPG - 30 - BQ - K

VSPG	30	BQ	K
Model No.	❷ Pad Diameter		⓬ Resin Attachment Material

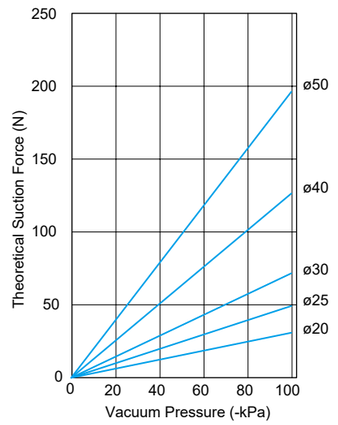
*: For ❷ 10 to 30, only the resin attachment can be selected.

Theoretical Suction Force

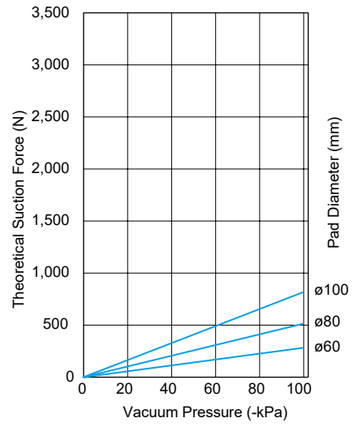
● Pad Diameter: ø2 mm to ø15 mm



●Pad Diameter: ø20 mm to ø50 mm



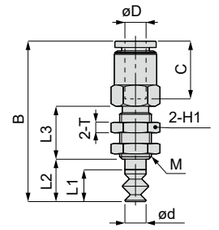
●Pad dia.: ø60 mm to ø100 mm



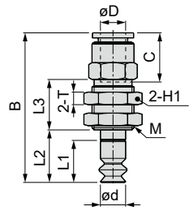
Theoretical suction force is a value under static conditions. For actual use, consider a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting. Regarding the suction force of the bellows type, due to pad characteristics, it may not be possible to secure the calculated suction force (theoretical suction force x safety factor) due to factors such as vacuum level, pad material, and adsorbed object. For selection, refer to "How to select Suction Pads" (P. 412) Use the suction force obtained with as a guide, and confirm that there is no problem with the suction capacity on the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

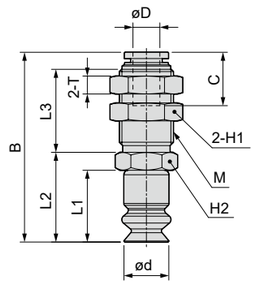
●VSP-A2, 4B□4



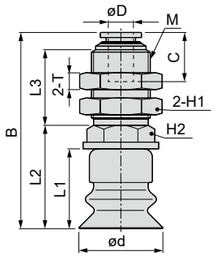
●VSP-A6, 8B□4/6



●VSP-A10, 15B□6



●VSP-A20 to 50B□-4/6

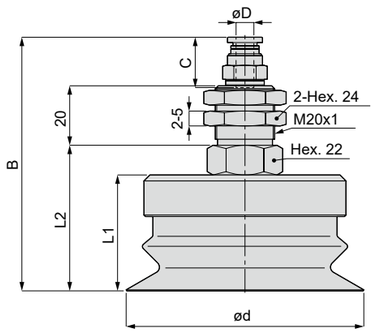


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	Tube End C	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A2B□-4	2	4	M6x0.75	30.6	6	8	10	11.2	8	-	2	5.7
VSP-A4B□-4	4	4	M6x0.75	30.6	6	8	10	11.2	8	-	2	5.7
VSP-A6B□-4	6	4	M8x0.75	35.1	10	12.5	12	11.2	10	-	2	8.5
VSP-A6B□-6		6	M10x1	35.8				11.9	12		3	13
VSP-A8B□-4	8	4	M8x0.75	35.1	10	12.5	12	11.2	10	-	2	8.5
VSP-A8B□-6		6	M10x1	35.8				11.9	12		3	13
VSP-A10B□-6	10	6	M12x1	42.3	16	20	18.5	11.9	14	12	4	22
VSP-A15B□-6	15	6	M12x1	42.3	16	20	18.5	11.9	14	12	4	22
VSP-A20B□-4	20	4	M12x1	55.9	19	25	18	11.2	14	12	4	31
VSP-A20B□-6		6	M14x1	46.9		24.6		11.9	17	14		37
VSP-A25B□-4	25	4	M12x1	55.9	19	25	18	11.2	14	12	4	32
VSP-A25B□-6		6	M14x1	46.9		24.6		11.9	17	14		38
VSP-A30B□-4	30	4	M12x1	59.9	23	29	18	11.2	14	12	4	34
VSP-A30B□-6		6	M14x1	50.9		28.6		11.9	17	14		40
VSP-A40B□-4	40	4	M12x1	66.9	30	36	18	11.2	14	12	4	43
VSP-A40B□-6		6	M14x1	57.9		35.6		11.9	17	14		49
VSP-A50B□-4	50	4	M12x1	68.9	32	38	18	11.2	14	12	4	49
VSP-A50B□-6		6	M14x1	59.9		37.6		11.9	17	14		55

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A60 to 100B□-4/6/8

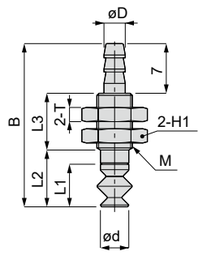


Unit: mm

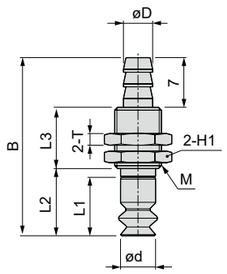
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Weight (g)
VSP-A60B□-4	60	4	80.2	37	49.6	11.2	149
VSP-A60B□-6		6	82.4			11.9	150
VSP-A60B□-8		8	90.8			18.2	155
VSP-A80B□-4	80	4	79.6	39	49	11.2	231
VSP-A80B□-6		6	81.8			11.9	232
VSP-A80B□-8		8	90.2			18.2	237
VSP-A100B□-4	100	4	85.6	45	55	11.2	330
VSP-A100B□-6		6	87.8			11.9	331
VSP-A100B□-8		8	96.2			18.2	336

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb Fitting)

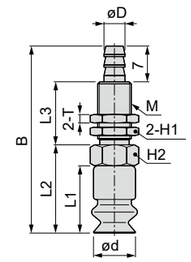
●VSP-A2 to 4B□-4T



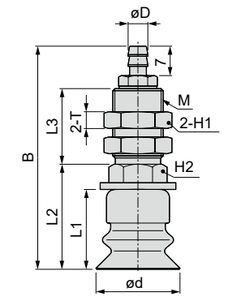
●VSP-A6, 8B□-4T/6T



●VSP-A10, 15B□-6T



●VSP-A20 to 50B□-4T/6T

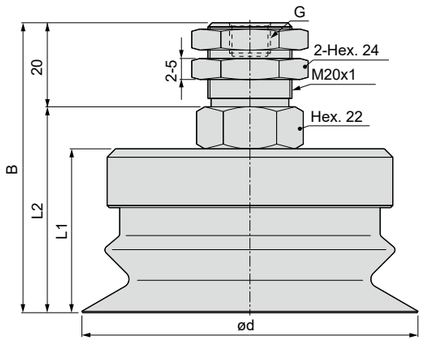


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A2B□-4T	2	2.5	M5x0.5	23	6	8	8	8	-	2	4
VSP-A4B□-4T	4	2.5	M5x0.5	23	6	8	8	8	-	2	4
VSP-A6B□-4T	6	2.5	M5x0.5	27.5	10	12.5	8	8	-	2	6
VSP-A6B□-6T		4	M8x0.75	29		11.5	10.5	10			8
VSP-A8B□-4T	8	2.5	M5x0.5	27.5	10	12.5	8	8	-	2	6
VSP-A8B□-6T		4	M8x0.75	29		11.5	10.5	10			8
VSP-A10B□-6T	10	4	M8x0.75	43	16	21	15	10	10	2	12
VSP-A15B□-6T	15	4	M8x0.75	43	16	21	15	10	10	2	13
VSP-A20B□-4T	20	2.5	M12x1	53	19	25	18	14	12	4	30
VSP-A20B□-6T		4									
VSP-A25B□-4T	25	2.5	M12x1	53	19	25	18	14	12	4	31
VSP-A25B□-6T		4									
VSP-A30B□-4T	30	2.5	M12x1	57	23	29	18	14	12	4	34
VSP-A30B□-6T		4									
VSP-A40B□-4T	40	2.5	M12x1	64	30	36	18	14	12	4	42
VSP-A40B□-6T		4									
VSP-A50B□-4T	50	2.5	M12x1	66	32	38	18	14	12	4	48
VSP-A50B□-6T		4									

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Female Thread)

●VSP-A60 to 100B□-6A

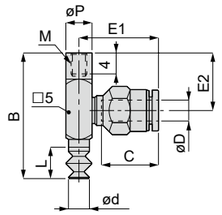


Unit: mm

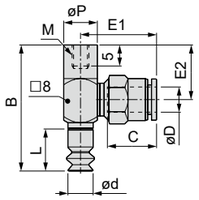
Model No.	Pad Diameter ød	Vacuum Outlet Size G	B	L1	L2	Weight (g)
VSP-A60B□-6A	60	G1/8	69.6	37	49.6	141
VSP-A80B□-6A	80	G1/8	69	39	49	223
VSP-A100B□-6A	100	G1/8	75	45	55	322

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

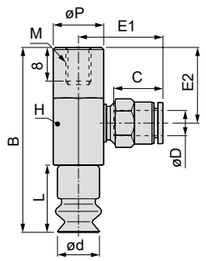
●VSP-B2, 4B□-2/4



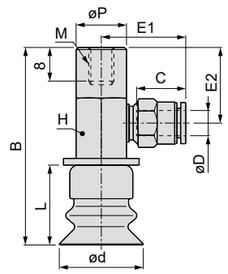
●VSP-B6, 8B□-2/4/6



●VSP-B10, 15B□-4/6



●VSP-B20 to 50B□-4/6

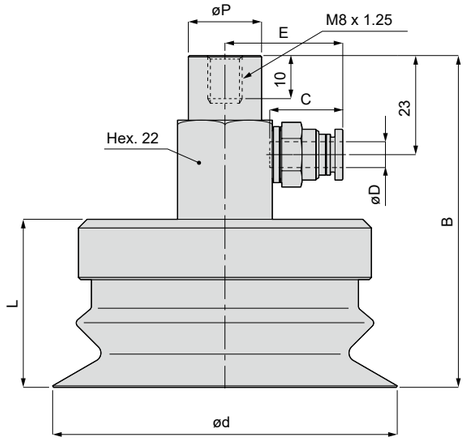


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L	Tube End C	øP	E1	E2	Width Across Flats H	Weight (g)
VSP-B2B□-2	2	1.8	M3x0.5	24	6	8.4	5	12	11	-	5
VSP-B2B□-4		4				11.2		15.3			6
VSP-B4B□-2	4	1.8	M3x0.5	24	6	8.4	5	12	11	-	5
VSP-B4B□-4		4				11.2		15.3			6
VSP-B6B□-2	6	1.8	M4x0.7	30	10	8.4	8	12.7	13	-	12
VSP-B6B□-4		4				11.2		16.8			13
VSP-B6B□-6		6				11.9		18.6			14
VSP-B8B□-2	8	1.8	M4x0.7	30	10	8.4	8	12.7	13	-	12
VSP-B8B□-4		4				11.2		16.8			13
VSP-B8B□-6		6				11.9		18.6			14
VSP-B10B□-4	10	4	M6x1	44	16	11.2	12	18.8	18	12	30
VSP-B10B□-6		6				11.9		20.1			31
VSP-B15B□-4	15	4	M6x1	44	16	11.2	12	18.8	18	12	30
VSP-B15B□-6		6				11.9		20.1			31
VSP-B20B□-4	20	4	M6x1	47	19	11.2	12	18.8	18	12	33
VSP-B20B□-6		6				11.9		20.1			34
VSP-B25B□-4	25	4	M6x1	47	19	11.2	12	18.8	18	12	34
VSP-B25B□-6		6				11.9		20.1			35
VSP-B30B□-4	30	4	M6x1	51	23	11.2	12	18.8	18	12	37
VSP-B30B□-6		6				11.9		20.1			38
VSP-B40B□-4	40	4	M6x1	58	30	11.2	12	18.8	18	12	45
VSP-B40B□-6		6				11.9		20.1			46
VSP-B50B□-4	50	4	M6x1	60	32	11.2	12	18.8	18	12	51
VSP-B50B□-6		6				11.9		20.1			52

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B60 to 100B□-4/6/8

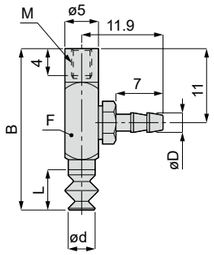


Unit: mm

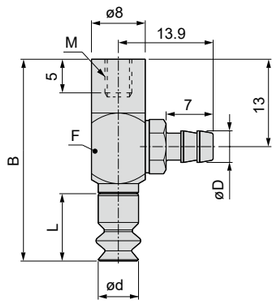
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	øP	E	Weight (g)
VSP-B60B□-4	60	4	77.6	37	11.2	17	21.5	155
VSP-B60B□-6		6			11.9		23.7	156
VSP-B60B□-8		8			18.2		32.1	161
VSP-B80B□-4	80	4	77	39	11.2	17	21.5	238
VSP-B80B□-6		6			11.9		23.7	239
VSP-B80B□-8		8			18.2		32.1	244
VSP-B100B□-4	100	4	83	45	11.2	17	21.5	337
VSP-B100B□-6		6			11.9		23.7	338
VSP-B100B□-8		8			18.2		32.1	343

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

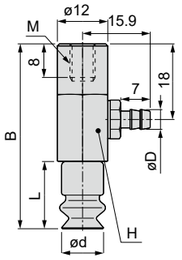
●VSP-B2, 4B□-4T/6T



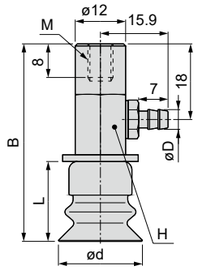
●VSP-B6, 8B□-4T/6T



●VSP-B10, 15B□-4T/6T



●VSP-B20 to 50B□-4T/6T

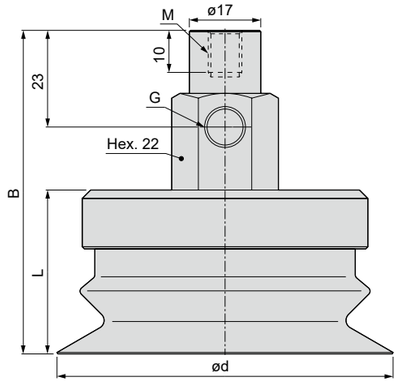


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L	Width Across Flats H	□F	Weight (g)
VSP-B2B□-4T	2	2.5	M3x0.5	24	6	-	5	5
VSP-B2B□-6T		4						
VSP-B4B□-4T	4	2.5	M3x0.5	24	6	-	5	5
VSP-B4B□-6T		4						
VSP-B6B□-4T	6	2.5	M4x0.7	30	10	-	8	12
VSP-B6B□-6T		4						
VSP-B8B□-4T	8	2.5	M4x0.7	30	10	-	8	12
VSP-B8B□-6T		4						
VSP-B10B□-4T	10	2.5	M6x1	44	16	12	-	29
VSP-B10B□-6T		4						
VSP-B15B□-4T	15	2.5	M6x1	44	16	12	-	30
VSP-B15B□-6T		4						
VSP-B20B□-4T	20	2.5	M6x1	47	19	12	-	32
VSP-B20B□-6T		4						
VSP-B25B□-4T	25	2.5	M6x1	47	19	12	-	33
VSP-B25B□-6T		4						
VSP-B30B□-4T	30	2.5	M6x1	51	23	12	-	36
VSP-B30B□-6T		4						
VSP-B40B□-4T	40	2.5	M6x1	58	30	12	-	44
VSP-B40B□-6T		4						
VSP-B50B□-4T	50	2.5	M6x1	60	32	12	-	50
VSP-B50B□-6T		4						

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Female Thread)

●VSP-B60 to 100B□-6A

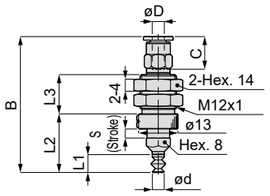


Unit: mm

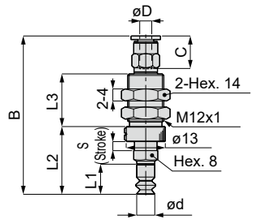
Model No.	Pad Diameter ød	Vacuum Outlet Size G	Mounting screw M	B	L	Weight (g)
VSP-B60B□-6A	60	G1/8	M8 x 1.25	77.6	37	147
VSP-B80B□-6A	80	G1/8	M8 x 1.25	77	39	230
VSP-B100B□-6A	100	G1/8	M8 x 1.25	83	45	329

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C2 to 4B□-2/4/6
●VSP-C2 to 4-□B□-2/4/6



●VSP-C6, 8B□-2/4/6
●VSP-C6, 8-□B□-2/4/6

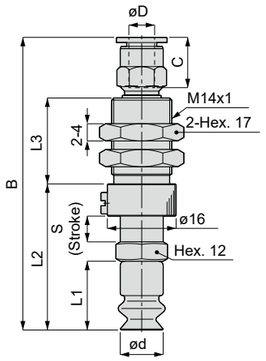


Unit: mm

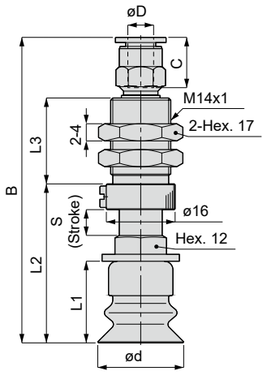
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C2B□-2	2	1.8	41.4	6	19.5	13	8.4	3	0.9 to 1.9	16
VSP-C2B□-4		4	45.5				11.2			17
VSP-C2B□-6		6	47.3				11.9			18
VSP-C2-10B□-2		1.8	55.4		29	17.5	8.4	10	0.6 to 1.7	20
VSP-C2-10B□-4		4	59.5				11.2			21
VSP-C2-10B□-6		6	61.3				11.9			22
VSP-C2-15B□-2		1.8	66.4		34	23.5	8.4	15	0.4 to 1.7	23
VSP-C2-15B□-4		4	70.5				11.2			24
VSP-C2-15B□-6		6	72.3				11.9			25
VSP-C2-20B□-2		1.8	76.4		39	28.5	8.4	20	0.3 to 1.8	26
VSP-C2-20B□-4		4	80.5				11.2			27
VSP-C2-20B□-6		6	82.3				11.9			28
VSP-C4B□-2	4	1.8	41.4	6	19.5	13	8.4	3	0.9 to 1.9	16
VSP-C4B□-4		4	45.5				11.2			17
VSP-C4B□-6		6	47.3				11.9			18
VSP-C4-10B□-2		1.8	55.4		29	17.5	8.4	10	0.6 to 1.7	20
VSP-C4-10B□-4		4	59.5				11.2			21
VSP-C4-10B□-6		6	61.3				11.9			22
VSP-C4-15B□-2		1.8	66.4		34	23.5	8.4	15	0.4 to 1.7	23
VSP-C4-15B□-4		4	70.5				11.2			24
VSP-C4-15B□-6		6	72.3				11.9			25
VSP-C4-20B□-2		1.8	76.4		39	28.5	8.4	20	0.3 to 1.8	26
VSP-C4-20B□-4		4	80.5				11.2			27
VSP-C4-20B□-6		6	82.3				11.9			28
VSP-C6B□-2	6	1.8	44.4	10	22.5	13	8.4	3	0.9 to 1.9	17
VSP-C6B□-4		4	48.5				11.2			18
VSP-C6B□-6		6	50.3				11.9			19
VSP-C6-10B□-2		1.8	58.4		29.5	17.5	8.4	10	0.8 to 2.7	18
VSP-C6-10B□-4		4	62.5				11.2			19
VSP-C6-10B□-6		6	64.3				11.9			20
VSP-C6-15B□-2		1.8	69.4		34.5	23.5	8.4	15	0.7 to 3.0	22
VSP-C6-15B□-4		4	73.5				11.2			23
VSP-C6-15B□-6		6	75.3				11.9			24
VSP-C6-20B□-2		1.8	79.4		39.5	28.5	8.4	20	0.9 to 3.4	24
VSP-C6-20B□-4		4	83.5				11.2			25
VSP-C6-20B□-6		6	85.3				11.9			26
VSP-C8B□-2	8	1.8	44.4	10	22.5	13	8.4	3	0.9 to 1.9	17
VSP-C8B□-4		4	48.5				11.2			18
VSP-C8B□-6		6	50.3				11.9			19
VSP-C8-10B□-2		1.8	58.4		29.5	17.5	8.4	10	0.8 to 2.7	18
VSP-C8-10B□-4		4	62.5				11.2			19
VSP-C8-10B□-6		6	64.3				11.9			20
VSP-C8-15B□-2		1.8	69.4		34.5	23.5	8.4	15	0.7 to 3.0	22
VSP-C8-15B□-4		4	73.5				11.2			23
VSP-C8-15B□-6		6	75.3				11.9			24
VSP-C8-20B□-2		1.8	79.4		39.5	28.5	8.4	20	0.9 to 3.4	24
VSP-C8-20B□-4		4	83.5				11.2			25
VSP-C8-20B□-6		6	85.3				11.9			26

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10, 15B□-4/6
●VSP-C10, 15-□B□-4/6



●VSP-C20 to 50B□-4/6
●VSP-C20 to 50-□B□-4/6

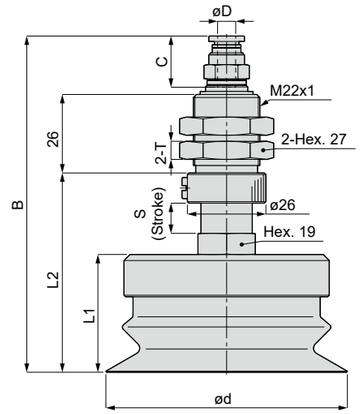


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10B□-4	10	4	67	16	34	20	11.2	6	4.0 to 7.1	35
VSP-C10B□-6		6	68.3				11.9			36
VSP-C10-10B□-4		4	71.5		38.5		11.2	10	2.0 to 5.2	36
VSP-C10-10B□-6		6	72.8				11.9			37
VSP-C10-15B□-4		4	81.5		43.5	25	11.2	15	2.0 to 5.9	41
VSP-C10-15B□-6		6	82.8				11.9			42
VSP-C10-20B□-4		4	97.5		50.5	34	11.2	20	1.1 to 4.8	49
VSP-C10-20B□-6		6	98.8				11.9			50
VSP-C15B□-4	15	4	67	16	34	20	11.2	6	4.0 to 7.1	36
VSP-C15B□-6		6	68.3				11.9			37
VSP-C15-10B□-4		4	71.5		38.5		11.2	10	2.0 to 5.2	37
VSP-C15-10B□-6		6	72.8				11.9			38
VSP-C15-15B□-4		4	81.5		43.5	25	11.2	15	2.0 to 5.9	42
VSP-C15-15B□-6		6	82.8				11.9			43
VSP-C15-20B□-4		4	97.5		50.5	34	11.2	20	1.1 to 4.8	49
VSP-C15-20B□-6		6	98.8				11.9			50
VSP-C20B□-4	20	4	70	19	37	20	11.2	6	7.0 to 12.6	39
VSP-C20B□-6		6	71.3				11.9			40
VSP-C20-10B□-4		4	76		43		11.2	10	3.3 to 10.0	41
VSP-C20-10B□-6		6	77.3				11.9			42
VSP-C20-15B□-4		4	86		48	25	11.2	15	3.3 to 10.4	46
VSP-C20-15B□-6		6	87.3				11.9			47
VSP-C20-20B□-4		4	102		55	34	11.2	20	2.0 to 8.7	53
VSP-C20-20B□-6		6	103.3				11.9			54
VSP-C25B□-4	25	4	70	19	37	20	11.2	6	7.0 to 12.6	40
VSP-C25B□-6		6	71.3				11.9			41
VSP-C25-10B□-4		4	76		43		11.2	10	3.3 to 10.0	42
VSP-C25-10B□-6		6	77.3				11.9			43
VSP-C25-15B□-4		4	86		48	25	11.2	15	3.3 to 10.4	47
VSP-C25-15B□-6		6	87.3				11.9			48
VSP-C25-20B□-4		4	102		55	34	11.2	20	2.0 to 8.7	54
VSP-C25-20B□-6		6	103.3				11.9			55
VSP-C30B□-4	30	4	74	23	41	20	11.2	6	7.0 to 12.6	43
VSP-C30B□-6		6	75.3				11.9			44
VSP-C30-10B□-4		4	80		47		11.2	10	3.3 to 10.0	47
VSP-C30-10B□-6		6	81.3				11.9			48
VSP-C30-15B□-4		4	90		52	25	11.2	15	3.3 to 10.4	50
VSP-C30-15B□-6		6	91.3				11.9			51
VSP-C30-20B□-4		4	106		59	34	11.2	20	2.0 to 8.7	57
VSP-C30-20B□-6		6	107.3				11.9			58
VSP-C40B□-4	40	4	81	30	48	20	11.2	6	7.0 to 12.6	51
VSP-C40B□-6		6	82.3				11.9			52
VSP-C40-10B□-4		4	87		54		11.2	10	3.3 to 10.0	54
VSP-C40-10B□-6		6	88.3				11.9			55
VSP-C40-15B□-4		4	97		59	25	11.2	15	3.3 to 10.4	58
VSP-C40-15B□-6		6	98.3				11.9			59
VSP-C40-20B□-4		4	113		66	34	11.2	20	2.0 to 8.7	65
VSP-C40-20B□-6		6	114.3				11.9			66
VSP-C50B□-4	50	4	83	32	50	20	11.2	6	7.0 to 12.6	57
VSP-C50B□-6		6	84.3				11.9			58
VSP-C50-10B□-4		4	89		56		11.2	10	3.3 to 10.0	59
VSP-C50-10B□-6		6	90.3				11.9			60
VSP-C50-15B□-4		4	99		61	25	11.2	15	3.3 to 10.4	65
VSP-C50-15B□-6		6	100.3				11.9			66
VSP-C50-20B□-4		4	115		68	34	11.2	20	2.0 to 8.7	71
VSP-C50-20B□-6		6	116.3				11.9			72

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C60 to 100B□-4/6/8

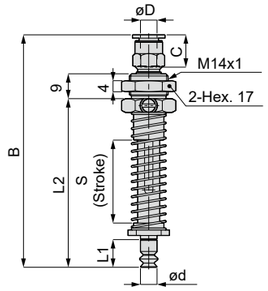


Unit: mm

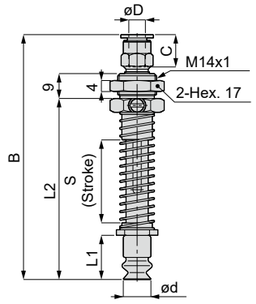
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C60B□-4	60	4	106.2	37	66.6	11.2	6	10	10.1 to 15.8	177
VSP-C60B□-6		6	108.4			11.9				178
VSP-C60B□-8		8	116.8			18.2				183
VSP-C80B□-4	80	4	105.6	39	66	11.2	6	10	10.1 to 15.8	259
VSP-C80B□-6		6	107.8			11.9				260
VSP-C80B□-8		8	116.2			18.2				265
VSP-C100B□-4	100	4	111.6	45	72	11.2	6	10	10.1 to 15.8	358
VSP-C100B□-6		6	113.8			11.9				359
VSP-C100B□-8		8	122.2			18.2				364

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting Type without Spring Cover)

●VSP-C6, 8-□B□-4C/6C



●VSP-C10, 15-□B□-4C/6C

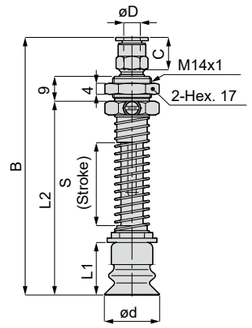


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20B□-4C	6	4	70	10	48	11.2	20	1.5 to 4.9	43
VSP-C6-20B□-6C		6	71.3			11.9			44
VSP-C6-30B□-4C		4	83		61	11.2	30	1.1 to 4.8	48
VSP-C6-30B□-6C		6	84.3			11.9			49
VSP-C6-40B□-4C		4	96		74	11.2	40	1.0 to 4.5	54
VSP-C6-40B□-6C		6	97.9			11.9			55
VSP-C6-50B□-4C		4	109		87	11.2	50	0.9 to 4.5	59
VSP-C6-50B□-6C		6	110.9			11.9			60
VSP-C8-20B□-4C	8	4	70	10	48	11.2	20	1.5 to 4.9	43
VSP-C8-20B□-6C		6	71.3			11.9			44
VSP-C8-30B□-4C		4	83		61	11.2	30	1.1 to 4.8	48
VSP-C8-30B□-6C		6	84.3			11.9			49
VSP-C8-40B□-4C		4	96		74	11.2	40	1.0 to 4.5	54
VSP-C8-40B□-6C		6	97.9			11.9			55
VSP-C8-50B□-4C		4	109		87	11.2	50	0.9 to 4.5	59
VSP-C8-50B□-6C		6	110.9			11.9			60
VSP-C10-20B□-4C	10	4	74.5	16	52.5	11.2	20	1.5 to 4.9	43
VSP-C10-20B□-6C		6	75.8			11.9			44
VSP-C10-30B□-4C		4	87.5		65.5	11.2	30	1.1 to 4.8	48
VSP-C10-30B□-6C		6	88.8			11.9			49
VSP-C10-40B□-4C		4	100.5		78.5	11.2	40	1.0 to 4.5	54
VSP-C10-40B□-6C		6	101.8			11.9			55
VSP-C10-50B□-4C		4	113.5		91.5	11.2	50	0.9 to 4.5	59
VSP-C10-50B□-6C		6	114.8			11.9			60
VSP-C15-20B□-4C	15	4	74.5	16	52.5	11.2	20	1.5 to 4.9	43
VSP-C15-20B□-6C		6	75.8			11.9			44
VSP-C15-30B□-4C		4	87.5		65.5	11.2	30	1.1 to 4.8	48
VSP-C15-30B□-6C		6	88.8			11.9			49
VSP-C15-40B□-4C		4	100.5		78.5	11.2	40	1.0 to 4.5	54
VSP-C15-40B□-6C		6	101.8			11.9			55
VSP-C15-50B□-4C		4	113.5		91.5	11.2	50	0.9 to 4.5	59
VSP-C15-50B□-6C		6	114.8			11.9			60

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C20 to 50-□B□-4C/6C

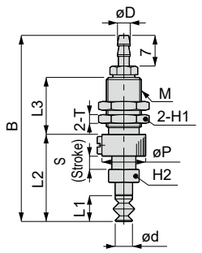


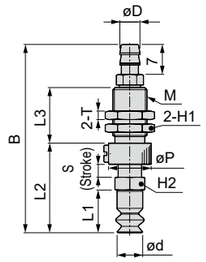
Unit: mm

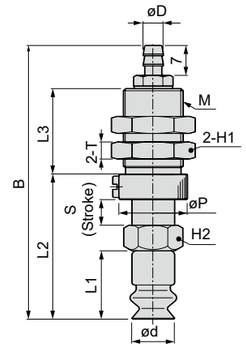
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C20-20B□-4C	20	4	79	19	57	11.2	20	1.5 to 4.9	49
VSP-C20-20B□-6C		6	80.3			11.9			50
VSP-C20-30B□-4C		4	92		70	11.2	30	1.1 to 4.8	54
VSP-C20-30B□-6C		6	93.3			11.9			55
VSP-C20-40B□-4C		4	105		83	11.2	40	1.0 to 4.5	59
VSP-C20-40B□-6C		6	106.3			11.9			60
VSP-C20-50B□-4C		4	118		96	11.2	50	0.9 to 4.5	64
VSP-C20-50B□-6C		6	119.3			11.9			65
VSP-C25-20B□-4C	25	4	79	19	57	11.2	20	1.5 to 4.9	50
VSP-C25-20B□-6C		6	80.3			11.9			51
VSP-C25-30B□-4C		4	92		70	11.2	30	1.1 to 4.8	55
VSP-C25-30B□-6C		6	93.3			11.9			56
VSP-C25-40B□-4C		4	105		83	11.2	40	1.0 to 4.5	60
VSP-C25-40B□-6C		6	106.3			11.9			61
VSP-C25-50B□-4C		4	118		96	11.2	50	0.9 to 4.5	65
VSP-C25-50B□-6C		6	119.3			11.9			66
VSP-C30-20B□-4C	30	4	83	23	61	11.2	20	1.5 to 4.9	52
VSP-C30-20S□-6C		6	84.3			11.9			53
VSP-C30-30B□-4C		4	96		74	11.2	30	1.1 to 4.8	57
VSP-C30-30S□-6C		6	97.3			11.9			58
VSP-C30-40B□-4C		4	109		87	11.2	40	1.0 to 4.5	63
VSP-C30-40S□-6C		6	110.3			11.9			64
VSP-C30-50B□-4C		4	122		100	11.2	50	0.9 to 4.5	68
VSP-C30-50S□-6C		6	123.3			11.9			69
VSP-C40-20B□-4C	40	4	90	30	68	11.2	20	1.5 to 4.9	61
VSP-C40-20S□-6C		6	91.3			11.9			62
VSP-C40-30B□-4C		4	103		81	11.2	30	1.1 to 4.8	66
VSP-C40-30S□-6C		6	104.3			11.9			67
VSP-C40-40B□-4C		4	116		94	11.2	40	1.0 to 4.5	71
VSP-C40-40S□-6C		6	117.3			11.9			72
VSP-C40-50B□-4C		4	129		107	11.2	50	0.9 to 4.5	77
VSP-C40-50S□-6C		6	130.3			11.9			78
VSP-C50-20B□-4C	50	4	92	32	70	11.2	20	1.5 to 4.9	67
VSP-C50-20S□-6C		6	93.3			11.9			68
VSP-C50-30B□-4C		4	105		83	11.2	30	1.1 to 4.8	72
VSP-C50-30S□-6C		6	106.3			11.9			73
VSP-C50-40B□-4C		4	118		96	11.2	40	1.0 to 4.5	77
VSP-C50-40S□-6C		6	119.3			11.9			78
VSP-C50-50B□-4C		4	131		109	11.2	50	0.9 to 4.5	82
VSP-C50-50S□-6C		6	132.3			11.9			83

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C2, 4B□-4T/6T
●VSP-C2, 4-□B□-4T/6T
●VSP-C6, 8B□-4T/6T
●VSP-C6, 8-□B□-4T/6T
●VSP-C10, 15B□-4T/6T
●VSP-C10, 15-□B□-4T/6T





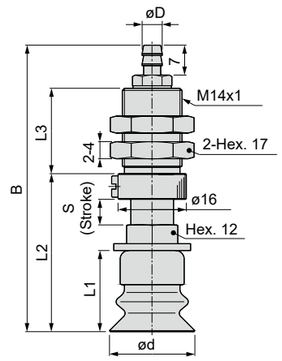


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	Width Across Flats H1	Width Across Flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C2B□-4T	2	2.5	M8x0.75	42.6	6	20	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C2B□-6T		4												
VSP-C2-10B□-4T		2.5	M12x1	56.6		29	17.5	13	14	8	4	10	0.6 to 1.7	19
VSP-C2-10B□-6T		4												
VSP-C2-15B□-4T		2.5		67.6		34	23.5					15	0.4 to 1.7	22
VSP-C2-15B□-6T		4												
VSP-C2-20B□-4T		2.5		77.6		39	28.5					20	0.3 to 1.8	25
VSP-C2-20B□-6T		4												
VSP-C4B□-4T	4	2.5	M8x0.75	42.6	6	20	13	10	10	7	2	3	0.9 to 1.9	8
VSP-C4B□-6T		4												
VSP-C4-10B□-4T		2.5	M12x1	56.6		29	17.5	13	14	8	4	10	0.6 to 1.7	19
VSP-C4-10B□-6T		4												
VSP-C4-15B□-4T		2.5		67.6		34	23.5					15	0.4 to 1.7	22
VSP-C4-15B□-6T		4												
VSP-C4-20B□-4T		2.5		77.6		39	28.5					20	0.3 to 1.8	25
VSP-C4-20B□-6T		4												
VSP-C6B□-4T	6	2.5	M8x0.75	43.6	10	21	13	10	10	7	2	3	0.9 to 1.9	9
VSP-C6B□-6T		4												
VSP-C6-10B□-4T		2.5	M12x1	57.1		29.5	17.5	13	14	8	4	10	0.8 to 2.7	19
VSP-C6-10B□-6T		4												
VSP-C6-15B□-4T		2.5		68.1		34.5	23.5					15	0.7 to 3.0	22
VSP-C6-15B□-6T		4												
VSP-C6-20B□-4T		2.5		78.1		39.5	28.5					20	0.9 to 3.4	24
VSP-C6-20B□-6T		4												
VSP-C8B□-4T	8	2.5	M8x0.75	43.6	10	21	13	10	10	7	2	3	0.9 to 1.9	9
VSP-C8B□-6T		4												
VSP-C8-10B□-4T		2.5	M12x1	57.1		29.5	17.5	13	14	8	4	10	0.8 to 2.7	19
VSP-C8-10B□-6T		4												
VSP-C8-15B□-4T		2.5		68.1		34.5	23.5					15	0.7 to 3.0	22
VSP-C8-15B□-6T		4												
VSP-C8-20B□-4T		2.5		78.1		39.5	28.5					20	0.9 to 3.4	24
VSP-C8-20B□-6T		4												
VSP-C10B□-4T	10	2.5	M14x1	64.1	16	34	20	16	17	12	4	6	4.0 to 7.1	34
VSP-C10B□-6T		4												
VSP-C10-10B□-4T		2.5		68.6		38.5						10	2.0 to 5.2	35
VSP-C10-10B□-6T		4												
VSP-C10-15B□-4T		2.5		78.6		43.5	25					15	2.0 to 5.9	40
VSP-C10-15B□-6T		4												
VSP-C10-20B□-4T		2.5		94.6		50.5	34					20	1.1 to 4.8	48
VSP-C10-20B□-6T		4												
VSP-C15B□-4T	15	2.5	M14x1	64.1	16	34	20	16	17	12	4	6	4.0 to 7.1	35
VSP-C15B□-6T		4												
VSP-C15-10B□-4T		2.5		68.6		38.5						10	2.0 to 5.2	36
VSP-C15-10B□-6T		4												
VSP-C15-15B□-4T		2.5		78.6		43.5	25					15	2.0 to 5.9	41
VSP-C15-15B□-6T		4												
VSP-C15-20B□-4T		2.5		94.6		50.5	34					20	1.1 to 4.8	48
VSP-C15-20B□-6T		4												

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C20 to 50B□-4T/6T
●VSP-C20 to 50-□B□-4T/6T

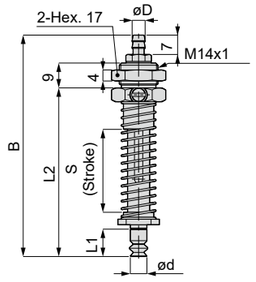


Unit: mm

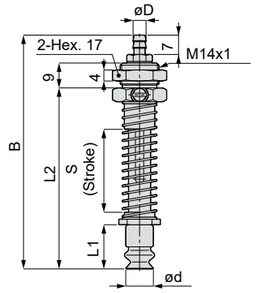
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C20B□-4T	20	2.5	67.1	19	37	20	6	7.0 to 12.6	38
VSP-C20B□-6T		4							
VSP-C20-10B□-4T		2.5	73.1		43		10	3.3 to 10.0	40
VSP-C20-10B□-6T		4							
VSP-C20-15B□-4T		2.5	83.1		48	25	15	3.3 to 10.4	45
VSP-C20-15B□-6T		4							
VSP-C20-20B□-4T		2.5	99.1		55	34	20	2.0 to 8.7	52
VSP-C20-20B□-6T		4							
VSP-C25B□-4T	25	2.5	67.1	19	37	20	6	7.0 to 12.6	39
VSP-C25B□-6T		4							
VSP-C25-10B□-4T		2.5	73.1		43		10	3.3 to 10.0	41
VSP-C25-10B□-6T		4							
VSP-C25-15B□-4T		2.5	83.1		48	25	15	3.3 to 10.4	46
VSP-C25-15B□-6T		4							
VSP-C25-20B□-4T		2.5	99.1		55	34	20	2.0 to 8.7	53
VSP-C25-20B□-6T		4							
VSP-C30B□-4T	30	2.5	71.1	23	41	20	6	7.0 to 12.6	41
VSP-C30B□-6T		4							
VSP-C30-10B□-4T		2.5	77.1		47		10	3.3 to 10.0	44
VSP-C30-10B□-6T		4							
VSP-C30-15B□-4T		2.5	87.1		52	25	15	3.3 to 10.4	49
VSP-C30-15B□-6T		4							
VSP-C30-20B□-4T		2.5	103.1		59	34	20	2.0 to 8.7	55
VSP-C30-20B□-6T		4							
VSP-C40B□-4T	40	2.5	78.1	32	48	20	6	7.0 to 12.6	50
VSP-C40B□-6T		4							
VSP-C40-10B□-4T		2.5	84.1		54		10	3.3 to 10.0	52
VSP-C40-10B□-6T		4							
VSP-C40-15B□-4T		2.5	94.1		59	25	15	3.3 to 10.4	57
VSP-C40-15B□-6T		4							
VSP-C40-20B□-4T		2.5	110.1		66	34	20	2.0 to 8.7	64
VSP-C40-20B□-6T		4							
VSP-C50B□-4T	50	2.5	80.1	40	50	20	6	7.0 to 12.6	56
VSP-C50B□-6T		4							
VSP-C50-10B□-4T		2.5	86.1		56		10	3.3 to 10.0	58
VSP-C50-10B□-6T		4							
VSP-C50-15B□-4T		2.5	96.1		61	25	15	3.3 to 10.4	63
VSP-C50-15B□-6T		4							
VSP-C50-20B□-4T		2.5	112.1		68	34	20	2.0 to 8.7	70
VSP-C50-20B□-6T		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C Barb Fitting Type without Spring Cover)

●VSP-C6, 8-□B□-4TC/6TC



●VSP-C10, 15-□B□-4TC/6TC

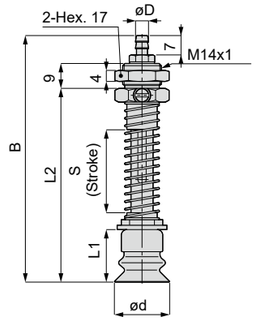


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20B□-4TC	6	2.5	67.1	10	48	20	1.5 to 4.9	42
VSP-C6-20B□-6TC		4						
VSP-C6-30B□-4TC		2.5	80.1		61	30	1.1 to 4.8	47
VSP-C6-30B□-6TC		4						
VSP-C6-40B□-4TC		2.5	93.1		74	40	1.0 to 4.5	52
VSP-C6-40B□-6TC		4						
VSP-C6-50B□-4TC		2.5	106.1		87	50	0.9 to 4.5	58
VSP-C6-50B□-6TC		4						
VSP-C8-20B□-4TC	8	2.5	67.1	10	48	20	1.5 to 4.9	42
VSP-C8-20B□-6TC		4						
VSP-C8-30B□-4TC		2.5	80.1		61	30	1.1 to 4.8	47
VSP-C8-30B□-6TC		4						
VSP-C8-40B□-4TC		2.5	93.1		74	40	1.0 to 4.5	52
VSP-C8-40B□-6TC		4						
VSP-C8-50B□-4TC		2.5	106.1		87	50	0.9 to 4.5	58
VSP-C8-50B□-6TC		4						
VSP-C10-20B□-4TC	10	2.5	71.6	16	52.5	20	1.5 to 4.9	43
VSP-C10-20B□-6TC		4						
VSP-C10-30B□-4TC		2.5	84.6		65.5	30	1.1 to 4.8	48
VSP-C10-30B□-6TC		4						
VSP-C10-40B□-4TC		2.5	97.6		78.5	40	1.0 to 4.5	53
VSP-C10-40B□-6TC		4						
VSP-C10-50B□-4TC		2.5	110.6		91.5	50	0.9 to 4.5	59
VSP-C10-50B□-6TC		4						
VSP-C15-20B□-4TC	15	2.5	71.6	16	52.5	20	1.5 to 4.9	43
VSP-C15-20B□-6TC		4						
VSP-C15-30B□-4TC		2.5	84.6		65.5	30	1.1 to 4.8	48
VSP-C15-30B□-6TC		4						
VSP-C15-40B□-4TC		2.5	97.6		78.5	40	1.0 to 4.5	53
VSP-C15-40B□-6TC		4						
VSP-C15-50B□-4TC		2.5	110.6		91.5	50	0.9 to 4.5	59
VSP-C15-50B□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C Barb Fitting without Spring Cover)

●VSP-C20 to 50-□B□-4TC/6TC

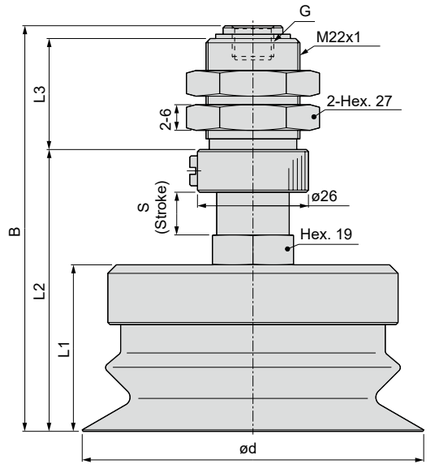


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C20-20B□-4TC	20	2.5	76.1	19	57	20	1.5 to 4.9	48
VSP-C20-20B□-6TC		4						
VSP-C20-30B□-4TC		2.5	89.1		70	30	1.1 to 4.8	53
VSP-C20-30B□-6TC		4						
VSP-C20-40B□-4TC		2.5	102.1		83	40	1.0 to 4.5	58
VSP-C20-40B□-6TC		4						
VSP-C20-50B□-4TC		2.5	115.1		96	50	0.9 to 4.5	63
VSP-C20-50B□-6TC		4						
VSP-C25-20B□-4TC	25	2.5	76.1	19	57	20	1.5 to 4.9	49
VSP-C25-20B□-6TC		4						
VSP-C25-30B□-4TC		2.5	89.1		70	30	1.1 to 4.8	54
VSP-C25-30B□-6TC		4						
VSP-C25-40B□-4TC		2.5	102.1		83	40	1.0 to 4.5	59
VSP-C25-40B□-6TC		4						
VSP-C25-50B□-4TC		2.5	115.1		96	50	0.9 to 4.5	64
VSP-C25-50B□-6TC		4						
VSP-C30-20B□-4TC	30	2.5	80.1	23	61	20	1.5 to 4.9	50
VSP-C30-20B□-6TC		4						
VSP-C30-30B□-4TC		2.5	93.1		74	30	1.1 to 4.8	55
VSP-C30-30B□-6TC		4						
VSP-C30-40B□-4TC		2.5	106.1		87	40	1.0 to 4.5	60
VSP-C30-40B□-6TC		4						
VSP-C30-50B□-4TC		2.5	119.1		100	50	0.9 to 4.5	65
VSP-C30-50B□-6TC		4						
VSP-C40-20B□-4TC	40	2.5	87.1	30	68	20	1.5 to 4.9	60
VSP-C40-20B□-6TC		4						
VSP-C40-30B□-4TC		2.5	100.1		81	30	1.1 to 4.8	65
VSP-C40-30B□-6TC		4						
VSP-C40-40B□-4TC		2.5	113.1		94	40	1.0 to 4.5	70
VSP-C40-40B□-6TC		4						
VSP-C40-50B□-4TC		2.5	126.1		107	50	0.9 to 4.5	75
VSP-C40-50B□-6TC		4						
VSP-C50-20B□-4TC	50	2.5	89.1	32	70	20	1.5 to 4.9	66
VSP-C50-20B□-6TC		4						
VSP-C50-30B□-4TC		2.5	102.1		83	30	1.1 to 4.8	71
VSP-C50-30B□-6TC		4						
VSP-C50-40B□-4TC		2.5	115.1		96	40	1.0 to 4.5	76
VSP-C50-40B□-6TC		4						
VSP-C50-50B□-4TC		2.5	128.1		109	50	0.9 to 4.5	81
VSP-C50-50B□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C Female Thread)

●VSP-C60 to 100B□-6A

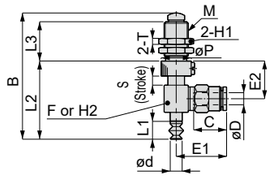


Unit: mm

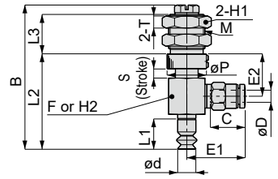
Model No.	Pad Diameter ød	Vacuum Outlet Size G	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C60B□-6A	60	G1/8	95.6	37	66.6	26	10	10.1 to 15.8	169
VSP-C80B□-6A	80	G1/8	95	39	66	26	10	10.1 to 15.8	251
VSP-C100B□-6A	100	G1/8	101	45	72	26	10	10.1 to 15.8	350

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D2, 4B□-2/4/6
●VSP-D2, 4-□B□-2/-4/-6



●VSP-D6, 8B□-2/4/6
●VSP-D6, 8-□B□-2/4/6

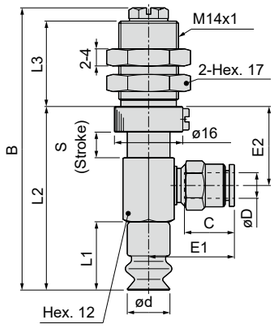


Unit: mm

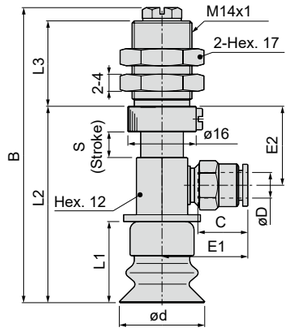
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	øP	Tube End C	E1	E2	Width Across Flats H1	Width Across Flats H2	□F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D2B□-2	2	1.8	M8x0.75	42	6	26	13	10	8.4	12.7	12.5	10	-	8	2	3	0.9 to 1.9	14
VSP-D2B□-4		4							11.2	16.8								15
VSP-D2B□-6		6							11.9	18.6								16
VSP-D2-10B□-2		1.8	M12x1	57.6		37	17.5	13	8.4	13.7	21	14	10	-	4	10	0.6 to 1.7	30
VSP-D2-10B□-4		4							11.2	17.8								31
VSP-D2-10B□-6		6							11.9	19.1								32
VSP-D2-15B□-2		1.8		68.6		40	23.5		8.4	13.7	26					15	0.4 to 1.7	34
VSP-D2-15B□-4		4							11.2	17.8								35
VSP-D2-15B□-6		6							11.9	19.1								36
VSP-D2-20B□-2		1.8		78.6		47	28.5		8.4	13.7	31					20	0.3 to 1.8	37
VSP-D2-20B□-4		4							11.2	17.8								38
VSP-D2-20B□-6		6							11.9	19.1								39
VSP-D4B□-2	4	1.8	M8x0.75	42	6	26	13	10	8.4	12.7	12.5	10	-	8	2	3	0.9 to 1.9	14
VSP-D4B□-4		4							11.2	16.8								15
VSP-D4B□-6		6							11.9	18.6								16
VSP-D4-10B□-2		1.8	M12x1	57.6		37	17.5	13	8.4	13.7	21	14	10	-	4	10	0.6 to 1.7	30
VSP-D4-10B□-4		4							11.2	17.8								31
VSP-D4-10B□-6		6							11.9	19.1								32
VSP-D4-15B□-2		1.8		68.6		40	23.5		8.4	13.7	26					15	0.4 to 1.7	34
VSP-D4-15B□-4		4							11.2	17.8								35
VSP-D4-15B□-6		6							11.9	19.1								36
VSP-D4-20B□-2		1.8		78.6		47	28.5		8.4	13.7	31					20	0.3 to 1.8	37
VSP-D4-20B□-4		4							11.2	17.8								38
VSP-D4-20B□-6		6							11.9	19.1								39
VSP-D6B□-2	6	1.8	M8x0.75	44	10	28	13	10	8.4	12.7	13	10	-	8	2	3	0.9 to 1.9	15
VSP-D6B□-4		4							11.2	16.8								16
VSP-D6B□-6		6							11.9	18.6								17
VSP-D6-10B□-2		1.8	M12x1	59.1		38.5	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D6-10B□-4		4							11.2	18.8								34
VSP-D6-10B□-6		6							11.9	20.1								35
VSP-D6-15B□-2		1.8		70.1		43.5	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D6-15B□-4		4							11.2	18.8								38
VSP-D6-15B□-6		6							11.9	20.1								39
VSP-D6-20B□-2		1.8		80.1		48.5	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D6-20B□-4		4							11.2	18.8								41
VSP-D6-20B□-6		6							11.9	20.1								42
VSP-D8B□-2	8	1.8	M8x0.75	44	10	28	13	10	8.4	12.7	13	10	-	8	2	3	0.9 to 1.9	15
VSP-D8B□-4		4							11.2	16.8								16
VSP-D8B□-6		6							11.9	18.6								17
VSP-D8-10B□-2		1.8	M12x1	59.1		38.5	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D8-10B□-4		4							11.2	18.8								34
VSP-D8-10B□-6		6							11.9	20.1								35
VSP-D8-15B□-2		1.8		70.1		43.5	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D8-15B□-4		4							11.2	18.8								38
VSP-D8-15B□-6		6							11.9	20.1								39
VSP-D8-20B□-2		1.8		80.1		48.5	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D8-20B□-4		4							11.2	18.8								41
VSP-D8-20B□-6		6							11.9	20.1								42

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10, 15B□4/6
●VSP-D10, 15-□B□-4/-6



●VSP-D20 to 50B□-4/6
●VSP-D20 to 50-□B□-4/-6

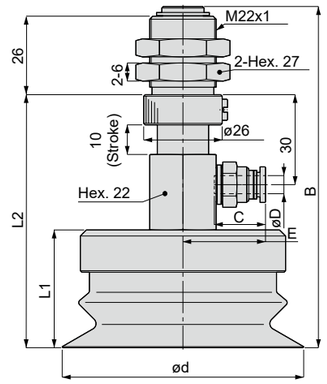


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10B□-4	10	4	66.1	16	43	20	11.2	18.8	18.5	6	4.0 to 7.1	47
VSP-D10B□-6		6					11.9	20.1				48
VSP-D10-10B□-4		4	71.1		48		11.2	18.8	25	10	2.0 to 5.2	50
VSP-D10-10B□-6		6					11.9	20.1				51
VSP-D10-15B□-4		4	81.1		53	25	11.2	18.8	30	15	2.0 to 5.9	56
VSP-D10-15B□-6		6					11.9	20.1				57
VSP-D10-20B□-4		4	97.1		60	34	11.2	18.8	37	20	1.1 to 4.8	66
VSP-D10-20B□-6		6					11.9	20.1				67
VSP-D15B□-4	15	4	66.1	16	43	20	11.2	18.8	18.5	6	4.0 to 7.1	48
VSP-D15B□-6		6					11.9	20.1				49
VSP-D15-10B□-4		4	71.1		48		11.2	18.8	25	10	2.0 to 5.2	51
VSP-D15-10B□-6		6					11.9	20.1				52
VSP-D15-15B□-4		4	81.1		53	25	11.2	18.8	30	15	2.0 to 5.9	56
VSP-D15-15B□-6		6					11.9	20.1				57
VSP-D15-20B□-4		4	97.1		60	34	11.2	18.8	37	20	1.1 to 4.8	67
VSP-D15-20B□-6		6					11.9	20.1				68
VSP-D20B□-4	20	4	69.1	19	46	20	11.2	18.8	18.5	6	7.0 to 12.6	51
VSP-D20B□-6		6					11.9	20.1				52
VSP-D20-10B□-4		4	75.1		52		11.2	18.8	24.5	10	3.3 to 10.0	54
VSP-D20-10B□-6		6					11.9	20.1				55
VSP-D20-15B□-4		4	85.1		57	25	11.2	18.8	29.5	15	3.3 to 10.4	61
VSP-D20-15B□-6		6					11.9	20.1				62
VSP-D20-20B□-4		4	101.1		64	34	11.2	18.8	36.5	20	2.0 to 8.7	71
VSP-D20-20B□-6		6					11.9	20.1				72
VSP-D25B□-4	25	4	69.1	19	46	20	11.2	18.8	18.5	6	7.0 to 12.6	52
VSP-D25B□-6		6					11.9	20.1				53
VSP-D25-10B□-4		4	75.1		52		11.2	18.8	24.5	10	3.3 to 10.0	55
VSP-D25-10B□-6		6					11.9	20.1				56
VSP-D25-15B□-4		4	85.1		57	25	11.2	18.8	29.5	15	3.3 to 10.4	61
VSP-D25-15B□-6		6					11.9	20.1				62
VSP-D25-20B□-4		4	101.1		64	34	11.2	18.8	36.5	20	2.0 to 8.7	72
VSP-D25-20B□-6		6					11.9	20.1				73
VSP-D30B□-4	30	4	73.1	23	50	20	11.2	18.8	18.5	6	7.0 to 12.6	54
VSP-D30B□-6		6					11.9	20.1				55
VSP-D30-10B□-4		4	79.1		56		11.2	18.8	24.5	10	3.3 to 10.0	58
VSP-D30-10B□-6		6					11.9	20.1				59
VSP-D30-15B□-4		4	89.1		61	25	11.2	18.8	29.5	15	3.3 to 10.4	64
VSP-D30-15B□-6		6					11.9	20.1				65
VSP-D30-20B□-4		4	105.1		68	34	11.2	18.8	36.5	20	2.0 to 8.7	74
VSP-D30-20B□-6		6					11.9	20.1				75
VSP-D40B□-4	40	4	80.1	30	57	20	11.2	18.8	18.5	6	7.0 to 12.6	63
VSP-D40B□-6		6					11.9	20.1				64
VSP-D40-10B□-4		4	86.1		63		11.2	18.8	24.5	10	3.3 to 10.0	58
VSP-D40-10B□-6		6					11.9	20.1				59
VSP-D40-15B□-4		4	96.1		68	25	11.2	18.8	29.5	15	3.3 to 10.4	64
VSP-D40-15B□-6		6					11.9	20.1				65
VSP-D40-20B□-4		4	112.1		75	34	11.2	18.8	36.5	20	2.0 to 8.7	74
VSP-D40-20B□-6		6					11.9	20.1				75
VSP-D50B□-4	50	4	82.1	32	59	20	11.2	18.8	18.5	6	7.0 to 12.6	69
VSP-D50B□-6		6					11.9	20.1				70
VSP-D50-10B□-4		4	88.1		65		11.2	18.8	24.5	10	3.3 to 10.0	72
VSP-D50-10B□-6		6					11.9	20.1				73
VSP-D50-15B□-4		4	98.1		70	25	11.2	18.8	29.5	15	3.3 to 10.4	79
VSP-D50-15B□-6		6					11.9	20.1				80
VSP-D50-20B□-4		4	1141		77	34	11.2	18.8	36.5	20	2.0 to 8.7	89
VSP-D50-20B□-6		6					11.9	20.1				90

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D60 to 100B□-4/6/8

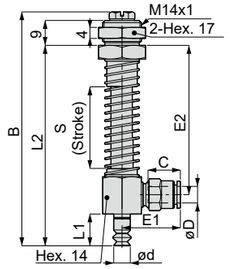


Unit: mm

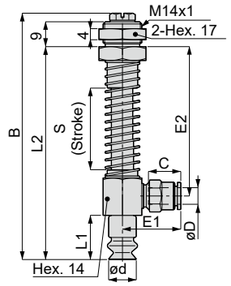
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D60B□-4	60	4	113.6	37	84.6	11.2	21.5	10	10.1 to 15.8	259
VSP-D60B□-6		6				11.9	23.7			260
VSP-D60B□-8		8				18.2	32.1			265
VSP-D80B□-4	80	4	113	39	84	11.2	21.5	10	10.1 to 15.8	342
VSP-D80B□-6		6				11.9	23.7			343
VSP-D80B□-8		8				18.2	32.1			348
VSP-D100B□-4	100	4	119	45	90	11.2	21.5	10	10.1 to 15.8	441
VSP-D100B□-6		6				11.9	23.7			442
VSP-D100B□-8		8				18.2	32.1			447

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D6, 8-□B□-4C/6C



●VSP-D10, 15-□B□-4C/6C

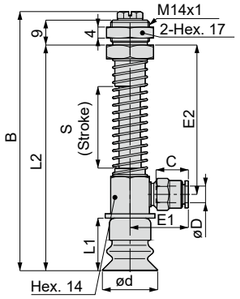


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20B□-4C	6	4	70.1	10	58	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D6-20B□-6C		6				83.1	21.1				63
VSP-D6-30B□-4C		4	83.1		71	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D6-30B□-6C		6				109.1	21.1				69
VSP-D6-40B□-4C		4	96.1		84	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D6-40B□-6C		6				83.1	21.1				76
VSP-D6-50B□-4C		4	109.1		97	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D6-50B□-6C		6				109.1	21.1				83
VSP-D8-20B□-4C	8	4	70.1	10	58	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D8-20B□-6C		6				89.1	21.1				63
VSP-D8-30B□-4C		4	83.1		71	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D8-30B□-6C		6				115.1	21.1				69
VSP-D8-40B□-4C		4	96.1		84	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D8-40B□-6C		6				89.1	21.1				76
VSP-D8-50B□-4C		4	109.1		97	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D8-50B□-6C		6				115.1	21.1				83
VSP-D10-20B□-4C	10	4	76.1	16	64	11.2	19.8	40.5	20	1.5 to 4.9	69
VSP-D10-20B□-6C		6				11.9	21.1				70
VSP-D10-30B□-4C		4	89.1		77	11.2	19.8	53.5	30	1.1 to 4.8	75
VSP-D10-30B□-6C		6				11.9	21.1				76
VSP-D10-40B□-4C		4	102.1		90	11.2	19.8	66.5	40	1.0 to 4.5	82
VSP-D10-40B□-6C		6				11.9	21.1				83
VSP-D10-50B□-4C		4	115.1		103	11.2	19.8	79.5	50	0.9 to 4.5	89
VSP-D10-50B□-6C		6				11.9	21.1				90
VSP-D15-20B□-4C	15	4	76.1	16	64	11.2	19.8	40.5	20	1.5 to 4.9	69
VSP-D15-20B□-6C		6				11.9	21.1				70
VSP-D15-30B□-4C		4	89.1		77	11.2	19.8	53.5	30	1.1 to 4.8	75
VSP-D15-30B□-6C		6				11.9	21.1				76
VSP-D15-40B□-4C		4	102.1		90	11.2	19.8	66.5	40	1.0 to 4.5	82
VSP-D15-40B□-6C		6				11.9	21.1				83
VSP-D15-50B□-4C		4	115.1		103	11.2	19.8	79.5	50	0.9 to 4.5	89
VSP-D15-50B□-6C		6				11.9	21.1				90

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting without Spring Cover)

●VSP-D20 to 50-□B□-4C/6C

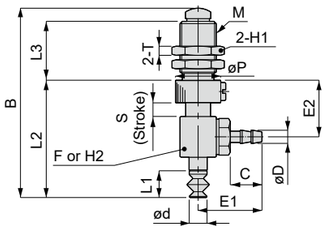


Unit: mm

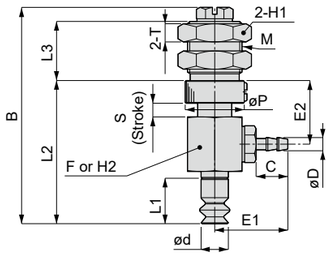
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D20-20B□-4C	20	4	80.6	19	68.5	11.2	19.8	41	20	1.5 to 4.9	70
VSP-D20-20B□-6C		6				11.9	21.1				71
VSP-D20-30B□-4C		4	93.6		81.5	11.2	19.8	54	30	1.1 to 4.8	77
VSP-D20-30B□-6C		6				11.9	21.1				78
VSP-D20-40B□-4C		4	106.6		94.5	11.2	19.8	67	40	1.0 to 4.5	82
VSP-D20-40B□-6C		6				11.9	21.1				83
VSP-D20-50B□-4C		4	119.6		107.5	11.2	19.8	80	50	0.9 to 4.5	90
VSP-D20-50B□-6C		6				11.9	21.1				91
VSP-D25-20B□-4C	25	4	80.6	19	68.5	11.2	19.8	41	20	1.5 to 4.9	71
VSP-D25-20B□-6C		6				11.9	21.1				72
VSP-D25-30B□-4C		4	93.6		81.5	11.2	19.8	54	30	1.1 to 4.8	78
VSP-D25-30B□-6C		6				11.9	21.1				79
VSP-D25-40B□-4C		4	106.6		94.5	11.2	19.8	67	40	1.0 to 4.5	83
VSP-D25-40B□-6C		6				11.9	21.1				84
VSP-D25-50B□-4C		4	119.6		107.5	11.2	19.8	80	50	0.9 to 4.5	91
VSP-D25-50B□-6C		6				11.9	21.1				92
VSP-D30-20B□-4C	30	4	84.6	23	72.5	11.2	19.8	41	20	1.5 to 4.9	75
VSP-D30-20B□-6C		6				11.9	21.1				76
VSP-D30-30B□-4C		4	97.6		85.5	11.2	19.8	54	30	1.1 to 4.8	82
VSP-D30-30B□-6C		6				11.9	21.1				83
VSP-D30-40B□-4C		4	110.6		98.5	11.2	19.8	67	40	1.0 to 4.5	87
VSP-D30-40B□-6C		6				11.9	21.1				88
VSP-D30-50B□-4C		4	123.6		111.5	11.2	19.8	80	50	0.9 to 4.5	95
VSP-D30-50B□-6C		6				11.9	21.1				96
VSP-D40-20B□-4C	40	4	91.6	30	79.5	11.2	19.8	41	20	1.5 to 4.9	86
VSP-D40-20B□-6C		6				11.9	21.1				87
VSP-D40-30B□-4C		4	104.6		92.5	11.2	19.8	54	30	1.1 to 4.8	93
VSP-D40-30B□-6C		6				11.9	21.1				94
VSP-D40-40B□-4C		4	117.6		105.5	11.2	19.8	67	40	1.0 to 4.5	100
VSP-D40-40B□-6C		6				11.9	21.1				101
VSP-D40-50B□-4C		4	130.6		118.5	11.2	19.8	80	50	0.9 to 4.5	107
VSP-D40-50B□-6C		6				11.9	21.1				108
VSP-D50-20B□-4C	50	4	93.6	32	81.5	11.2	19.8	41	20	1.5 to 4.9	92
VSP-D50-20B□-6C		6				11.9	21.1				93
VSP-D50-30B□-4C		4	106.6		94.5	11.2	19.8	54	30	1.1 to 4.8	100
VSP-D50-30B□-6C		6				11.9	21.1				101
VSP-D50-40B□-4C		4	119.6		107.5	11.2	19.8	67	40	1.0 to 4.5	107
VSP-D50-40B□-6C		6				11.9	21.1				108
VSP-D50-50B□-4C		4	132.6		120.5	11.2	19.8	80	50	0.9 to 4.5	114
VSP-D50-50B□-6C		6				11.9	21.1				115

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D2, 4B□-4T/6T
●VSP-D2, 4-□B-4T/6T



●VSP-D6, 8B□-4T/6T
●VSP-D6, 8-□B-4T/6T

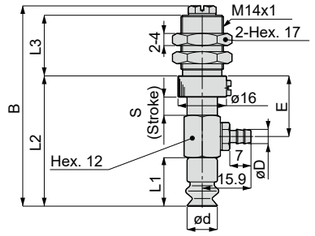


Unit: mm

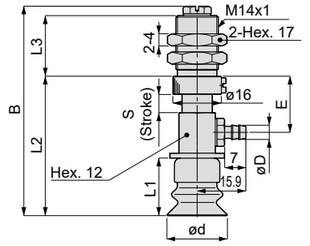
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	E1	E2	Width across flats H1	Width across flats H2	□F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D2B□-4T	2	2.5	M8x0.75	42	6	26	13	10	13.9	12.5	10	-	8	2	3	0.9 to 1.9	12
VSP-D2B□-6T		4															
VSP-D2-10B□-4T		2.5	M12x1	57.6		37	17.5	13	14.9	21	14	10	-	4	10	0.6 to 1.7	27
VSP-D2-10B□-6T		4															
VSP-D2-15B□-4T		2.5		68.6		42	23.5			26					15	0.4 to 1.7	32
VSP-D2-15B□-6T		4															
VSP-D2-20B□-4T		2.5		78.6		47	28.5			31					20	0.3 to 1.8	35
VSP-D2-20B□-6T		4															
VSP-D4B□-4T	4	2.5	M8x0.75	42	6	26	13	10	13.9	12.5	10	-	8	2	3	0.9 to 1.9	12
VSP-D4B□-6T		4															
VSP-D4-10B□-4T		2.5	M12x1	57.6		37	17.5	13	14.9	21	14	10	-	4	10	0.6 to 1.7	27
VSP-D4-10B□-6T		4															
VSP-D4-15B□-4T		2.5		68.6		42	23.5			26					15	0.4 to 1.7	32
VSP-D4-15B□-6T		4															
VSP-D4-20B□-4T		2.5		78.6		47	28.5			31					20	0.3 to 1.8	35
VSP-D4-20B□-6T		4															
VSP-D6B□-4T	6	2.5	M8x0.75	44	10	28	13	10	13.9	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D6B□-6T		4															
VSP-D6-10B□-4T		2.5	M12x1	59.1		38.5	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	32
VSP-D6-10B□-6T		4															
VSP-D6-15B□-4T		2.5		70.1		43.5	23.5			26					15	0.4 to 1.7	36
VSP-D6-15B□-6T		4															
VSP-D6-20B□-4T		2.5		80.1		48.5	28.5			31					20	0.3 to 1.8	39
VSP-D6-20B□-6T		4															
VSP-D8B□-4T	8	2.5	M8x0.75	44	10	28	13	10	13.9	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D8B□-6T		4															
VSP-D8-10B□-4T		2.5	M12x1	59.1		38.5	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	32
VSP-D8-10B□-6T		4															
VSP-D8-15B□-4T		2.5		70.1		43.5	23.5			26					15	0.4 to 1.7	36
VSP-D8-15B□-6T		4															
VSP-D8-20B□-4T		2.5		80.1		48.5	28.5			31					20	0.3 to 1.8	39
VSP-D8-20B□-6T		4															

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10, 15B□-4T/6T
●VSP-D10, 15-□B□-4T/6T



●VSP-D20 to 50B□-4T/6T
●VSP-D20 to 50-□B□-4T/6T

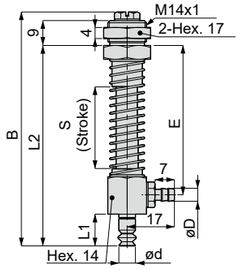


Unit: mm

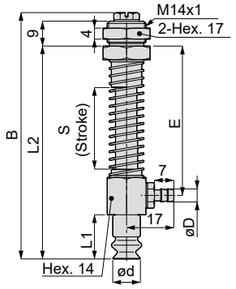
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10B□-4T	10	2.5	66.1	16	43	20	18.5	6	4.0 to 7.1	47
VSP-D10B□-6T		4								
VSP-D10-10B□-4T		2.5	71.1		48		25	10	2.0 to 5.2	50
VSP-D10-10B□-6T		4								
VSP-D10-15B□-4T		2.5	81.1		53	25	30	15	2.0 to 5.9	55
VSP-D10-15B□-6T		4								
VSP-D10-20B□-4T		2.5	97.1		60	34	37	20	1.1 to 4.8	66
VSP-D10-20B□-6T		4								
VSP-D15B□-4T	15	2.5	66.1	16	43	20	18.5	6	4.0 to 7.1	47
VSP-D15B□-6T		4								
VSP-D15-10B□-4T		2.5	71.1		48		25	10	2.0 to 5.2	50
VSP-D15-10B□-6T		4								
VSP-D15-15B□-4T		2.5	81.1		53	25	30	15	2.0 to 5.9	55
VSP-D15-15B□-6T		4								
VSP-D15-20B□-4T		2.5	97.1		60	34	37	20	1.1 to 4.8	66
VSP-D15-20B□-6T		4								
VSP-D20B□-4T	20	2.5	69.1	19	46	20	18.5	6	7.0 to 12.6	50
VSP-D20B□-6T		4								
VSP-D20-10B□-4T		2.5	75.1		52		24.5	10	3.3 to 10.0	54
VSP-D20-10B□-6T		4								
VSP-D20-15B□-4T		2.5	85.1		57	25	29.5	15	3.3 to 10.4	61
VSP-D20-15B□-6T		4								
VSP-D20-20B□-4T		2.5	101.1		64	34	36.5	20	2.0 to 8.7	71
VSP-D20-20B□-6T		4								
VSP-D25B□-4T	25	2.5	69.1	19	46	20	18.5	6	7.0 to 12.6	51
VSP-D25B□-6T		4								
VSP-D25-10B□-4T		2.5	75.1		52		24.5	10	3.3 to 10.0	55
VSP-D25-10B□-6T		4								
VSP-D25-15B□-4T		2.5	85.1		57	25	29.5	15	3.3 to 10.4	61
VSP-D25-15B□-6T		4								
VSP-D25-20B□-4T		2.5	101.1		64	34	36.5	20	2.0 to 8.7	71
VSP-D25-20B□-6T		4								
VSP-D30B□-4T	30	2.5	73.1	23	50	20	18.5	6	7.0 to 12.6	53
VSP-D30B□-6T		4								
VSP-D30-10B□-4T		2.5	79.1		56		24.5	10	3.3 to 10.0	55
VSP-D30-10B□-6T		4								
VSP-D30-15B□-4T		2.5	89.1		61	25	29.5	15	3.3 to 10.4	62
VSP-D30-15B□-6T		4								
VSP-D30-20B□-4T		2.5	105.1		68	34	36.5	20	2.0 to 8.7	72
VSP-D30-20B□-6T		4								
VSP-D40B□-4T	40	2.5	80.1	30	57	20	18.5	6	7.0 to 12.6	59
VSP-D40B□-6T		4								
VSP-D40-10B□-4T		2.5	86.1		63		24.5	10	3.3 to 10.0	66
VSP-D40-10B□-6T		4								
VSP-D40-15B□-4T		2.5	96.1		68	25	29.5	15	3.3 to 10.4	72
VSP-D40-15B□-6T		4								
VSP-D40-20B□-4T		2.5	112.1		75	34	36.5	20	2.0 to 8.7	82
VSP-D40-20B□-6T		4								
VSP-D50B□-4T	50	2.5	82.1	32	59	20	18.5	6	7.0 to 12.6	68
VSP-D50B□-6T		4								
VSP-D50-10B□-4T		2.5	88.1		65		24.5	10	3.3 to 10.0	72
VSP-D50-10B□-6T		4								
VSP-D50-15B□-4T		2.5	98.1		70	25	29.5	15	3.3 to 10.4	78
VSP-D50-15B□-6T		4								
VSP-D50-20B□-4T		2.5	114.1		77	34	36.5	20	2.0 to 8.7	88
VSP-D50-20B□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D6, 8-□B□-4TC/6TC



●VSP-D10, 15-□B□-4TC/6TC

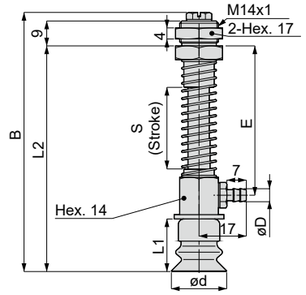


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20B□-4TC	6	2.5	70.1	10	58	40.5	20	1.5 to 4.9	60
VSP-D6-20B□-6TC		4							
VSP-D6-30B□-4TC		2.5	83.1		71	53.5	30	1.1 to 4.8	67
VSP-D6-30B□-6TC		4							
VSP-D6-40B□-4TC		2.5	96.1		84	66.5	40	1.0 to 4.5	74
VSP-D6-40B□-6TC		4							
VSP-D6-50B□-4TC		2.5	109.1		97	79.5	50	0.9 to 4.5	80
VSP-D6-50B□-6TC		4							
VSP-D8-20B□-4TC	8	2.5	70.1	10	58	40.5	20	1.5 to 4.9	60
VSP-D8-20B□-6TC		4							
VSP-D8-30B□-4TC		2.5	83.1		71	53.5	30	1.1 to 4.8	67
VSP-D8-30B□-6TC		4							
VSP-D8-40B□-4TC		2.5	96.1		84	66.5	40	1.0 to 4.5	74
VSP-D8-40B□-6TC		4							
VSP-D8-50B□-4TC		2.5	109.1		97	79.5	50	0.9 to 4.5	80
VSP-D8-50B□-6TC		4							
VSP-D10-20B□-4TC	10	2.5	76.1	16	64	40.5	20	1.5 to 4.9	60
VSP-D10-20B□-6TC		4							
VSP-D10-30B□-4TC		2.5	89.1		77	53.5	30	1.1 to 4.8	67
VSP-D10-30B□-6TC		4							
VSP-D10-40B□-4TC		2.5	102.1		90	66.5	40	1.0 to 4.5	74
VSP-D10-40B□-6TC		4							
VSP-D10-50B□-4TC		2.5	115.1		103	79.5	50	0.9 to 4.5	80
VSP-D10-50B□-6TC		4							
VSP-D15-20B□-4TC	15	2.5	76.1	16	64	40.5	20	1.5 to 4.9	61
VSP-D15-20B□-6TC		4							
VSP-D15-30B□-4TC		2.5	89.1		77	53.5	30	1.1 to 4.8	68
VSP-D15-30B□-6TC		4							
VSP-D15-40B□-4TC		2.5	102.1		90	66.5	40	1.0 to 4.5	75
VSP-D15-40B□-6TC		4							
VSP-D15-50B□-4TC		2.5	115.1		103	79.5	50	0.9 to 4.5	81
VSP-D15-50B□-6TC		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D20 to 50-□B□-4TC/6TC

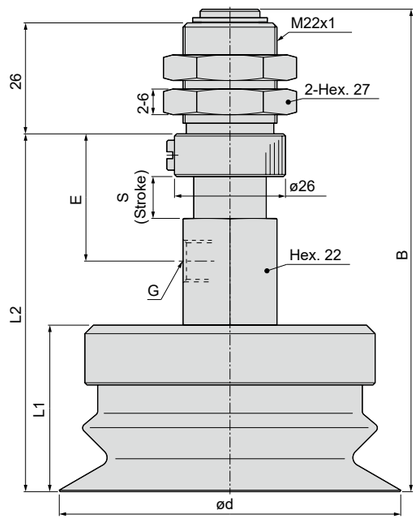


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D20-20B□-4TC	20	4	80.6	19	68.5	41	20	1.5 to 4.9	68
VSP-D20-20B□-6TC		6							
VSP-D20-30B□-4TC		4	93.6		81.5	54	30	1.1 to 4.8	75
VSP-D20-30B□-6TC		6							
VSP-D20-40B□-4TC		4	106.6		94.5	67	40	1.0 to 4.5	81
VSP-D20-40B□-6TC		6							
VSP-D20-50B□-4TC		4	119.6		107.5	80	50	0.9 to 4.5	88
VSP-D20-50B□-6TC		6							
VSP-D25-20B□-4TC	25	4	80.6	19	68.5	41	20	1.5 to 4.9	68
VSP-D25-20B□-6TC		6							
VSP-D25-30B□-4TC		4	93.6		81.5	54	30	1.1 to 4.8	75
VSP-D25-30B□-6TC		6							
VSP-D25-40B□-4TC		4	106.6		94.5	67	40	1.0 to 4.5	82
VSP-D25-40B□-6TC		6							
VSP-D25-50B□-4TC		4	119.6		107.5	80	50	0.9 to 4.5	89
VSP-D25-50B□-6TC		6							
VSP-D30-20B□-4TC	30	4	84.6	23	72.5	41	20	1.5 to 4.9	70
VSP-D30-20B□-6TC		6							
VSP-D30-30B□-4TC		4	97.6		85.5	54	30	1.1 to 4.8	77
VSP-D30-30B□-6TC		6							
VSP-D30-40B□-4TC		4	110.6		98.5	67	40	1.0 to 4.5	83
VSP-D30-40B□-6TC		6							
VSP-D30-50B□-4TC		4	123.6		111.5	80	50	0.9 to 4.5	90
VSP-D30-50B□-6TC		6							
VSP-D40-20B□-4TC	40	4	91.6	30	79.5	41	20	1.5 to 4.9	80
VSP-D40-20B□-6TC		6							
VSP-D40-30B□-4TC		4	104.6		92.5	54	30	1.1 to 4.8	87
VSP-D40-30B□-6TC		6							
VSP-D40-40B□-4TC		4	117.6		105.5	67	40	1.0 to 4.5	94
VSP-D40-40B□-6TC		6							
VSP-D40-50B□-4TC		4	130.6		118.5	80	50	0.9 to 4.5	100
VSP-D40-50B□-6TC		6							
VSP-D50-20B□-4TC	50	4	93.6	32	81.5	41	20	1.5 to 4.9	86
VSP-D50-20B□-6TC		6							
VSP-D50-30B□-4TC		4	106.6		94.5	54	30	1.1 to 4.8	93
VSP-D50-30B□-6TC		6							
VSP-D50-40B□-4TC		4	119.6		107.5	67	40	1.0 to 4.5	99
VSP-D50-40B□-6TC		6							
VSP-D50-50B□-4TC		4	132.6		120.5	80	50	0.9 to 4.5	106
VSP-D50-50B□-6TC		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Female Thread)

●VSP-D60 to 100B□-6A

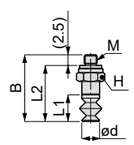


Unit: mm

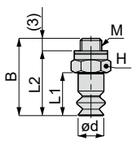
Model No.	Pad Diameter ød	Vacuum Outlet Size G	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-D60B□-6A	60	G1/8	113.6	37	84.6	10	10.1 to 15.8	251
VSP-D80B□-6A	80	G1/8	113	39	84	10	10.1 to 15.8	334
VSP-D100B□-6A	100	G1/8	119	45	90	10	10.1 to 15.8	433

Outline Dimension Drawing (Fixed Type, Direct Mount, VSP-E, Male Thread)

●VSP-E2, 4B□



●VSP-E6, 8B□

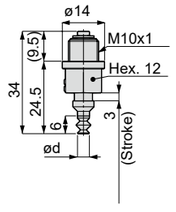


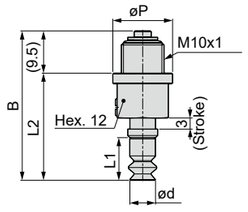
Unit: mm

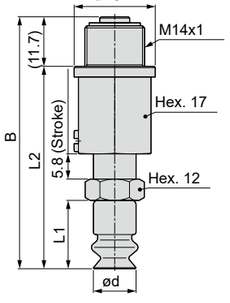
Model No.	Pad Diameter ød	M	B	L1	L2	Width Across Flats H	Weight (g)
VSP-E2B□	2	M3x0.5	15	6	12.5	5.5	1.8
VSP-E4B□	4	M3x0.5	15	6	12.5	5.5	1.8
VSP-E6B□	6	M5x0.8	18	10	15	8	3.2
VSP-E8B□	8	M5x0.8	18	10	15	8	3.2

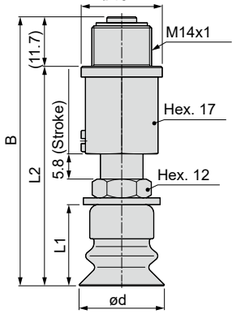
Outline Dimension Drawing (Buffer Type, Direct Mount, VSP-F, Male Thread)

●VSP-F2, 4B□ ●VSP-F6, 8B□ ●VSP-F10, 15B□ ●VSP-F20 to 50B□







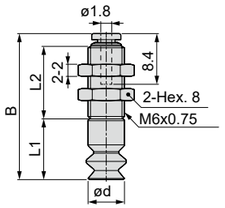


Unit: mm

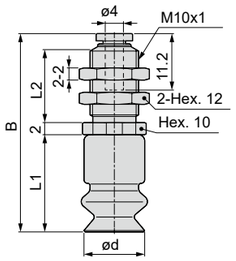
Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F2B□	2	34	6	24.5	2.3 to 3.9	16
VSP-F4B□	4	34	6	24.5	2.3 to 3.9	16
VSP-F6B□	6	35	10	25.5	2.3 to 3.9	16
VSP-F8B□	8	35	10	25.5	2.3 to 3.9	16
VSP-F10B□	10	59	16	47.3	7.9 to 15	58
VSP-F15B□	15	59	16	47.3	7.9 to 15	58
VSP-F20B□	20	63	19	51.3	7.9 to 15	62
VSP-F25B□	25	63	19	51.3	7.9 to 15	62
VSP-F30B□	30	67	23	55.3	7.9 to 15	63
VSP-F40B□	40	74	30	62.3	7.9 to 15	70
VSP-F50B□	50	76	32	64.3	7.9 to 15	76

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

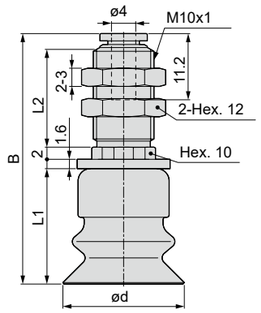
●VSP-MA6, 8B□2



●VSP-MA10, 15B□4



●VSP-MA20 to 50B□-4

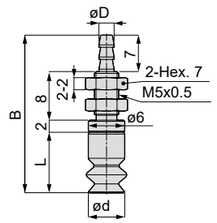


Unit: mm

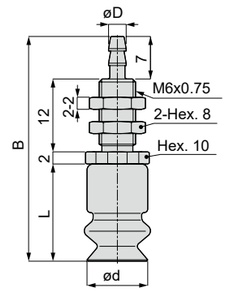
Model No.	Pad Diameter ød	B	L1	L2	Weight (g)
VSP-MA6B□-2	6	24.1	10	12	2.5
VSP-MA8B□-2	8	24.1	10	12	2.5
VSP-MA10B□-4	10	37	16	16.4	6.6
VSP-MA15B□-4	15	37	16	16.4	7.1
VSP-MA20B□-4	20	41.6	19	16.4	12
VSP-MA25B□-4	25	41.6	19	16.4	13
VSP-MA30B□-4	30	45.6	23	16.4	16
VSP-MA40B□-4	40	52.6	30	16.4	24
VSP-MA50B□-4	50	54.6	32	16.4	30

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

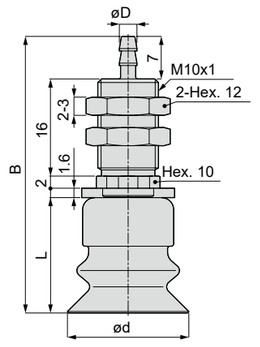
●VSP-MA6, 8B□-4T



●VSP-MA10, 15B□-4T



●VSP-MA20 to 50B□-4T/6T

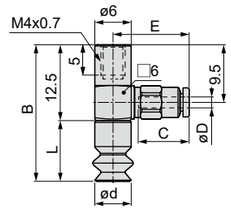


Unit: mm

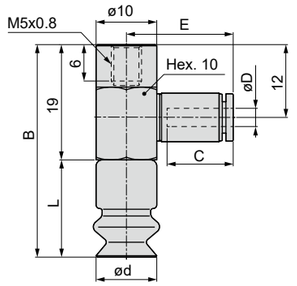
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MA6B□-4T	6	2.5	27	10	2.1
VSP-MA8B□-4T	8	2.5	27	10	2.1
VSP-MA10B□-4T	10	2.5	37	16	3.8
VSP-MA15B□-4T	15	2.5	37	16	4.3
VSP-MA20B□-4T	20	2.5	45.6	19	12
VSP-MA20B□-6T		4			
VSP-MA25B□-4T	25	2.5	45.6	19	13
VSP-MA25B□-6T		4			
VSP-MA30B□-4T	30	2.5	49.6	23	16
VSP-MA30B□-6T		4			
VSP-MA40B□-4T	40	2.5	56.6	30	23
VSP-MA40B□-6T		4			
VSP-MA50B□-4T	50	2.5	58.6	32	30
VSP-MA50B□-6T		4			

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

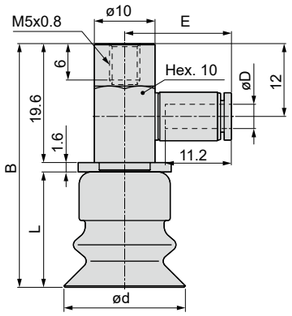
●VSP-MB6, 8B□2/4



●VSP-MB10, 15B□-2/4/6



●VSP-MB20 to 50B□-2/4/6

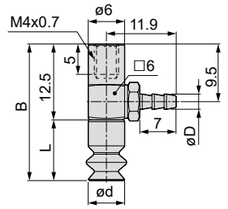


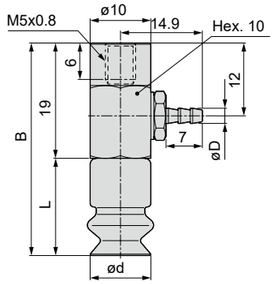
Unit: mm

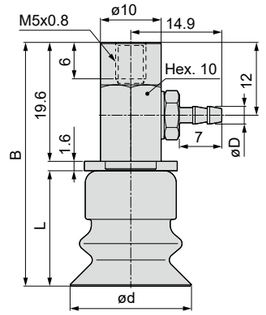
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB6B□-2	6	1.8	22.5	10	8.4	12.5	2.5
VSP-MB6B□-4		4			11.2	15.8	4
VSP-MB8B□-2	8	1.8	22.5	10	8.4	12.5	2.5
VSP-MB8B□-4		4			11.2	15.8	4
VSP-MB10B□-2	10	1.8	35	16	8.4	13.7	7.7
VSP-MB10B□-4		4			11.2	17.8	8.4
VSP-MB10B□-6		6			11.9	19.6	9.8
VSP-MB15B□-2	15	1.8	35	16	8.4	13.7	8.2
VSP-MB15B□-4		4			11.2	17.8	8.9
VSP-MB15B□-6		6			11.9	19.6	10.3
VSP-MB20B□-2	20	1.8	40.2	19	8.4	13.7	12
VSP-MB20B□-4		4			11.2	17.8	13
VSP-MB20B□-6		6			11.9	19.6	14
VSP-MB25B□-2	25	1.8	40.2	19	8.4	13.7	13
VSP-MB25B□-4		4			11.2	17.8	14
VSP-MB25B□-6		6			11.9	19.6	15
VSP-MB30B□-2	30	1.8	44.2	23	8.4	13.7	16
VSP-MB30B□-4		4			11.2	17.8	17
VSP-MB30B□-6		6			11.9	19.6	18
VSP-MB40B□-2	40	1.8	51.2	30	8.4	13.7	23
VSP-MB40B□-4		4			11.2	17.8	24
VSP-MB40B□-6		6			11.9	19.6	25
VSP-MB50B□-2	50	1.8	53.2	32	8.4	13.7	29
VSP-MB50B□-4		4			11.2	17.8	30
VSP-MB50B□-6		6			11.9	19.6	31

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB6, 8B□-4T/6T ●VSP-MB10, 15B□-4T/6T ●VSP-MB20 to 50B□-4T/6T





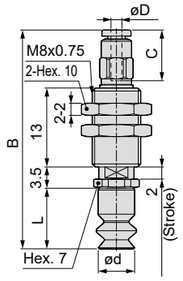


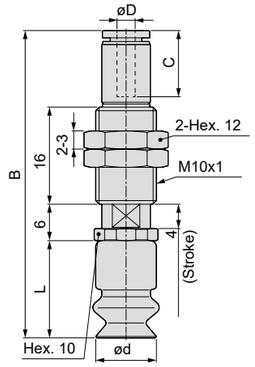
Unit: mm

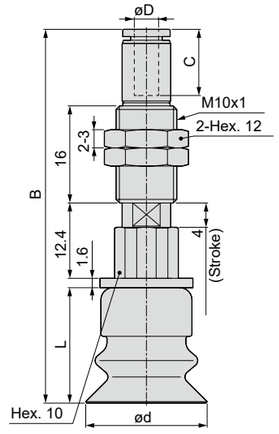
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Weight (g)
VSP-MB6B□-4T	6	2.5	22.5	10	2.6
VSP-MB6B□-6T		4			
VSP-MB8B□-4T	8	2.5	22.5	10	2.6
VSP-MB8B□-6T		4			
VSP-MB10B□-4T	10	2.5	35	16	7.2
VSP-MB10B□-6T		4			
VSP-MB15B□-4T	15	2.5	35	16	7.7
VSP-MB15B□-6T		4			
VSP-MB20B□-4T	20	2.5	40.2	19	12
VSP-MB20B□-6T		4			
VSP-MB25B□-4T	25	2.5	40.2	19	13
VSP-MB25B□-6T		4			
VSP-MB30B□-4T	30	2.5	44.2	23	15
VSP-MB30B□-6T		4			
VSP-MB40B□-4T	40	2.5	51.2	30	23
VSP-MB40B□-6T		4			
VSP-MB50B□-4T	50	2.5	53.2	32	30
VSP-MB50B□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC6, 8B□2 ●VSP-MC10, 15B□2/4 ●VSP-MC20 to 50B□-2/4





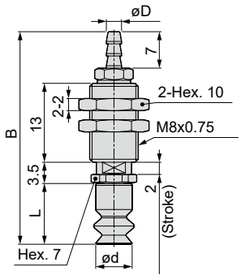


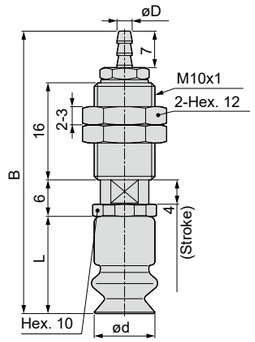
Unit: mm

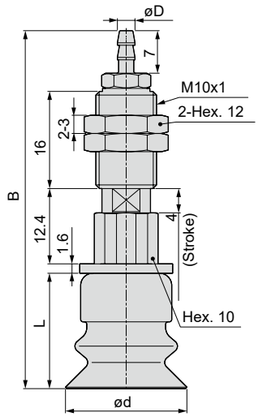
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC6B□-2	6	1.8	36.2	10	8.4	0.2 to 0.3	7.3
VSP-MC8B□-2	8	1.8	36.2	10	8.4	0.2 to 0.3	7.3
VSP-MC10B□-2	10	1.8	46.9	16	8.4	0.5 to 0.6	15
VSP-MC10B□-4		4	51		11.2		16
VSP-MC15B□-2	15	1.8	46.9	16	8.4	0.5 to 0.6	16
VSP-MC15B□-4		4	51		11.2		17
VSP-MC20B□-2	20	1.8	57.9	19	8.4	1 to 1.3	23
VSP-MC20B□-4		4	62		11.2		24
VSP-MC25B□-2	25	1.8	57.9	19	8.4	1 to 1.3	24
VSP-MC25B□-4		4	62		11.2		25
VSP-MC30B□-2	30	1.8	61.9	23	8.4	1 to 1.3	27
VSP-MC30B□-4		4	66		11.2		28
VSP-MC40B□-2	40	1.8	68.9	30	8.4	1 to 1.3	34
VSP-MC40B□-4		4	73		11.2		35
VSP-MC50B□-2	50	1.8	70.9	32	8.4	1 to 1.3	40
VSP-MC50B□-4		4	75		11.2		41

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC6, 8B□-4T/6T ●VSP-MC10, 15B□-4T/6T ●VSP-MC20 to 50B□-4T/6T





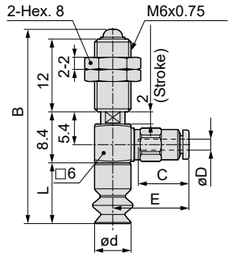


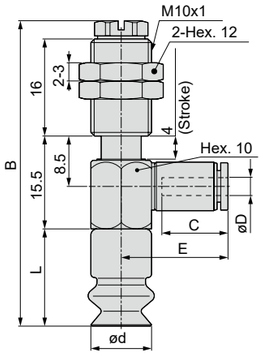
Unit: mm

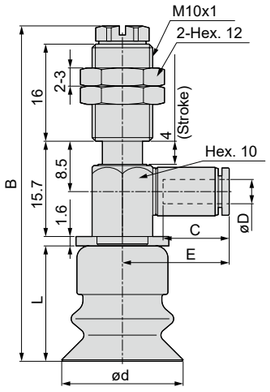
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC6B□-4T	6	2.5	36.1	10	0.2 to 0.3	7.4
VSP-MC6B□-6T		4				
VSP-MC8B□-4T	8	2.5	36.1	10	0.2 to 0.3	7.4
VSP-MC8B□-6T		4				
VSP-MC10B□-4T	10	2.5	48.1	16	0.5 to 0.6	15
VSP-MC10B□-6T		4				
VSP-MC15B□-4T	15	2.5	48.1	16	0.5 to 0.6	16
VSP-MC15B□-6T		4				
VSP-MC20B□-4T	20	2.5	59.1	19	1 to 1.3	23
VSP-MC20B□-6T		4				
VSP-MC25B□-4T	25	2.5	59.1	19	1 to 1.3	24
VSP-MC25B□-6T		4				
VSP-MC30B□-4T	30	2.5	63.1	23	1 to 1.3	26
VSP-MC30B□-6T		4				
VSP-MC40B□-4T	40	2.5	70.1	30	1 to 1.3	34
VSP-MC40B□-6T		4				
VSP-MC50B□-4T	50	2.5	72.1	32	1 to 1.3	41
VSP-MC50B□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD6, 8B□2/4 ●VSP-MD10, 15B□-2/4/6 ●VSP-MD20 to 50B□-2/4/6





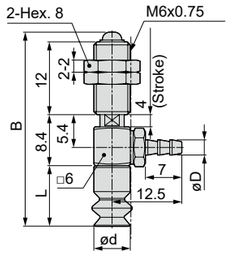


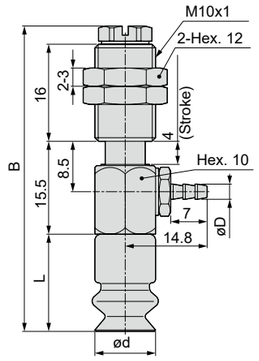
Unit: mm

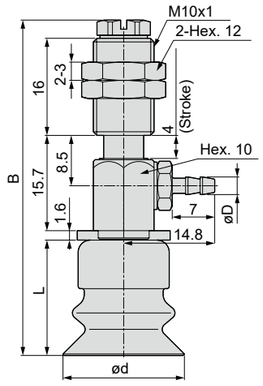
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD6B□-2	6	1.8	32	10	8.4	12.6	0.5 to 0.6	6.6
VSP-MD6B□-4		4			11.2	15.9		8
VSP-MD8B□-2	8	1.8	32	10	8.4	12.6	0.5 to 0.6	6.6
VSP-MD8B□-4		4			11.2	15.9		8
VSP-MD10B□-2	10	1.8	50.5	16	8.4	13.6	1 to 1.3	23
VSP-MD10B□-4		4			11.2	17.7		24
VSP-MD10B□-6		6			11.9	19.5		25
VSP-MD15B□-2	15	1.8	50.5	16	8.4	13.6	1 to 1.3	24
VSP-MD15B□-4		4			11.2	17.7		25
VSP-MD15B□-6		6			11.9	19.5		26
VSP-MD20B□-2	20	1.8	55.3	19	8.4	13.6	1 to 1.3	27
VSP-MD20B□-4		4			11.2	17.7		28
VSP-MD20B□-6		6			11.9	19.5		29
VSP-MD25B□-2	25	1.8	55.3	19	8.4	13.6	1 to 1.3	28
VSP-MD25B□-4		4			11.2	17.7		29
VSP-MD25B□-6		6			11.9	19.5		30
VSP-MD30B□-2	30	1.8	59.3	23	8.4	13.6	1 to 1.3	30
VSP-MD30B□-4		4			11.2	17.7		31
VSP-MD30B□-6		6			11.9	19.5		32
VSP-MD40B□-2	40	1.8	66.3	30	8.4	13.6	1 to 1.3	37
VSP-MD40B□-4		4			11.2	17.7		38
VSP-MD40B□-6		6			11.9	19.5		39
VSP-MD50B□-2	50	1.8	68.3	32	8.4	13.6	1 to 1.3	43
VSP-MD50B□-4		4			11.2	17.7		44
VSP-MD50B□-6		6			11.9	19.5		45

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD6, 8B□-4T/6T ●VSP-MD10, 15B□-4T/6T ●VSP-MD20 to 50B□-4T/6T





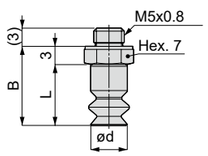


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD6B□-4T	6	2.5	32	10	0.5 to 0.6	6.7
VSP-MD6B□-6T		4				
VSP-MD8B□-4T	8	2.5	32	10	0.5 to 0.6	6.7
VSP-MD8B□-6T		4				
VSP-MD10B□-4T	10	2.5	50.5	16	1 to 1.3	22
VSP-MD10B□-6T		4				
VSP-MD15B□-4T	15	2.5	50.5	16	1 to 1.3	23
VSP-MD15B□-6T		4				
VSP-MD20B□-4T	20	2.5	55.3	19	1 to 1.3	27
VSP-MD20B□-6T		4				
VSP-MD25B□-4T	25	2.5	55.3	19	1 to 1.3	28
VSP-MD25B□-6T		4				
VSP-MD30B□-4T	30	2.5	59.3	23	1 to 1.3	30
VSP-MD30B□-6T		4				
VSP-MD40B□-4T	40	2.5	66.3	30	1 to 1.3	38
VSP-MD40B□-6T		4				
VSP-MD50B□-4T	50	2.5	68.3	32	1 to 1.3	45
VSP-MD50B□-6T		4				

External Dimension Diagram (Compact, Direct Mount, VSP-ME, Male Thread)

●VSP-ME6, 8B□-M5

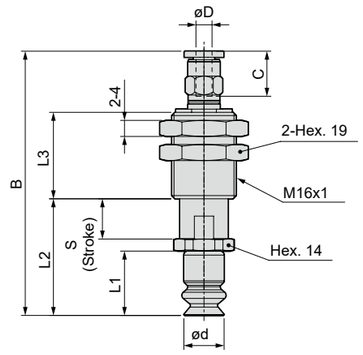


Unit: mm

Model No.	Pad Diameter ød	B	L	Weight (g)
VSP-ME6B□-M5	6	10	7	2
VSP-ME8B□-M5	8	8.5	5.5	2

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10, 15-□B□-2/4/6

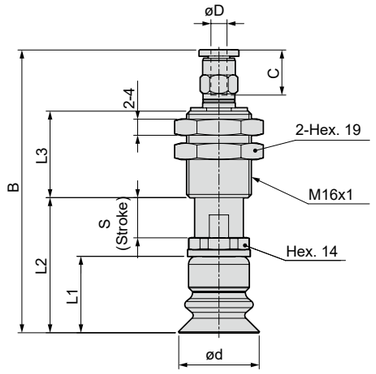


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10B□-2	10	1.8	61.6	16	29	21.5	8.4	10	1.0 to 2.4	22
VSP-HC10-10B□-4		4	65.7				11.2			23
VSP-HC10-10B□-6		6	67				11.9			24
VSP-HC10-15B□-2		1.8	71.6		34	26.5	8.4	15	1.0 to 2.7	24
VSP-HC10-15B□-4		4	75.7				11.2			25
VSP-HC10-15B□-6		6	77				11.9			26
VSP-HC10-20B□-2		1.8	81.6		39	31.5	8.4	20	1.0 to 3.0	26
VSP-HC10-20B□-4		4	85.7				11.2			27
VSP-HC10-20B□-6		6	87				11.9			28
VSP-HC10-25B□-2		1.8	92.1		44	37	8.4	25	1.0 to 3.0	28
VSP-HC10-25B□-4		4	96.2				11.2			29
VSP-HC10-25B□-6		6	97.5				11.9			30
VSP-HC10-30B□-2		1.8	103.1		49	43	8.4	30	1.0 to 3.0	30
VSP-HC10-30B□-4		4	107.2				11.2			31
VSP-HC10-30B□-6		6	108.5				11.9			32
VSP-HC10-40B□-2		1.8	125.1		59	55	8.4	40	1.0 to 3.0	34
VSP-HC10-40B□-4		4	129.2				11.2			35
VSP-HC10-40B□-6		6	130.5				11.9			36
VSP-HC10-50B□-2		1.8	146.6		69	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50B□-4		4	150.7				11.2			40
VSP-HC10-50B□-6		6	152				11.9			41
VSP-HC15-10B□-2	15	1.8	61.6	16	29	21.5	8.4	10	1.0 to 2.4	22
VSP-HC15-10B□-4		4	65.7				11.2			23
VSP-HC15-10B□-6		6	67				11.9			24
VSP-HC15-15B□-2		1.8	71.6		34	26.5	8.4	15	1.0 to 2.7	24
VSP-HC15-15B□-4		4	75.7				11.2			25
VSP-HC15-15B□-6		6	77				11.9			26
VSP-HC15-20B□-2		1.8	81.6		39	31.5	8.4	20	1.0 to 3.0	26
VSP-HC15-20B□-4		4	85.7				11.2			27
VSP-HC15-20B□-6		6	87				11.9			28
VSP-HC15-25B□-2		1.8	92.1		44	37	8.4	25	1.0 to 3.0	28
VSP-HC15-25B□-4		4	96.2				11.2			29
VSP-HC15-25B□-6		6	97.5				11.9			30
VSP-HC15-30B□-2		1.8	103.1		49	43	8.4	30	1.0 to 3.0	30
VSP-HC15-30B□-4		4	107.2				11.2			31
VSP-HC15-30B□-6		6	108.5				11.9			32
VSP-HC15-40B□-2		1.8	125.1		59	55	8.4	40	1.0 to 3.0	34
VSP-HC15-40B□-4		4	129.2				11.2			35
VSP-HC15-40B□-6		6	130.5				11.9			36
VSP-HC15-50B□-2		1.8	146.6		69	66.5	8.4	50	1.0 to 3.1	39
VSP-HC15-50B□-4		4	150.7				11.2			40
VSP-HC15-50B□-6		6	152				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 25-□B□-2/4/6

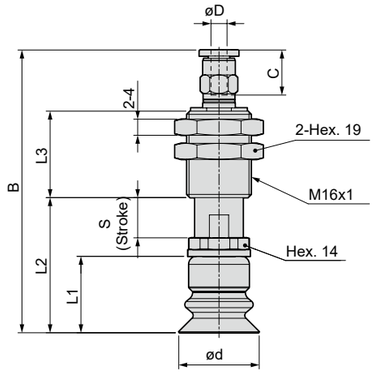


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10B□-2	20	1.8	66.2	19	33.6	21.5	8.4	10	1.0 to 2.4	27
VSP-HC20-10B□-4		4	70.3				11.2			28
VSP-HC20-10B□-6		6	71.6				11.9			29
VSP-HC20-15B□-2		1.8	76.2		38.6	26.5	8.4	15	1.0 to 2.7	29
VSP-HC20-15B□-4		4	80.3				11.2			30
VSP-HC20-15B□-6		6	81.6				11.9			31
VSP-HC20-20B□-2		1.8	86.2		43.6	31.5	8.4	20	1.0 to 3.0	31
VSP-HC20-20B□-4		4	90.3				11.2			32
VSP-HC20-20B□-6		6	91.6				11.9			33
VSP-HC20-25B□-2		1.8	96.7		48.6	37	8.4	25	1.0 to 3.0	33
VSP-HC20-25B□-4		4	100.8				11.2			34
VSP-HC20-25B□-6		6	102.1				11.9			35
VSP-HC20-30B□-2		1.8	107.7		53.6	43	8.4	30	1.0 to 3.0	35
VSP-HC20-30B□-4		4	111.8				11.2			36
VSP-HC20-30B□-6		6	113.1				11.9			37
VSP-HC20-40B□-2		1.8	129.7		63.6	55	8.4	40	1.0 to 3.0	39
VSP-HC20-40B□-4		4	133.8				11.2			40
VSP-HC20-40B□-6		6	135.1				11.9			41
VSP-HC20-50B□-2		1.8	151.2		73.6	66.5	8.4	50	1.0 to 3.1	43
VSP-HC20-50B□-4		4	155.3				11.2			44
VSP-HC20-50B□-6		6	156.6				11.9			45
VSP-HC25-10B□-2	25	1.8	66.2	19	33.6	21.5	8.4	10	1.0 to 2.4	27
VSP-HC25-10B□-4		4	70.3				11.2			28
VSP-HC25-10B□-6		6	71.6				11.9			29
VSP-HC25-15B□-2		1.8	76.2		38.6	26.5	8.4	15	1.0 to 2.7	29
VSP-HC25-15B□-4		4	80.3				11.2			30
VSP-HC25-15B□-6		6	81.6				11.9			31
VSP-HC25-20B□-2		1.8	86.2		43.6	31.5	8.4	20	1.0 to 3.0	31
VSP-HC25-20B□-4		4	90.3				11.2			32
VSP-HC25-20B□-6		6	91.6				11.9			33
VSP-HC25-25B□-2		1.8	96.7		48.6	37	8.4	25	1.0 to 3.0	33
VSP-HC25-25B□-4		4	100.8				11.2			34
VSP-HC25-25B□-6		6	102.1				11.9			35
VSP-HC25-30B□-2		1.8	107.7		53.6	43	8.4	30	1.0 to 3.0	35
VSP-HC25-30B□-4		4	111.8				11.2			36
VSP-HC25-30B□-6		6	113.1				11.9			37
VSP-HC25-40B□-2		1.8	129.7		63.6	55	8.4	40	1.0 to 3.0	39
VSP-HC25-40B□-4		4	133.8				11.2			40
VSP-HC25-40B□-6		6	135.1				11.9			41
VSP-HC25-50B□-2		1.8	151.2		73.6	66.5	8.4	50	1.0 to 3.1	43
VSP-HC25-50B□-4		4	155.3				11.2			44
VSP-HC25-50B□-6		6	156.6				11.9			45

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC30, 40-□B□-2/4/6

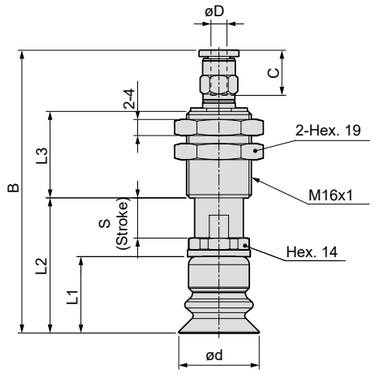


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC30-10B□-2	30	1.8	70.2	23	37.6	21.5	8.4	10	1.0 to 2.4	30
VSP-HC30-10B□-4		4	74.3				11.2			31
VSP-HC30-10B□-6		6	75.6				11.9			32
VSP-HC30-15B□-2		1.8	80.2		42.6	26.5	8.4	15	1.0 to 2.7	32
VSP-HC30-15B□-4		4	84.3				11.2			33
VSP-HC30-15B□-6		6	85.6				11.9			34
VSP-HC30-20B□-2		1.8	90.2		47.6	31.5	8.4	20	1.0 to 3.0	34
VSP-HC30-20B□-4		4	94.3				11.2			35
VSP-HC30-20B□-6		6	95.6				11.9			36
VSP-HC30-25B□-2		1.8	100.7		52.6	37	8.4	25	1.0 to 3.0	36
VSP-HC30-25B□-4		4	104.8				11.2			37
VSP-HC30-25B□-6		6	106.1				11.9			38
VSP-HC30-30B□-2		1.8	111.7		57.6	43	8.4	30	1.0 to 3.0	38
VSP-HC30-30B□-4		4	115.8				11.2			39
VSP-HC30-30B□-6		6	117.1				11.9			40
VSP-HC30-40B□-2		1.8	133.7		67.6	55	8.4	40	1.0 to 3.0	42
VSP-HC30-40B□-4		4	137.8				11.2			43
VSP-HC30-40B□-6		6	139.1				11.9			44
VSP-HC30-50B□-2		1.8	155.2		77.6	66.5	8.4	50	1.0 to 3.1	46
VSP-HC30-50B□-4		4	159.3				11.2			47
VSP-HC30-50B□-6		6	160.6				11.9			48
VSP-HC40-10B□-2	40	1.8	77.2	30	44.6	21.5	8.4	10	1.0 to 2.4	37
VSP-HC40-10B□-4		4	81.3				11.2			38
VSP-HC40-10B□-6		6	82.6				11.9			39
VSP-HC40-15B□-2		1.8	87.2		49.6	26.5	8.4	15	1.0 to 2.7	39
VSP-HC40-15B□-4		4	91.3				11.2			40
VSP-HC40-15B□-6		6	92.6				11.9			41
VSP-HC40-20B□-2		1.8	97.2		54.6	31.5	8.4	20	1.0 to 3.0	41
VSP-HC40-20B□-4		4	101.3				11.2			42
VSP-HC40-20B□-6		6	102.6				11.9			43
VSP-HC40-25B□-2		1.8	107.7		59.6	37	8.4	25	1.0 to 3.0	43
VSP-HC40-25B□-4		4	111.8				11.2			44
VSP-HC40-25B□-6		6	113.1				11.9			45
VSP-HC40-30B□-2		1.8	118.7		64.6	43	8.4	30	1.0 to 3.0	45
VSP-HC40-30B□-4		4	122.8				11.2			46
VSP-HC40-30B□-6		6	124.1				11.9			47
VSP-HC40-40B□-2		1.8	140.7		74.6	55	8.4	40	1.0 to 3.0	49
VSP-HC40-40B□-4		4	144.8				11.2			50
VSP-HC40-40B□-6		6	146.1				11.9			51
VSP-HC40-50B□-2		1.8	162.2		84.6	66.5	8.4	50	1.0 to 3.1	53
VSP-HC40-50B□-4		4	166.3				11.2			54
VSP-HC40-50B□-6		6	167.6				11.9			55

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC50-□B□-2/4/6

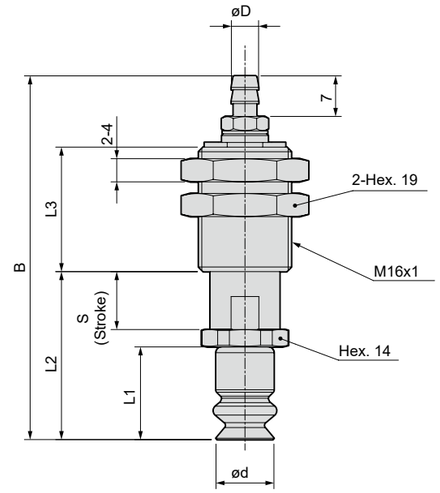


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC50-10B□-2	50	1.8	79.2	32	46.6	21.5	8.4	10	1.0 to 2.4	45
VSP-HC50-10B□-4		4	83.3				11.2			46
VSP-HC50-10B□-6		6	84.6				11.9			47
VSP-HC50-15B□-2		1.8	89.2		52.6	26.5	8.4	15	1.0 to 2.7	47
VSP-HC50-15B□-4		4	93.3				11.2			48
VSP-HC50-15B□-6		6	94.6				11.9			49
VSP-HC50-20B□-2		1.8	99.2		58.6	31.5	8.4	20	1.0 to 3.0	50
VSP-HC50-20B□-4		4	103.3				11.2			51
VSP-HC50-20B□-6		6	104.6				11.9			52
VSP-HC50-25B□-2		1.8	109.7		64.6	37	8.4	25	1.0 to 3.0	52
VSP-HC50-25B□-4		4	113.8				11.2			53
VSP-HC50-25B□-6		6	115.1				11.9			54
VSP-HC50-30B□-2		1.8	120.7		70.6	43	8.4	30	1.0 to 3.0	54
VSP-HC50-30B□-4		4	124.8				11.2			55
VSP-HC50-30B□-6		6	126.1				11.9			56
VSP-HC50-40B□-2		1.8	142.7		81.6	55	8.4	40	1.0 to 3.0	58
VSP-HC50-40B□-4		4	146.8				11.2			59
VSP-HC50-40B□-6		6	148.1				11.9			60
VSP-HC50-50B□-2		1.8	164.2		92.6	66.5	8.4	50	1.0 to 3.1	62
VSP-HC50-50B□-4		4	168.3				11.2			63
VSP-HC50-50B□-6		6	169.6				11.9			64

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10, 15-□B□-4T/6T

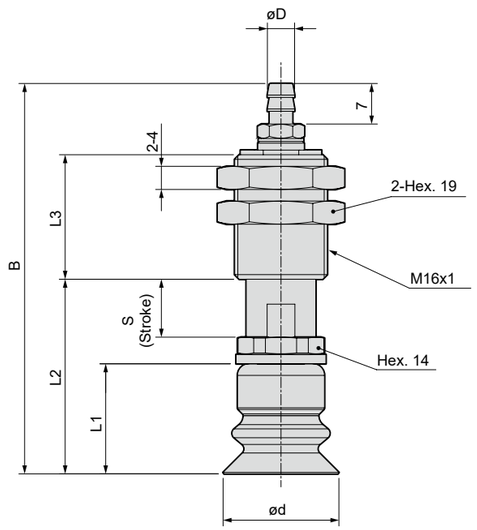


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10B□-4T	10	2.5	62.8	16	29	21.5	10	1.0 to 2.4	21
VSP-HC10-10B□-6T		4							
VSP-HC10-15B□-4T		2.5	72.8		34	26.5	15	1.0 to 2.7	23
VSP-HC10-15B□-6T		4							
VSP-HC10-20B□-4T		2.5	82.8		39	31.5	20	1.0 to 3.0	25
VSP-HC10-20B□-6T		4							
VSP-HC10-25B□-4T		2.5	93.3		44	37	25	1.0 to 3.0	28
VSP-HC10-25B□-6T		4							
VSP-HC10-30B□-4T		2.5	104.3		49	43	30	1.0 to 3.0	30
VSP-HC10-30B□-6T		4							
VSP-HC10-40B□-4T		2.5	126.3		59	55	40	1.0 to 3.0	34
VSP-HC10-40B□-6T		4							
VSP-HC10-50B□-4T		2.5	147.8		69	66.5	50	1.0 to 3.1	38
VSP-HC10-50B□-6T		4							
VSP-HC15-10B□-4T	15	2.5	62.8	16	29	21.5	10	1.0 to 2.4	21
VSP-HC15-10B□-6T		4							
VSP-HC15-15B□-4T		2.5	72.8		34	26.5	15	1.0 to 2.7	23
VSP-HC15-15B□-6T		4							
VSP-HC15-20B□-4T		2.5	82.8		39	31.5	20	1.0 to 3.0	25
VSP-HC15-20B□-6T		4							
VSP-HC15-25B□-4T		2.5	93.3		44	37	25	1.0 to 3.0	28
VSP-HC15-25B□-6T		4							
VSP-HC15-30B□-4T		2.5	104.3		49	43	30	1.0 to 3.0	30
VSP-HC15-30B□-6T		4							
VSP-HC15-40B□-4T		2.5	126.3		59	55	40	1.0 to 3.0	34
VSP-HC15-40B□-6T		4							
VSP-HC15-50B□-4T		2.5	147.8		69	66.5	50	1.0 to 3.1	38
VSP-HC15-50B□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20, 25-□B□-4T/6T

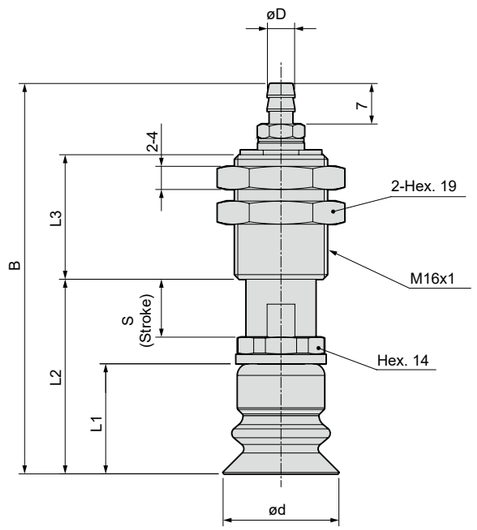


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10B□-4T	20	2.5	67.4	19	33.6	21.5	10	1.0 to 2.4	25
VSP-HC20-10B□-6T		4							
VSP-HC20-15B□-4T		2.5	77.4		38.6	26.5	15	1.0 to 2.7	27
VSP-HC20-15B□-6T		4							
VSP-HC20-20B□-4T		2.5	87.4		43.6	31.5	20	1.0 to 3.0	29
VSP-HC20-20B□-6T		4							
VSP-HC20-25B□-4T		2.5	97.9		48.6	37	25	1.0 to 3.0	31
VSP-HC20-25B□-6T		4							
VSP-HC20-30B□-4T		2.5	108.9		53.6	43	30	1.0 to 3.0	34
VSP-HC20-30B□-6T		4							
VSP-HC20-40B□-4T		2.5	130.9		63.6	55	40	1.0 to 3.0	38
VSP-HC20-40B□-6T		4							
VSP-HC20-50B□-4T		2.5	152.4		73.6	66.5	50	1.0 to 3.1	42
VSP-HC20-50B□-6T		4							
VSP-HC25-10B□-4T	25	2.5	67.4	19	33.6	21.5	10	1.0 to 2.4	26
VSP-HC25-10B□-6T		4							
VSP-HC25-15B□-4T		2.5	77.4		38.6	26.5	15	1.0 to 2.7	28
VSP-HC25-15B□-6T		4							
VSP-HC25-20B□-4T		2.5	87.4		43.6	31.5	20	1.0 to 3.0	30
VSP-HC25-20B□-6T		4							
VSP-HC25-25B□-4T		2.5	97.9		48.6	37	25	1.0 to 3.0	32
VSP-HC25-25B□-6T		4							
VSP-HC25-30B□-4T		2.5	108.9		53.6	43	30	1.0 to 3.0	35
VSP-HC25-30B□-6T		4							
VSP-HC25-40B□-4T		2.5	130.9		63.6	55	40	1.0 to 3.0	39
VSP-HC25-40B□-6T		4							
VSP-HC25-50B□-4T		2.5	152.4		73.6	66.5	50	1.0 to 3.1	43
VSP-HC25-50B□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC30, 40-□B□-4T/6T

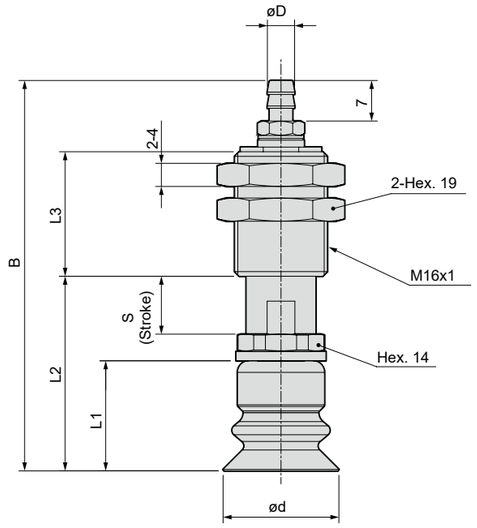


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC30-10B□-4T	30	2.5	71.4	23	37.6	21.5	10	1.0 to 2.4	29
VSP-HC30-10B□-6T		4							
VSP-HC30-15B□-4T		2.5	81.4		42.6	26.5	15	1.0 to 2.7	31
VSP-HC30-15B□-6T		4							
VSP-HC30-20B□-4T		2.5	91.4		47.6	31.5	20	1.0 to 3.0	33
VSP-HC30-20B□-6T		4							
VSP-HC30-25B□-4T		2.5	101.9		52.6	37	25	1.0 to 3.0	35
VSP-HC30-25B□-6T		4							
VSP-HC30-30B□-4T		2.5	112.9		57.6	43	30	1.0 to 3.0	38
VSP-HC30-30B□-6T		4							
VSP-HC30-40B□-4T		2.5	134.9		67.6	55	40	1.0 to 3.0	42
VSP-HC30-40B□-6T		4							
VSP-HC30-50B□-4T		2.5	156.4		77.6	66.5	50	1.0 to 3.1	47
VSP-HC30-50B□-6T		4							
VSP-HC40-10B□-4T	40	2.5	78.4	30	44.6	21.5	10	1.0 to 2.4	31
VSP-HC40-10B□-6T		4							
VSP-HC40-15B□-4T		2.5	88.4		49.6	26.5	15	1.0 to 2.7	33
VSP-HC40-15B□-6T		4							
VSP-HC40-20B□-4T		2.5	98.4		54.6	31.5	20	1.0 to 3.0	35
VSP-HC40-20B□-6T		4							
VSP-HC40-25B□-4T		2.5	108.9		59.6	37	25	1.0 to 3.0	37
VSP-HC40-25B□-6T		4							
VSP-HC40-30B□-4T		2.5	119.9		64.6	43	30	1.0 to 3.0	40
VSP-HC40-30B□-6T		4							
VSP-HC40-40B□-4T		2.5	141.9		74.6	55	40	1.0 to 3.0	44
VSP-HC40-40B□-6T		4							
VSP-HC40-50B□-4T		2.5	163.4		84.6	66.5	50	1.0 to 3.1	49
VSP-HC40-50B□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC50-□B□-4T/6T

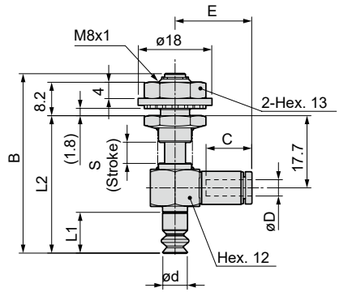


Unit: mm

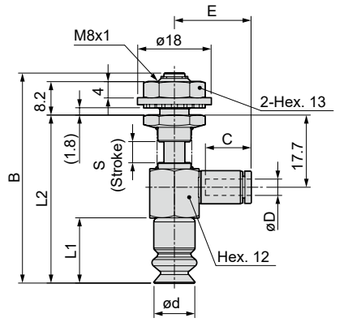
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC50-10B□-4T	50	2.5	80.4	32	46.6	21.5	10	1.0 to 2.4	52
VSP-HC50-10B□-6T		4							
VSP-HC50-15B□-4T		2.5	90.4		51.6	26.5	15	1.0 to 2.7	54
VSP-HC50-15B□-6T		4							
VSP-HC50-20B□-4T		2.5	100.4		56.6	31.5	20	1.0 to 3.0	56
VSP-HC50-20B□-6T		4							
VSP-HC50-25B□-4T		2.5	110.9		61.6	37	25	1.0 to 3.0	58
VSP-HC50-25B□-6T		4							
VSP-HC50-30B□-4T		2.5	121.9		66.6	43	30	1.0 to 3.0	61
VSP-HC50-30B□-6T		4							
VSP-HC50-40B□-4T		2.5	143.9		76.6	55	40	1.0 to 3.0	65
VSP-HC50-40B□-6T		4							
VSP-HC50-50B□-4T		2.5	165.4		86.6	66.5	50	1.0 to 3.1	69
VSP-HC50-50B□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

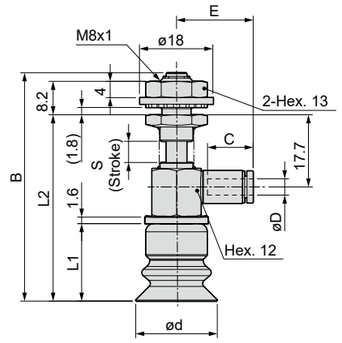
●VSP-HD6, 8B□-2/4/6



●VSP-HD10, 15B□-2/4/6



●VSP-HD20 to 50B□-2/4/6

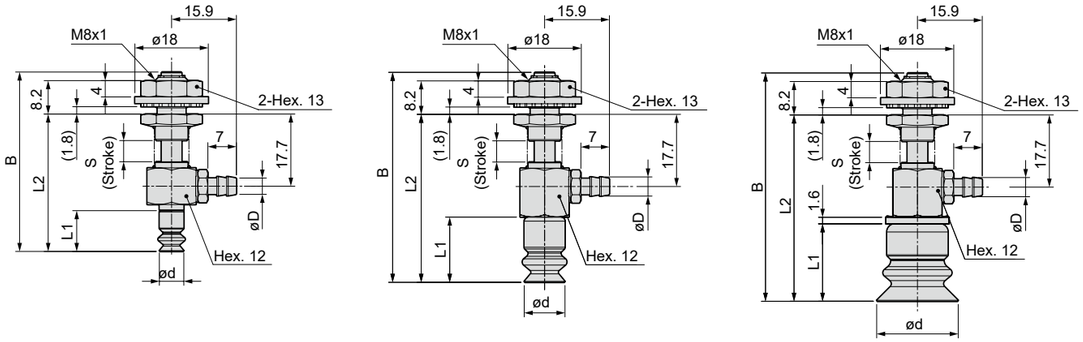


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6B□-2	6	1.8	44	10	33.7	8.4	14.7	5.2	1.6 to 2.9	28
VSP-HD6B□-4		4				11.2	18.8			29
VSP-HD6B□-6		6				11.9	20.6			30
VSP-HD8B□-2	8	1.8	44	10	33.7	8.4	14.7	5.2	1.6 to 2.9	28
VSP-HD8B□-4		4				11.2	18.8			29
VSP-HD8B□-6		6				11.9	20.6			30
VSP-HD10B□-2	10	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	32
VSP-HD10B□-4		4				11.2	18.8			33
VSP-HD10B□-6		6				11.9	20.6			34
VSP-HD15B□-2	15	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HD15B□-4		4				11.2	18.8			34
VSP-HD15B□-6		6				11.9	20.6			35
VSP-HD20B□-2	20	1.8	56	19	45.7	8.4	14.7	5.2	1.6 to 2.9	36
VSP-HD20B□-4		4				11.2	18.8			37
VSP-HD20B□-6		6				11.9	20.6			38
VSP-HD25B□-2	25	1.8	56	19	45.7	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HD25B□-4		4				11.2	18.8			38
VSP-HD25B□-6		6				11.9	20.6			39
VSP-HD30B□-2	30	1.8	60	23	49.7	8.4	14.7	5.2	1.6 to 2.9	39
VSP-HD30B□-4		4				11.2	18.8			40
VSP-HD30B□-6		6				11.9	20.6			41
VSP-HD40B□-2	40	1.8	67	30	56.7	8.4	14.7	5.2	1.6 to 2.9	46
VSP-HD40B□-4		4				11.2	18.8			47
VSP-HD40B□-6		6				11.9	20.6			48
VSP-HD50B□-2	50	1.8	69	32	58.7	8.4	14.7	5.2	1.6 to 2.9	53
VSP-HD50B□-4		4				11.2	18.8			54
VSP-HD50B□-6		6				11.9	20.6			55

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD6, 8B□-4T/6T ●VSP-HD10, 15B□-4T/6T ●VSP-HD20 to 50B□-4T/6T

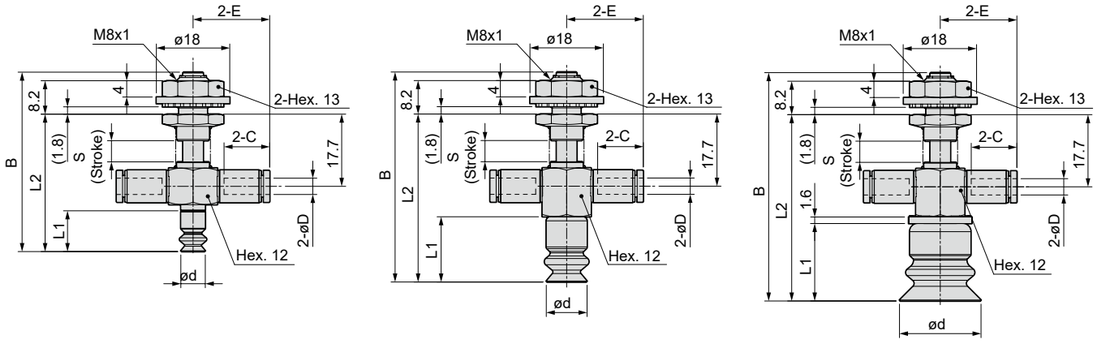


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6B□-4T	6	2.5	44	10	33.7	5.2	1.6 to 2.9	28
VSP-HD6B□-6T		4						
VSP-HD8B□-4T	8	2.5	44	10	33.7	5.2	1.6 to 2.9	28
VSP-HD8B□-6T		4						
VSP-HD10B□-4T	10	2.5	51.5	16	41.2	5.2	1.6 to 2.9	31
VSP-HD10B□-6T		4						
VSP-HD15B□-4T	15	2.5	51.5	16	41.2	5.2	1.6 to 2.9	32
VSP-HD15B□-6T		4						
VSP-HD20B□-4T	20	2.5	56	19	45.7	5.2	1.6 to 2.9	36
VSP-HD20B□-6T		4						
VSP-HD25B□-4T	25	2.5	56	19	45.7	5.2	1.6 to 2.9	37
VSP-HD25B□-6T		4						
VSP-HD30B□-4T	30	2.5	60	23	49.7	5.2	1.6 to 2.9	39
VSP-HD30B□-6T		4						
VSP-HD40B□-4T	40	2.5	67	30	56.7	5.2	1.6 to 2.9	47
VSP-HD40B□-6T		4						
VSP-HD50B□-4T	50	2.5	69	32	58.7	5.2	1.6 to 2.9	53
VSP-HD50B□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW6, 8B□-2/4/6 ●VSP-HDW10, 15B□-2/4/6 ●VSP-HDW20 to 50B□-2/4/6

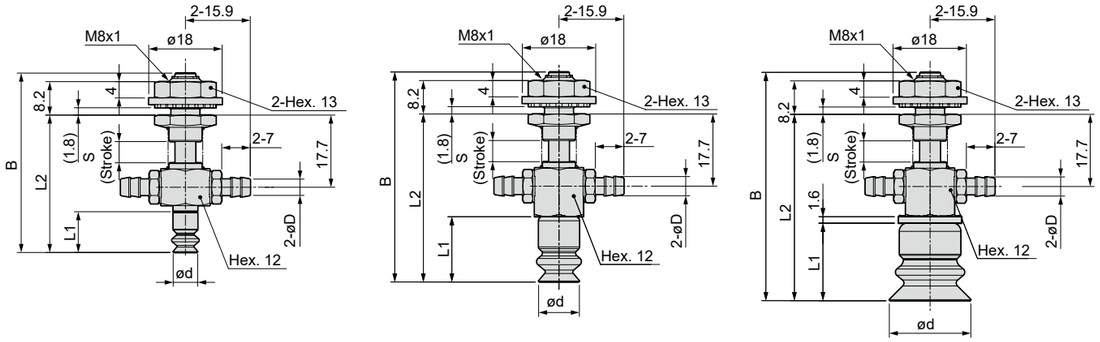


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6B□-2	6	1.8	44	10	33.7	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW6B□-4		4				11.2	18.8			32
VSP-HDW6B□-6		6				11.9	20.6			34
VSP-HDW8B□-2	8	1.8	44	10	33.7	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW8B□-4		4				11.2	18.8			32
VSP-HDW8B□-6		6				11.9	20.6			34
VSP-HDW10B□-2	10	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW10B□-4		4				11.2	18.8			35
VSP-HDW10B□-6		6				11.9	20.6			37
VSP-HDW15B□-2	15	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW15B□-4		4				11.2	18.8			35
VSP-HDW15B□-6		6				11.9	20.6			37
VSP-HDW20B□-2	20	1.8	56	19	45.7	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HDW20B□-4		4				11.2	18.8			39
VSP-HDW20B□-6		6				11.9	20.6			41
VSP-HDW25B□-2	25	1.8	56	19	45.7	8.4	14.7	5.2	1.6 to 2.9	38
VSP-HDW25B□-4		4				11.2	18.8			40
VSP-HDW25B□-6		6				11.9	20.6			42
VSP-HDW30B□-2	30	1.8	60	23	49.7	8.4	14.7	5.2	1.6 to 2.9	41
VSP-HDW30B□-4		4				11.2	18.8			43
VSP-HDW30B□-6		6				11.9	20.6			45
VSP-HDW40B□-2	40	1.8	67	30	56.7	8.4	14.7	5.2	1.6 to 2.9	49
VSP-HDW40B□-4		4				11.2	18.8			51
VSP-HDW40B□-6		6				11.9	20.6			53
VSP-HDW50B□-2	50	1.8	69	32	58.7	8.4	14.7	5.2	1.6 to 2.9	55
VSP-HDW50B□-4		4				11.2	18.8			57
VSP-HDW50B□-6		6				11.9	20.6			59

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW6, 8B□-4T/6T ●VSP-HDW10, 15B□-4T/6T ●VSP-HDW20 to 50B□-4T/6T

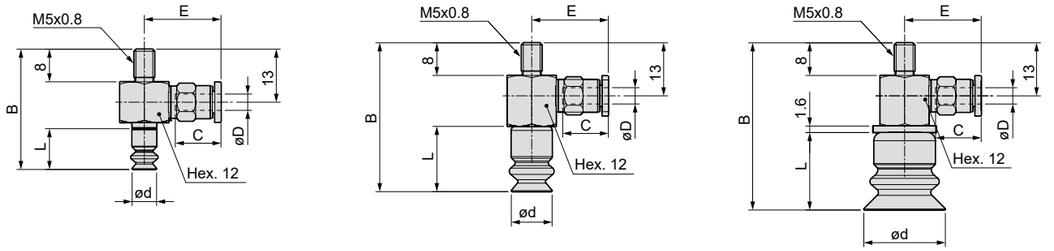


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6B□-4T	6	2.5	44	10	33.7	5.2	1.6 to 2.9	28
VSP-HDW6B□-6T		4						
VSP-HDW8B□-4T	8	2.5	44	10	33.7	5.2	1.6 to 2.9	28
VSP-HDW8B□-6T		4						
VSP-HDW10B□-4T	10	2.5	51.5	16	41.2	5.2	1.6 to 2.9	32
VSP-HDW10B□-6T		4						
VSP-HDW15B□-4T	15	2.5	51.5	16	41.2	5.2	1.6 to 2.9	32
VSP-HDW15B□-6T		4						
VSP-HDW20B□-4T	20	2.5	56	19	45.7	5.2	1.6 to 2.9	37
VSP-HDW20B□-6T		4						
VSP-HDW25B□-4T	25	2.5	56	19	45.7	5.2	1.6 to 2.9	37
VSP-HDW25B□-6T		4						
VSP-HDW30B□-4T	30	2.5	60	23	49.7	5.2	1.6 to 2.9	39
VSP-HDW30B□-6T		4						
VSP-HDW40B□-4T	40	2.5	67	30	56.7	5.2	1.6 to 2.9	48
VSP-HDW40B□-6T		4						
VSP-HDW50B□-4T	50	2.5	69	32	58.7	5.2	1.6 to 2.9	55
VSP-HDW50B□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE6, 8B□-2/4/6 ●VSP-HE10, 15B□-2/4/6 ●VSP-HE20 to 50B□-2/4/6

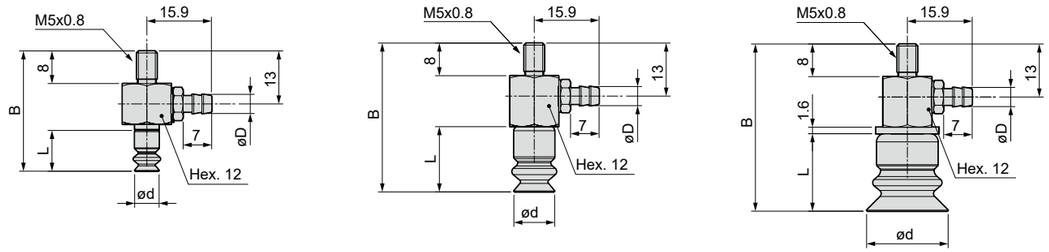


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE6B□-2	6	1.8	29.5	10	8.4	14.7	14
VSP-HE6B□-4		4			11.2	18.8	15
VSP-HE6B□-6		6			11.9	20.6	16
VSP-HE8B□-2	8	1.8	29.5	10	8.4	14.7	14
VSP-HE8B□-4		4			11.2	18.8	15
VSP-HE8B□-6		6			11.9	20.6	16
VSP-HE10B□-2	10	1.8	36.5	16	8.4	14.7	17
VSP-HE10B□-4		4			11.2	18.8	18
VSP-HE10B□-6		6			11.9	20.6	19
VSP-HE15B□-2	15	1.8	36.5	16	8.4	14.7	17
VSP-HE15B□-4		4			11.2	18.8	18
VSP-HE15B□-6		6			11.9	20.6	19
VSP-HE20B□-2	20	1.8	41	19	8.4	14.7	22
VSP-HE20B□-4		4			11.2	18.8	23
VSP-HE20B□-6		6			11.9	20.6	24
VSP-HE25B□-2	25	1.8	41	19	8.4	14.7	22
VSP-HE25B□-4		4			11.2	18.8	23
VSP-HE25B□-6		6			11.9	20.6	24
VSP-HE30B□-2	30	1.8	47	23	8.4	14.7	25
VSP-HE30B□-4		4			11.2	18.8	26
VSP-HE30B□-6		6			11.9	20.6	27
VSP-HE40B□-2	40	1.8	52	30	8.4	14.7	33
VSP-HE40B□-4		4			11.2	18.8	34
VSP-HE40B□-6		6			11.9	20.6	35
VSP-HE50B□-2	50	1.8	54	32	8.4	14.7	41
VSP-HE50B□-4		4			11.2	18.8	42
VSP-HE50B□-6		6			11.9	20.6	43

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE6, 8B□-4T/6T ●VSP-HE10, 15B□-4T/6T ●VSP-HE20 to 50B□-4T/6T

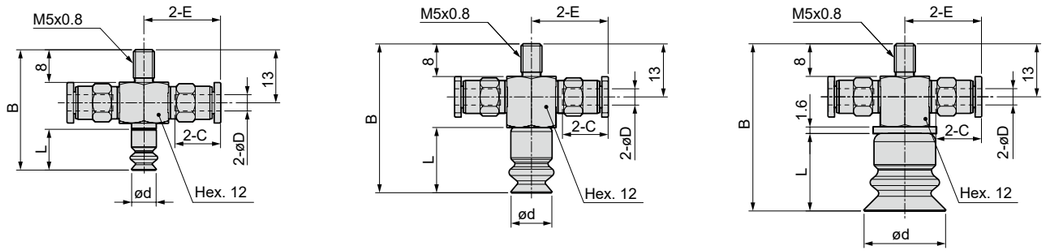


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE6B□-4T	6	2.5	29.5	10	13
VSP-HE6B□-6T		4			
VSP-HE8B□-4T	8	2.5	29.5	10	13
VSP-HE8B□-6T		4			
VSP-HE10B□-4T	10	2.5	36.5	16	16
VSP-HE10B□-6T		4			
VSP-HE15B□-4T	15	2.5	36.5	16	16
VSP-HE15B□-6T		4			
VSP-HE20B□-4T	20	2.5	41	19	21
VSP-HE20B□-6T		4			
VSP-HE25B□-4T	25	2.5	41	19	21
VSP-HE25B□-6T		4			
VSP-HE30B□-4T	30	2.5	47	23	24
VSP-HE30B□-6T		4			
VSP-HE40B□-4T	40	2.5	52	30	32
VSP-HE40B□-6T		4			
VSP-HE50B□-4T	50	2.5	54	32	40
VSP-HE50B□-6T		4			

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet Both Sides, VSP-HE, Push-in fitting)

●VSP-HEW6, 8B□-2/4/6 ●VSP-HEW10, 15B□-2/4/6 ●VSP-HEW20 to 50B□-2/4/6

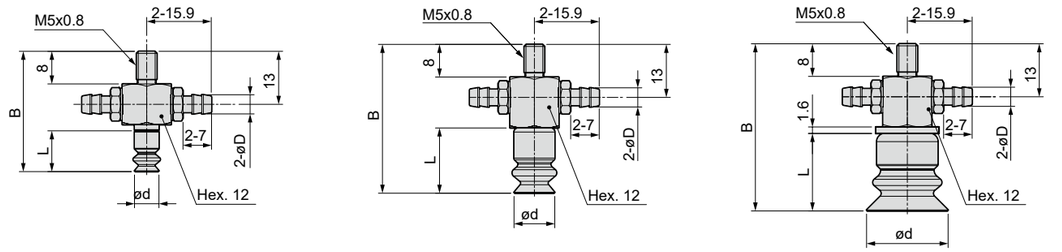


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW6B□-2	6	1.8	29.5	10	8.4	14.7	16
VSP-HEW6B□-4		4			11.2	18.8	18
VSP-HEW6B□-6		6			11.9	20.6	20
VSP-HEW8B□-2	8	1.8	29.5	10	8.4	14.7	16
VSP-HEW8B□-4		4			11.2	18.8	18
VSP-HEW8B□-6		6			11.9	20.6	20
VSP-HEW10B□-2	10	1.8	36.5	16	8.4	14.7	19
VSP-HEW10B□-4		4			11.2	18.8	21
VSP-HEW10B□-6		6			11.9	20.6	23
VSP-HEW15B□-2	15	1.8	36.5	16	8.4	14.7	20
VSP-HEW15B□-4		4			11.2	18.8	22
VSP-HEW15B□-6		6			11.9	20.6	24
VSP-HEW20B□-2	20	1.8	41	19	8.4	14.7	23
VSP-HEW20B□-4		4			11.2	18.8	25
VSP-HEW20B□-6		6			11.9	20.6	27
VSP-HEW25B□-2	25	1.8	41	19	8.4	14.7	24
VSP-HEW25B□-4		4			11.2	18.8	26
VSP-HEW25B□-6		6			11.9	20.6	28
VSP-HEW30B□-2	30	1.8	47	23	8.4	14.7	28
VSP-HEW30B□-4		4			11.2	18.8	30
VSP-HEW30B□-6		6			11.9	20.6	32
VSP-HEW40B□-2	40	1.8	52	30	8.4	14.7	34
VSP-HEW40B□-4		4			11.2	18.8	36
VSP-HEW40B□-6		6			11.9	20.6	38
VSP-HEW50B□-2	50	1.8	54	32	8.4	14.7	41
VSP-HEW50B□-4		4			11.2	18.8	43
VSP-HEW50B□-6		6			11.9	20.6	45

Outline Dimension Drawing (Low Profile Buffer Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW6, 8B□-4T/6T ●VSP-HEW10, 15B□-4T/6T ●VSP-HEW20 to 50B□-4T/6T

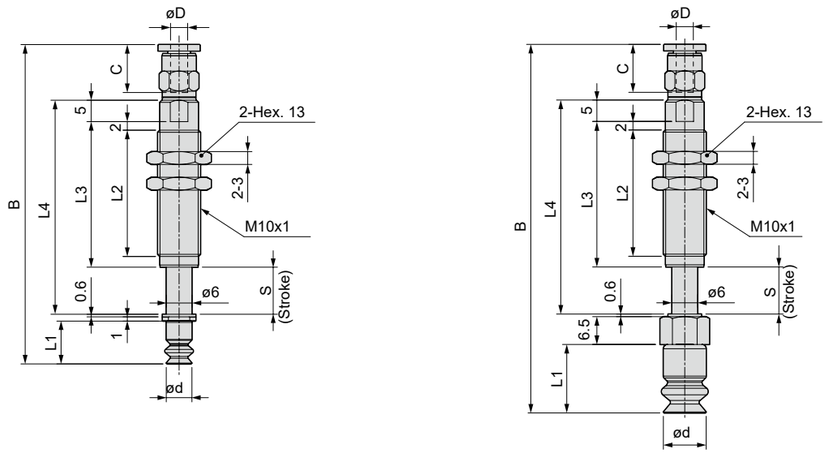


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW6B□-4T	6	2.5	29.5	10	14
VSP-HEW6B□-6T		4			
VSP-HEW8B□-4T	8	2.5	29.5	10	14
VSP-HEW8B□-6T		4			
VSP-HEW10B□-4T	10	2.5	36.5	16	17
VSP-HEW10B□-6T		4			
VSP-HEW15B□-4T	15	2.5	36.5	16	17
VSP-HEW15B□-6T		4			
VSP-HEW20B□-4T	20	2.5	41	19	21
VSP-HEW20B□-6T		4			
VSP-HEW25B□-4T	25	2.5	41	19	22
VSP-HEW25B□-6T		4			
VSP-HEW30B□-4T	30	2.5	47	23	25
VSP-HEW30B□-6T		4			
VSP-HEW40B□-4T	40	2.5	52	30	33
VSP-HEW40B□-6T		4			
VSP-HEW50B□-4T	50	2.5	54	32	40
VSP-HEW50B□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC6, 8-□B□-4 ●VSP-LFC10, 15-□B□-4



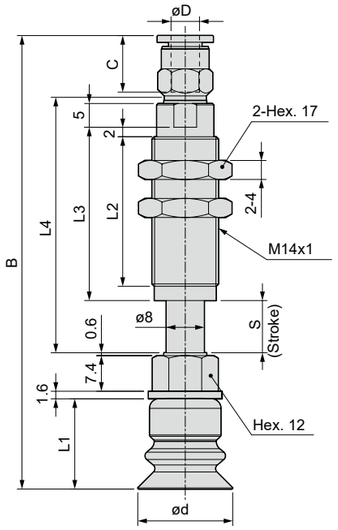
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2B□-4	6	4	58.6	10	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC6-5B□-4			64.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC6-10B□-4			74.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC6-15B□-4			84.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC6-20B□-4			94.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC8-2B□-4	8	4	58.6	10	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC8-5B□-4			64.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC8-10B□-4			74.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC8-15B□-4			84.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC8-20B□-4			94.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC10-2B□-4	10	4	70.1	16	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC10-5B□-4			76.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-10B□-4			86.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-15B□-4			96.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-20B□-4			106.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC15-2B□-4	15	4	70.1	16	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC15-5B□-4			76.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC15-10B□-4			86.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC15-15B□-4			96.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC15-20B□-4			106.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	36

*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC20 to 50-□B□-4/6



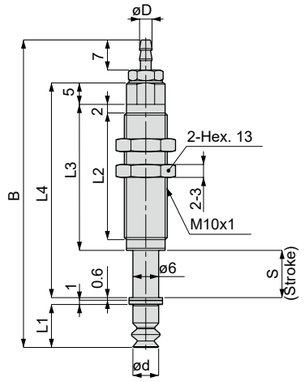
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5B□-4	20	4	84.1	19	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57
VSP-LFC20-5B□-6		6	85.4					11.9			58
VSP-LFC20-10B□-4		4	94.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59
VSP-LFC20-10B□-6		6	95.4					11.9			60
VSP-LFC20-15B□-4		4	104.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62
VSP-LFC20-15B□-6		6	105.4					11.9			63
VSP-LFC20-20B□-4		4	114.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65
VSP-LFC20-20B□-6		6	115.4					11.9			66
VSP-LFC25-5B□-4	25	4	84.1	19	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	58
VSP-LFC25-5B□-6		6	85.4					11.9			59
VSP-LFC25-10B□-4		4	94.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	60
VSP-LFC25-10B□-6		6	95.4					11.9			61
VSP-LFC25-15B□-4		4	104.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	63
VSP-LFC25-15B□-6		6	105.4					11.9			64
VSP-LFC25-20B□-4		4	114.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	66
VSP-LFC25-20B□-6		6	115.4					11.9			67
VSP-LFC30-5B□-4	30	4	88.1	23	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	59
VSP-LFC30-5S□-6		6	89.4					11.9			60
VSP-LFC30-10B□-4		4	98.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	61
VSP-LFC30-10S□-6		6	99.4					11.9			62
VSP-LFC30-15B□-4		4	108.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	64
VSP-LFC30-15S□-6		6	109.4					11.9			65
VSP-LFC30-20B□-4		4	118.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	67
VSP-LFC30-20S□-6		6	119.4					11.9			68
VSP-LFC40-5B□-4	40	4	95.1	30	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	70
VSP-LFC40-5S□-6		6	96.4					11.9			71
VSP-LFC40-10B□-4		4	105.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	72
VSP-LFC40-10S□-6		6	106.4					11.9			73
VSP-LFC40-15B□-4		4	115.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	75
VSP-LFC40-15S□-6		6	116.4					11.9			76
VSP-LFC40-20B□-4		4	125.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	78
VSP-LFC40-20S□-6		6	126.4					11.9			79
VSP-LFC50-5B□-4	50	4	97.1	32	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	76
VSP-LFC50-5S□-6		6	98.4					11.9			77
VSP-LFC50-10B□-4		4	107.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	78
VSP-LFC50-10S□-6		6	108.4					11.9			79
VSP-LFC50-15B□-4		4	117.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	81
VSP-LFC50-15S□-6		6	118.4					11.9			82
VSP-LFC50-20B□-4		4	127.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	84
VSP-LFC50-20S□-6		6	128.4					11.9			85

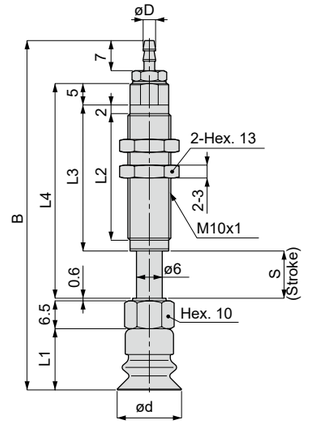
*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC6, 8-□B□-4T/6T



●VSP-LFC10, 15-□B□-4T/6T



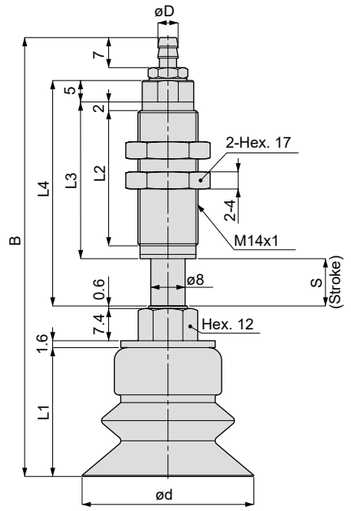
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2B□-4T	6	2.5	55.7	10	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC6-2B□-6T		4								
VSP-LFC6-5B□-4T		2.5	61.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC6-5B□-6T		4								
VSP-LFC6-10B□-4T		2.5	71.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC6-10B□-6T		4								
VSP-LFC6-15B□-4T		2.5	81.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC6-15B□-6T		4								
VSP-LFC6-20B□-4T		2.5	91.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	32
VSP-LFC6-20B□-6T		4								
VSP-LFC8-2B□-4T	8	2.5	55.7	10	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC8-2B□-6T		4								
VSP-LFC8-5B□-4T		2.5	61.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC8-5B□-6T		4								
VSP-LFC8-10B□-4T		2.5	71.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC8-10B□-6T		4								
VSP-LFC8-15B□-4T		2.5	81.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC8-15B□-6T		4								
VSP-LFC8-20B□-4T		2.5	91.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	32
VSP-LFC8-20B□-6T		4								
VSP-LFC10-2B□-4T	10	2.5	67.2	16	21.5	26	34	2	1.3 to 1.8	27
VSP-LFC10-2B□-6T		4								
VSP-LFC10-5B□-4T		2.5	73.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	29
VSP-LFC10-5B□-6T		4								
VSP-LFC10-10B□-4T		2.5	83.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	31
VSP-LFC10-10B□-6T		4								
VSP-LFC10-15B□-4T		2.5	93.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	33
VSP-LFC10-15B□-6T		4								
VSP-LFC10-20B□-4T		2.5	103.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	35
VSP-LFC10-20B□-6T		4								
VSP-LFC15-2B□-4T	15	2.5	67.2	16	21.5	26	34	2	1.3 to 1.8	27
VSP-LFC15-2B□-6T		4								
VSP-LFC15-5B□-4T		2.5	73.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	29
VSP-LFC15-5B□-6T		4								
VSP-LFC15-10B□-4T		2.5	83.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	31
VSP-LFC15-10B□-6T		4								
VSP-LFC15-15B□-4T		2.5	93.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	33
VSP-LFC15-15B□-6T		4								
VSP-LFC15-20B□-4T		2.5	103.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	35
VSP-LFC15-20B□-6T		4								

*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC20 to 50-□B□-4T/6T



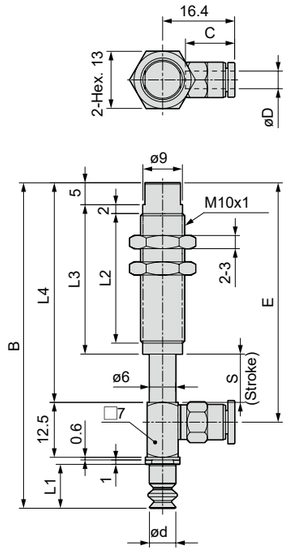
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5B□-4T	20	2.5	81.2	19	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC20-5B□-6T		4								
VSP-LFC20-10B□-4T		2.5	91.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC20-10B□-6T		4								
VSP-LFC20-15B□-4T		2.5	101.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC20-15B□-6T		4								
VSP-LFC20-20B□-4T		2.5	111.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC20-20B□-6T		4								
VSP-LFC25-5B□-4T	25	2.5	81.2	19	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC25-5B□-6T		4								
VSP-LFC25-10B□-4T		2.5	91.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC25-10B□-6T		4								
VSP-LFC25-15B□-4T		2.5	101.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC25-15B□-6T		4								
VSP-LFC25-20B□-4T		2.5	111.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC25-20B□-6T		4								
VSP-LFC30-5B□-4T	30	2.5	85.2	23	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	55
VSP-LFC30-5S□-6T		4								
VSP-LFC30-10B□-4T		2.5	95.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	57
VSP-LFC30-10S□-6T		4								
VSP-LFC30-15B□-4T		2.5	105.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	60
VSP-LFC30-15S□-6T		4								
VSP-LFC30-20B□-4T		2.5	115.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	63
VSP-LFC30-20B□-6T		4								
VSP-LFC40-5B□-4T	40	2.5	92.2	30	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	66
VSP-LFC40-5B□-6T		4								
VSP-LFC40-10B□-4T		2.5	102.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	68
VSP-LFC40-10B□-6T		4								
VSP-LFC40-15B□-4T		2.5	112.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	71
VSP-LFC40-15B□-6T		4								
VSP-LFC40-20B□-4T		2.5	122.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	74
VSP-LFC40-20B□-6T		4								
VSP-LFC50-5B□-4T	50	2.5	94.2	32	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	72
VSP-LFC50-5B□-6T		4								
VSP-LFC50-10B□-4T		2.5	104.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	74
VSP-LFC50-10B□-6T		4								
VSP-LFC50-15B□-4T		2.5	114.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	77
VSP-LFC50-15B□-6T		4								
VSP-LFC50-20B□-4T		2.5	124.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	80
VSP-LFC50-20B□-6T		4								

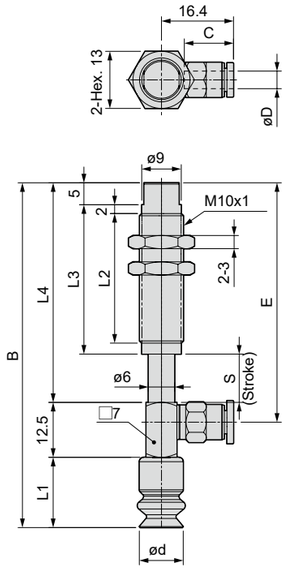
*Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD6, 8-□B□-4



●VSP-LFD10, 15-□B□-4

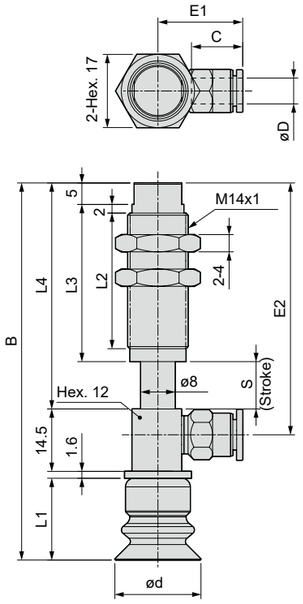


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5B□-4	6	4	64.1	10	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD6-10B□-4			74.1		29.5	34	50		54.5	10	1.3 to 3.3	34
VSP-LFD6-15B□-4			84.1		34.5	39	60		64.5	15	1.3 to 4.2	36
VSP-LFD6-20B□-4			94.1		39.5	44	70		74.5	20	1.3 to 5.1	38
VSP-LFD8-5B□-4	8	4	64.1	10	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD8-10B□-4			74.1		29.5	34	50		54.5	10	1.3 to 3.3	34
VSP-LFD8-15B□-4			84.1		34.5	39	60		64.5	15	1.3 to 4.2	36
VSP-LFD8-20B□-4			94.1		39.5	44	70		74.5	20	1.3 to 5.1	38
VSP-LFD10-5B□-4	10	4	68.5	16	24.5	29	40	11.2	44.5	5	1.3 to 2.4	26
VSP-LFD10-10B□-4			78.5		29.5	34	50		54.5	10	1.3 to 3.3	28
VSP-LFD10-15B□-4			88.5		34.5	39	60		64.5	15	1.3 to 4.2	30
VSP-LFD10-20B□-4			98.5		39.5	44	70		74.5	20	1.3 to 5.1	32
VSP-LFD15-5B□-4	15	4	68.5	16	24.5	29	40	11.2	44.5	5	1.3 to 2.4	26
VSP-LFD15-10B□-4			78.5		29.5	34	50		54.5	10	1.3 to 3.3	28
VSP-LFD15-15B□-4			88.5		34.5	39	60		64.5	15	1.3 to 4.2	30
VSP-LFD15-20B□-4			98.5		39.5	44	70		74.5	20	1.3 to 5.1	32

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD20 to 50-□B□-4/6



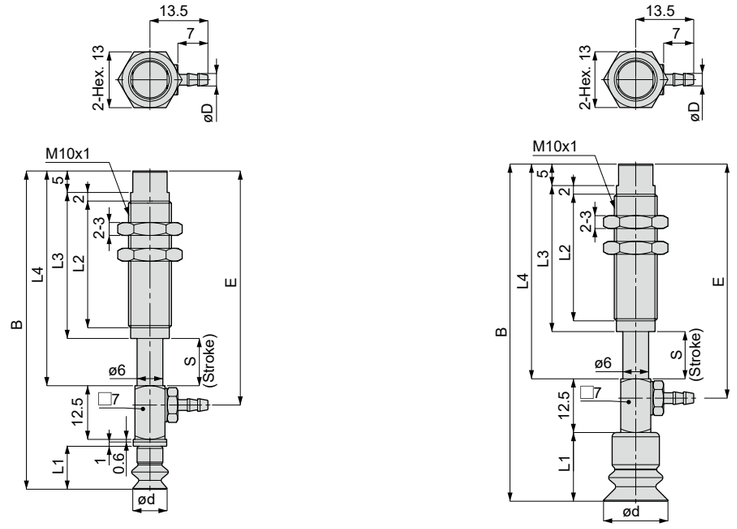
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5B□-4	20	4	77.5	19	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58
VSP-LFD20-5B□-6		6						11.9	19.7				59
VSP-LFD20-10B□-4		4	87.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62
VSP-LFD20-10B□-6		6						11.9	19.7				63
VSP-LFD20-15B□-4		4	97.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66
VSP-LFD20-15B□-6		6						11.9	19.7				67
VSP-LFD20-20B□-4		4	107.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70
VSP-LFD20-20B□-6		6						11.9	19.7				71
VSP-LFD25-5B□-4	25	4	77.5	19	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	59
VSP-LFD25-5B□-6		6						11.9	19.7				60
VSP-LFD25-10B□-4		4	87.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	63
VSP-LFD25-10B□-6		6						11.9	19.7				64
VSP-LFD25-15B□-4		4	97.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	67
VSP-LFD25-15B□-6		6						11.9	19.7				68
VSP-LFD25-20B□-4		4	107.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	71
VSP-LFD25-20B□-6		6						11.9	19.7				72
VSP-LFD30-5B□-4	30	4	81.5	23	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	60
VSP-LFD30-5B□-6		6						11.9	19.7				61
VSP-LFD30-10B□-4		4	91.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	64
VSP-LFD30-10B□-6		6						11.9	19.7				65
VSP-LFD30-15B□-4		4	101.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	68
VSP-LFD30-15B□-6		6						11.9	19.7				69
VSP-LFD30-20B□-4		4	111.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	72
VSP-LFD30-20B□-6		6						11.9	19.7				73
VSP-LFD40-5B□-4	40	4	88.5	30	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	71
VSP-LFD40-5B□-6		6						11.9	19.7				72
VSP-LFD40-10B□-4		4	98.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	75
VSP-LFD40-10B□-6		6						11.9	19.7				76
VSP-LFD40-15B□-4		4	108.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	79
VSP-LFD40-15B□-6		6						11.9	19.7				80
VSP-LFD40-20B□-4		4	118.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	84
VSP-LFD40-20B□-6		6						11.9	19.7				85
VSP-LFD50-5B□-4	50	4	90.5	32	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	77
VSP-LFD50-5B□-6		6						11.9	19.7				78
VSP-LFD50-10B□-4		4	100.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	81
VSP-LFD50-10B□-6		6						11.9	19.7				82
VSP-LFD50-15B□-4		4	118.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	85
VSP-LFD50-15B□-6		6						11.9	19.7				86
VSP-LFD50-20B□-4		4	128.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	90
VSP-LFD50-20B□-6		6						11.9	19.7				91

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD6, 8-□B□-4T/6T

●VSP-LFD10 to 15-□B□-4T/6T

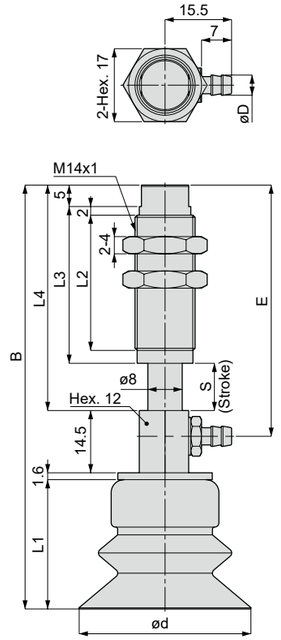


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5B□-4T	6	2.5	64.1	10	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD6-5B□-6T		4									
VSP-LFD6-10B□-4T		2.5	74.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD6-10B□-6T		4									
VSP-LFD6-15B□-4T		2.5	84.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD6-15B□-6T		4									
VSP-LFD6-20B□-4T		2.5	94.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD6-20B□-6T		4									
VSP-LFD8-5B□-4T	8	2.5	64.1	10	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD8-5B□-6T		4									
VSP-LFD8-10B□-4T		2.5	74.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD8-10B□-6T		4									
VSP-LFD8-15B□-4T		2.5	84.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD8-15B□-6T		4									
VSP-LFD8-20B□-4T		2.5	94.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD8-20B□-6T		4									
VSP-LFD10-5B□-4T	10	2.5	68.5	16	24.5	29	40	44.5	5	1.3 to 2.4	26
VSP-LFD10-5B□-6T		4									
VSP-LFD10-10B□-4T		2.5	78.5		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD10-10B□-6T		4									
VSP-LFD10-15B□-4T		2.5	88.5		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD10-15B□-6T		4									
VSP-LFD10-20B□-4T		2.5	98.5		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD10-20B□-6T		4									
VSP-LFD15-5B□-4T	15	2.5	68.5	16	24.5	29	40	44.5	5	1.3 to 2.4	26
VSP-LFD15-5B□-6T		4									
VSP-LFD15-10B□-4T		2.5	78.5		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD15-10B□-6T		4									
VSP-LFD15-15B□-4T		2.5	88.5		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD15-15B□-6T		4									
VSP-LFD15-20B□-4T		2.5	98.5		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD15-20B□-6T		4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD20 to 50-□B□-4T/6T



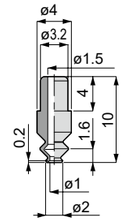
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5B□-4T	20	2.5	77.5	19	26.5	31.5	42.5	48.5	5	4.5 to 6.5	54
VSP-LFD20-5B□-6T		4									
VSP-LFD20-10B□-4T		2.5	87.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57
VSP-LFD20-10B□-6T		4									
VSP-LFD20-15B□-4T		2.5	97.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61
VSP-LFD20-15B□-6T		4									
VSP-LFD20-20B□-4T		2.5	107.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65
VSP-LFD20-20B□-6T		4									
VSP-LFD25-5B□-4T	25	2.5	77.5	19	26.5	31.5	42.5	48.5	5	4.5 to 6.5	55
VSP-LFD25-5B□-6T		4									
VSP-LFD25-10B□-4T		2.5	87.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	58
VSP-LFD25-10B□-6T		4									
VSP-LFD25-15B□-4T		2.5	97.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	62
VSP-LFD25-15B□-6T		4									
VSP-LFD25-20B□-4T		2.5	107.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	66
VSP-LFD25-20B□-6T		4									
VSP-LFD30-5B□-4T	30	2.5	81.5	23	26.5	31.5	42.5	48.5	5	4.5 to 6.5	56
VSP-LFD30-5B□-6T		4									
VSP-LFD30-10B□-4T		2.5	91.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	59
VSP-LFD30-10B□-6T		4									
VSP-LFD30-15B□-4T		2.5	101.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	63
VSP-LFD30-15B□-6T		4									
VSP-LFD30-20B□-4T		2.5	111.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	67
VSP-LFD30-20B□-6T		4									
VSP-LFD40-5B□-4T	40	2.5	88.5	30	26.5	31.5	42.5	48.5	5	4.5 to 6.5	67
VSP-LFD40-5B□-6T		4									
VSP-LFD40-10B□-4T		2.5	98.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	70
VSP-LFD40-10B□-6T		4									
VSP-LFD40-15B□-4T		2.5	108.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	74
VSP-LFD40-15B□-6T		4									
VSP-LFD40-20B□-4T		2.5	118.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	78
VSP-LFD40-20B□-6T		4									
VSP-LFD50-5B□-4T	50	2.5	90.5	32	26.5	31.5	42.5	48.5	5	4.5 to 6.5	73
VSP-LFD50-5B□-6T		4									
VSP-LFD50-10B□-4T		2.5	100.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	76
VSP-LFD50-10B□-6T		4									
VSP-LFD50-15B□-4T		2.5	118.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	80
VSP-LFD50-15B□-6T		4									
VSP-LFD50-20B□-4T		2.5	128.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	84
VSP-LFD50-20B□-6T		4									

External Dimension Drawings

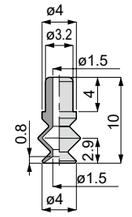
Pad Rubber Only External Dimension Diagram

●VSPG-2B□



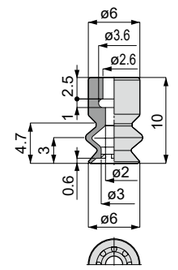
Weight: 0.2 g [0.3 g]

●VSPG-4B□



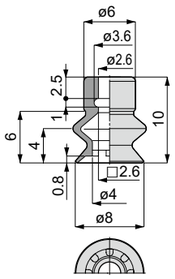
Weight: 0.2 g [0.3 g]

●VSPG-6B□



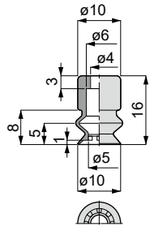
Weight: 0.3 g [0.4 g]

●VSPG-8B□



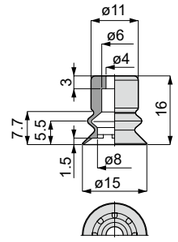
Weight: 0.3 g [0.4 g]

●VSPG-10B□



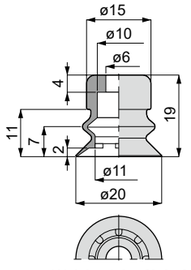
Weight: 0.8 g [1.2 g]

●VSPG-15B□



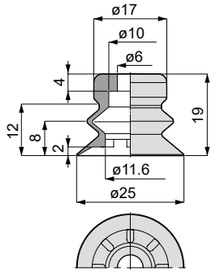
Weight: 1.1 g [1.7 g]

●VSPG-20B□



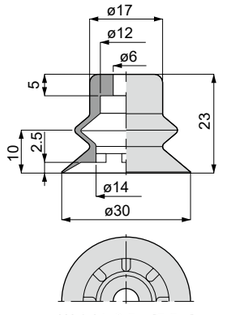
Weight: 1.9 g [3.0 g]

●VSPG-25B□



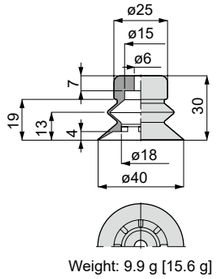
Weight: 2.7 g [4.2 g]

●VSPG-30B□



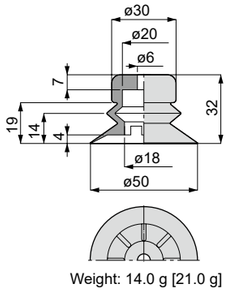
Weight: 3.5 g [5.5 g]

●VSPG-40B□



Weight: 9.9 g [15.6 g]

●VSPG-50B□



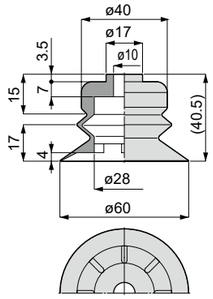
Weight: 14.0 g [21.0 g]

Weight: Values in [ ] are for fluororubber only.

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

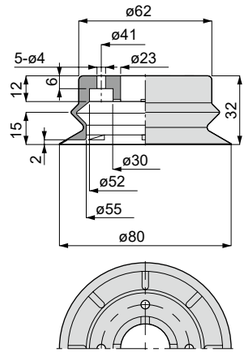
Pad Rubber Only External Dimension Diagram

●VSPG-60B□



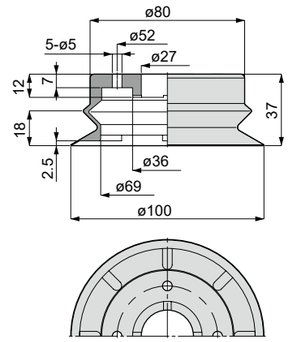
Weight: 25 g [39 g]

●VSPG-80B□



Weight: 39 g [61 g]

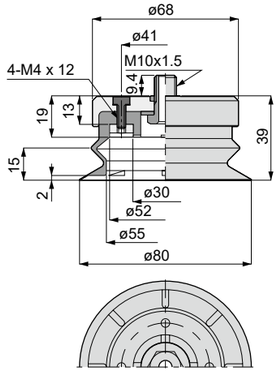
●VSPG-100B□



Weight: 70 g [110 g]

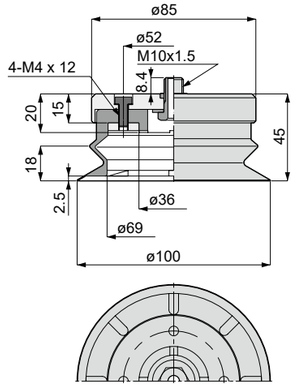
Pad Rubber + Set with Fixing Screw External Dimension Diagram

●VSPG-80B□A



Weight: 131 g [155 g]

●VSPG-100B□A

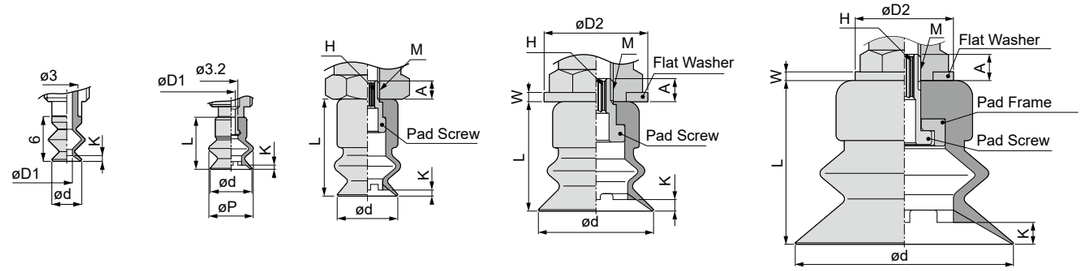


Weight: 238 g [278 g]

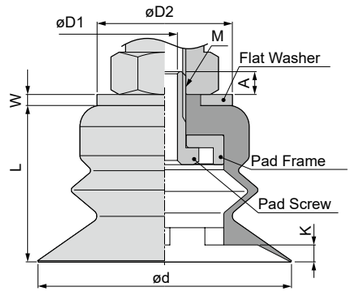
Weight: Values in [ ] are for fluororubber only.

Detailed Diagram of Pad and Holder Connection Part

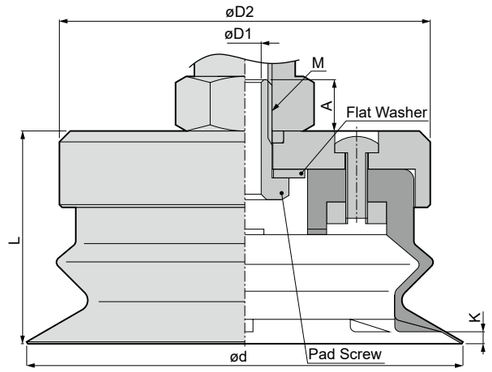
●VSPG-2, 4B□ ●VSPG-6, 8B□ ●VSPG-10, 15B□A ●VSPG-20, 25, 30B□A ●VSPG-40, 50B□A



●VSPG-60BøA



●VSPG-80, 100BøA

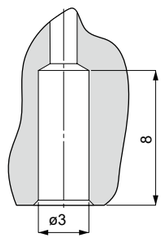


Unit: mm

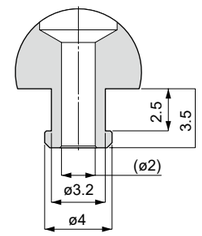
Model No.	Pad Diameter ød	L	Lip Internal Height K	Fixing Screw M	A	Width Across Flats H	øD1	øD2	øP	W
VSPG-2B□	2	6	0.2	–	–	–	1	–	–	–
VSPG-4B□	4	6	0.8	–	–	–	1.5	–	–	–
VSPG-6B□	6	10	0.6	–	–	–	2	–	6.7	–
VSPG-8B□	8	10	0.8	–	–	–	2	–	8.6	–
VSPG-10B□A	10	16	1	M4x0.7	3	2	–	–	–	–
VSPG-15B□A	15	16	1.5	M4x0.7	3	2	–	–	–	–
VSPG-20B□A	20	19	2	M6x1	4	3	–	15.5	–	1.6
VSPG-25B□A	25	19	2	M6x1	4	3	–	15.5	–	1.6
VSPG-30B□A	30	23	2.5	M6x1	5	3	–	15.5	–	1.6
VSPG-40B□A	40	30	4	M6x1	5	3	–	22	–	1.6
VSPG-50B□A	50	32	4	M6x1	5	3	–	22	–	1.6
VSPG-60B□A	60	40.5	4	M10x1.5	5.4	14	6	32	–	2.6
VSPG-80B□A	80	39	2	M10x1.5	9.4	14	6	68	–	–
VSPG-100B□A	100	45	2.5	M10x1.5	8.4	14	6	85	–	–

Pad Rubber Fitting Part Dimension

●VSPG-2, 4B□

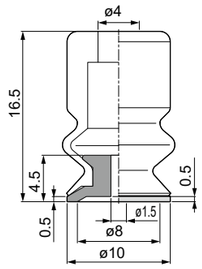


●VSPG-6, 8B□



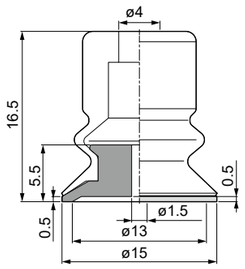
External Dimension Diagram (Detailed Diagram When Resin Attachment is Mounted)

●VSPG-10BQ□



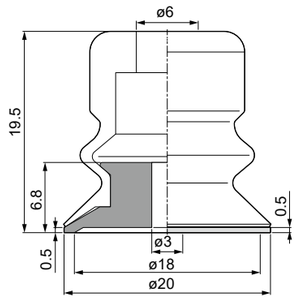
Weight: 0.3 g

●VSPG-15BQ□



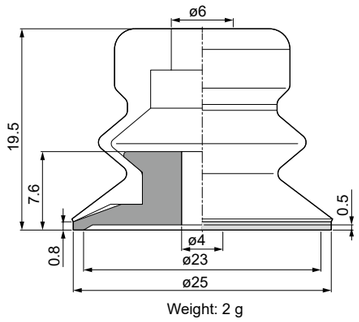
Weight: 0.6 g

●VSPG-20BQ□



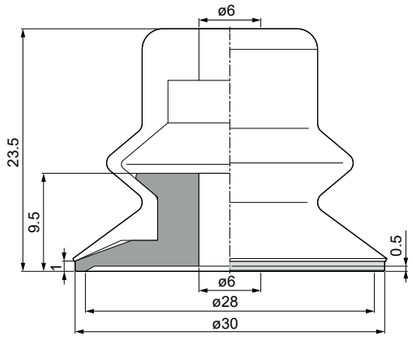
Weight: 1.3 g

●VSPG-25BQ□



Weight: 2 g

●VSPG-30BQ□



Weight: 3.4 g

Weight: Values are for the resin attachment only.

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Bellows Type VSP-øB□Series

Design / Selection

Warning

■ Use CKD's "Suction Pads bellows type" for the pad rubber for mounting the suction mark prevention resin attachment. If the shape of the suction mark prevention resin attachment and the pad rubber is not appropriate, the resin attachment may come off or excessive leakage may occur.

■ Status Because of the characteristics of the bellows pad material, the pads may stick to each other, so please check with the actual device.
Also, tackiness may increase depending on the operating environment or pad wear. Review the pad shape, material, quantity, etc., as necessary.

■ Use the bellows so that it does not overcrush. Excessive crushing may accelerate wear of the bellows part, cause cracks in the lip part, or lead to deformation due to strain, potentially causing suction failure.

Caution

■ Compared to conventional rubber Suction Pads, the suction mark prevention resin attachment reduces suction marks by using resin for the lip portion; however, confirm with an actual device that the effects of suction marks on the workpieces are acceptable.

■ The suction mark prevention resin attachment has a greater impact on leakage from the suction surface than conventional rubber Suction Pads. Please note that it cannot be used for vacuum holding. Also, secure the vacuum flow rate as large as possible to minimize pressure drop due to leakage.

■ Clean the suction surface of the Suction Pads before use. Adhered substances may remain as suction marks. Furthermore, when cleaning, be careful not to scratch the suction surface, and do not use organic solvents.

■ Select a material that suits the working conditions for the pad rubber for mounting the suction mark prevention resin attachment.

■ Pad Rubber Material: Do not use the suction mark prevention resin attachment with suction pads made of ultra soft silicone or those with selected surface treatment options.

■ Pad O.D.: Pad frames of ø80 mm or greater have no conductivity. When using vacuum pads made of conductive material, take measures to dissipate electricity directly from the pad rubber.

■ When replacing the pad rubber with bellows pad diameter: ø80mm, be sure to check the configuration diagram in the catalog, use appropriate tools according to the recommended tightening torque below and tighten without looseness using the hexagonal part of the holder outer diameter.

●Recommended Tightening Torque

Screw Size (mm)	Tightening Torque
M4x0.7	0.5 to 0.7 N·m
M5x0.8	

MEMO

Suction Pad Multi-stage Bellows Type

VSP-□W□ Series

Suction pad with multi-stage bellows structure that softly conforms to the workpiece

RoHS

The 4-stage bellows (bellows) part follows curved workpieces and ensures reliable suction through bellows expansion/contraction, making it ideal for transporting bags containing retort pouches, food, etc.

Abundant holder variations

Shape 18 types

- Standard6 types
- CompactClass 5
- Low dust generation .....2 types
- Lightweight3 types
- Low back2 types

Piping Connection 6 types

- Push-in fitting (ø1.8 to ø6)3 types
- Barbed fitting (ø4, ø6) .....2 types
- Screw-in (M5).....1 type

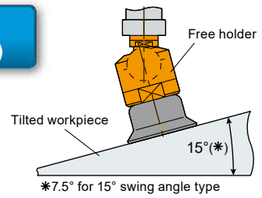
Stroke 12 types

2 mm to 50 mm
(Depends on pad diameter, holder type)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

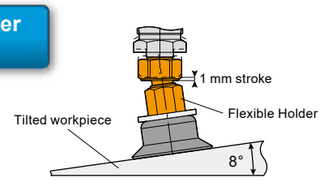
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

Free holder (F1:30°, F2:15°)



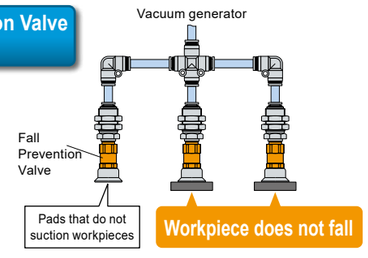
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

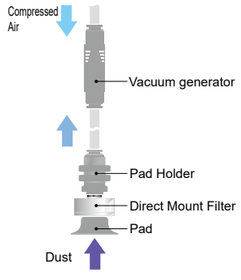
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



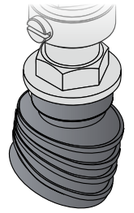
Pad surface treatment (option) with special processing to reduce adsorption marks is available

	-DL	-ER	-FG
Surface Treatment	Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
Compatible Material	Silicone Fluorine Conductive Silicone	Nitrile Conductive NBR (Low Resistance-type)	Silicone Conductive Silicone Ultra Soft Silicone
Features	Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

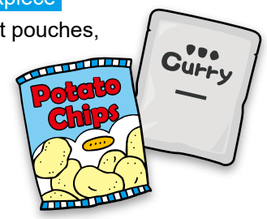
4-Stage Bellows

Can significantly follow changes in the height of the contacting workpiece and surface inclination.



Recommended Workpiece

Bags containing retort pouches, food items, etc.



Pad Diameter

7 types 6 | 8 | 10 | 20 | 30 | 40 | 50

Pad Material

10 types

Nitrile | Silicone | Urethane | Fluorine | Conductive NBR (Low Resistance-type) | Food Sanitation Act Compliant NBR | HNBR | EPDM | Ultra Soft Silicone Hardness 20° | Ultra Soft Silicone Hardness 40°

Hardness 20° Type

Hardness 40° Type

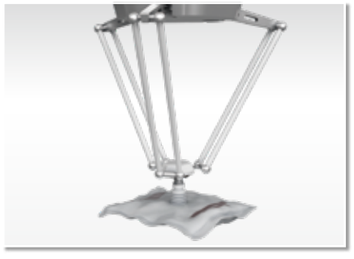
Ultra Soft Silicone

*Ultra soft silicone (YS2, YS4) conforms to the Food Sanitation Act, FDA compliant. Food Sanitation Act compliant NBR (G), Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Workpieces with uneven suction surfaces

Flexibly follows and adsorbs workpieces with irregularities such as retort pouches or those with changing suction surface heights.



Workpieces with curved suction surfaces

Bellows can follow the inclination of the workpiece surface for suction.

Workpieces with irregular suction surfaces

Demonstrates high conformability to workpieces with irregular surface shapes, like packaged candies.

Model No. Notation

●Multi-stage Bellows Type

Suction Pad

VSP - C - 30 - -20 - W - N - -ER - 6 - [ ] - F1 - V - T1

Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Size/Shape	❽ Buffer Load	❾ Pad Swinging	❿ Drop Prevention Valve	⓫ Direct Mount Filter

Pad Rubber Only

VSPG - 30 - W - N - -ER

Model No.	❷	❹	❺	❻

Pad Rubber + Set with Fixing Screw

VSPG - 30 - W - N - -ER A

Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment

*1: For ❷ Pad Diameter 10 to 50, the "Pad Rubber + Set Screw Set" can be selected.

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
	Standard	Direct Mount Type	E	
	Compact		ME	

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
			HD	
	Lightweight	Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Pad Diameter	Pad Material N	S	YS2	YS4	U	F	NE	G	HN	EP	Code
ø6	●	●				●	●	●	●	●	6
ø8	●	●				●	●	●	●	●	8
ø10	●	●	*1	*1	●	●	●	●	●	●	10
ø20	●	●	●	●	●	●	●	●	●	●	20
ø30	●	●	●	●	●	●	●	●	●	●	30
ø40	●	●	●	●	●	●	●	●	●	●	40
ø50	●	●	●	●	●	●	●	●	●	●	50

*1: For ❷ 10, ❺ Pad Material YS2 and YS4 can only be selected when ❻ Surface Treatment is -FG.

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●				Blank	*1, *2
Stroke 2 mm				●		–2	*3
Stroke 5 mm				●	●	–5	
Stroke 10 mm	●	●	●	●	●	–10	
Stroke 15 mm	●	●	●	●	●	–15	
Stroke 20 mm	●	●	●	●	●	–20	
Stroke 25 mm			●			–25	
Stroke 30 mm	●	●	●			–30	
Stroke 40 mm	●	●	●			–40	
Stroke 50 mm	●	●	●			–50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 6 to 10, -2 can be selected for ❸.

❹ Pad Shape

Code	Content	
W	Multi-stage Bellows Type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
YS2	Ultra Soft Silicone Rubber (Hardness 20°)
YS4	Ultra Soft Silicone Rubber (Hardness 40°)
U	Urethane rubber
F	Fluororubber
NE	Conductive NBR (Low Resistance-type)
G	Food Sanitation Act Compliant NBR
HN	HNBR
EP	EPDM

❻ Surface Treatment

Content	Compatible Pad Material N	S	YS2	YS4	F	NE	Compatible Pad Diameter Multi-stage Bellows (W)	Code
No surface treatment	All pad materials, all pad diameters							Blank
Anti-Adhesion Special Coating		●			●		*10, *20	–DL
Suction Mark Reduction Surface Modification	●					●	*6 to ø50	–ER
Fluorine Coating		●	●	●			*6 to ø50	–FG

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP - ..... - P4*

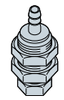
*Please inquire for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP - ..... - FP*

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	ME	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: For E and F)																	Blank	
ø1.8, Push-in fitting		●	●	●	●	●	●	●				●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●		●	●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●													4C	
ø6, Push-in fitting, without spring cover			●	●													6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●													4TC	
ø6, Barb fitting, without spring cover			●	●													6TC	
M5×0.8									●								M5	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❼. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1, *2

*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

⓫ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	
T2	With direct-mount filter (filtration area 7 cm²)	

*1
*2

*1: ⓫ T1 can be selected when ❷ Pad Diameter is 10 to 50.
*2: ⓫ T2 can be selected when ❷ Pad Diameter is 20 to 50.
*3: For dimensions with the direct mount filter, please refer to P. 1064.

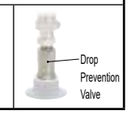
❾ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	
F2	With Free Holder (Angle 15°)	
CF	With flexible holder (Angle 8°)	

*1
*1
*2

*1: ❾ F1 and F2 can be selected when ❷ Pad Diameter is 10 to 50.
*2 ❾ CF can be selected for ❶ Holder Shape E and ME, and when ❷ Pad Diameter is 10 to 50.
*3: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❿ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	

*1

*1: ❿ V can be selected for ❶ Holder Shape E and ME, and when ❷ Pad Diameter is 10 to 50.
*2: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

Holder Shape	Pad Diameter	Push-in fitting ø1.8	ø4		ø6		Barb fitting ø4		ø6	
		2	4	4C	6	6C	4T	4TC	6T	6TC
A	ø6 to ø8		●		●		●		●	
	ø10				●				●	
	ø20 to ø50		●		●		●		●	
B	ø6 to ø8	●	●		●		●		●	
	ø10 to ø50		●		●		●		●	
C	ø6 to ø8	●	●	●	●	●	●	●	●	●
	ø10 to ø50		●	●	●	●	●	●	●	●
D	ø6 to ø8	●	●	●	●	●	●	●	●	●
	ø10 to ø50		●	●	●	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M5
		Blank
E	ø6 to ø8	●

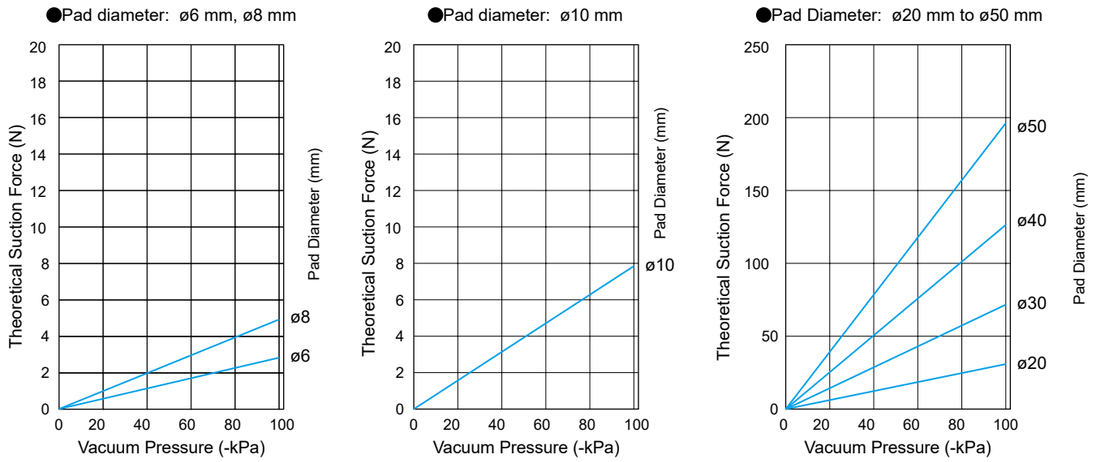
Holder Shape	Pad Diameter	Thread M10	M14
		Blank	
F	ø6 to ø8	●	
	ø10 to ø50		●

Holder Shape	Pad Diameter	Thread M5
		M5
ME	ø6 to ø8	●

Holder Shape	Pad Diameter	Push-in fitting ø1.8	ø4	ø6	Barb fitting ø4	ø6
		2	4	6	4T	6T
MA	ø6 to ø8	●			●	
	ø10		●		●	
	ø20 to ø50		●		●	●
MB	ø6 to ø8	●	●		●	●
	ø10 to ø50	●	●	●	●	●
MC	ø6 to ø8	●			●	●
	ø10 to ø50	●	●		●	●
MD	ø6 to ø8	●	●		●	●
	ø10 to ø50	●	●	●	●	●

Holder Shape	Pad Diameter	Push-in fitting ø1.8	ø4	ø6	Barb fitting ø4	ø6
		2	4	6	4T	6T
LFC	ø6 to ø10		●		●	●
	ø20 to ø50		●	●	●	●
LFD	ø6 to ø10		●		●	●
	ø20 to ø50		●	●	●	●
HC	ø10 to ø50	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

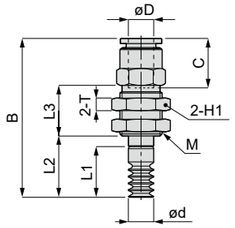
Theoretical Suction Force



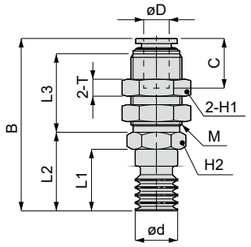
Regarding the suction force of the multi-stage bellows type, due to pad characteristics, it may not be possible to secure the calculated suction force (theoretical suction force x safety factor) due to factors such as vacuum level, pad material, and adsorbed object. For selection, read the precautions in "How to select a Suction Pads" P. 412 Use the suction force obtained by as a guide, and confirm that there is no problem with the suction capacity on the actual machine. Also, the multi-stage bellows type is not suitable for vertical lifting. When using, please sufficiently check with the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

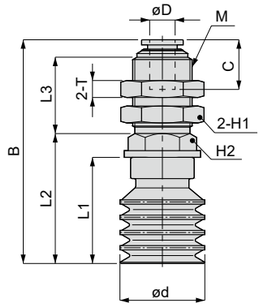
●VSP-A6, 8W□-4/6



●VSP-A10W□-6



●VSP-A20 to 50W□-4/6

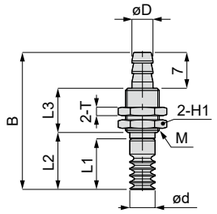


Unit: mm

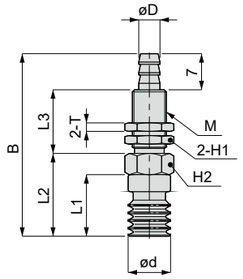
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	Tube End C	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A6W□-4	6	4	M8x0.75	37.1	12	14.5	12	11.2	10	-	2	8.5
VSP-A6W□-6		6	M10x1	37.8				11.9	12		3	13
VSP-A8W□-4	8	4	M8x0.75	37.6	12.5	15	12	11.2	10	-	2	8.5
VSP-A8W□-6		6	M10x1	38.3				11.9	12		3	13
VSP-A10W□-6	10	6	M12x1	40.8	14.5	18.5	18.5	11.9	14	12	4	22
VSP-A20W□-4	20	4	M12x1	61.9	25	31	18	11.2	14	12	4	31
VSP-A20W□-6		6	M14x1	52.9		30.6		11.9	17	14		37
VSP-A30W□-4	30	4	M12x1	75.4	38.5	44.5	18	11.2	14	12	4	37
VSP-A30W□-6		6	M14x1	66.4		44.1		11.9	17	14		43
VSP-A40W□-4	40	4	M12x1	81.9	45	51	18	11.2	14	12	4	47
VSP-A40W□-6		6	M14x1	72.9		50.6		11.9	17	14		53
VSP-A50W□-4	50	4	M12x1	92.9	56	62	18	11.2	14	12	4	58
VSP-A50W□-6		6	M14x1	83.9		61.6		11.9	17	14		64

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

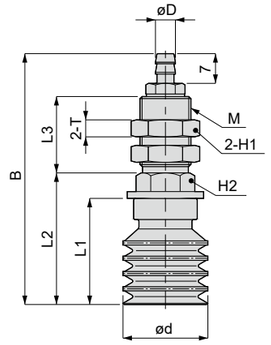
●VSP-A6, 8W□-4T/6T



●VSP-A10W□-6T



●VSP-A20 to 50W□-4T/6T

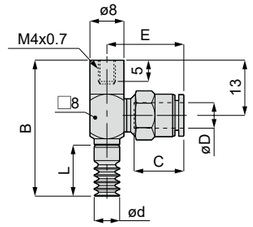


Unit: mm

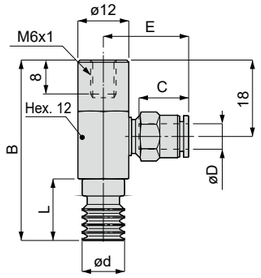
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A6W□-4T	6	2.5	M5x0.5	29.5	12	14.5	8	8	-	2	6
VSP-A6W□-6T		4	M8x0.75	31		13.5	10.5	10			8
VSP-A8W□-4T	8	2.5	M5x0.5	30	12.5	15	8	8	-	2	6
VSP-A8W□-6T		4	M8x0.75	31.5		14	10.5	10			8
VSP-A10W□-6T	10	4	M8x0.75	41.5	14.5	19.5	15	10	10	2	12
VSP-A20W□-4T	20	2.5	M12x1	59	25	31	18	14	12	4	31
VSP-A20W□-6T		4									
VSP-A30W□-4T	30	2.5	M12x1	72.5	38.5	44.5	18	14	12	4	37
VSP-A30W□-6T		4									
VSP-A40W□-4T	40	2.5	M12x1	79	45	51	18	14	12	4	46
VSP-A40W□-6T		4									
VSP-A50W□-4T	50	2.5	M12x1	90	56	62	18	14	12	4	58
VSP-A50W□-6T		4									

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

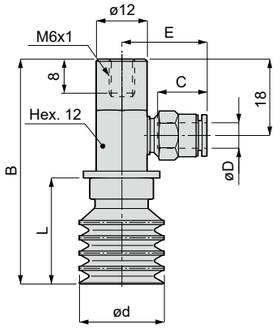
●VSP-B6, 8W□-2/4/6



●VSP-B10W□-4/6



●VSP-B20 to 50W□-4/6

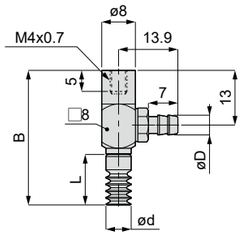


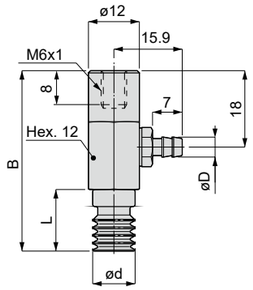
Unit: mm

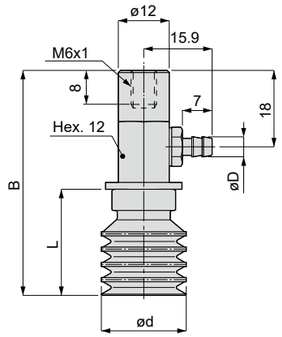
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B6W□-2	6	1.8	32	12	8.4	12.7	12
VSP-B6W□-4		4			11.2	16.8	13
VSP-B6W□-6		6			11.9	18.6	14
VSP-B8W□-2	8	1.8	32.5	12.5	8.4	12.7	12
VSP-B8W□-4		4			11.2	16.8	13
VSP-B8W□-6		6			11.9	18.6	14
VSP-B10W□-4	10	4	42.5	14.5	11.2	18.8	30
VSP-B10W□-6		6			11.9	20.1	31
VSP-B20W□-4	20	4	53	25	11.2	18.8	34
VSP-B20W□-6		6			11.9	20.1	35
VSP-B30W□-4	30	4	66.5	38.5	11.2	18.8	40
VSP-B30W□-6		6			11.9	20.1	41
VSP-B40W□-4	40	4	73	45	11.2	18.8	49
VSP-B40W□-6		6			11.9	20.1	50
VSP-B50W□-4	50	4	84	56	11.2	18.8	61
VSP-B50W□-6		6			11.9	20.1	62

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B6, 8W□-4T/6T ●VSP-B10W□-4T/6T ●VSP-B20 to 50W□-4T/6T





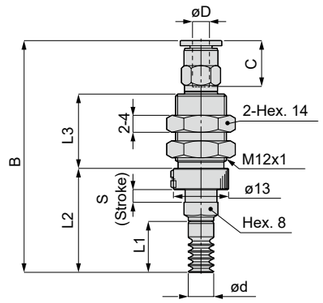


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B6W□-4T	6	2.5	32	12	13
VSP-B6W□-6T		4			
VSP-B8W□-4T	8	2.5	32.5	12.5	13
VSP-B8W□-6T		4			
VSP-B10W□-4T	10	2.5	42.5	14.5	29
VSP-B10W□-6T		4			
VSP-B20W□-4T	20	2.5	53	25	33
VSP-B20W□-6T		4			
VSP-B30W□-4T	30	2.5	66.5	38.5	39
VSP-B30W□-6T		4			
VSP-B40W□-4T	40	2.5	73	45	48
VSP-B40W□-6T		4			
VSP-B50W□-4T	50	2.5	84	56	60
VSP-B50W□-6T		4			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C6, 8W□-2/4/6
●VSP-C6, 8-□W□-2/4/6

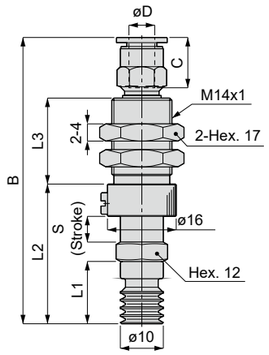


Unit: mm

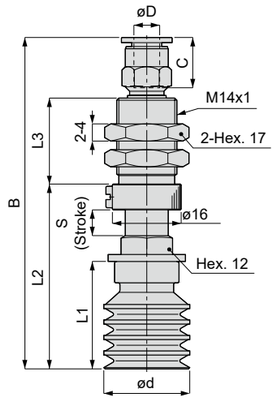
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6W□-2	6	1.8	46.4	12	24.5	13	8.4	3	0.9 to 1.9	18
VSP-C6W□-4		4	50.5				11.2			19
VSP-C6W□-6		6	52.3				11.9			20
VSP-C6-10W□-2		1.8	57.9		31.5	17.5	8.4	10	0.8 to 2.7	19
VSP-C6-10W□-4		4	62				11.2			20
VSP-C6-10W□-6		6	63.8				11.9			21
VSP-C6-15W□-2		1.8	68.9		36.5	23.5	8.4	15	0.7 to 3.0	23
VSP-C6-15W□-4		4	73				11.2			24
VSP-C6-15W□-6		6	74.8				11.9			25
VSP-C6-20W□-2		1.8	78.9		41.5	28.5	8.4	20	0.9 to 3.4	24
VSP-C6-20W□-4		4	83				11.2			25
VSP-C6-20W□-6		6	84.8				11.9			26
VSP-C8W□-2	8	1.8	46.9	12.5	25	13	8.4	3	0.9 to 1.9	18
VSP-C8W□-4		4	51				11.2			19
VSP-C8W□-6		6	52.8				11.9			20
VSP-C8-10W□-2		1.8	58.4		32	17.5	8.4	10	0.8 to 2.7	19
VSP-C8-10W□-4		4	62.5				11.2			20
VSP-C8-10W□-6		6	64.3				11.9			21
VSP-C8-15W□-2		1.8	69.4		37	23.5	8.4	15	0.7 to 3.0	23
VSP-C8-15W□-4		4	73.5				11.2			24
VSP-C8-15W□-6		6	75.3				11.9			25
VSP-C8-20W□-2		1.8	79.4		42	28.5	8.4	20	0.9 to 3.4	25
VSP-C8-20W□-4		4	83.5				11.2			26
VSP-C8-20W□-6		6	85.3				11.9			27

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10W□-4/6
●VSP-C10-□W□-4/6



●VSP-C20 to 50W□-4/6
●VSP-C20 to 50-□W□-4/6

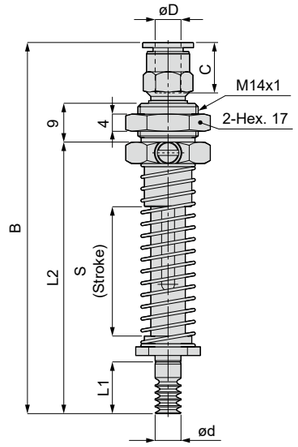


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10W□-4	10	4	65.5	14.5	32.5	20	11.2	6	4.0 to 7.1	35
VSP-C10W□-6		6	66.8				11.9			36
VSP-C10-10W□-4		4	70		37		11.2	10	2.0 to 5.2	36
VSP-C10-10W□-6		6	71.3				11.9			37
VSP-C10-15W□-4		4	80		42	25	11.2	15	2.0 to 5.9	41
VSP-C10-15W□6		6	81.3				11.9			42
VSP-C10-20W□-4		4	96		49	34	11.2	20	1.1 to 4.8	49
VSP-C10-20W□-6		6	97.3				11.9			50
VSP-C20W□-4	20	4	76	25	43	20	11.2	6	7.0 to 12.6	39
VSP-C20W□-6		6	77.3				11.9			40
VSP-C20-10W□-4		4	82		49		11.2	10	3.3 to 10.0	41
VSP-C20-10W□-6		6	83.3				11.9			42
VSP-C20-15W□-4		4	92		54	25	11.2	15	3.3 to 10.4	46
VSP-C20-15W□-6		6	93.3				11.9			47
VSP-C20-20W□-4		4	110		61	34	11.2	20	2.0 to 8.7	53
VSP-C20-20W□-6		6	109.3				11.9			54
VSP-C30W□-4	30	4	89.5	38.5	56.5	20	11.2	6	7.0 to 12.6	46
VSP-C30W□-6		6	90.8				11.9			47
VSP-C30-10W□-4		4	95.5		62.5		11.2	10	3.3 to 10.0	49
VSP-C30-10W□-6		6	96.8				11.9			50
VSP-C30-15W□-4		4	105.5		67.5	25	11.2	15	3.3 to 10.4	52
VSP-C30-15W□-6		6	106.8				11.9			53
VSP-C30-20W□-4		4	121.5		74.5	34	11.2	20	2.0 to 8.7	59
VSP-C30-20W□-6		6	122.8				11.9			60
VSP-C40W□-4	40	4	96	45	63	20	11.2	6	7.0 to 12.6	55
VSP-C40W□-6		6	97.3				11.9			56
VSP-C40-10W□-4		4	102		69		11.2	10	3.3 to 10.0	59
VSP-C40-10W□-6		6	103.3				11.9			60
VSP-C40-15W□-4		4	112		74	25	11.2	15	3.3 to 10.4	63
VSP-C40-15W□-6		6	113.3				11.9			64
VSP-C40-20W□-4		4	128		81	34	11.2	20	2.0 to 8.7	69
VSP-C40-20W□-6		6	129.3				11.9			70
VSP-C50W□-4	50	4	107	56	74	20	11.2	6	7.0 to 12.6	66
VSP-C50W□-6		6	108.3				11.9			67
VSP-C50-10W□-4		4	113		80		11.2	10	3.3 to 10.0	70
VSP-C50-10W□-6		6	114.3				11.9			71
VSP-C50-15W□-4		4	123		85	25	11.2	15	3.3 to 10.4	74
VSP-C50-15W□-6		6	124.3				11.9			75
VSP-C50-20W□-4		4	139		92	34	11.2	20	2.0 to 8.7	80
VSP-C50-20W□-6		6	140.3				11.9			81

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C6, 8-□W□-4C/6C

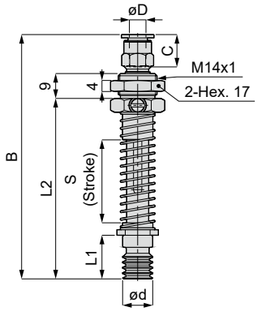


Unit: mm

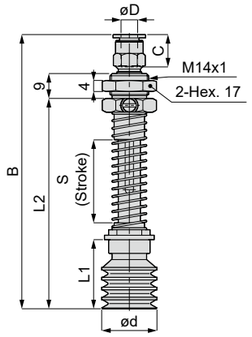
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20W□-4C	6	4	72	12	50	11.2	20	1.5 to 4.9	43
VSP-C6-20W□-6C		6	73.3			11.9			44
VSP-C6-30W□-4C		4	85		63	11.2	30	1.1 to 4.8	48
VSP-C6-30W□-6C		6	86.3			11.9			49
VSP-C6-40W□-4C		4	98		76	11.2	40	1.0 to 4.5	54
VSP-C6-40W□-6C		6	99.3			11.9			55
VSP-C6-50W□-4C		4	111		89	11.2	50	0.9 to 4.5	59
VSP-C6-50W□-6C		6	112.3			11.9			60
VSP-C8-20W□-4C	8	4	72.5	12.5	50.5	11.2	20	1.5 to 4.9	43
VSP-C8-20W□-6C		6	73.8			11.9			44
VSP-C8-30W□-4C		4	85.5		63.5	11.2	30	1.1 to 4.8	48
VSP-C8-30W□-6C		6	86.8			11.9			49
VSP-C8-40W□-4C		4	98.5		76.5	11.2	40	1.0 to 4.5	54
VSP-C8-40W□-6C		6	99.8			11.9			55
VSP-C8-50W□-4C		4	111.5		89.5	11.2	50	0.9 to 4.5	59
VSP-C8-50W□-6C		6	112.8			11.9			60

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C10-□W□-4C/6C



●VSP-C20 to 50-□W□-4C/6C

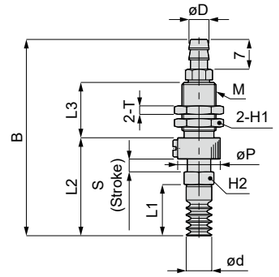


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20W□-4C	10	4	73	14.5	51	11.2	20	1.5 to 4.9	43
VSP-C10-20W□-6C		6	74.3			11.9			44
VSP-C10-30W□-4C		4	86		64	11.2	30	1.1 to 4.8	49
VSP-C10-30W□-6C		6	87.3			11.9			50
VSP-C10-40W□-4C		4	99		77	11.2	40	1.0 to 4.5	54
VSP-C10-40W□-6C		6	100.3			11.9			55
VSP-C10-50W□-4C		4	112		90	11.2	50	0.9 to 4.5	59
VSP-C10-50W□-6C		6	113.3			11.9			60
VSP-C20-20W□-4C	20	4	85	25	63	11.2	20	1.5 to 4.9	49
VSP-C20-20W□-6C		6	86.3			11.9			50
VSP-C20-30W□-4C		4	98		76	11.2	30	1.1 to 4.8	54
VSP-C20-30W□-6C		6	99.3			11.9			55
VSP-C20-40W□-4C		4	111		89	11.2	40	1.0 to 4.5	59
VSP-C20-40W□-6C		6	112.3			11.9			60
VSP-C20-50W□-4C		4	124		102	11.2	50	0.9 to 4.5	64
VSP-C20-50W□-6C		6	125.3			11.9			65
VSP-C30-20W□-4C	30	4	98.5	38.5	76.5	11.2	20	1.5 to 4.9	52
VSP-C30-20W□-6C		6	99.8			11.9			53
VSP-C30-30W□-4C		4	111.5		89.5	11.2	30	1.1 to 4.8	57
VSP-C30-30W□-6C		6	112.8			11.9			58
VSP-C30-40W□-4C		4	124.5		102.5	11.2	40	1.0 to 4.5	63
VSP-C30-40W□-6C		6	125.8			11.9			64
VSP-C30-50W□-4C		4	137.5		115.5	11.2	50	0.9 to 4.5	68
VSP-C30-50W□-6C		6	138.8			11.9			69
VSP-C40-20W□-4C	40	4	105	45	73	11.2	20	1.5 to 4.9	61
VSP-C40-20W□-6C		6	106.3			11.9			62
VSP-C40-30W□-4C		4	118		86	11.2	30	1.1 to 4.8	66
VSP-C40-30W□-6C		6	119.3			11.9			67
VSP-C40-40W□-4C		4	131		99	11.2	40	1.0 to 4.5	71
VSP-C40-40W□-6C		6	132.3			11.9			72
VSP-C40-50W□-4C		4	144		112	11.2	50	0.9 to 4.5	77
VSP-C40-50W□-6C		6	145.3			11.9			78
VSP-C50-20W□-4C	50	4	116	56	84	11.2	20	1.5 to 4.9	67
VSP-C50-20W□-6C		6	117.3			11.9			68
VSP-C50-30W□-4C		4	129		97	11.2	30	1.1 to 4.8	72
VSP-C50-30W□-6C		6	130.3			11.9			73
VSP-C50-40W□-4C		4	142		110	11.2	40	1.0 to 4.5	77
VSP-C50-40W□-6C		6	143.3			11.9			78
VSP-C50-50W□-4C		4	155		123	11.2	50	0.9 to 4.5	82
VSP-C50-50W□-6C		6	156.3			11.9			83

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C6, 8W□-4T/6T
●VSP-C6, 8-□W□-4T/6T

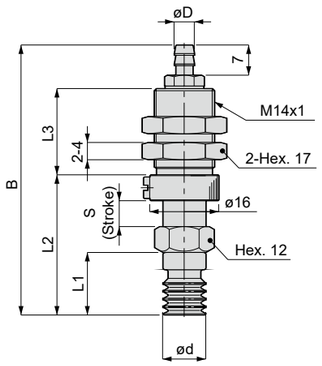


Unit: mm

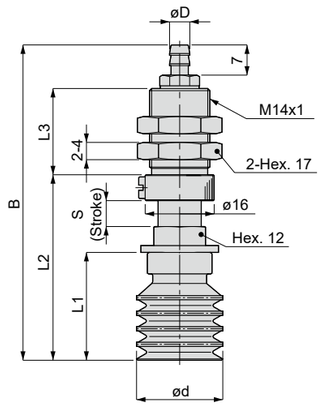
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	Width Across Flats H1	Width Across Flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C6W□-4T	6	2.5	M8x0.75	45.6	12	23	13	10	10	7	2	3	0.9 to 1.9	10
VSP-C6W□-6T		4												
VSP-C6-10W□-4T		2.5	M12x1	59.1		31.5	17.5	13	14	8	4	10	0.8 to 2.7	19
VSP-C6-10W□-6T		4												
VSP-C6-15W□-4T		2.5		70.1		36.5	23.5					15	0.7 to 3.0	23
VSP-C6-15W□-6T		4												
VSP-C6-20W□-4T		2.5		80.1		41.5	28.5					20	0.9 to 3.4	25
VSP-C6-20W□-6T		4												
VSP-C8W□-4T	8	2.5	M8x0.75	46.1	12.5	23	13	10	10	7	2	3	0.9 to 1.9	10
VSP-C8W□-6T		4												
VSP-C8-10W□-4T		2.5	M12x1	59.6		31.5	17.5	13	14	8	4	10	0.8 to 2.7	19
VSP-C8-10W□-6T		4												
VSP-C8-15W□-4T		2.5		70.6		36.5	23.5					15	0.7 to 3.0	23
VSP-C8-15W□-6T		4												
VSP-C8-20W□-4T		2.5		80.6		41.5	28.5					20	0.9 to 3.4	25
VSP-C8-20W□-6T		4												

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C10W□-4T/6T
●VSP-C10-□W□-4T/6T



●VSP-C20 to 50W□-4T/6T
●VSP-C20 to 50-□W□-4T/6T

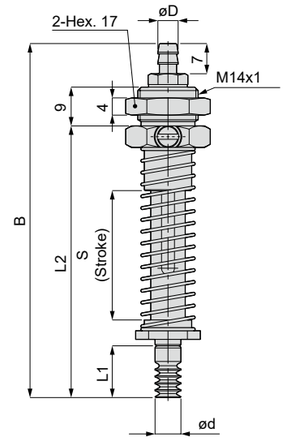


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C10W□-4T	10	2.5	62.6	14.5	32.5	20	6	4.0 to 7.1	34
VSP-C10W□-6T		4							
VSP-C10-10W□-4T		2.5	67.1		37		10	2.0 to 5.2	35
VSP-C10-10W□-6T		4							
VSP-C10-15W□-4T		2.5	77.1		42	25	15	2.0 to 5.9	40
VSP-C10-15W□-6T		4							
VSP-C10-20W□-4T		2.5	93.1		49	34	20	1.1 to 4.8	48
VSP-C10-20W□-6T		4							
VSP-C20W□-4T	20	2.5	73.1	25	43	20	6	7.0 to 12.6	38
VSP-C20W□-6T		4							
VSP-C20-10W□-4T		2.5	79.1		49		10	3.3 to 10.0	40
VSP-C20-10W□-6T		4							
VSP-C20-15W□-4T		2.5	89.1		54	25	15	3.3 to 10.4	45
VSP-C20-15W□-6T		4							
VSP-C20-20W□-4T		2.5	105.1		61	34	20	2.0 to 8.7	52
VSP-C20-20W□-6T		4							
VSP-C30W□-4T	30	2.5	86.6	38.5	56.5	20	6	7.0 to 12.6	41
VSP-C30W□-6T		4							
VSP-C30-10W□-4T		2.5	92.6		62.5		10	3.3 to 10.0	44
VSP-C30-10W□-6T		4							
VSP-C30-15W□-4T		2.5	102.6		67.5	25	15	3.3 to 10.4	49
VSP-C30-15W□-6T		4							
VSP-C30-20W□-4T		2.5	118.6		74.5	34	20	2.0 to 8.7	55
VSP-C30-20W□-6T		4							
VSP-C40W□-4T	40	2.5	93.1	45	63	20	6	7.0 to 12.6	50
VSP-C40W□-6T		4							
VSP-C40-10W□-4T		2.5	99.1		69		10	3.3 to 10.0	52
VSP-C40-10W□-6T		4							
VSP-C40-15W□-4T		2.5	109.1		74	25	15	3.3 to 10.4	57
VSP-C40-15W□-6T		4							
VSP-C40-20W□-4T		2.5	125.1		81	34	20	2.0 to 8.7	64
VSP-C40-20W□-6T		4							
VSP-C50W□-4T	50	2.5	104.1	56	74	20	6	7.0 to 12.6	56
VSP-C50W□-6T		4							
VSP-C50-10W□-4T		2.5	110.1		80		10	3.3 to 10.0	58
VSP-C50-10W□-6T		4							
VSP-C50-15W□-4T		2.5	120.1		85	25	15	3.3 to 10.4	63
VSP-C50-15W□-6T		4							
VSP-C50-20W□-4T		2.5	136.1		92	34	20	2.0 to 8.7	70
VSP-C50-20W□-6T		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C6, 8-□W□-4TC/6TC

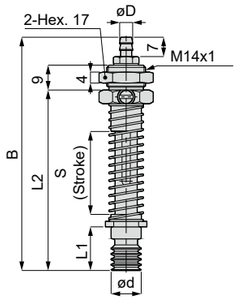


Unit: mm

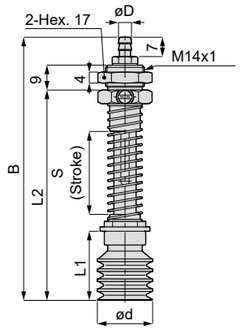
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20W□-4TC	6	2.5	69.1	12	50	20	1.5 to 4.9	42
VSP-C6-20W□-6TC		4						
VSP-C6-30W□-4TC		2.5	82.1		63	30	1.1 to 4.8	47
VSP-C6-30W□-6TC		4						
VSP-C6-40W□-4TC		2.5	95.1		76	40	1.0 to 4.5	52
VSP-C6-40W□-6TC		4						
VSP-C6-50W□-4TC		2.5	108.1		89	50	0.9 to 4.5	58
VSP-C6-50W□-6TC		4						
VSP-C8-20W□-4TC	8	2.5	69.6	12.5	50.5	20	1.5 to 4.9	42
VSP-C8-20W□-6TC		4						
VSP-C8-30W□-4TC		2.5	82.6		63.5	30	1.1 to 4.8	47
VSP-C8-30W□-6TC		4						
VSP-C8-40W□-4TC		2.5	95.6		76.5	40	1.0 to 4.5	52
VSP-C8-40W□-6TC		4						
VSP-C8-50W□-4TC		2.5	108.6		89.5	50	0.9 to 4.5	58
VSP-C8-50W□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C10-□W□-4TC/6TC



●VSP-C20 to 50-□W□-4TC/6TC

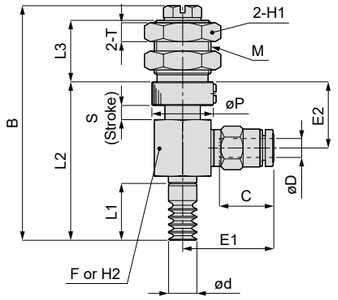


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20W□-4TC	10	2.5	70.1	14.5	51	20	1.5 to 4.9	43
VSP-C10-20W□-6TC		4						
VSP-C10-30W□-4TC		2.5	83.1		64	30	1.1 to 4.8	48
VSP-C10-30W□-6TC		4						
VSP-C10-40W□-4TC		2.5	96.1		77	40	1.0 to 4.5	53
VSP-C10-40W□-6TC		4						
VSP-C10-50W□-4TC		2.5	109.1		90	50	0.9 to 4.5	59
VSP-C10-50W□-6TC		4						
VSP-C20-20W□-4TC	20	2.5	82.1	25	63	20	1.5 to 4.9	48
VSP-C20-20W□-6TC		4						
VSP-C20-30W□-4TC		2.5	95.1		76	30	1.1 to 4.8	53
VSP-C20-30W□-6TC		4						
VSP-C20-40W□-4TC		2.5	108.1		89	40	1.0 to 4.5	58
VSP-C20-40W□-6TC		4						
VSP-C20-50W□-4TC		2.5	121.1		102	50	0.9 to 4.5	63
VSP-C20-50W□-6TC		4						
VSP-C30-20W□-4TC	30	2.5	95.6	38.5	76.5	20	1.5 to 4.9	50
VSP-C30-20W□-6TC		4						
VSP-C30-30W□-4TC		2.5	108.6		89.5	30	1.1 to 4.8	55
VSP-C30-30W□-6TC		4						
VSP-C30-40W□-4TC		2.5	121.6		102.5	40	1.0 to 4.5	60
VSP-C30-40W□-6TC		4						
VSP-C30-50W□-4TC		2.5	134.6		115.5	50	0.9 to 4.5	65
VSP-C30-50W□-6TC		4						
VSP-C40-20W□-4TC	40	2.5	102.1	45	73	20	1.5 to 4.9	60
VSP-C40-20W□-6TC		4						
VSP-C40-30W□-4TC		2.5	115.1		86	30	1.1 to 4.8	65
VSP-C40-30W□-6TC		4						
VSP-C40-40W□-4TC		2.5	128.1		99	40	1.0 to 4.5	70
VSP-C40-40W□-6TC		4						
VSP-C40-50W□-4TC		2.5	141.1		112	50	0.9 to 4.5	75
VSP-C40-50W□-6TC		4						
VSP-C50-20W□-4TC	50	2.5	113.1	56	84	20	1.5 to 4.9	68
VSP-C50-20W□-6TC		4						
VSP-C50-30W□-4TC		2.5	126.1		97	30	1.1 to 4.8	71
VSP-C50-30W□-6TC		4						
VSP-C50-40W□-4TC		2.5	139.1		110	40	1.0 to 4.5	76
VSP-C50-40W□-6TC		4						
VSP-C50-50W□-4TC		2.5	152.1		123	50	0.9 to 4.5	81
VSP-C50-50W□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D6, 8W□-2/4/6
●VSP-D6, 8-□W□-2/4/6

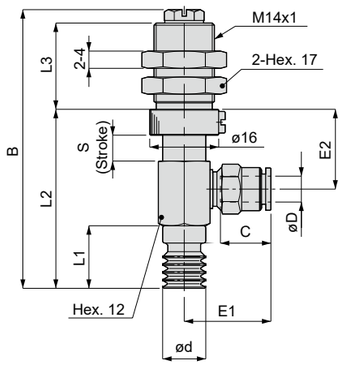


Unit: mm

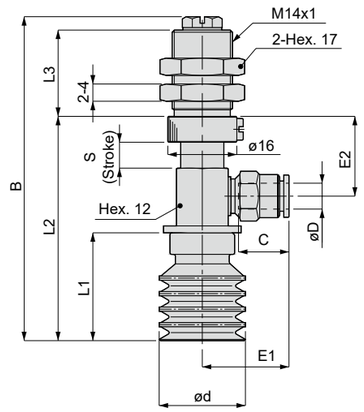
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	øP	Tube End C	E1	E2	Width Across Flats H1	Width Across Flats H2	□F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D6W□-2	6	1.8	M8x0.75	46	12	30	13	10	8.4	12.7	13	10	-	8	2	3	0.9 to 1.9	15
VSP-D6W□-4		4							11.2	16.8								16
VSP-D6W□-6		6							11.9	18.6								17
VSP-D6-10W□-2		1.8	M12x1	61.1		40.5	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D6-10W□-4		4							11.2	18.8								34
VSP-D6-10W□-6		6							11.9	20.1								35
VSP-D6-15W□-2		1.8		72.1		45.5	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D6-15W□-4		4							11.2	18.8								38
VSP-D6-15W□-6		6							11.9	20.1								39
VSP-D6-20W□-2		1.8		82.1		50.5	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D6-20W□-4		4							11.2	18.8								41
VSP-D6-20W□-6		6							11.9	20.1								42
VSP-D8W□-2	8	1.8	M8x0.75	46.5	12.5	30.5	13	10	8.4	12.7	13	10	-	8	2	3	0.9 to 1.9	15
VSP-D8W□-4		4							11.2	16.8								16
VSP-D8W□-6		6							11.9	18.6								17
VSP-D8-10W□-2		1.8	M12x1	61.6		41	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D8-10W□-4		4							11.2	18.8								34
VSP-D8-10W□-6		6							11.9	20.1								35
VSP-D8-15W□-2		1.8		72.6		46	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D8-15W□-4		4							11.2	18.8								38
VSP-D8-15W□-6		6							11.9	20.1								39
VSP-D8-20W□-2		1.8		82.6		51	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D8-20W□-4		4							11.2	18.8								41
VSP-D8-20W□-6		6							11.9	20.1								42

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10W□-4/6
●VSP-D10-□W□-4/-6



●VSP-D20 to 50W□-4/6
●VSP-D20 to 50-□W□-4/-6

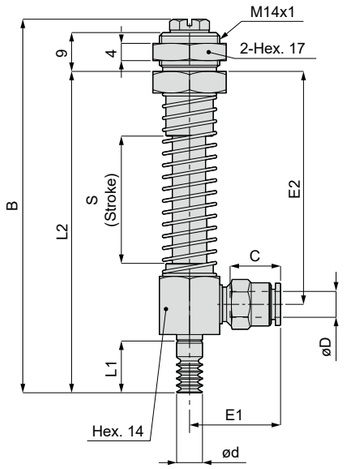


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10W□-4	10	4	64.6	14.5	41.5	20	11.2	18.8	18.5	6	4.0 to 7.1	47
VSP-D10W□-6		6					11.9	20.1				48
VSP-D10-10W□-4		4	69.6		46.5		11.2	18.8	25	10	2.0 to 5.2	50
VSP-D10-10W□-6		6					11.9	20.1				51
VSP-D10-15W□-4		4	79.6		51.5	25	11.2	18.8	30	15	2.0 to 5.9	56
VSP-D10-15W□-6		6					11.9	20.1				57
VSP-D10-20W□-4		4	95.6		58.5	34	11.2	18.8	37	20	1.1 to 4.8	66
VSP-D10-20W□-6		6					11.9	20.1				67
VSP-D20W□-4	20	4	75.1	25	52	20	11.2	18.8	18.5	6	7.0 to 12.6	51
VSP-D20W□-6		6					11.9	20.1				52
VSP-D20-10W□-4		4	81.1		58		11.2	18.8	24.5	10	3.3 to 10.0	54
VSP-D20-10W□-6		6					11.9	20.1				55
VSP-D20-15W□-4		4	91.1		63	25	11.2	18.8	29.5	15	3.3 to 10.4	61
VSP-D20-15W□-6		6					11.9	20.1				62
VSP-D20-20W□-4		4	107.1		70	34	11.2	18.8	36.5	20	2.0 to 8.7	71
VSP-D20-20W□-6		6					11.9	20.1				72
VSP-D30W□-4	30	4	88.6	38.5	65.5	20	11.2	18.8	18.5	6	7.0 to 12.6	57
VSP-D30W□-6		6					11.9	20.1				58
VSP-D30-10W□-4		4	94.6		71.5		11.2	18.8	24.5	10	3.3 to 10.0	61
VSP-D30-10W□-6		6					11.9	20.1				62
VSP-D30-15W□-4		4	104.6		76.5	25	11.2	18.8	29.5	15	3.3 to 10.4	67
VSP-D30-15W□-6		6					11.9	20.1				68
VSP-D30-20W□-4		4	120.6		83.5	34	11.2	18.8	36.5	20	2.0 to 8.7	77
VSP-D30-20W□-6		6					11.9	20.1				78
VSP-D40W□-4	40	4	95.1	45	72	20	11.2	18.8	18.5	6	7.0 to 12.6	67
VSP-D40W□-6		6					11.9	20.1				68
VSP-D40-10W□-4		4	101.1		78		11.2	18.8	24.5	10	3.3 to 10.0	62
VSP-D40-10W□-6		6					11.9	20.1				63
VSP-D40-15W□-4		4	111.1		83	25	11.2	18.8	29.5	15	3.3 to 10.4	68
VSP-D40-15W□-6		6					11.9	20.1				69
VSP-D40-20W□-4		4	127.1		90	34	11.2	18.8	36.5	20	2.0 to 8.7	78
VSP-D40-20W□-6		6					11.9	20.1				79
VSP-D50W□-4	50	4	106.1	56	83	20	11.2	18.8	18.5	6	7.0 to 12.6	78
VSP-D50W□-6		6					11.9	20.1				79
VSP-D50-10W□-4		4	112.1		89		11.2	18.8	24.5	10	3.3 to 10.0	81
VSP-D50-10W□-6		6					11.9	20.1				82
VSP-D50-15W□-4		4	122.1		94	25	11.2	18.8	29.5	15	3.3 to 10.4	88
VSP-D50-15W□-6		6					11.9	20.1				89
VSP-D50-20W□-4		4	138.1		101	34	11.2	18.8	36.5	20	2.0 to 8.7	97
VSP-D50-20W□-6		6					11.9	20.1				98

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D6, 8-□W□-4C/6C

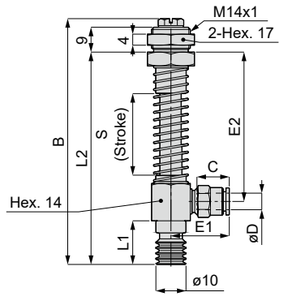


Unit: mm

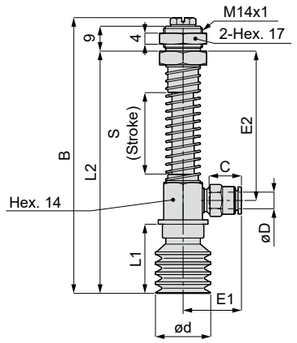
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20W□-4C	6	4	72.1	12	60	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D6-20W□-6C		6				11.9	21.1				63
VSP-D6-30W□-4C		4	85.1		73	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D6-30W□-6C		6				11.9	21.1				69
VSP-D6-40W□-4C		4	98.1		86	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D6-40W□-6C		6				11.9	21.1				76
VSP-D6-50W□-4C		4	111.1		99	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D6-50W□-6C		6				11.9	21.1				83
VSP-D8-20W□-4C	8	4	72.6	12.5	60.5	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D8-20W□-6C		6				11.9	21.1				63
VSP-D8-30W□-4C		4	85.6		73.5	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D8-30W□-6C		6				11.9	21.1				69
VSP-D8-40W□-4C		4	98.6		86.5	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D8-40W□-6C		6				11.9	21.1				76
VSP-D8-50W□-4C		4	111.6		99.5	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D8-50W□-6C		6				11.9	21.1				83

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D10-□W□-4C/6C



●VSP-D20 to 50-□W□-4C/6C

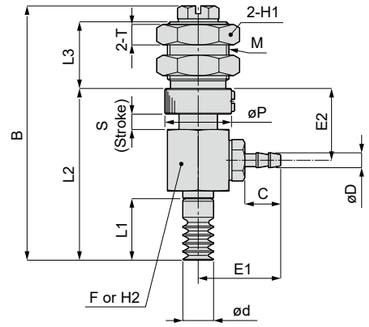


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20W□-4C	10	4	74.6	14.5	62.5	11.2	19.8	40.5	20	1.5 to 4.9	69
VSP-D10-20W□-6C		6				11.9	21.1				70
VSP-D10-30W□-4C		4	87.6		75.5	11.2	19.8	53.5	30	1.1 to 4.8	75
VSP-D10-30W□-6C		6				11.9	21.1				76
VSP-D10-40W□-4C		4	100.6		88.5	11.2	19.8	66.5	40	1.0 to 4.5	82
VSP-D10-40W□-6C		6				11.9	21.1				83
VSP-D10-50W□-4C		4	113.6		101.5	11.2	19.8	79.5	50	0.9 to 4.5	89
VSP-D10-50W□-6C		6				11.9	21.1				90
VSP-D20-20W□-4C	20	4	86.6	25	74.5	11.2	19.8	41	20	1.5 to 4.9	70
VSP-D20-20W□-6C		6				11.9	21.1				71
VSP-D20-30W□-4C		4	99.6		87.5	11.2	19.8	54	30	1.1 to 4.8	77
VSP-D20-30W□-6C		6				11.9	21.1				78
VSP-D20-40W□-4C		4	112.6		100.5	11.2	19.8	67	40	1.0 to 4.5	82
VSP-D20-40W□-6C		6				11.9	21.1				83
VSP-D20-50W□-4C		4	125.6		113.5	11.2	19.8	80	50	0.9 to 4.5	90
VSP-D20-50W□-6C		6				11.9	21.1				91
VSP-D30-20W□-4C	30	4	100.1	38.5	88	11.2	19.8	41	20	1.5 to 4.9	75
VSP-D30-20W□-6C		6				11.9	21.1				76
VSP-D30-30W□-4C		4	113.1		101	11.2	19.8	54	30	1.1 to 4.8	82
VSP-D30-30W□-6C		6				11.9	21.1				83
VSP-D30-40W□-4C		4	126.1		114	11.2	19.8	67	40	1.0 to 4.5	87
VSP-D30-40W□-6C		6				11.9	21.1				88
VSP-D30-50W□-4C		4	139.1		127	11.2	19.8	80	50	0.9 to 4.5	95
VSP-D30-50W□-6C		6				11.9	21.1				96
VSP-D40-20W□-4C	40	4	106.6	45	94.5	11.2	19.8	41	20	1.5 to 4.9	86
VSP-D40-20W□-6C		6				11.9	21.1				87
VSP-D40-30W□-4C		4	119.6		107.5	11.2	19.8	54	30	1.1 to 4.8	93
VSP-D40-30W□-6C		6				11.9	21.1				94
VSP-D40-40W□-4C		4	132.6		120.5	11.2	19.8	67	40	1.0 to 4.5	100
VSP-D40-40W□-6C		6				11.9	21.1				101
VSP-D40-50W□-4C		4	145.6		133.5	11.2	19.8	80	50	0.9 to 4.5	107
VSP-D40-50W□-6C		6				11.9	21.1				108
VSP-D50-20W□-4C	50	4	117.6	56	105.5	11.2	19.8	41	20	1.5 to 4.9	92
VSP-D50-20W□-6C		6				11.9	21.1				93
VSP-D50-30W□-4C		4	130.6		118.5	11.2	19.8	54	30	1.1 to 4.8	100
VSP-D50-30W□-6C		6				11.9	21.1				101
VSP-D50-40W□-4C		4	143.6		131.5	11.2	19.8	67	40	1.0 to 4.5	107
VSP-D50-40W□-6C		6				11.9	21.1				108
VSP-D50-50W□-4C		4	156.6		144.5	11.2	19.8	80	50	0.9 to 4.5	114
VSP-D50-50W□-6C		6				11.9	21.1				115

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D6, 8W□-4T/6T
●VSP-D6, 8-□W-4T/6T

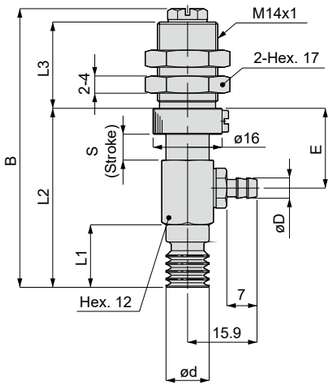


Unit: mm

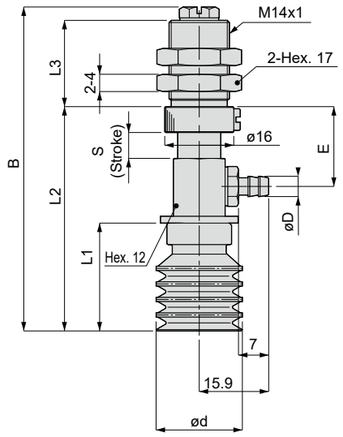
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	E1	E2	Width Across Flats H1	Width Across Flats H2	□F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D6W□-4T	6	2.5	M8x0.75	46	12	30	13	10	13.9	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D6W□-6T		4															
VSP-D6-10W□-4T		2.5	M12x1	61.1		40.5	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	32
VSP-D6-10W□-6T		4															
VSP-D6-15W□-4T		2.5		72.1		45.5	23.5			26					15	0.4 to 1.7	36
VSP-D6-15W□-6T		4															
VSP-D6-20W□-4T		2.5		82.1		50.5	28.5			31					20	0.3 to 1.8	39
VSP-D6-20W□-6T		4															
VSP-D8W□-4T	8	2.5	M8x0.75	46.5	12.5	30.5	13	10	13.9	13	10	-	8	2	3	0.9 to 1.9	13
VSP-D8W□-6T		4															
VSP-D8-10W□-4T		2.5	M12x1	61.6		41	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	32
VSP-D8-10W□-6T		4															
VSP-D8-15W□-4T		2.5		72.6		46	23.5			26					15	0.4 to 1.7	36
VSP-D8-15W□-6T		4															
VSP-D8-20W□-4T		2.5		82.6		51	28.5			31					20	0.3 to 1.8	39
VSP-D8-20W□-6T		4															

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10W□-4T/6T
●VSP-D10-□W□-4T/6T



●VSP-D20 to 50W□-4T/6T
●VSP-D20 to 50-□W□-4T/6T

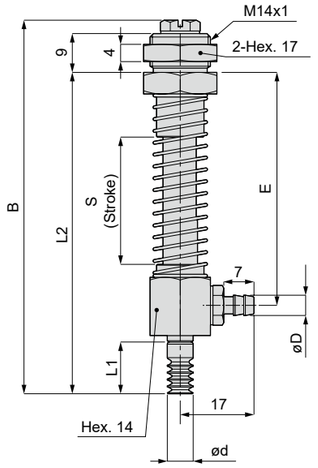


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10W□-4T	10	2.5	64.6	14.5	41.5	20	18.5	6	4.0 to 7.1	48
VSP-D10W□-6T		4								
VSP-D10-10W□-4T		2.5	69.6		46.5		25	10	2.0 to 5.2	49
VSP-D10-10W□-6T		4								
VSP-D10-15W□-4T		2.5	79.6		51.5	25	30	15	2.0 to 5.9	55
VSP-D10-15W□-6T		4								
VSP-D10-20W□-4T		2.5	95.6		58.5	34	37	20	1.1 to 4.8	65
VSP-D10-20W□-6T		4								
VSP-D20W□-4T	20	2.5	75.1	25	52	20	18.5	6	7.0 to 12.6	52
VSP-D20W□-6T		4								
VSP-D20-10W□-4T		2.5	81.1		58		24.5	10	3.3 to 10.0	53
VSP-D20-10W□-6T		4								
VSP-D20-15W□-4T		2.5	91.1		63	25	29.5	15	3.3 to 10.4	60
VSP-D20-15W□-6T		4								
VSP-D20-20W□-4T		2.5	107.1		70	34	36.5	20	2.0 to 8.7	70
VSP-D20-20W□-6T		4								
VSP-D30W□-4T	30	2.5	88.6	38.5	65.5	20	18.5	6	7.0 to 12.6	58
VSP-D30W□-6T		4								
VSP-D30-10W□-4T		2.5	94.6		71.5		24.5	10	3.3 to 10.0	59
VSP-D30-10W□-6T		4								
VSP-D30-15W□-4T		2.5	104.6		76.5	25	29.5	15	3.3 to 10.4	63
VSP-D30-15W□-6T		4								
VSP-D30-20W□-4T		2.5	120.6		83.5	34	36.5	20	2.0 to 8.7	74
VSP-D30-20W□-6T		4								
VSP-D40W□-4T	40	2.5	95.1	45	72	20	18.5	6	7.0 to 12.6	68
VSP-D40W□-6T		4								
VSP-D40-10W□-4T		2.5	101.1		78		24.5	10	3.3 to 10.0	69
VSP-D40-10W□-6T		4								
VSP-D40-15W□-4T		2.5	111.1		83	25	29.5	15	3.3 to 10.4	74
VSP-D40-15W□-6T		4								
VSP-D40-20W□-4T		2.5	127.1		90	34	36.5	20	2.0 to 8.7	84
VSP-D40-20W□-6T		4								
VSP-D50W□-4T	50	2.5	106.1	56	83	20	18.5	6	7.0 to 12.6	79
VSP-D50W□-6T		4								
VSP-D50-10W□-4T		2.5	112.1		89		24.5	10	3.3 to 10.0	80
VSP-D50-10W□-6T		4								
VSP-D50-15W□-4T		2.5	122.1		94	25	29.5	15	3.3 to 10.4	84
VSP-D50-15W□-6T		4								
VSP-D50-20W□-4T		2.5	138.1		101	34	36.5	20	2.0 to 8.7	94
VSP-D50-20W□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D6, 8-□W□-4TC/6TC

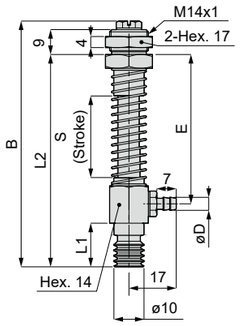


Unit: mm

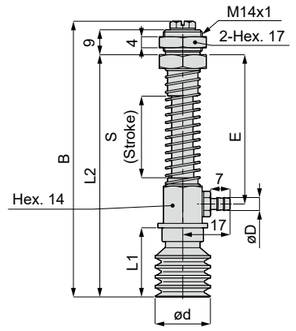
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20W□-4TC	6	2.5	72.1	12	60	40.5	20	1.5 to 4.9	60
VSP-D6-20W□-6TC		4							
VSP-D6-30W□-4TC		2.5	85.1		73	53.5	30	1.1 to 4.8	67
VSP-D6-30W□-6TC		4							
VSP-D6-40W□-4TC		2.5	98.1		86	66.5	40	1.0 to 4.5	74
VSP-D6-40W□-6TC		4							
VSP-D6-50W□-4TC		2.5	111.1		99	79.5	50	0.9 to 4.5	80
VSP-D6-50W□-6TC		4							
VSP-D8-20W□-4TC	8	2.5	72.6	12.5	60.5	40.5	20	1.5 to 4.9	60
VSP-D8-20W□-6TC		4							
VSP-D8-30W□-4TC		2.5	85.6		73.5	53.5	30	1.1 to 4.8	67
VSP-D8-30W□-6TC		4							
VSP-D8-40W□-4TC		2.5	98.6		86.5	66.5	40	1.0 to 4.5	74
VSP-D8-40W□-6TC		4							
VSP-D8-50W□-4TC		2.5	111.6		99.5	79.5	50	0.9 to 4.5	80
VSP-D8-50W□-6TC		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D10-□W□-4TC/6TC



●VSP-D20 to 50-□W□-4TC/6TC

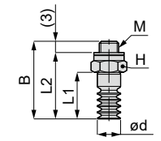


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20W□-4TC	10	2.5	74.6	14.5	62.5	40.5	20	1.5 to 4.9	67
VSP-D10-20W□-6TC		4							
VSP-D10-30W□-4TC		2.5	87.6		75.5	53.5	30	1.1 to 4.8	74
VSP-D10-30W□-6TC		4							
VSP-D10-40W□-4TC		2.5	100.6		88.5	66.5	40	1.0 to 4.5	81
VSP-D10-40W□-6TC		4							
VSP-D10-50W□-4TC		2.5	113.6		101.5	79.5	50	0.9 to 4.5	87
VSP-D10-50W□-6TC		4							
VSP-D20-20W□-4TC	20	4	86.6	25	74.5	41	20	1.5 to 4.9	68
VSP-D20-20W□-6TC		6							
VSP-D20-30W□-4TC		4	99.6		87.5	54	30	1.1 to 4.8	75
VSP-D20-30W□-6TC		6							
VSP-D20-40W□-4TC		4	112.6		100.5	67	40	1.0 to 4.5	81
VSP-D20-40W□-6TC		6							
VSP-D20-50W□-4TC		4	125.6		113.5	80	50	0.9 to 4.5	88
VSP-D20-50W□-6TC		6							
VSP-D30-20W□-4TC	30	4	100.1	38.5	88	41	20	1.5 to 4.9	70
VSP-D30-20W□-6TC		6							
VSP-D30-30W□-4TC		4	113.1		101	54	30	1.1 to 4.8	77
VSP-D30-30W□-6TC		6							
VSP-D30-40W□-4TC		4	126.1		114	67	40	1.0 to 4.5	83
VSP-D30-40W□-6TC		6							
VSP-D30-50W□-4TC		4	139.1		127	80	50	0.9 to 4.5	90
VSP-D30-50W□-6TC		6							
VSP-D40-20W□-4TC	40	4	106.6	45	94.5	41	20	1.5 to 4.9	80
VSP-D40-20W□-6TC		6							
VSP-D40-30W□-4TC		4	119.6		107.5	54	30	1.1 to 4.8	87
VSP-D40-30W□-6TC		6							
VSP-D40-40W□-4TC		4	132.6		120.5	67	40	1.0 to 4.5	94
VSP-D40-40W□-6TC		6							
VSP-D40-50W□-4TC		4	145.6		133.5	80	50	0.9 to 4.5	100
VSP-D40-50W□-6TC		6							
VSP-D50-20W□-4TC	50	4	117.6	56	105.5	41	20	1.5 to 4.9	86
VSP-D50-20W□-6TC		6							
VSP-D50-30W□-4TC		4	130.6		118.5	54	30	1.1 to 4.8	93
VSP-D50-30W□-6TC		6							
VSP-D50-40W□-4TC		4	143.6		131.5	67	40	1.0 to 4.5	99
VSP-D50-40W□-6TC		6							
VSP-D50-50W□-4TC		4	156.6		144.5	80	50	0.9 to 4.5	106
VSP-D50-50W□-6TC		6							

Outline Dimension Drawing (Fixed Type, Direct Mount Type, VSP-E, Male Thread Type)

●VSP-E6, 8W□

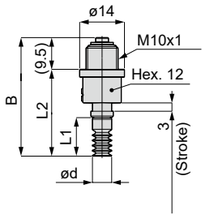


Unit: mm

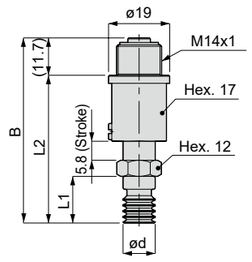
Model No.	Pad Diameter ød	M	B	L1	L2	Width Across Flats H	Weight (g)
VSP-E6W□	6	M5x0.8	20	12	17	8	3
VSP-E8W□	8	M5x0.8	20.5	12.5	17.5	8	3

Outline Dimension Drawing (Buffer Type, Direct Mount Type, VSP-F, Male Thread Type)

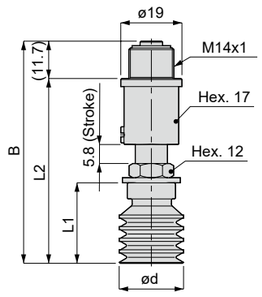
●VSP-F6, 8W□



●VSP-F10W□



●VSP-F20 to 50W□

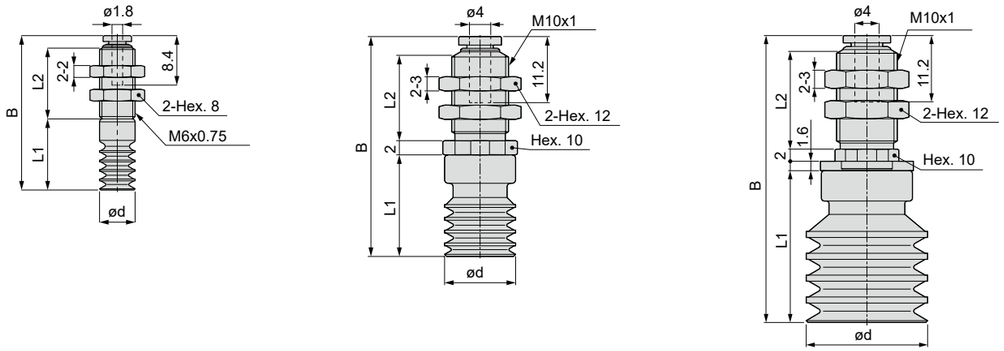


Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F6W□	6	37	12	27.5	2.3 to 3.9	16
VSP-F8W□	8	37.5	12.5	28	2.3 to 3.9	16
VSP-F10W□	10	57.5	14.5	45.8	7.9 to 15	57
VSP-F20W□	20	69	25	57.3	7.9 to 15	60
VSP-F30W□	30	82.5	38.5	70.8	7.9 to 15	66
VSP-F40W□	40	89	45	77.3	7.9 to 15	76
VSP-F50W□	50	100	56	88.3	7.9 to 15	87

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA6, 8W□2 ●VSP-MA10W□-4 ●VSP-MA20 to 50W□-4

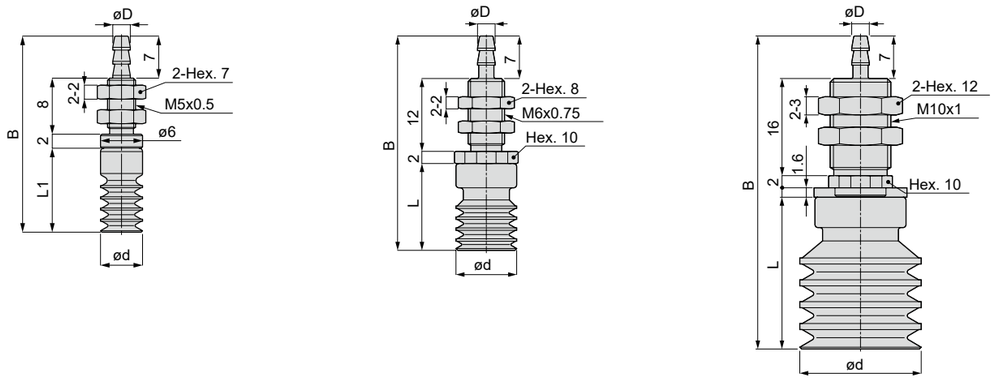


Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	Weight (g)
VSP-MA6W□-2	6	26.1	12	12	2.5
VSP-MA8W□-2	8	26.6	12.5	12	2.5
VSP-MA10W□-4	10	35.5	14.5	16.4	6.6
VSP-MA20W□-4	20	47.6	25	16.4	13
VSP-MA30W□-4	30	61.1	38.5	16.4	19
VSP-MA40W□-4	40	52.6	45	16.4	26
VSP-MA50W□-4	50	54.6	56	16.4	32

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA6, 8W□-4T ●VSP-MA10W□-4T ●VSP-MA20 to 50W□-4T/6T

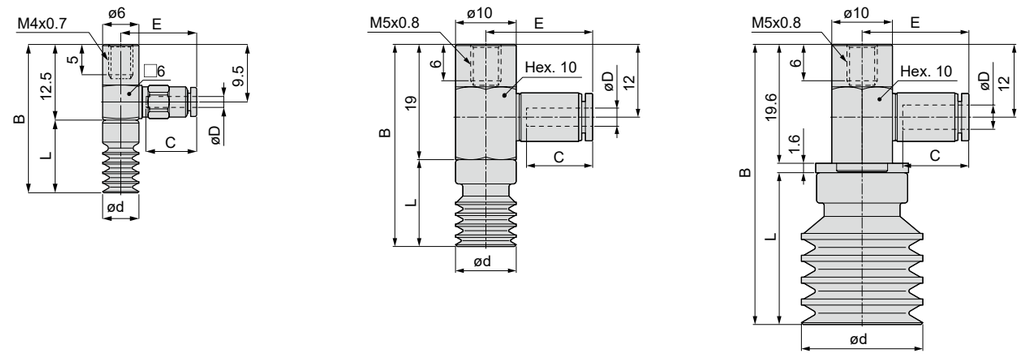


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MA6W□-4T	6	2.5	29	12	2.1
VSP-MA8W□-4T	8	2.5	29.5	12.5	2.1
VSP-MA10W□-4T	10	2.5	35.5	14.5	3.8
VSP-MA20W□-4T	20	2.5	51.6	25	13
VSP-MA20W□-6T		4			
VSP-MA30W□-4T	30	2.5	65.1	38.5	19
VSP-MA30W□-6T		4			
VSP-MA40W□-4T	40	2.5	71.6	45	25
VSP-MA40W□-6T		4			
VSP-MA50W□-4T	50	2.5	82.6	56	32
VSP-MA50W□-6T		4			

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB6, 8W□2/4 ●VSP-MB10W□-2/4/6 ●VSP-MB20 to 50W□-2/4/6

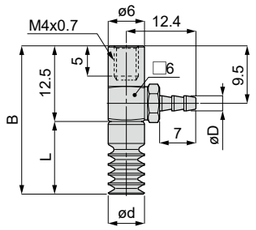


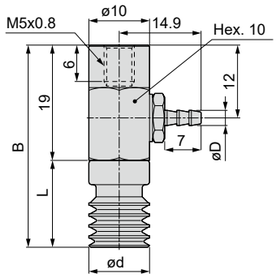
Unit: mm

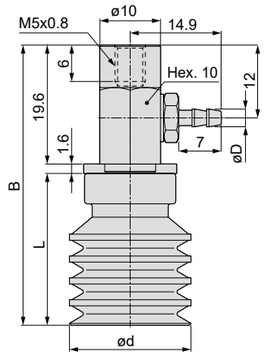
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB6W□-2	6	1.8	24.5	12	8.4	12.5	2.5
VSP-MB6W□-4		4			11.2	15.8	4
VSP-MB8W□-2	8	1.8	25	12.5	8.4	12.5	2.5
VSP-MB8W□-4		4			11.2	15.8	4
VSP-MB10W□-2	10	1.8	33.5	14.5	8.4	13.7	7.7
VSP-MB10W□-4		4			11.2	17.8	8.4
VSP-MB10W□-6		6			11.9	19.6	9.8
VSP-MB20W□-2	20	1.8	46.2	25	8.4	13.7	12
VSP-MB20W□-4		4			11.2	17.8	13
VSP-MB20W□-6		6			11.9	19.6	14
VSP-MB30W□-2	30	1.8	59.7	38.5	8.4	13.7	18
VSP-MB30W□-4		4			11.2	17.8	19
VSP-MB30W□-6		6			11.9	19.6	20
VSP-MB40W□-2	40	1.8	66.2	45	8.4	13.7	25
VSP-MB40W□-4		4			11.2	17.8	26
VSP-MB40W□-6		6			11.9	19.6	27
VSP-MB50W□-2	50	1.8	77.2	56	8.4	13.7	32
VSP-MB50W□-4		4			11.2	17.8	33
VSP-MB50W□-6		6			11.9	19.6	34

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB6, 8W□-4T/6T ●VSP-MB10W□-4T/6T ●VSP-MB20 to 50W□-4T/6T





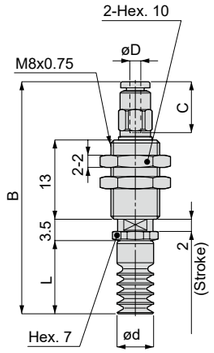


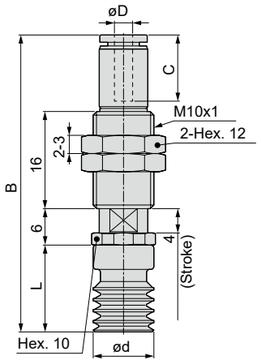
Unit: mm

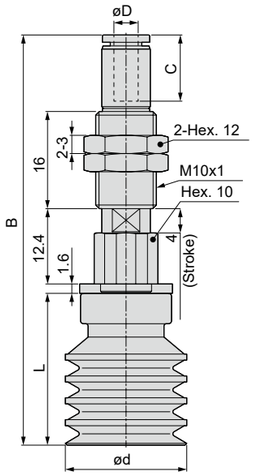
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Weight (g)
VSP-MB6W□-4T	6	2.5	24.5	12	2.7
VSP-MB6W□-6T		4			
VSP-MB8W□-4T	8	2.5	25	12.5	2.7
VSP-MB8W□-6T		4			
VSP-MB10W□-4T	10	2.5	33.5	14.5	7.3
VSP-MB10W□-6T		4			
VSP-MB20W□-4T	20	2.5	46.2	25	13
VSP-MB20W□-6T		4			
VSP-MB30W□-4T	30	2.5	59.7	38.5	18
VSP-MB30W□-6T		4			
VSP-MB40W□-4T	40	2.5	66.2	45	27
VSP-MB40W□-6T		4			
VSP-MB50W□-4T	50	2.5	77.2	56	35
VSP-MB50W□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC6, 8W□2 ●VSP-MC10W□2/4 ●VSP-MC20 to 50W□-2/4





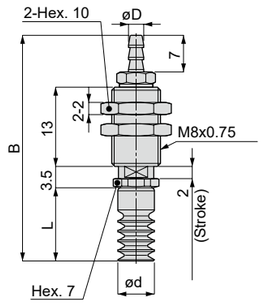


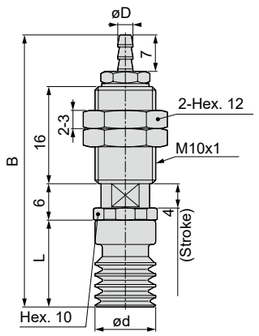
Unit: mm

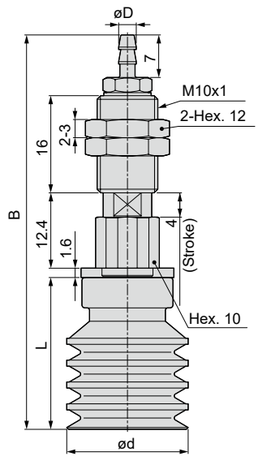
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC6W□2	6	1.8	38.2	12	8.4	0.2 to 0.3	7.3
VSP-MC8W□2	8	1.8	38.7	12.5	8.4	0.2 to 0.3	7.3
VSP-MC10W□2	10	1.8	45.4	14.5	8.4	0.5 to 0.6	15
VSP-MC10W□-4		4	49.5		11.2		16
VSP-MC20W□2	20	1.8	63.9	25	8.4	1 to 1.3	24
VSP-MC20W□-4		4	68		11.2		25
VSP-MC30W□2	30	1.8	77.4	38.5	8.4	1 to 1.3	30
VSP-MC30W□-4		4	81.5		11.2		31
VSP-MC40W□2	40	1.8	83.9	45	8.4	1 to 1.3	38
VSP-MC40W□-4		4	88		11.2		39
VSP-MC50W□2	50	1.8	94.9	56	8.4	1 to 1.3	45
VSP-MC50W□-4		4	99		11.2		46

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC6, 8W□-4T/6T ●VSP-MC10W□-4T/6T ●VSP-MC20 to 50W□-4T/6T





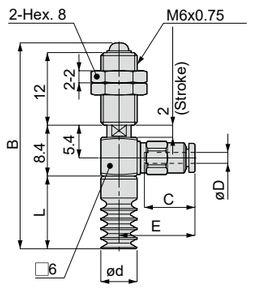


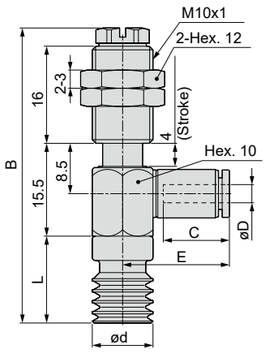
Unit: mm

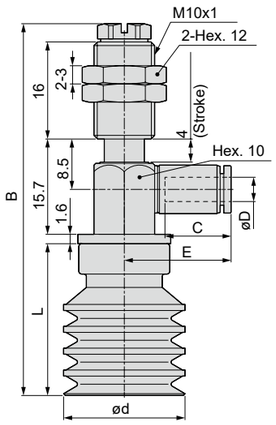
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC6W□-4T	6	2.5	38.1	12	0.2 to 0.3	7.5
VSP-MC6W□-6T		4				
VSP-MC8W□-4T	8	2.5	38.6	12.5	0.2 to 0.3	7.5
VSP-MC8W□-6T		4				
VSP-MC10W□-4T	10	2.5	46.6	14.5	0.5 to 0.6	15
VSP-MC10W□-6T		4				
VSP-MC20W□-4T	20	2.5	65.1	25	1 to 1.3	24
VSP-MC20W□-6T		4				
VSP-MC30W□-4T	30	2.5	78.6	38.5	1 to 1.3	29
VSP-MC30W□-6T		4				
VSP-MC40W□-4T	40	2.5	85.1	45	1 to 1.3	38
VSP-MC40W□-6T		4				
VSP-MC50W□-4T	50	2.5	96.1	56	1 to 1.3	46
VSP-MC50W□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD6, 8W□2/4 ●VSP-MD10W□-2/4/6 ●VSP-MD20 to 50W□-2/4/6





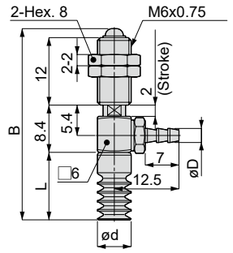


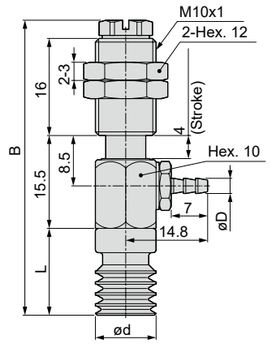
Unit: mm

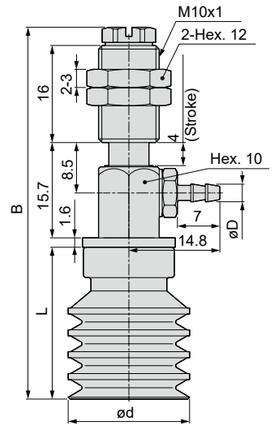
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD6W□2	6	1.8	34	12	8.4	12.6	0.5 to 0.6	6.6
VSP-MD6W□-4		4			11.2	15.9		8
VSP-MD8W□2	8	1.8	34.5	12.5	8.4	12.6	0.5 to 0.6	6.6
VSP-MD8W□-4		4			11.2	15.9		8
VSP-MD10W□2	10	1.8	49	14.5	8.4	13.6	1 to 1.3	23
VSP-MD10W□-4		4			11.2	17.7		24
VSP-MD10W□6		6			11.9	19.5		25
VSP-MD20W□2	20	1.8	61.3	25	8.4	13.6	1 to 1.3	27
VSP-MD20W□-4		4			11.2	17.7		28
VSP-MD20W□6		6			11.9	19.5		29
VSP-MD30W□2	30	1.8	74.8	38.5	8.4	13.6	1 to 1.3	33
VSP-MD30W□-4		4			11.2	17.7		34
VSP-MD30W□6		6			11.9	19.5		35
VSP-MD40W□2	40	1.8	81.3	45	8.4	13.6	1 to 1.3	42
VSP-MD40W□-4		4			11.2	17.7		43
VSP-MD40W□6		6			11.9	19.5		44
VSP-MD50W□2	50	1.8	92.3	56	8.4	13.6	1 to 1.3	51
VSP-MD50W□-4		4			11.2	17.7		50
VSP-MD50W□6		6			11.9	19.5		52

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD6, 8W□-4T/6T ●VSP-MD10W□-4T/6T ●VSP-MD20 to 50W□-4T/6T





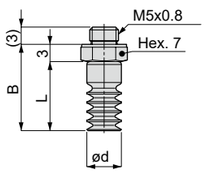


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD6W□-4T	6	2.5	34	12	0.5 to 0.6	6.4
VSP-MD6W□-6T		4				
VSP-MD8W□-4T	8	2.5	34.5	12.5	0.5 to 0.6	6.4
VSP-MD8W□-6T		4				
VSP-MD10W□-4T	10	2.5	49	14.5	1 to 1.3	22
VSP-MD10W□-6T		4				
VSP-MD20W□-4T	20	2.5	61.3	25	1 to 1.3	27
VSP-MD20W□-6T		4				
VSP-MD30W□-4T	30	2.5	74.8	38	1 to 1.3	33
VSP-MD30W□-6T		4				
VSP-MD40W□-4T	40	2.5	81.3	45	1 to 1.3	40
VSP-MD40W□-6T		4				
VSP-MD50W□-4T	50	2.5	92.3	56	1 to 1.3	48
VSP-MD50W□-6T		4				

External Dimension Diagram (Compact, Direct Mount Type, VSP-ME, Male Thread)

●VSP-ME6, 8W□-M5

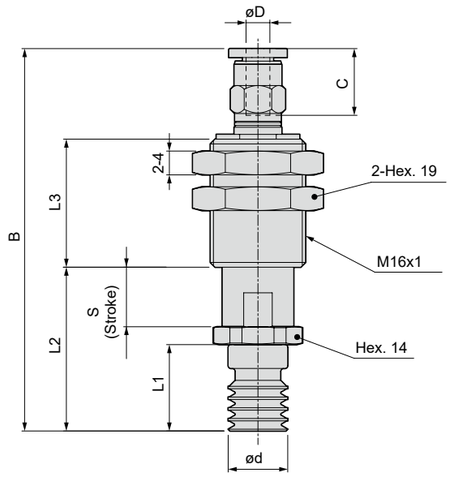


Unit: mm

Model No.	Pad Diameter ød	B	L	Weight (g)
VSP-ME6W□-M5	6	20	12	3
VSP-ME8W□-M5	8	20.5	12.5	3

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10-□W□-2/4/6

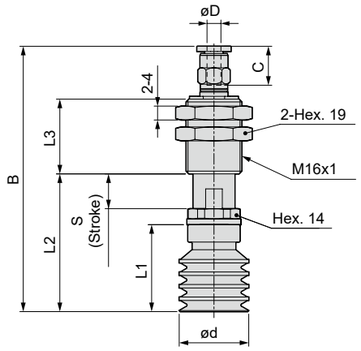


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10W□2	10	1.8	60.1	14.5	27.5	21.5	8.4	10	1.0 to 2.4	22
VSP-HC10-10W□-4		4	64.2				11.2			23
VSP-HC10-10W□6		6	65.5				11.9			24
VSP-HC10-15W□2		1.8	70.1		32.5	26.5	8.4	15	1.0 to 2.7	24
VSP-HC10-15W□-4		4	74.2				11.2			25
VSP-HC10-15W□6		6	75.5				11.9			26
VSP-HC10-20W□2		1.8	80.1		37.5	31.5	8.4	20	1.0 to 3.0	26
VSP-HC10-20W□-4		4	84.2				11.2			27
VSP-HC10-20W□6		6	85.5				11.9			28
VSP-HC10-25W□2		1.8	90.6		42.5	37	8.4	25	1.0 to 3.0	28
VSP-HC10-25W□-4		4	94.7				11.2			29
VSP-HC10-25W□6		6	96				11.9			30
VSP-HC10-30W□2		1.8	101.6		47.5	43	8.4	30	1.0 to 3.0	30
VSP-HC10-30W□-4		4	105.7				11.2			31
VSP-HC10-30W□6		6	107				11.9			32
VSP-HC10-40W□2		1.8	123.6		57.5	55	8.4	40	1.0 to 3.0	34
VSP-HC10-40W□-4		4	127.7				11.2			35
VSP-HC10-40W□6		6	129				11.9			36
VSP-HC10-50W□2		1.8	145.1		67.5	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50W□-4		4	149.2				11.2			40
VSP-HC10-50W□6		6	150.5				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 30-□W□-2/4/6

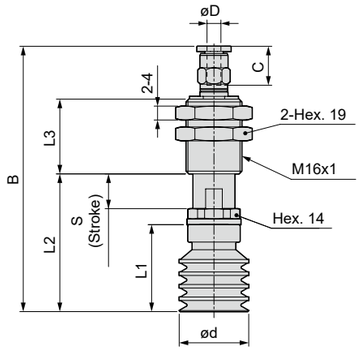


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10W□2	20	1.8	72.2	25	39.6	21.5	8.4	10	1.0 to 2.4	27
VSP-HC20-10W□-4		4	76.3				11.2			28
VSP-HC20-10W□6		6	77.6				11.9			29
VSP-HC20-15W□2		1.8	82.2		44.6	26.5	8.4	15	1.0 to 2.7	29
VSP-HC20-15W□-4		4	86.3				11.2			30
VSP-HC20-15W□6		6	87.6				11.9			31
VSP-HC20-20W□2		1.8	92.2		49.6	31.5	8.4	20	1.0 to 3.0	31
VSP-HC20-20W□-4		4	96.3				11.2			32
VSP-HC20-20W□6		6	97.6				11.9			33
VSP-HC20-25W□2		1.8	102.7		54.6	37	8.4	25	1.0 to 3.0	33
VSP-HC20-25W□-4		4	106.8				11.2			34
VSP-HC20-25W□6		6	108.1				11.9			35
VSP-HC20-30W□2		1.8	113.7		59.6	43	8.4	30	1.0 to 3.0	35
VSP-HC20-30W□-4		4	117.8				11.2			36
VSP-HC20-30W□6		6	119.1				11.9			37
VSP-HC20-40W□2		1.8	135.7		69.6	55	8.4	40	1.0 to 3.0	39
VSP-HC20-40W□-4		4	139.8				11.2			40
VSP-HC20-40W□6		6	141.1				11.9			41
VSP-HC20-50W□2		1.8	157.2		79.6	66.5	8.4	50	1.0 to 3.1	43
VSP-HC20-50W□-4		4	161.3				11.2			44
VSP-HC20-50W□6		6	162.6				11.9			45
VSP-HC30-10W□2	30	1.8	85.7	38.5	53.1	21.5	8.4	10	1.0 to 2.4	33
VSP-HC30-10W□-4		4	89.8				11.2			34
VSP-HC30-10W□6		6	91.1				11.9			35
VSP-HC30-15W□2		1.8	95.7		58.1	26.5	8.4	15	1.0 to 2.7	35
VSP-HC30-15W□-4		4	99.8				11.2			36
VSP-HC30-15W□6		6	101.1				11.9			37
VSP-HC30-20W□2		1.8	105.7		63.1	31.5	8.4	20	1.0 to 3.0	37
VSP-HC30-20W□-4		4	109.8				11.2			38
VSP-HC30-20W□6		6	111.1				11.9			39
VSP-HC30-25W□2		1.8	116.2		68.1	37	8.4	25	1.0 to 3.0	39
VSP-HC30-25W□-4		4	120.3				11.2			40
VSP-HC30-25W□6		6	121.6				11.9			41
VSP-HC30-30W□2		1.8	127.2		73.1	43	8.4	30	1.0 to 3.0	41
VSP-HC30-30W□-4		4	131.3				11.2			42
VSP-HC30-30W□6		6	132.6				11.9			43
VSP-HC30-40W□2		1.8	149.2		83.1	55	8.4	40	1.0 to 3.0	45
VSP-HC30-40W□-4		4	153.3				11.2			46
VSP-HC30-40W□6		6	154.6				11.9			47
VSP-HC30-50W□2		1.8	170.7		93.1	66.5	8.4	50	1.0 to 3.1	49
VSP-HC30-50W□-4		4	174.8				11.2			50
VSP-HC30-50W□6		6	176.1				11.9			51

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC40, 50-□W□-2/4/6

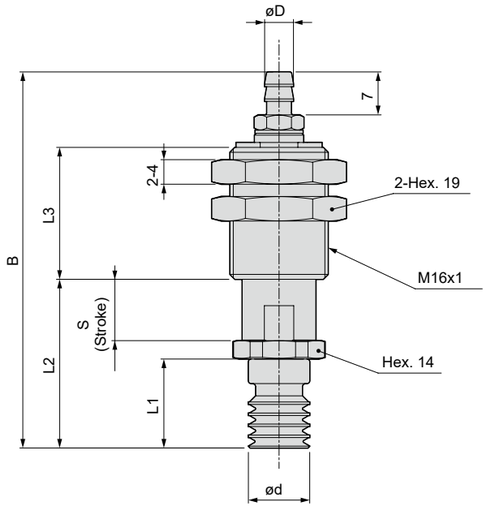


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC40-10W□2	40	1.8	92.2	45	59.6	21.5	8.4	10	1.0 to 2.4	43
VSP-HC40-10W□-4		4	96.3				11.2			44
VSP-HC40-10W□6		6	97.6				11.9			45
VSP-HC40-15W□2		1.8	102.2		64.6	26.5	8.4	15	1.0 to 2.7	45
VSP-HC40-15W□-4		4	106.3				11.2			46
VSP-HC40-15W□6		6	107.6				11.9			47
VSP-HC40-20W□2		1.8	112.2		69.6	31.5	8.4	20	1.0 to 3.0	47
VSP-HC40-20W□-4		4	116.3				11.2			48
VSP-HC40-20W□6		6	117.6				11.9			49
VSP-HC40-25W□2		1.8	122.7		74.6	37	8.4	25	1.0 to 3.0	49
VSP-HC40-25W□-4		4	126.8				11.2			50
VSP-HC40-25W□6		6	128.1				11.9			51
VSP-HC40-30W□2		1.8	133.7		79.6	43	8.4	30	1.0 to 3.0	51
VSP-HC40-30W□-4		4	137.8				11.2			52
VSP-HC40-30W□6		6	139.1				11.9			53
VSP-HC40-40W□2		1.8	155.7		89.6	55	8.4	40	1.0 to 3.0	55
VSP-HC40-40W□-4		4	159.8				11.2			56
VSP-HC40-40W□6		6	161.1				11.9			57
VSP-HC40-50W□2		1.8	177.2		99.6	66.5	8.4	50	1.0 to 3.1	59
VSP-HC40-50W□-4		4	181.3				11.2			60
VSP-HC40-50W□6		6	182.6				11.9			61
VSP-HC50-10W□2	50	1.8	103.2	56	70.6	21.5	8.4	10	1.0 to 2.4	55
VSP-HC50-10W□-4		4	107.3				11.2			56
VSP-HC50-10W□6		6	108.6				11.9			57
VSP-HC50-15W□2		1.8	113.2		75.6	26.5	8.4	15	1.0 to 2.7	57
VSP-HC50-15W□-4		4	117.3				11.2			58
VSP-HC50-15W□6		6	118.6				11.9			59
VSP-HC50-20W□2		1.8	123.2		80.6	31.5	8.4	20	1.0 to 3.0	59
VSP-HC50-20W□-4		4	127.3				11.2			60
VSP-HC50-20W□6		6	128.6				11.9			61
VSP-HC50-25W□2		1.8	133.7		85.6	37	8.4	25	1.0 to 3.0	61
VSP-HC50-25W□-4		4	137.8				11.2			62
VSP-HC50-25W□6		6	139.1				11.9			63
VSP-HC50-30W□2		1.8	144.7		90.6	43	8.4	30	1.0 to 3.0	63
VSP-HC50-30W□-4		4	148.8				11.2			64
VSP-HC50-30W□6		6	150.1				11.9			65
VSP-HC50-40W□2		1.8	166.7		100.6	55	8.4	40	1.0 to 3.0	67
VSP-HC50-40W□-4		4	170.8				11.2			68
VSP-HC50-40W□6		6	172.1				11.9			69
VSP-HC50-50W□2		1.8	188.2		110.6	66.5	8.4	50	1.0 to 3.1	71
VSP-HC50-50W□-4		4	192.3				11.2			72
VSP-HC50-50W□6		6	193.6				11.9			73

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10-□W□-4T/6T

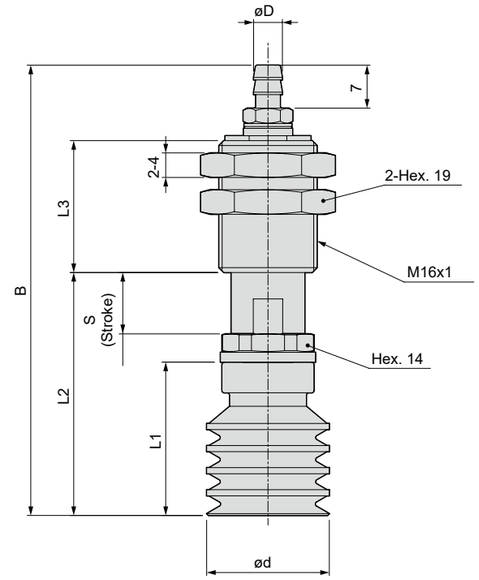


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10W□-4T	10	2.5	61.3	14.5	27.5	21.5	10	1.0 to 2.4	21
VSP-HC10-10W□-6T		4							
VSP-HC10-15W□-4T		2.5	71.3		32.5	26.5	15	1.0 to 2.7	23
VSP-HC10-15W□-6T		4							
VSP-HC10-20W□-4T		2.5	81.3		37.5	31.5	20	1.0 to 3.0	25
VSP-HC10-20W□-6T		4							
VSP-HC10-25W□-4T		2.5	91.8		42.5	37	25	1.0 to 3.0	28
VSP-HC10-25W□-6T		4							
VSP-HC10-30W□-4T		2.5	102.8		47.5	43	30	1.0 to 3.0	30
VSP-HC10-30W□-6T		4							
VSP-HC10-40W□-4T		2.5	124.8		57.5	55	40	1.0 to 3.0	34
VSP-HC10-40W□-6T		4							
VSP-HC10-50W□-4T		2.5	146.3		67.5	66.5	50	1.0 to 3.1	38
VSP-HC10-50W□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20, 30-□W□-4T/6T

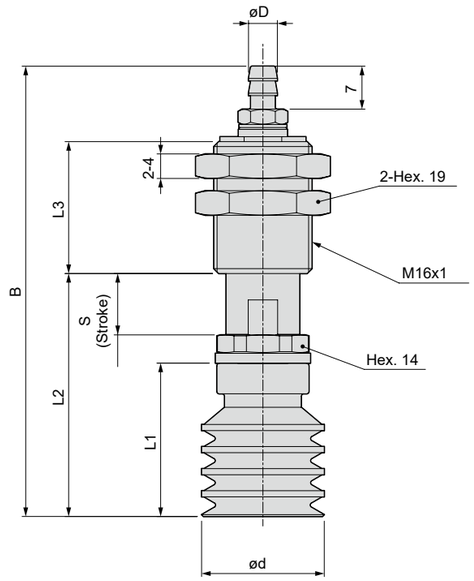


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10W□-4T	20	2.5	73.4	25	39.6	21.5	10	1.0 to 2.4	26
VSP-HC20-10W□-6T		4							
VSP-HC20-15W□-4T		2.5	83.4		44.6	26.5	15	1.0 to 2.7	28
VSP-HC20-15W□-6T		4							
VSP-HC20-20W□-4T		2.5	93.4		49.6	31.5	20	1.0 to 3.0	30
VSP-HC20-20W□-6T		4							
VSP-HC20-25W□-4T		2.5	103.9		54.6	37	25	1.0 to 3.0	32
VSP-HC20-25W□-6T		4							
VSP-HC20-30W□-4T		2.5	114.9		59.6	43	30	1.0 to 3.0	35
VSP-HC20-30W□-6T		4							
VSP-HC20-40W□-4T		2.5	136.9		69.6	55	40	1.0 to 3.0	39
VSP-HC20-40W□-6T		4							
VSP-HC20-50W□-4T		2.5	158.4		79.6	66.5	50	1.0 to 3.1	43
VSP-HC20-50W□-6T		4							
VSP-HC30-10W□-4T	30	2.5	86.9	38.5	53.1	21.5	10	1.0 to 2.4	32
VSP-HC30-10W□-6T		4							
VSP-HC30-15W□-4T		2.5	96.9		58.1	26.5	15	1.0 to 2.7	34
VSP-HC30-15W□-6T		4							
VSP-HC30-20W□-4T		2.5	106.9		63.1	31.5	20	1.0 to 3.0	36
VSP-HC30-20W□-6T		4							
VSP-HC30-25W□-4T		2.5	117.4		68.1	37	25	1.0 to 3.0	38
VSP-HC30-25W□-6T		4							
VSP-HC30-30W□-4T		2.5	128.4		73.1	43	30	1.0 to 3.0	41
VSP-HC30-30W□-6T		4							
VSP-HC30-40W□-4T		2.5	150.4		83.1	55	40	1.0 to 3.0	45
VSP-HC30-40W□-6T		4							
VSP-HC30-50W□-4T		2.5	171.9		93.1	66.5	50	1.0 to 3.1	49
VSP-HC30-50W□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC40, 50-□W□-4T/6T

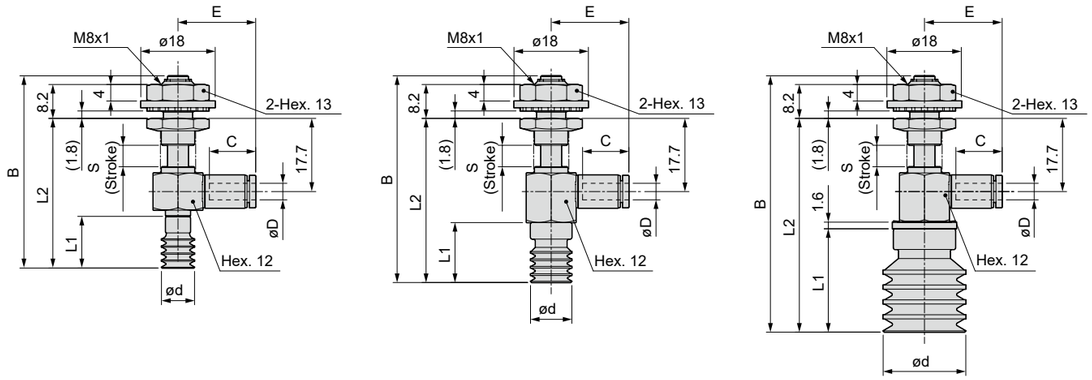


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC40-10W□-4T	40	2.5	93.4	45	59.6	21.5	10	1.0 to 2.4	42
VSP-HC40-10W□-6T		4							
VSP-HC40-15W□-4T		2.5	103.4		64.6	26.5	15	1.0 to 2.7	44
VSP-HC40-15W□-6T		4							
VSP-HC40-20W□-4T		2.5	113.4		69.6	31.5	20	1.0 to 3.0	46
VSP-HC40-20W□-6T		4							
VSP-HC40-25W□-4T		2.5	124		74.6	37	25	1.0 to 3.0	48
VSP-HC40-25W□-6T		4							
VSP-HC40-30W□-4T		2.5	134.9		79.6	43	30	1.0 to 3.0	51
VSP-HC40-30W□-6T		4							
VSP-HC40-40W□-4T		2.5	156.9		89.6	55	40	1.0 to 3.0	55
VSP-HC40-40W□-6T		4							
VSP-HC40-50W□-4T		2.5	178.4		99.6	66.5	50	1.0 to 3.1	59
VSP-HC40-50W□-6T		4							
VSP-HC50-10W□-4T	50	2.5	104.4	56	70.6	21.5	10	1.0 to 2.4	54
VSP-HC50-10W□-6T		4							
VSP-HC50-15W□-4T		2.5	114.4		75.6	26.5	15	1.0 to 2.7	56
VSP-HC50-15W□-6T		4							
VSP-HC50-20W□-4T		2.5	124.4		80.6	31.5	20	1.0 to 3.0	58
VSP-HC50-20W□-6T		4							
VSP-HC50-25W□-4T		2.5	134.9		85.6	37	25	1.0 to 3.0	60
VSP-HC50-25W□-6T		4							
VSP-HC50-30W□-4T		2.5	145.9		90.6	43	30	1.0 to 3.0	63
VSP-HC50-30W□-6T		4							
VSP-HC50-40W□-4T		2.5	167.9		100.6	55	40	1.0 to 3.0	67
VSP-HC50-40W□-6T		4							
VSP-HC50-50W□-4T		2.5	189.4		110.6	66.5	50	1.0 to 3.1	71
VSP-HC50-50W□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD6, 8W□-2/4/6 ●VSP-HD10W□-2/4/6 ●VSP-HD20 to 50W□-2/4/6

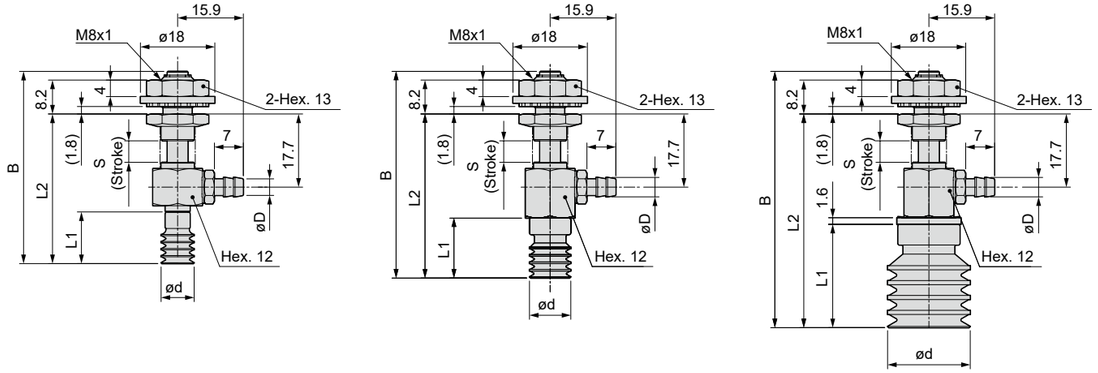


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6W□2	6	1.8	46	12	35.7	8.4	14.7	5.2	1.6 to 2.9	28
VSP-HD6W□-4		4				11.2	18.8			29
VSP-HD6W□6		6				11.9	20.6			30
VSP-HD8W□2	8	1.8	46.5	12.5	36.2	8.4	14.7	5.2	1.6 to 2.9	28
VSP-HD8W□-4		4				11.2	18.8			29
VSP-HD8W□6		6				11.9	20.6			30
VSP-HD10W□2	10	1.8	50	14.5	39.7	8.4	14.7	5.2	1.6 to 2.9	32
VSP-HD10W□-4		4				11.2	18.8			33
VSP-HD10W□6		6				11.9	20.6			34
VSP-HD20W□2	20	1.8	62	25	51.7	8.4	14.7	5.2	1.6 to 2.9	36
VSP-HD20W□-4		4				11.2	18.8			37
VSP-HD20W□6		6				11.9	20.6			38
VSP-HD30W□2	30	1.8	75.5	38.5	65.2	8.4	14.7	5.2	1.6 to 2.9	42
VSP-HD30W□-4		4				11.2	18.8			43
VSP-HD30W□6		6				11.9	20.6			44
VSP-HD40W□2	40	1.8	82	45	71.7	8.4	14.7	5.2	1.6 to 2.9	52
VSP-HD40W□-4		4				11.2	18.8			53
VSP-HD40W□6		6				11.9	20.6			54
VSP-HD50W□2	50	1.8	93	56	82.7	8.4	14.7	5.2	1.6 to 2.9	64
VSP-HD50W□-4		4				11.2	18.8			65
VSP-HD50W□6		6				11.9	20.6			66

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD6, 8W□-4T/6T ●VSP-HD10W□-4T/6T ●VSP-HD20 to 50W□-4T/6T

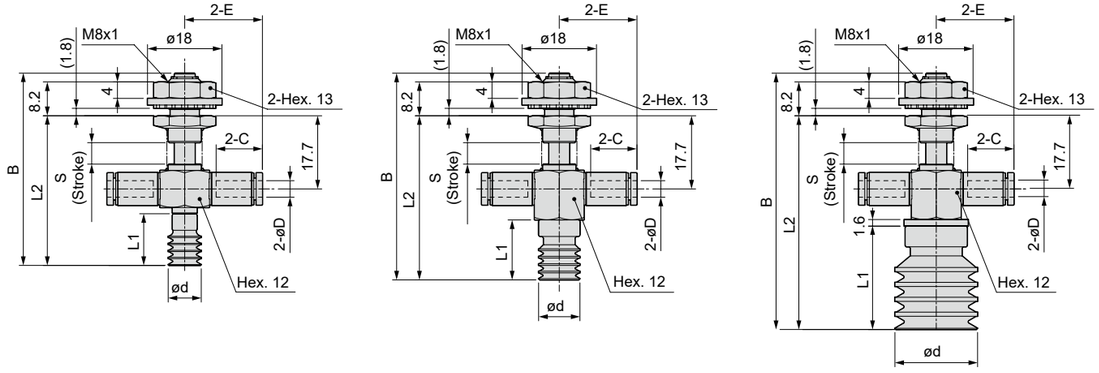


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6W□-4T	6	2.5	46	12	35.7	5.2	1.6 to 2.9	28
VSP-HD6W□-6T		4						
VSP-HD8W□-4T	8	2.5	46.5	12.5	36.2	5.2	1.6 to 2.9	28
VSP-HD8W□-6T		4						
VSP-HD10W□-4T	10	2.5	50	14.5	39.7	5.2	1.6 to 2.9	31
VSP-HD10W□-6T		4						
VSP-HD20W□-4T	20	2.5	62	25	51.7	5.2	1.6 to 2.9	36
VSP-HD20W□-6T		4						
VSP-HD30W□-4T	30	2.5	75.5	38.5	65.2	5.2	1.6 to 2.9	42
VSP-HD30W□-6T		4						
VSP-HD40W□-4T	40	2.5	82	45	71.7	5.2	1.6 to 2.9	52
VSP-HD40W□-6T		4						
VSP-HD50W□-4T	50	2.5	93	56	82.7	5.2	1.6 to 2.9	64
VSP-HD50W□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW6, 8W□-2/4/6 ●VSP-HDW10W□-2/4/6 ●VSP-HDW20 to 50W□-2/4/6

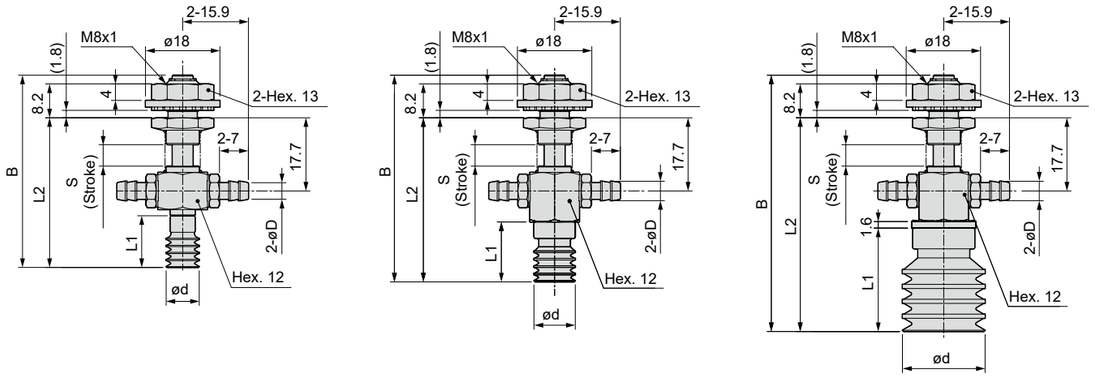


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6W□2	6	1.8	46	12	35.7	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW6W□-4		4				11.2	18.8			32
VSP-HDW6W□6		6				11.9	20.6			34
VSP-HDW8W□2	8	1.8	46.5	12.5	36.2	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW8W□-4		4				11.2	18.8			32
VSP-HDW8W□6		6				11.9	20.6			34
VSP-HDW10W□2	10	1.8	50	14.5	39.7	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW10W□-4		4				11.2	18.8			35
VSP-HDW10W□6		6				11.9	20.6			37
VSP-HDW20W□2	20	1.8	62	25	51.7	8.4	14.7	5.2	1.6 to 2.9	38
VSP-HDW20W□-4		4				11.2	18.8			40
VSP-HDW20W□6		6				11.9	20.6			42
VSP-HDW30W□2	30	1.8	75.5	38.5	65.2	8.4	14.7	5.2	1.6 to 2.9	44
VSP-HDW30W□-4		4				11.2	18.8			46
VSP-HDW30W□6		6				11.9	20.6			48
VSP-HDW40W□2	40	1.8	82	45	71.7	8.4	14.7	5.2	1.6 to 2.9	54
VSP-HDW40W□-4		4				11.2	18.8			56
VSP-HDW40W□6		6				11.9	20.6			58
VSP-HDW50W□2	50	1.8	93	56	82.7	8.4	14.7	5.2	1.6 to 2.9	66
VSP-HDW50W□-4		4				11.2	18.8			68
VSP-HDW50W□6		6				11.9	20.6			70

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW6, 8W□-4T/6T ●VSP-HDW10W□-4T/6T ●VSP-HDW20 to 50W□-4T/6T

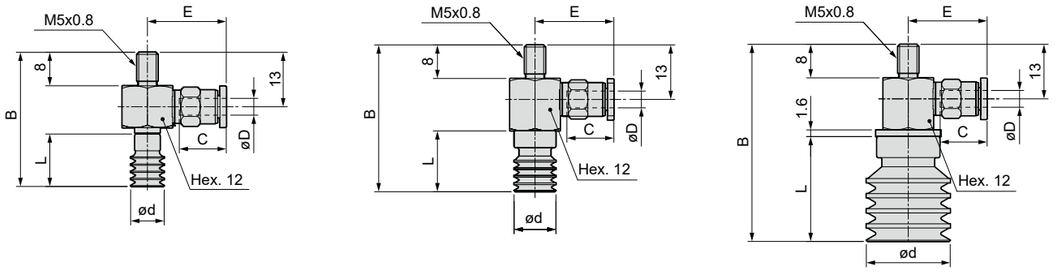


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6W□-4T	6	2.5	46	12	35.7	5.2	1.6 to 2.9	28
VSP-HDW6W□-6T		4						
VSP-HDW8W□-4T	8	2.5	46.5	12.5	36.2	5.2	1.6 to 2.9	28
VSP-HDW8W□-6T		4						
VSP-HDW10W□-4T	10	2.5	50	14.5	39.7	5.2	1.6 to 2.9	32
VSP-HDW10W□-6T		4						
VSP-HDW20W□-4T	20	2.5	62	25	51.7	5.2	1.6 to 2.9	37
VSP-HDW20W□-6T		4						
VSP-HDW30W□-4T	30	2.5	75.5	38.5	65.2	5.2	1.6 to 2.9	43
VSP-HDW30W□-6T		4						
VSP-HDW40W□-4T	40	2.5	82	45	71.7	5.2	1.6 to 2.9	53
VSP-HDW40W□-6T		4						
VSP-HDW50W□-4T	50	2.5	93	56	82.7	5.2	1.6 to 2.9	65
VSP-HDW50W□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE6, 8W□-2/4/6 ●VSP-HE10W□-2/4/6 ●VSP-HE20 to 50W□-2/4/6

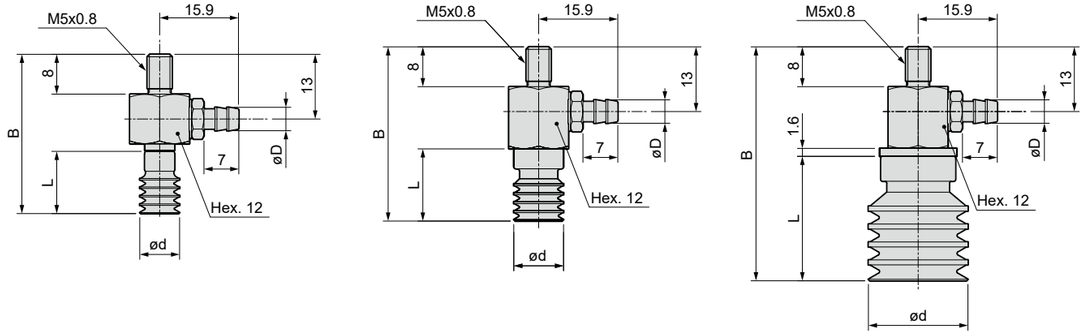


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE6W□-2	6	1.8	31.5	12	8.4	14.7	14
VSP-HE6W□-4		4			11.2	18.8	15
VSP-HE6W□-6		6			11.9	20.6	16
VSP-HE8W□-2	8	1.8	32	12.5	8.4	14.7	14
VSP-HE8W□-4		4			11.2	18.8	15
VSP-HE8W□-6		6			11.9	20.6	16
VSP-HE10W□-2	10	1.8	35	14.5	8.4	14.7	17
VSP-HE10W□-4		4			11.2	18.8	18
VSP-HE10W□-6		6			11.9	20.6	19
VSP-HE20W□-2	20	1.8	47	25	8.4	14.7	22
VSP-HE20W□-4		4			11.2	18.8	23
VSP-HE20W□-6		6			11.9	20.6	24
VSP-HE30W□-2	30	1.8	60.5	38.5	8.4	14.7	28
VSP-HE30W□-4		4			11.2	18.8	29
VSP-HE30W□-6		6			11.9	20.6	30
VSP-HE40W□-2	40	1.8	67	45	8.4	14.7	38
VSP-HE40W□-4		4			11.2	18.8	39
VSP-HE40W□-6		6			11.9	20.6	40
VSP-HE50W□-2	50	1.8	78	56	8.4	14.7	50
VSP-HE50W□-4		4			11.2	18.8	51
VSP-HE50W□-6		6			11.9	20.6	52

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE6, 8W□-4T/6T ●VSP-HE10W□-4T/6T ●VSP-HE20 to 50W□-4T/6T

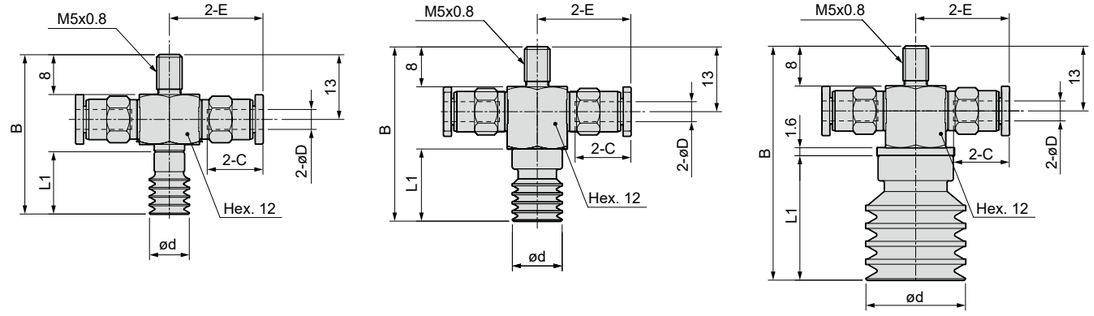


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE6W□-4T	6	2.5	31.5	12	13
VSP-HE6W□-6T		4			
VSP-HE8W□-4T	8	2.5	29.5	12.5	13
VSP-HE8W□-6T		4			
VSP-HE10W□-4T	10	2.5	35	14.5	16
VSP-HE10W□-6T		4			
VSP-HE20W□-4T	20	2.5	47	25	21
VSP-HE20W□-6T		4			
VSP-HE30W□-4T	30	2.5	60.5	38.5	27
VSP-HE30W□-6T		4			
VSP-HE40W□-4T	40	2.5	67	45	37
VSP-HE40W□-6T		4			
VSP-HE50W□-4T	50	2.5	78	56	49
VSP-HE50W□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW6, 8W□-2/4/6 ●VSP-HEW10W□-2/4/6 ●VSP-HEW20 to 50W□-2/4/6

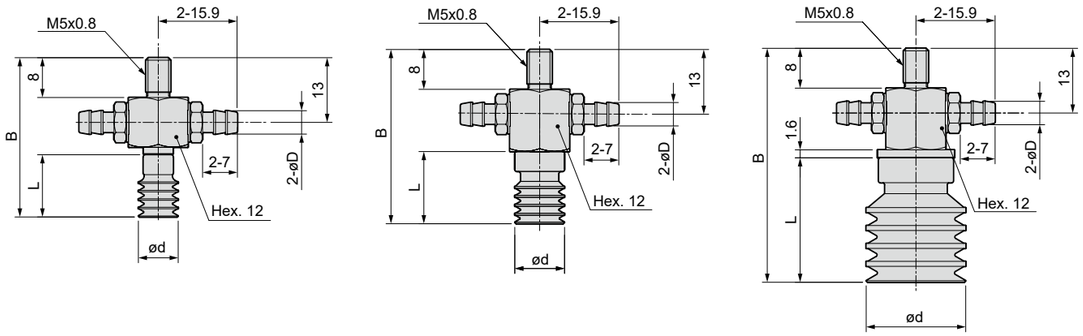


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW6W□-2	6	1.8	31.5	12	8.4	14.7	16
VSP-HEW6W□-4		4			11.2	18.8	18
VSP-HEW6W□-6		6			11.9	20.6	20
VSP-HEW8W□-2	8	1.8	32	12.5	8.4	14.7	16
VSP-HEW8W□-4		4			11.2	18.8	18
VSP-HEW8W□-6		6			11.9	20.6	20
VSP-HEW10W□-2	10	1.8	35	14.5	8.4	14.7	19
VSP-HEW10W□-4		4			11.2	18.8	21
VSP-HEW10W□-6		6			11.9	20.6	23
VSP-HEW20W□-2	20	1.8	47	25	8.4	14.7	23
VSP-HEW20W□-4		4			11.2	18.8	25
VSP-HEW20W□-6		6			11.9	20.6	27
VSP-HEW30W□-2	30	1.8	60.5	38.5	8.4	14.7	29
VSP-HEW30W□-4		4			11.2	18.8	31
VSP-HEW30W□-6		6			11.9	20.6	33
VSP-HEW40W□-2	40	1.8	67	45	8.4	14.7	39
VSP-HEW40W□-4		4			11.2	18.8	41
VSP-HEW40W□-6		6			11.9	20.6	43
VSP-HEW50W□-2	50	1.8	78	56	8.4	14.7	51
VSP-HEW50W□-4		4			11.2	18.8	53
VSP-HEW50W□-6		6			11.9	20.6	55

Outline Dimension Drawing (Low Profile Buffer Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW6, 8W□-4T/6T ●VSP-HEW10W□-4T/6T ●VSP-HEW20 to 50W□-4T/6T

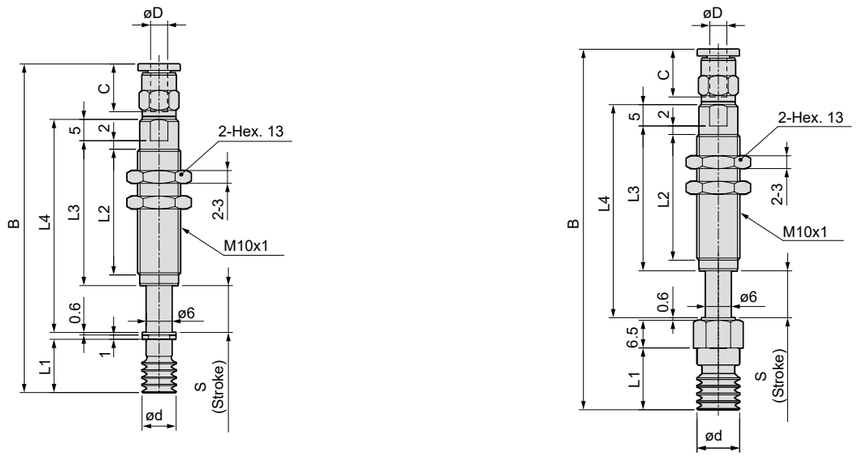


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW6W□-4T	6	2.5	31.5	12	14
VSP-HEW6W□-6T		4			
VSP-HEW8W□-4T	8	2.5	29.5	12.5	14
VSP-HEW8W□-6T		4			
VSP-HEW10W□-4T	10	2.5	35	14.5	17
VSP-HEW10W□-6T		4			
VSP-HEW20W□-4T	20	2.5	47	25	22
VSP-HEW20W□-6T		4			
VSP-HEW30W□-4T	30	2.5	60.5	38.5	28
VSP-HEW30W□-6T		4			
VSP-HEW40W□-4T	40	2.5	67	45	38
VSP-HEW40W□-6T		4			
VSP-HEW50W□-4T	50	2.5	78	56	50
VSP-HEW50W□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC6, 8-□W□-4 ●VSP-LFC10-□W□-4



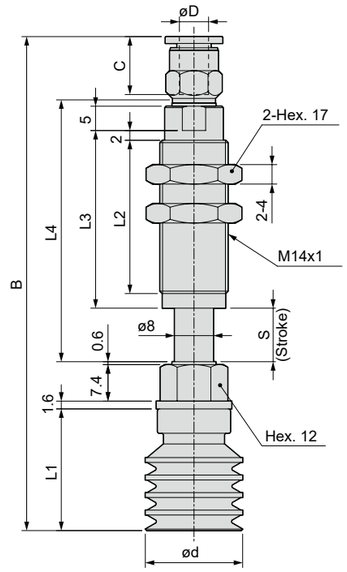
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2W□-4	6	4	60.6	12	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC6-5W□-4			66.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC6-10W□-4			76.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC6-15W□-4			86.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC6-20W□-4			96.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC8-2W□-4	8	4	61.1	12.5	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC8-5W□-4			67.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC8-10W□-4			77.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC8-15W□-4			87.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC8-20W□-4			97.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC10-2W□-4	10	4	68.6	14.5	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC10-5W□-4			74.6		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-10W□-4			84.6		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-15W□-4			94.6		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-20W□-4			104.6		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	35

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC20 to 50-□W□-4/6



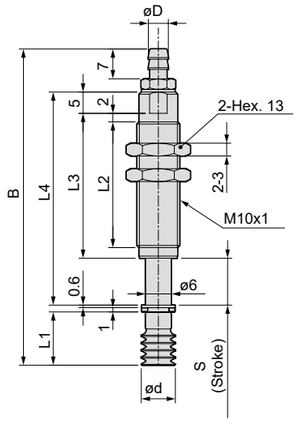
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5W□-4	20	4	90.1	25	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	58
VSP-LFC20-5W□-6		6	91.4					11.9			59
VSP-LFC20-10W□-4		4	100.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	60
VSP-LFC20-10W□-6		6	101.4					11.9			61
VSP-LFC20-15W□-4		4	110.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	63
VSP-LFC20-15W□-6		6	111.4					11.9			64
VSP-LFC20-20W□-4		4	120.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	66
VSP-LFC20-20W□-6		6	121.4					11.9			67
VSP-LFC30-5W□-4	30	4	103.6	38.5	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	64
VSP-LFC30-5W□-6		6	104.9					11.9			65
VSP-LFC30-10W□-4		4	113.6		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	66
VSP-LFC30-10W□-6		6	114.9					11.9			67
VSP-LFC30-15W□-4		4	123.6		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	69
VSP-LFC30-15W□-6		6	124.9					11.9			70
VSP-LFC30-20W□-4		4	133.6		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	72
VSP-LFC30-20W□-6		6	134.9					11.9			73
VSP-LFC40-5W□-4	40	4	110.1	45	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	74
VSP-LFC40-5W□-6		6	111.4					11.9			75
VSP-LFC40-10W□-4		4	120.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	76
VSP-LFC40-10W□-6		6	121.4					11.9			77
VSP-LFC40-15W□-4		4	130.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	79
VSP-LFC40-15W□-6		6	131.4					11.9			80
VSP-LFC40-20W□-4		4	140.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	82
VSP-LFC40-20W□-6		6	141.4					11.9			83
VSP-LFC50-5W□-4	50	4	121.1	56	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	86
VSP-LFC50-5W□-6		6	122.4					11.9			87
VSP-LFC50-10W□-4		4	131.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	88
VSP-LFC50-10W□-6		6	132.4					11.9			89
VSP-LFC50-15W□-4		4	141.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	91
VSP-LFC50-15W□-6		6	142.4					11.9			92
VSP-LFC50-20W□-4		4	151.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	94
VSP-LFC50-20W□-6		6	152.4					11.9			95

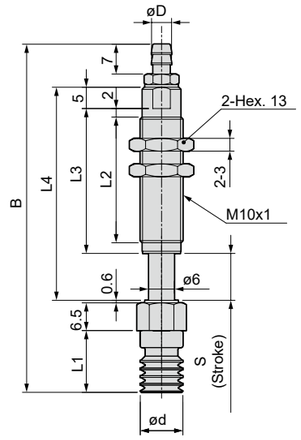
* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC6, 8-□W□-4T/6T



●VSP-LFC10-□W□-4T/6T



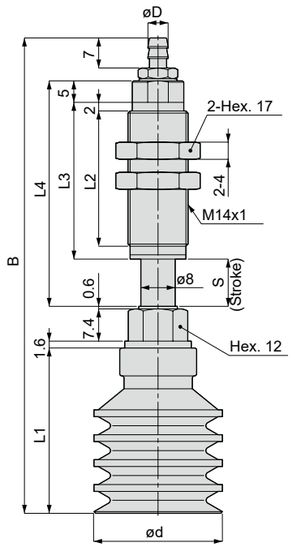
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2W□-4T	6	2.5	57.7	12	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC6-2W□-6T		4								
VSP-LFC6-5W□-4T		2.5	63.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC6-5W□-6T		4								
VSP-LFC6-10W□-4T		2.5	73.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC6-10W□-6T		4								
VSP-LFC6-15W□-4T		2.5	83.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC6-15W□-6T		4								
VSP-LFC6-20W□-4T		2.5	93.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC6-20W□-6T		4								
VSP-LFC8-2W□-4T	8	2.5	58.2	12.5	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC8-2W□-6T		4								
VSP-LFC8-5W□-4T		2.5	64.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC8-5W□-6T		4								
VSP-LFC8-10W□-4T		2.5	74.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC8-10W□-6T		4								
VSP-LFC8-15W□-4T		2.5	84.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC8-15W□-6T		4								
VSP-LFC8-20W□-4T		2.5	94.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC8-20W□-6T		4								
VSP-LFC10-2W□-4T	10	2.5	65.7	14.5	21.5	26	34	2	1.3 to 1.8	26
VSP-LFC10-2W□-6T		4								
VSP-LFC10-5W□-4T		2.5	71.7		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	28
VSP-LFC10-5W□-6T		4								
VSP-LFC10-10W□-4T		2.5	81.7		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	30
VSP-LFC10-10W□-6T		4								
VSP-LFC10-15W□-4T		2.5	91.7		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	32
VSP-LFC10-15W□-6T		4								
VSP-LFC10-20W□-4T		2.5	101.7		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	34
VSP-LFC10-20W□-6T		4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC20 to 50-□W□-4T/6T



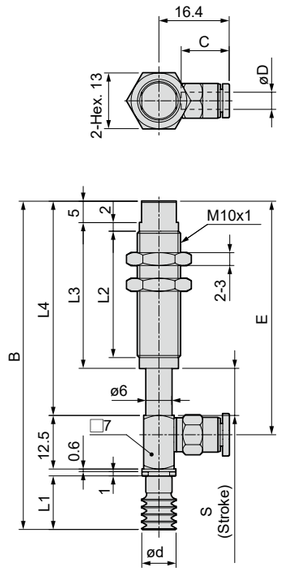
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5W□-4T	20	2.5	87.2	25	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC20-5W□-6T		4								
VSP-LFC20-10W□-4T		2.5	97.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC20-10W□-6T		4								
VSP-LFC20-15W□-4T		2.5	107.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC20-15W□-6T		4								
VSP-LFC20-20W□-4T		2.5	117.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC20-20W□-6T		4								
VSP-LFC30-5W□-4T	30	2.5	100.7	38.5	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	59
VSP-LFC30-5W□-6T		4								
VSP-LFC30-10W□-4T		2.5	110.7		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	61
VSP-LFC30-10W□-6T		4								
VSP-LFC30-15W□-4T		2.5	120.7		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	64
VSP-LFC30-15W□-6T		4								
VSP-LFC30-20W□-4T		2.5	130.7		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	67
VSP-LFC30-20W□-6T		4								
VSP-LFC40-5W□-4T	40	2.5	107.2	45	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	69
VSP-LFC40-5W□-6T		4								
VSP-LFC40-10W□-4T		2.5	117.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	71
VSP-LFC40-10W□-6T		4								
VSP-LFC40-15W□-4T		2.5	127.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	74
VSP-LFC40-15W□-6T		4								
VSP-LFC40-20W□-4T		2.5	137.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	77
VSP-LFC40-20W□-6T		4								
VSP-LFC50-5W□-4T	50	2.5	118.2	56	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	81
VSP-LFC50-5W□-6T		4								
VSP-LFC50-10W□-4T		2.5	128.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	83
VSP-LFC50-10W□-6T		4								
VSP-LFC50-15W□-4T		2.5	138.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	86
VSP-LFC50-15W□-6T		4								
VSP-LFC50-20W□-4T		2.5	148.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	89
VSP-LFC50-20W□-6T		4								

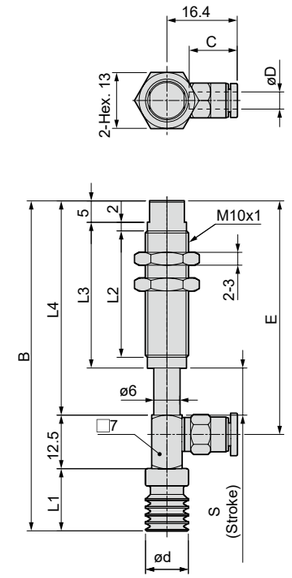
* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD6, 8-□W□-4



●VSP-LFD10-□W□-4

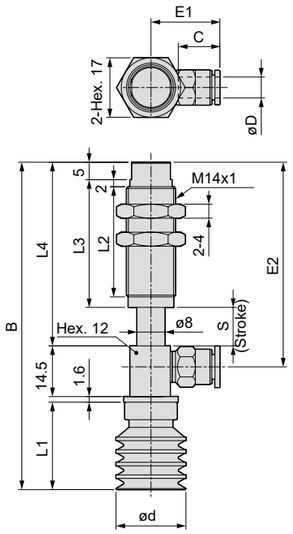


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5W□-4	6	4	66.1	12	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD6-10W□-4			76.1		29.5	34	50		54.5	10	1.3 to 3.3	34
VSP-LFD6-15W□-4			86.1		34.5	39	60		64.5	15	1.3 to 4.2	36
VSP-LFD6-20W□-4			96.1		39.5	44	70		74.5	20	1.3 to 5.1	38
VSP-LFD8-5W□-4	8	4	66.6	12.5	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD8-10W□-4			76.6		29.5	34	50		54.5	10	1.3 to 3.3	34
VSP-LFD8-15W□-4			86.6		34.5	39	60		64.5	15	1.3 to 4.2	36
VSP-LFD8-20W□-4			96.6		39.5	44	70		74.5	20	1.3 to 5.1	38
VSP-LFD10-5W□-4	10	4	67	14.5	24.5	29	40	11.2	44.5	5	1.3 to 2.4	26
VSP-LFD10-10W□-4			77		29.5	34	50		54.5	10	1.3 to 3.3	28
VSP-LFD10-15W□-4			87		34.5	39	60		64.5	15	1.3 to 4.2	30
VSP-LFD10-20W□-4			97		39.5	44	70		74.5	20	1.3 to 5.1	32

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD20 to 50-□W□-4/6

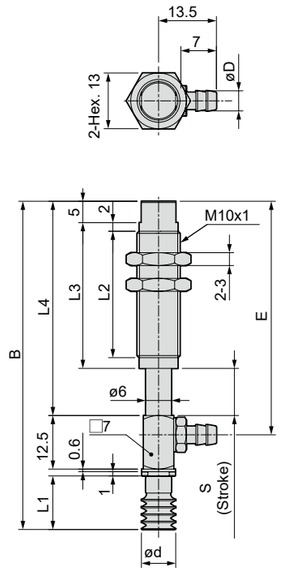


Unit: mm

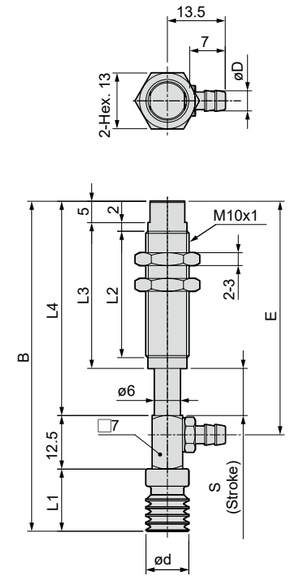
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5W□-4	20	4	83.5	25	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	59
VSP-LFD20-5W□-6		6						11.9	19.7				60
VSP-LFD20-10W□-4		4	93.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	63
VSP-LFD20-10W□-6		6						11.9	19.7				64
VSP-LFD20-15W□-4		4	103.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	67
VSP-LFD20-15W□-6		6						11.9	19.7				68
VSP-LFD20-20W□-4		4	113.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	71
VSP-LFD20-20W□-6		6						11.9	19.7				72
VSP-LFD30-5W□-4	30	4	97	38.5	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	65
VSP-LFD30-5W□-6		6						11.9	19.7				66
VSP-LFD30-10W□-4		4	107		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	69
VSP-LFD30-10W□-6		6						11.9	19.7				70
VSP-LFD30-15W□-4		4	117		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	73
VSP-LFD30-15W□-6		6						11.9	19.7				74
VSP-LFD30-20W□-4		4	127		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	77
VSP-LFD30-20W□-6		6						11.9	19.7				78
VSP-LFD40-5W□-4	40	4	103.5	45	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	75
VSP-LFD40-5W□-6		6						11.9	19.7				76
VSP-LFD40-10W□-4		4	113.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	79
VSP-LFD40-10W□-6		6						11.9	19.7				80
VSP-LFD40-15W□-4		4	123.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	83
VSP-LFD40-15W□-6		6						11.9	19.7				84
VSP-LFD40-20W□-4		4	133.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	87
VSP-LFD40-20W□-6		6						11.9	19.7				88
VSP-LFD50-5W□-4	50	4	114.5	56	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	87
VSP-LFD50-5W□-6		6						11.9	19.7				88
VSP-LFD50-10W□-4		4	124.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	91
VSP-LFD50-10W□-6		6						11.9	19.7				92
VSP-LFD50-15W□-4		4	134.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	94
VSP-LFD50-15W□-6		6						11.9	19.7				95
VSP-LFD50-20W□-4		4	144.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	99
VSP-LFD50-20W□-6		6						11.9	19.7				100

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD6, 8-□W□-4T/6T



●VSP-LFD10-□W□-4T/6T

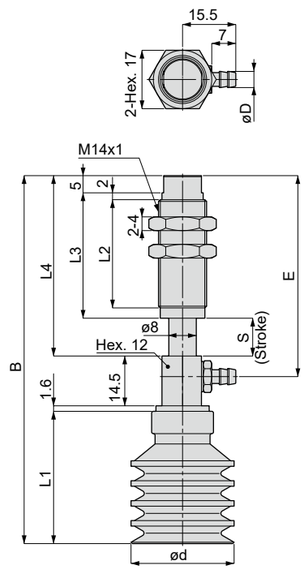


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5W□-4T	6	2.5	66.1	12	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD6-5W□-6T		4									
VSP-LFD6-10W□-4T		2.5	76.1		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD6-10W□-6T		4									
VSP-LFD6-15W□-4T		2.5	86.1		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD6-15W□-6T		4									
VSP-LFD6-20W□-4T		2.5	96.1		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD6-20W□-6T		4									
VSP-LFD8-5W□-4T	8	2.5	66.6	12.5	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD8-5W□-6T		4									
VSP-LFD8-10W□-4T		2.5	76.6		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD8-10W□-6T		4									
VSP-LFD8-15W□-4T		2.5	86.6		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD8-15W□-6T		4									
VSP-LFD8-20W□-4T		2.5	96.6		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD8-20W□-6T		4									
VSP-LFD10-5W□-4T	10	2.5	67	14.5	24.5	29	40	44.5	5	1.3 to 2.4	25
VSP-LFD10-5W□-6T		4									
VSP-LFD10-10W□-4T		2.5	77		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD10-10W□-6T		4									
VSP-LFD10-15W□-4T		2.5	87		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD10-15W□-6T		4									
VSP-LFD10-20W□-4T		2.5	97		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD10-20W□-6T		4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD20 to 50-□W□-4T/6T



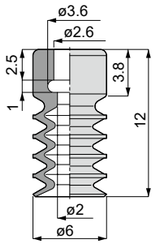
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5W□-4T	20	2.5	83.5	25	26.5	31.5	42.5	48.5	5	4.5 to 6.5	55
VSP-LFD20-5W□-6T		4									
VSP-LFD20-10W□-4T		2.5	93.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	58
VSP-LFD20-10W□-6T		4									
VSP-LFD20-15W□-4T		2.5	103.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	62
VSP-LFD20-15W□-6T		4									
VSP-LFD20-20W□-4T		2.5	113.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	66
VSP-LFD20-20W□-6T		4									
VSP-LFD30-5W□-4T	30	2.5	97	38.5	26.5	31.5	42.5	48.5	5	4.5 to 6.5	61
VSP-LFD30-5W□-6T		4									
VSP-LFD30-10W□-4T		2.5	107		31.5	36.5	52.5	58.5	10	4.5 to 8.2	64
VSP-LFD30-10W□-6T		4									
VSP-LFD30-15W□-4T		2.5	117		36.5	41.5	62.5	68.5	15	4.5 to 9.9	68
VSP-LFD30-15W□-6T		4									
VSP-LFD30-20W□-4T		2.5	127		41.5	46.5	72.5	78.5	20	4.5 to 14.9	72
VSP-LFD30-20W□-6T		4									
VSP-LFD40-5W□-4T	40	2.5	103.5	45	26.5	31.5	42.5	48.5	5	4.5 to 6.5	71
VSP-LFD40-5W□-6T		4									
VSP-LFD40-10W□-4T		2.5	113.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	74
VSP-LFD40-10W□-6T		4									
VSP-LFD40-15W□-4T		2.5	123.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	78
VSP-LFD40-15W□-6T		4									
VSP-LFD40-20W□-4T		2.5	133.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	82
VSP-LFD40-20W□-6T		4									
VSP-LFD50-5W□-4T	50	2.5	114.5	56	26.5	31.5	42.5	48.5	5	4.5 to 6.5	83
VSP-LFD50-5W□-6T		4									
VSP-LFD50-10W□-4T		2.5	124.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	86
VSP-LFD50-10W□-6T		4									
VSP-LFD50-15W□-4T		2.5	134.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	90
VSP-LFD50-15W□-6T		4									
VSP-LFD50-20W□-4T		2.5	144.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	94
VSP-LFD50-20W□-6T		4									

MEMO

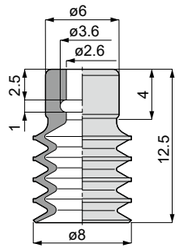
Pad Rubber Only External Dimension Diagram

●VSPG-6W□



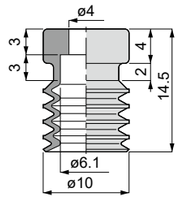
Weight: 0.4 g [0.6 g]

●VSPG-8W□



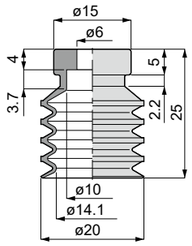
Weight: 0.5 g [0.8 g]

●VSPG-10W□



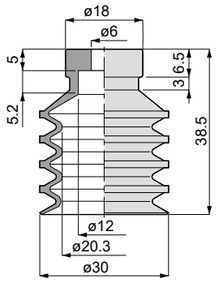
Weight: 0.6 g [1.0 g]

●VSPG-20W□



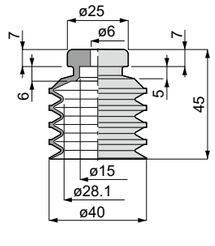
Weight: 2.4 g [3.6 g]

●VSPG-30W□



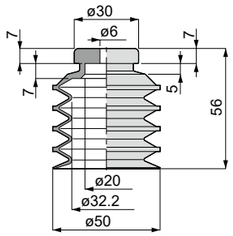
Weight: 6.7 g [10.1 g]

●VSPG-40W□



Weight: 15 g [23 g]

●VSPG-50W□

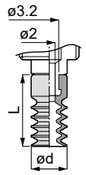


Weight: 25 g [37.5 g]

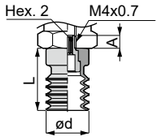
Weight: Values in [ ] are for fluororubber only.

Detailed Diagram of Pad and Holder Connection Part

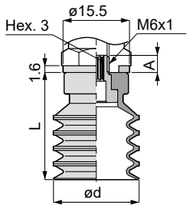
●VSPG-6, 8W□



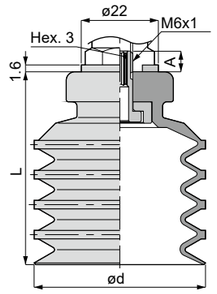
●VSPG-10WøA



●VSPG-20, 30WøA



●VSPG-40, 50WøA

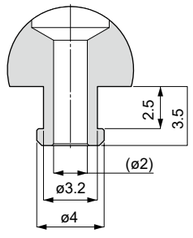


Unit: mm

Model No.	Pad Outer Diameter ød	L	Fixing Screw	A
VSPG-6W□	6	6	-	-
VSPG-8W□	8	8	-	-
VSPG-10WøA	10	10	10	3
VSPG-20WøA	20	20	20	4
VSPG-30WøA	30	30	30	5
VSPG-40WøA	40	40	40	5
VSPG-50WøA	50	50	50	5

Pad Rubber Fitting Part Dimension

●VSPG-6, 8W□



Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro Page 15 for details.

Individual Precautions: Suction Pad Multi-stage Bellows Type, VSP-□W□Series

Design / Selection

Warning

- Since the multi-stage bellows type pads may adhere together due to working Status and material characteristics, confirm performance with an actual device. Also, tackiness may increase depending on the operating environment or pad wear. Review the pad shape, material, quantity, etc., as necessary.
- Do not use the multi-stage bellows type in a way that it is excessively crushed. Excessive crushing may accelerate wear of the bellows part, cause cracks in the lip part, or lead to deformation due to strain, potentially causing suction failure.

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad Oblong Type

VSP-□E□ Series

Oblong-shaped suction pad convenient for cases where a circular suction surface cannot be secured

RoHS

Ideal for transporting long workpieces such as substrates or semiconductors

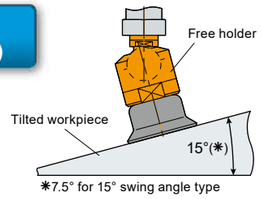
Abundant holder variations

Shape	Piping Connection	Stroke
16 types	5 types	10 types
●Standard .5 types ●Compact Class 4 ●Low dust generation .....2 types ●Lightweight3 types ●Low back 2 types	●Push-in fitting (ø1.8 to ø6)3 types ●Barbed fitting (ø4, ø6) .....2 types	4 mm to 50 mm (Depending on pad size, holder type)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

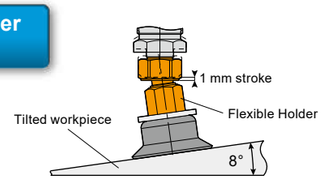
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

Free holder (F1:30°, F2:15°)



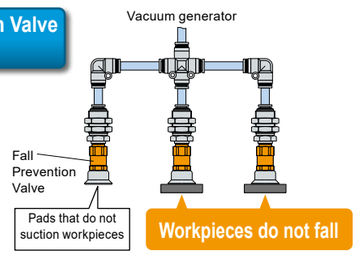
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

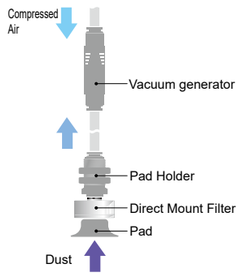
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



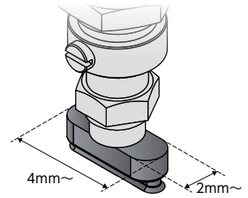
Pad surface treatment (option) with special processing to reduce adsorption marks is available

Code	-DL	-ER	-FG
Surface Treatment	Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
Compatible Material	Silicone Fluorine Conductive Silicone	Nitrile Conductive NBR (Low Resistance-type)	Silicone Conductive Silicone
Features	Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

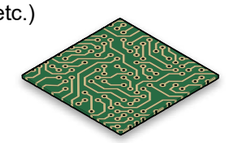
Wide suction area with oblong shape

Available from 2 mm x 4 mm to accommodate small suction spaces. Securing suction area is possible even in narrow spaces.



Recommended Workpiece

Workpieces with limited suction space (substrates, semiconductors, round bars, etc.)



Pad Size

13 types							
	2x4	3.5x7	4x10	5x10	6 x 10	4x20	5 x 20
	6 x 20	8 x 20	4 x 30	5 x 30	6 x 30	8 x 30	

Pad Material

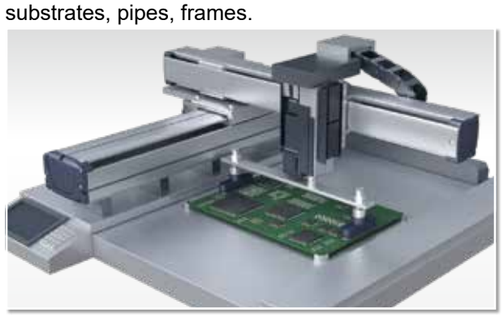
8 types						
	Nitrile	Silicone	Urethane	Fluorine	Conductive Silicone	
	Conductive NBR (Low Resistance-type)	HNBR	EPDM			

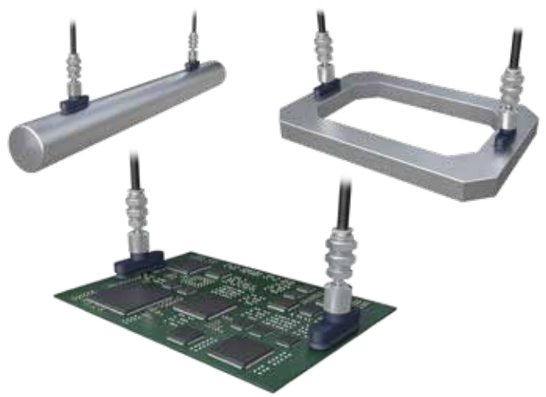
*Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Long, narrow workpieces

Supports workpieces where securing suction area is difficult with circular pads, such as electronic substrates, pipes, frames.





Model No. Notation

●Oval-type

Suction Pad

VSP	C	2×4	-20	E	N	-ER	6			F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Size	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Size/Shape	❽ Buffer Load		❾ Pad Swinging	❿ Drop Prevention Valve	⓫ Direct Mount Filter

Pad Rubber Only

VSPG	2×4		E	N	-ER
Model No.	❷		❹	❺	❻

Pad Rubber + Set with Fixing Screw

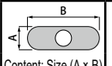
VSPG	2×4		E	N	-ER	A
Model No.	❷ Pad Size		❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Screw Fastening		AE	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
	Low Profile	Both Sides Direction	HEW	
	Screw Fastening	Side Direction	BE	

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
	Lightweight	Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Size

Pad Shape	E									
Pad Material	N	S	U	F	SE	E	NE	HN	EP	Code
 Content: Size (A × B)										
2 mm × 4 mm	●	●	●	●	●		●	●	●	2×4
3.5 mm × 7 mm	●	●	●	●	●		●	●	●	3.5×7
4 mm × 10 mm	●	●	●	●	●	●	●	●	●	4×10
4 mm × 20 mm	●	●	●	●	●	●	●	●	●	4×20
4 mm × 30 mm	●	●			●	●	●	●	●	4 × 30
5 mm × 10 mm	●	●	●	●	●	●	●	●	●	5×10
5 mm × 20 mm	●	●	●	●	●	●	●	●	●	5 × 20
5 mm × 30 mm	●	●	●	●	●	●	●	●	●	5 × 30
6 mm × 10 mm	●	●	●	●	●	●	●	●	●	6 × 10
6 mm × 20 mm	●	●	●	●	●	●	●	●	●	6 × 20
6 mm × 30 mm	●	●	●	●	●	●	●	●	●	6 × 30
8 mm × 20 mm	●	●	●	●	●	●	●	●	●	8 × 20
8 mm × 30 mm	●	●	●	●	●	●	●	●	●	8 × 30

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●				Blank	*1, *2
Stroke 5 mm				●	●	–5	
Stroke 10 mm	●	●	●	●	●	–10	
Stroke 15 mm	●	●	●	●	●	–15	
Stroke 20 mm	●	●	●	●	●	–20	
Stroke 25 mm			●			–25	
Stroke 30 mm	●	●	●			–30	
Stroke 40 mm	●	●	●			–40	
Stroke 50 mm	●	●	●			–50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.

❹ Pad Shape

Code	Content	
E	Oval-type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
U	Urethane rubber
F	Fluororubber
SE	Conductive Silicone Rubber
NE	Conductive NBR (Low Resistance-type)
HN	HNBR
EP	EPDM

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP –... –P4*

*Please inquire for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

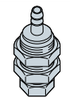
●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP –... –FP*

❻ Surface Treatment

Content	Compatible Pad Material N	S	F	SE	NE	Compatible Pad Diameter Oblong (E)	Code
No surface treatment	All pad materials, all pad sizes						Blank
Anti-Adhesion Special Coating		●	●	●		All sizes	–DL
Suction Mark Reduction Surface Modification	●				●	All sizes	–ER
Fluorine Coating		●		●		All sizes	–FG

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	AE	BE	Code	
(❶: When F)																		Blank	
ø1.8, Push-in fitting						●	●	●			●	●	●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●														4C	
ø6, Push-in fitting, without spring cover			●	●														6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●														4TC	
ø6, Barb fitting, without spring cover			●	●														6TC	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for (7). Additionally, for (3) Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.

❽ Buffer Load

Code	Content	
Blank	Standard Load or No Buffer	*1
L	Low Load (1/4 of Standard Load)	

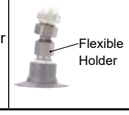
*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.

⓫ Direct Mount Filter

Code	Content		
Blank	None		*1
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter	
T2	With Direct Mount Filter (Filtration Area 7 cm²)		

*1: For ❶ Holder Shape AE and BE, ⓫ is 'Blank'.
*2: For dimensions with the direct mount filter, please refer to P. 1064.

❾ Pad Swing

Code	Content		
Blank	None		*1
F1	With Free Holder (Angle 30°)	Free Holder	
F2	With Free Holder (Angle 15°)		
CF	With Flexible Holder (Angle 8°)	 Flexible Holder	

*1: For ❶ Holder Shape AE and BE, ❾ is 'Blank'.
*2: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

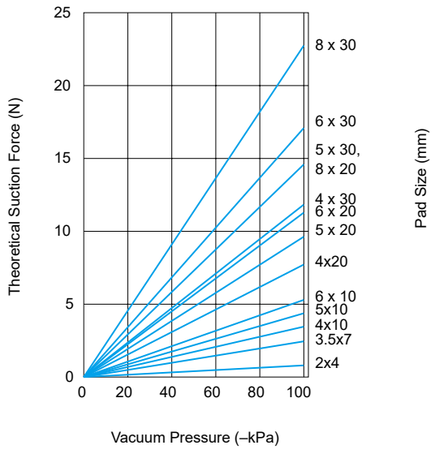
❿ Drop Prevention Valve

Code	Content		
Blank	None		*1
V	With Drop Prevention Valve	Drop Prevention Valve	

*1: For ❶ Holder Shape AE and BE, ❿ is 'Blank'.
*2: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

Theoretical Suction Force

● Pad Size: 2 x 4 mm, 3.5 x 7 mm, □ x 10 mm, □ x 20 mm, □ x 30 mm

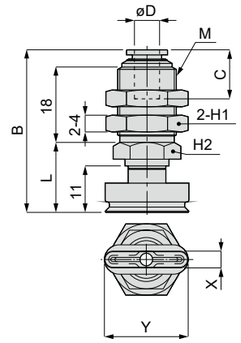


*The theoretical suction force is a value under static conditions. When actually using, apply a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting.

Refer to "Suction Pads selection method" (P. 412) Use the suction force obtained with this formula as a guide, and make sure that there is no problem with the suction capacity on the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A□E□-4/6

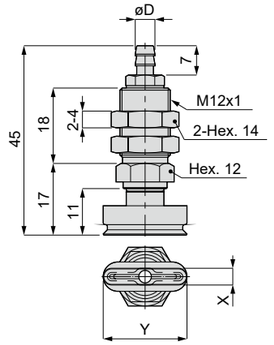


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	Mounting screw M	B	L	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A2x4E□-4	2	4	4	M12x1	47.9	17	11.2	14	12	26
VSP-A2x4E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A3.5x7E□-4	3.5	7	4	M12x1	47.9	17	11.2	14	12	26
VSP-A3.5x7E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A4x10E□-4	4	10	4	M12x1	47.9	17	11.2	14	12	26
VSP-A4x10E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A4x20E□-4		20	4	M12x1	47.9	17	11.2	14	12	26
VSP-A4x20E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A4x30E□-4		30	4	M12x1	47.9	17	11.2	14	12	27
VSP-A4x30E□-6			6	M14x1	38.9	16.6	11.9	17	14	33
VSP-A5x10E□-4	5	10	4	M12x1	47.9	17	11.2	14	12	26
VSP-A5x10E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A5x20E□-4		20	4	M12x1	47.9	17	11.2	14	12	26
VSP-A5x20E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A5x30E□-4		30	4	M12x1	47.9	17	11.2	14	12	26
VSP-A5x30E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A6x10E□-4	6	10	4	M12x1	47.9	17	11.2	14	12	26
VSP-A6x10E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A6x20E□-4		20	4	M12x1	47.9	17	11.2	14	12	26
VSP-A6x20E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A6x30E□-4		30	4	M12x1	47.9	17	11.2	14	12	27
VSP-A6x30E□-6			6	M14x1	38.9	16.6	11.9	17	14	33
VSP-A8x20E□-4	8	20	4	M12x1	47.9	17	11.2	14	12	26
VSP-A8x20E□-6			6	M14x1	38.9	16.6	11.9	17	14	32
VSP-A8x30E□-4		30	4	M12x1	47.9	17	11.2	14	12	27
VSP-A8x30E□-6			6	M14x1	38.9	16.6	11.9	17	14	33

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A□E□-4T/6T

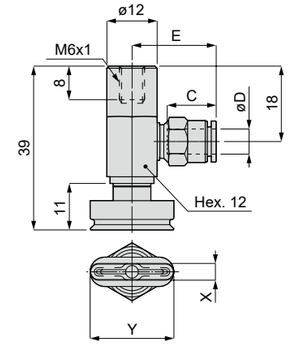


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Weight (g)
VSP-A2x4E□-4T	2	4	2.5	25
VSP-A2x4E□-6T			4	
VSP-A3.5x7E□-4T	3.5	7	2.5	25
VSP-A3.5x7E□-6T			4	
VSP-A4x10E□-4T	4	10	2.5	25
VSP-A4x10E□-6T			4	
VSP-A4x20E□-4T		20	2.5	26
VSP-A4x20E□-6T			4	
VSP-A4x30E□-4T		30	2.5	26
VSP-A4x30E□-6T			4	
VSP-A5x10E□-4T	5	10	2.5	25
VSP-A5x10E□-6T			4	
VSP-A5x20E□-4T		20	2.5	26
VSP-A5x20E□-6T			4	
VSP-A5x30E□-4T		30	2.5	26
VSP-A5x30E□-6T			4	
VSP-A6x10E□-4T	6	10	2.5	25
VSP-A6x10E□-6T			4	
VSP-A6x20E□-4T		20	2.5	26
VSP-A6x20E□-6T			4	
VSP-A6x30E□-4T		30	2.5	26
VSP-A6x30E□-6T			4	
VSP-A8x20E□-4T	8	20	2.5	26
VSP-A8x20E□-6T			4	
VSP-A8x30E□-4T		30	2.5	26
VSP-A8x30E□-6T			4	

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B□E□-4/6

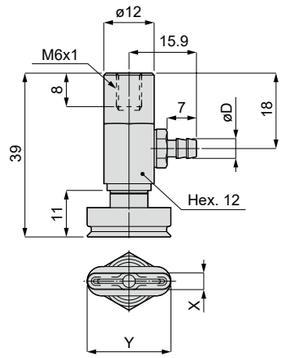


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	Tube End C	E	Weight (g)
VSP-B2x4E□-4	2	4	4	11.2	18.8	28
VSP-B2x4E□-6			6	11.9	20.1	29
VSP-B3.5x7E□-4	3.5	7	4	11.2	18.8	28
VSP-B3.5x7E□-6			6	11.9	20.1	29
VSP-B4x10E□-4	4	10	4	11.2	18.8	28
VSP-B4x10E□-6			6	11.9	20.1	29
VSP-B4x20E□-4		20	4	11.2	18.8	29
VSP-B4x20E□-6			6	11.9	20.1	30
VSP-B4x30E□-4		30	4	11.2	18.8	29
VSP-B4x30E□-6			6	11.9	20.1	30
VSP-B5x10E□-4	5	10	4	11.2	18.8	28
VSP-B5x10E□-6			6	11.9	20.1	29
VSP-B5x20E□-4		20	4	11.2	18.8	29
VSP-B5x20E□-6			6	11.9	20.1	30
VSP-B5x30E□-4		30	4	11.2	18.8	29
VSP-B5x30E□-6			6	11.9	20.1	30
VSP-B6x10E□-4	6	10	4	11.2	18.8	28
VSP-B6x10E□-6			6	11.9	20.1	29
VSP-B6x20E□-4		20	4	11.2	18.8	29
VSP-B6x20E□-6			6	11.9	20.1	30
VSP-B6x30E□-4		30	4	11.2	18.8	29
VSP-B6x30E□-6			6	11.9	20.1	30
VSP-B8x20E□-4	8	20	4	11.2	18.8	29
VSP-B8x20E□-6			6	11.9	20.1	30
VSP-B8x30E□-4		30	4	11.2	18.8	29
VSP-B8x30E□-6			6	11.9	20.1	30

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B□E□-4T/6T

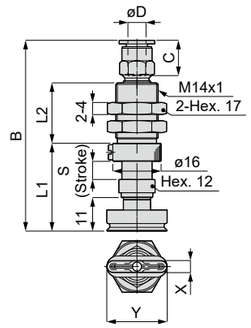


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Weight (g)
VSP-B2x4E□-4T	2	4	2.5	27
VSP-B2x4E□-6T			4	
VSP-B3.5x7E□-4T	3.5	7	2.5	27
VSP-B3.5x7E□-6T			4	
VSP-B4x10E□-4T	4	10	2.5	27
VSP-B4x10E□-6T			4	
VSP-B4x20E□-4T		20	2.5	28
VSP-B4x20E□-6T			4	
VSP-B4x30E□-4T		30	2.5	28
VSP-B4x30E□-6T			4	
VSP-B5x10E□-4T	5	10	2.5	27
VSP-B5x10E□-6T			4	
VSP-B5x20E□-4T		20	2.5	28
VSP-B5x20E□-6T			4	
VSP-B5x30E□-4T		30	2.5	28
VSP-B5x30E□-6T			4	
VSP-B6x10E□-4T	6	10	2.5	27
VSP-B6x10E□-6T			4	
VSP-B6x20E□-4T		20	2.5	28
VSP-B6x20E□-6T			4	
VSP-B6x30E□-4T		30	2.5	28
VSP-B6x30E□-6T			4	
VSP-B8x20E□-4T	8	20	2.5	28
VSP-B8x20E□-6T			4	
VSP-B8x30E□-4T		30	2.5	28
VSP-B8x30E□-6T			4	

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C□E□-4/6
●VSP-C□-□E□-4/6

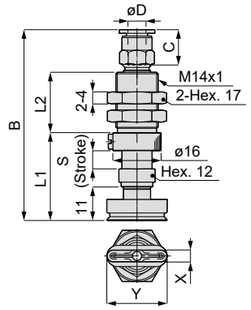


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C2x4E□-4	2	4	4	62	29	20	11.2	6	7.0 to 12.6	34
VSP-C2x4E□-6			6	63.3			11.9			35
VSP-C2x4-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C2x4-10E□-6			6	69.3			11.9			38
VSP-C2x4-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	41
VSP-C2x4-15E□-6			6	79.3			11.9			42
VSP-C2x4-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	46
VSP-C2x4-20E□-6			6	95.3			11.9			47
VSP-C3.5x7E□-4	3.5	7	4	62	29	20	11.2	6	7.0 to 12.6	34
VSP-C3.5x7E□-6			6	63.3			11.9			35
VSP-C3.5x7-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C3.5x7-10E□-6			6	69.3			11.9			38
VSP-C3.5x7-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	41
VSP-C3.5x7-15E□-6			6	79.3			11.9			42
VSP-C3.5x7-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	48
VSP-C3.5x7-20E□-6			6	95.3			11.9			49
VSP-C4x10E□-4	4	10	4	62	29	20	11.2	6	7.0 to 12.6	34
VSP-C4x10E□-6			6	63.3			11.9			35
VSP-C4x10-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C4x10-10E□-6			6	69.3			11.9			38
VSP-C4x10-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	41
VSP-C4x10-15E□-6			6	79.3			11.9			42
VSP-C4x10-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	48
VSP-C4x10-20E□-6			6	95.3			11.9			49
VSP-C4x20E□-4		20	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C4x20E□-6			6	63.3			11.9			36
VSP-C4x20-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C4x20-10E□-6			6	69.3			11.9			38
VSP-C4x20-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C4x20-15E□-6			6	79.3			11.9			43
VSP-C4x20-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C4x20-20E□-6			6	95.3			11.9			50
VSP-C4x30E□-4		30	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C4x30E□-6			6	63.3			11.9			36
VSP-C4x30-10E□-4			4	68	35		11.2	10	3.3 to 10.0	38
VSP-C4x30-10E□-6			6	69.3			11.9			39
VSP-C4x30-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C4x30-15E□-6			6	79.3			11.9			43
VSP-C4x30-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C4x30-20E□-6			6	95.3			11.9			50

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C□E□-4/6
●VSP-C□-□E□-4/6

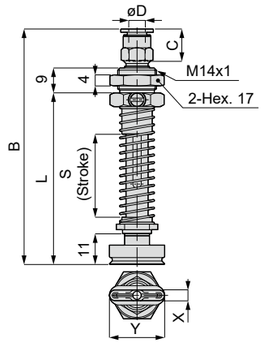


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C5x10E□-4	5	10	4	62	29	20	11.2	6	7.0 to 12.6	34
VSP-C5x10E□-6			6	63.3			11.9			35
VSP-C5x10-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C5x10-10E□-6			6	69.3			11.9			38
VSP-C5x10-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	41
VSP-C5x10-15E□-6			6	79.3			11.9			42
VSP-C5x10-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	48
VSP-C5x10-20E□-6			6	95.3			11.9			49
VSP-C5x20E□-4		20	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C5x20E□-6			6	63.3			11.9			36
VSP-C5x20-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C5x20-10E□-6			6	69.3			11.9			38
VSP-C5x20-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C5x20-15E□-6			6	79.3			11.9			43
VSP-C5x20-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C5x20-20E□-6			6	95.3			11.9			50
VSP-C5x30E□-4		30	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C5x30E□-6			6	63.3			11.9			36
VSP-C5x30-10E□-4			4	68	35		11.2	10	3.3 to 10.0	38
VSP-C5x30-10E□-6			6	69.3			11.9			39
VSP-C5x30-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C5x30-15E□-6			6	79.3			11.9			43
VSP-C5x30-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C5x30-20E□-6			6	95.3			11.9			50
VSP-C6x10E□-4	6	10	4	62	29	20	11.2	6	7.0 to 12.6	34
VSP-C6x10E□-6			6	63.3			11.9			35
VSP-C6x10-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C6x10-10E□-6			6	69.3			11.9			38
VSP-C6x10-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	41
VSP-C6x10-15E□-6			6	79.3			11.9			42
VSP-C6x10-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	48
VSP-C6x10-20E□-6			6	95.3			11.9			49
VSP-C6x20E□-4		20	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C6x20E□-6			6	63.3			11.9			36
VSP-C6x20-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C6x20-10E□-6			6	69.3			11.9			38
VSP-C6x20-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C6x20-15E□-6			6	79.3			11.9			43
VSP-C6x20-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C6x20-20E□-6			6	95.3			11.9			50
VSP-C6x30E□-4		30	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C6x30E□-6			6	63.3			11.9			36
VSP-C6x30-10E□-4			4	68	35		11.2	10	3.3 to 10.0	38
VSP-C6x30-10E□-6			6	69.3			11.9			39
VSP-C6x30-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C6x30-15E□-6			6	79.3			11.9			43
VSP-C6x30-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C6x30-20E□-6			6	95.3			11.9			50
VSP-C8x20E□-4	8	20	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C8x20E□-6			6	63.3			11.9			36
VSP-C8x20-10E□-4			4	68	35		11.2	10	3.3 to 10.0	37
VSP-C8x20-10E□-6			6	69.3			11.9			38
VSP-C8x20-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C8x20-15E□-6			6	79.3			11.9			43
VSP-C8x20-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C8x20-20E□-6			6	95.3			11.9			50
VSP-C8x30E□-4		30	4	62	29	20	11.2	6	7.0 to 12.6	35
VSP-C8x30E□-6			6	63.3			11.9			36
VSP-C8x30-10E□-4			4	68	35		11.2	10	3.3 to 10.0	38
VSP-C8x30-10E□-6			6	69.3			11.9			39
VSP-C8x30-15E□-4			4	78	40	25	11.2	15	3.3 to 10.4	42
VSP-C8x30-15E□-6			6	79.3			11.9			43
VSP-C8x30-20E□-4			4	94	47	34	11.2	20	2.0 to 8.7	49
VSP-C8x30-20E□-6			6	95.3			11.9			50

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C□-□E□-4C/6C

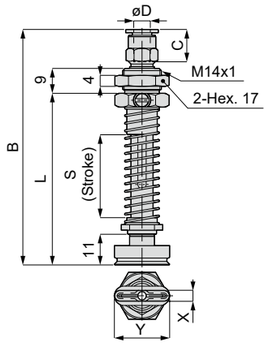


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C2x4-20E□-4C	2	4	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C2x4-20E□-6C			6	72.3		11.9			45
VSP-C2x4-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	49
VSP-C2x4-30E□-6C			6	85.3		11.9			50
VSP-C2x4-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	54
VSP-C2x4-40E□-6C			6	98.3		11.9			55
VSP-C2x4-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C2x4-50E□-6C			6	111.3		11.9			61
VSP-C3.5x7-20E□-4C	3.5	7	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C3.5x7-20E□-6C			6	72.3		11.9			45
VSP-C3.5x7-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	49
VSP-C3.5x7-30E□-6C			6	85.3		11.9			50
VSP-C3.5x7-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	54
VSP-C3.5x7-40E□-6C			6	98.3		11.9			55
VSP-C3.5x7-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C3.5x7-50E□-6C			6	111.3		11.9			61
VSP-C4x10-20E□-4C	4	10	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C4x10-20E□-6C			6	72.3		11.9			45
VSP-C4x10-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C4x10-30E□-6C			6	85.3		11.9			51
VSP-C4x10-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C4x10-40E□-6C			6	98.3		11.9			56
VSP-C4x10-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C4x10-50E□-6C			6	111.3		11.9			61
VSP-C4x20-20E□-4C		20	4	71	49	11.2	20	1.5 to 4.9	45
VSP-C4x20-20E□-6C			6	72.3		11.9			46
VSP-C4x20-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C4x20-30E□-6C			6	85.3		11.9			51
VSP-C4x20-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C4x20-40E□-6C			6	98.3		11.9			56
VSP-C4x20-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	61
VSP-C4x20-50E□-6C			6	111.3		11.9			62
VSP-C4x30-20E□-4C		30	4	71	49	11.2	20	1.5 to 4.9	45
VSP-C4x30-20E□-6C			6	72.3		11.9			46
VSP-C4x30-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C4x30-30E□-6C			6	85.3		11.9			51
VSP-C4x30-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C4x30-40E□-6C			6	98.3		11.9			56
VSP-C4x30-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C4x30-50E□-6C			6	111.3		11.9			61

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C□-□E□-4C/6C

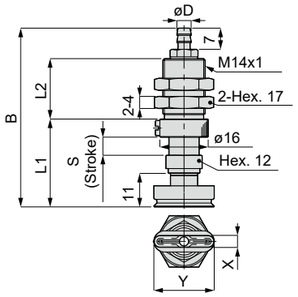


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C5x10-20E□-4C	5	10	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C5x10-20E□-6C			6	72.3		11.9			45
VSP-C5x10-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	49
VSP-C5x10-30E□-6C			6	85.3		11.9			50
VSP-C5x10-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	54
VSP-C5x10-40E□-6C			6	98.3		11.9			55
VSP-C5x10-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C5x10-50E□-6C			6	111.3		11.9			61
VSP-C5x20-20E□-4C		20	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C5x20-20E□-6C			6	72.3		11.9			45
VSP-C5x20-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C5x20-30E□-6C			6	85.3		11.9			51
VSP-C5x20-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C5x20-40E□-6C			6	98.3		11.9			56
VSP-C5x20-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C5x20-50E□-6C			6	111.3		11.9			61
VSP-C5x30-20E□-4C		30	4	71	49	11.2	20	1.5 to 4.9	45
VSP-C5x30-20E□-6C			6	72.3		11.9			46
VSP-C5x30-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C5x30-30E□-6C			6	85.3		11.9			51
VSP-C5x30-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C5x30-40E□-6C			6	98.3		11.9			56
VSP-C5x30-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	61
VSP-C5x30-50E□-6C			6	111.3		11.9			62
VSP-C6x10-20E□-4C	6	10	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C6x10-20E□-6C			6	72.3		11.9			45
VSP-C6x10-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	49
VSP-C6x10-30E□-6C			6	85.3		11.9			50
VSP-C6x10-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	54
VSP-C6x10-40E□-6C			6	98.3		11.9			55
VSP-C6x10-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C6x10-50E□-6C			6	111.3		11.9			61
VSP-C6x20-20E□-4C		20	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C6x20-20E□-6C			6	72.3		11.9			45
VSP-C6x20-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C6x20-30E□-6C			6	85.3		11.9			51
VSP-C6x20-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C6x20-40E□-6C			6	98.3		11.9			56
VSP-C6x20-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C6x20-50E□-6C			6	111.3		11.9			61
VSP-C6x30-20E□-4C		30	4	71	49	11.2	20	1.5 to 4.9	45
VSP-C6x30-20E□-6C			6	72.3		11.9			46
VSP-C6x30-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C6x30-30E□-6C			6	85.3		11.9			51
VSP-C6x30-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C6x30-40E□-6C			6	98.3		11.9			56
VSP-C6x30-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	61
VSP-C6x30-50E□-6C			6	111.3		11.9			62
VSP-C8x20-20E□-4C	8	20	4	71	49	11.2	20	1.5 to 4.9	44
VSP-C8x20-20E□-6C			6	72.3		11.9			45
VSP-C8x20-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C8x20-30E□-6C			6	85.3		11.9			51
VSP-C8x20-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C8x20-40E□-6C			6	98.3		11.9			56
VSP-C8x20-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	60
VSP-C8x20-50E□-6C			6	111.3		11.9			61
VSP-C8x30-20E□-4C		30	4	71	49	11.2	20	1.5 to 4.9	45
VSP-C8x30-20E□-6C			6	72.3		11.9			46
VSP-C8x30-30E□-4C			4	84	62	11.2	30	1.1 to 4.8	50
VSP-C8x30-30E□-6C			6	85.3		11.9			51
VSP-C8x30-40E□-4C			4	97	75	11.2	40	1.0 to 4.5	55
VSP-C8x30-40E□-6C			6	98.3		11.9			56
VSP-C8x30-50E□-4C			4	110	88	11.2	50	0.9 to 4.5	61
VSP-C8x30-50E□-6C			6	111.3		11.9			62

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C□E□-4T/6T
●VSP-C□-□E□-4T/6T

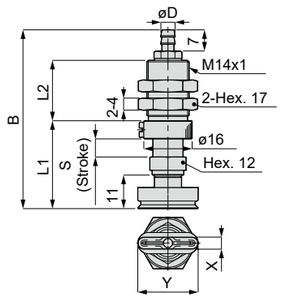


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C2x4E□-4T	2	4	2.5	59.1	29	20	6	7.0 to 12.6	33
VSP-C2x4E□-6T			4						
VSP-C2x4-10E□-4T			2.5	65.1	35		10	3.3 to 10.0	36
VSP-C2x4-10E□-6T			4						
VSP-C2x4-15E□-4T			2.5	75.1	40	25	15	3.3 to 10.4	40
VSP-C2x4-15E□-6T			4						
VSP-C2x4-20E□-4T			2.5	91.1	47	34	20	2.0 to 8.7	47
VSP-C2x4-20E□-6T			4						
VSP-C3.5x7E□-4T	3.5	7	2.5	59.1	29	20	6	7.0 to 12.6	33
VSP-C3.5x7E□-6T			4						
VSP-C3.5x7-10E□-4T			2.5	65.1	35		10	3.3 to 10.0	36
VSP-C3.5x7-10E□-6T			4						
VSP-C3.5x7-15E□-4T			2.5	75.1	40	25	15	3.3 to 10.4	40
VSP-C3.5x7-15E□-6T			4						
VSP-C3.5x7-20E□-4T			2.5	91.1	47	34	20	2.0 to 8.7	47
VSP-C3.5x7-20E□-6T			4						
VSP-C4x10E□-4T	4	10	2.5	59.1	29	20	6	7.0 to 12.6	33
VSP-C4x10E□-6T			4						
VSP-C4x10-10E□-4T			2.5	65.1	35		10	3.3 to 10.0	36
VSP-C4x10-10E□-6T			4						
VSP-C4x10-15E□-4T			2.5	75.1	40	25	15	3.3 to 10.4	40
VSP-C4x10-15E□-6T			4						
VSP-C4x10-20E□-4T			2.5	91.1	47	34	20	2.0 to 8.7	47
VSP-C4x10-20E□-6T			4						
VSP-C4x20E□-4T		20	2.5	59.1	29	20	6	7.0 to 12.6	34
VSP-C4x20E□-6T			4						
VSP-C4x20-10E□-4T			2.5	65.1	35		10	3.3 to 10.0	36
VSP-C4x20-10E□-6T			4						
VSP-C4x20-15E□-4T			2.5	75.1	40	25	15	3.3 to 10.4	41
VSP-C4x20-15E□-6T			4						
VSP-C4x20-20E□-4T			2.5	91.1	47	34	20	2.0 to 8.7	48
VSP-C4x20-20E□-6T			4						
VSP-C4x30E□-4T		30	2.5	59.1	29	20	6	7.0 to 12.6	34
VSP-C4x30E□-6T			4						
VSP-C4x30-10E□-4T			2.5	65.1	35		10	3.3 to 10.0	37
VSP-C4x30-10E□-6T			4						
VSP-C4x30-15E□-4T			2.5	75.1	40	25	15	3.3 to 10.4	41
VSP-C4x30-15E□-6T			4						
VSP-C4x30-20E□-4T			2.5	91.1	47	34	20	2.0 to 8.7	48
VSP-C4x30-20E□-6T			4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C□E□-4T/6T
●VSP-C□-□E□-4T/6T

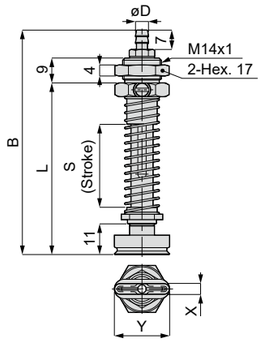


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C5x10E□-4T	5	10	4	59.1	29	20	6	7.0 to 12.6	33
VSP-C5x10E□-6T			6						
VSP-C5x10-10E□-4T			4	65.1	35		10	3.3 to 10.0	36
VSP-C5x10-10E□-6T			6						
VSP-C5x10-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	40
VSP-C5x10-15E□-6T			6						
VSP-C5x10-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	47
VSP-C5x10-20E□-6T			6						
VSP-C5x20E□-4T		20	4	59.1	29	20	6	7.0 to 12.6	34
VSP-C5x20E□-6T			6						
VSP-C5x20-10E□-4T			4	65.1	35		10	3.3 to 10.0	36
VSP-C5x20-10E□-6T			6						
VSP-C5x20-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	41
VSP-C5x20-15E□-6T			6						
VSP-C5x20-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	48
VSP-C5x20-20E□-6T			6						
VSP-C5x30E□-4T		30	4	59.1	29	20	6	7.0 to 12.6	34
VSP-C5x30E□-6T			6						
VSP-C5x30-10E□-4T			4	65.1	35		10	3.3 to 10.0	37
VSP-C5x30-10E□-6T			6						
VSP-C5x30-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	41
VSP-C5x30-15E□-6T			6						
VSP-C5x30-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	48
VSP-C5x30-20E□-6T			6						
VSP-C6x10E□-4T	6	10	4	59.1	29	20	6	7.0 to 12.6	33
VSP-C6x10E□-6T			6						
VSP-C6x10-10E□-4T			4	65.1	35		10	3.3 to 10.0	36
VSP-C6x10-10E□-6T			6						
VSP-C6x10-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	40
VSP-C6x10-15E□-6T			6						
VSP-C6x10-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	47
VSP-C6x10-20E□-6T			6						
VSP-C6x20E□-4T		20	4	59.1	29	20	6	7.0 to 12.6	34
VSP-C6x20E□-6T			6						
VSP-C6x20-10E□-4T			4	65.1	35		10	3.3 to 10.0	36
VSP-C6x20-10E□-6T			6						
VSP-C6x20-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	41
VSP-C6x20-15E□-6T			6						
VSP-C6x20-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	48
VSP-C6x20-20E□-6T			6						
VSP-C6x30E□-4T		30	4	59.1	29	20	6	7.0 to 12.6	34
VSP-C6x30E□-6T			6						
VSP-C6x30-10E□-4T			4	65.1	35		10	3.3 to 10.0	37
VSP-C6x30-10E□-6T			6						
VSP-C6x30-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	41
VSP-C6x30-15E□-6T			6						
VSP-C6x30-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	48
VSP-C6x30-20E□-6T			6						
VSP-C8x20E□-4T	8	20	4	59.1	29	20	6	7.0 to 12.6	34
VSP-C8x20E□-6T			6						
VSP-C8x20-10E□-4T			4	65.1	35		10	3.3 to 10.0	36
VSP-C8x20-10E□-6T			6						
VSP-C8x20-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	41
VSP-C8x20-15E□-6T			6						
VSP-C8x20-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	48
VSP-C8x20-20E□-6T			6						
VSP-C8x30E□-4T		30	4	59.1	29	20	6	7.0 to 12.6	34
VSP-C8x30E□-6T			6						
VSP-C8x30-10E□-4T			4	65.1	35		10	3.3 to 10.0	37
VSP-C8x30-10E□-6T			6						
VSP-C8x30-15E□-4T			4	75.1	40	25	15	3.3 to 10.4	41
VSP-C8x30-15E□-6T			6						
VSP-C8x30-20E□-4T			4	91.1	47	34	20	2.0 to 8.7	48
VSP-C8x30-20E□-6T			6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C□-□E□-4TC/6TC

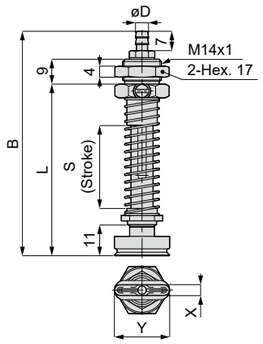


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Stroke S	Spring Force (N)	Weight (g)
VSP-C2x4-20E□-4TC	2	4	4	68.1	49	20	1.5 to 4.9	45
VSP-C2x4-20E□-6TC			6					
VSP-C2x4-30E□-4TC			4	81.1	62	30	1.1 to 4.8	50
VSP-C2x4-30E□-6TC			6					
VSP-C2x4-40E□-4TC			4	94.1	75	40	1.0 to 4.5	55
VSP-C2x4-40E□-6TC			6					
VSP-C2x4-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C2x4-50E□-6TC			6					
VSP-C3.5x7-20E□-4TC	3.5	7	4	68.1	49	20	1.5 to 4.9	45
VSP-C3.5x7-20E□-6TC			6					
VSP-C3.5x7-30E□-4TC			4	81.1	62	30	1.1 to 4.8	50
VSP-C3.5x7-30E□-6TC			6					
VSP-C3.5x7-40E□-4TC			4	94.1	75	40	1.0 to 4.5	55
VSP-C3.5x7-40E□-6TC			6					
VSP-C3.5x7-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C3.5x7-50E□-6TC			6					
VSP-C4x10-20E□-4TC	4	10	4	68.1	49	20	1.5 to 4.9	45
VSP-C4x10-20E□-6TC			6					
VSP-C4x10-30E□-4TC			4	81.1	62	30	1.1 to 4.8	50
VSP-C4x10-30E□-6TC			6					
VSP-C4x10-40E□-4TC			4	94.1	75	40	1.0 to 4.5	55
VSP-C4x10-40E□-6TC			6					
VSP-C4x10-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C4x10-50E□-6TC			6					
VSP-C4x20-20E□-4TC		20	4	68.1	49	20	1.5 to 4.9	45
VSP-C4x20-20E□-6TC			6					
VSP-C4x20-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C4x20-30E□-6TC			6					
VSP-C4x20-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C4x20-40E□-6TC			6					
VSP-C4x20-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C4x20-50E□-6TC			6					
VSP-C4x30-20E□-4TC		30	4	68.1	49	20	1.5 to 4.9	46
VSP-C4x30-20E□-6TC			6					
VSP-C4x30-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C4x30-30E□-6TC			6					
VSP-C4x30-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C4x30-40E□-6TC			6					
VSP-C4x30-50E□-4TC			4	107.1	88	50	0.9 to 4.5	62
VSP-C4x30-50E□-6TC			6					

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C□-□E□-4TC/6TC

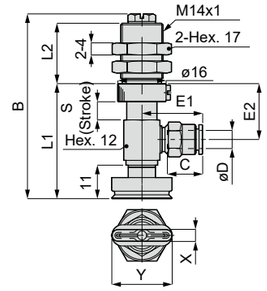


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Stroke S	Spring Force (N)	Weight (g)
VSP-C5x10-20E□-4TC	5	10	4	68.1	49	20	1.5 to 4.9	45
VSP-C5x10-20E□-6TC			6					
VSP-C5x10-30E□-4TC			4	81.1	62	30	1.1 to 4.8	50
VSP-C5x10-30E□-6TC			6					
VSP-C5x10-40E□-4TC			4	94.1	75	40	1.0 to 4.5	55
VSP-C5x10-40E□-6TC			6					
VSP-C5x10-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C5x10-50E□-6TC			6					
VSP-C5x20-20E□-4TC		20	4	68.1	49	20	1.5 to 4.9	45
VSP-C5x20-20E□-6TC			6					
VSP-C5x20-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C5x20-30E□-6TC			6					
VSP-C5x20-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C5x20-40E□-6TC			6					
VSP-C5x20-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C5x20-50E□-6TC			6					
VSP-C5x30-20E□-4TC		30	4	68.1	49	20	1.5 to 4.9	46
VSP-C5x30-20E□-6TC			6					
VSP-C5x30-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C5x30-30E□-6TC			6					
VSP-C5x30-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C5x30-40E□-6TC			6					
VSP-C5x30-50E□-4TC			4	107.1	88	50	0.9 to 4.5	62
VSP-C5x30-50E□-6TC			6					
VSP-C6x10-20E□-4TC	6	10	4	68.1	49	20	1.5 to 4.9	45
VSP-C6x10-20E□-6TC			6					
VSP-C6x10-30E□-4TC			4	81.1	62	30	1.1 to 4.8	50
VSP-C6x10-30E□-6TC			6					
VSP-C6x10-40E□-4TC			4	94.1	75	40	1.0 to 4.5	55
VSP-C6x10-40E□-6TC			6					
VSP-C6x10-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C6x10-50E□-6TC			6					
VSP-C6x20-20E□-4TC		20	4	68.1	49	20	1.5 to 4.9	45
VSP-C6x20-20E□-6TC			6					
VSP-C6x20-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C6x20-30E□-6TC			6					
VSP-C6x20-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C6x20-40E□-6TC			6					
VSP-C6x20-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C6x20-50E□-6TC			6					
VSP-C6x30-20E□-4TC		30	4	68.1	49	20	1.5 to 4.9	46
VSP-C6x30-20E□-6TC			6					
VSP-C6x30-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C6x30-30E□-6TC			6					
VSP-C6x30-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C6x30-40E□-6TC			6					
VSP-C6x30-50E□-4TC			4	107.1	88	50	0.9 to 4.5	62
VSP-C6x30-50E□-6TC			6					
VSP-C8x20-20E□-4TC	8	20	4	68.1	49	20	1.5 to 4.9	45
VSP-C8x20-20E□-6TC			6					
VSP-C8x20-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C8x20-30E□-6TC			6					
VSP-C8x20-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C8x20-40E□-6TC			6					
VSP-C8x20-50E□-4TC			4	107.1	88	50	0.9 to 4.5	61
VSP-C8x20-50E□-6TC			6					
VSP-C8x30-20E□-4TC		30	4	68.1	49	20	1.5 to 4.9	46
VSP-C8x30-20E□-6TC			6					
VSP-C8x30-30E□-4TC			4	81.1	62	30	1.1 to 4.8	51
VSP-C8x30-30E□-6TC			6					
VSP-C8x30-40E□-4TC			4	94.1	75	40	1.0 to 4.5	56
VSP-C8x30-40E□-6TC			6					
VSP-C8x30-50E□-4TC			4	107.1	88	50	0.9 to 4.5	62
VSP-C8x30-50E□-6TC			6					

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D□E□-4/6
●VSP-D□-□E□-4/6

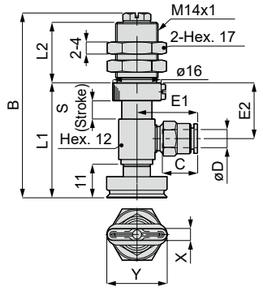


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D2x4E□-4	2	4	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D2x4E□-6			6				11.9	20.1				47
VSP-D2x4-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D2x4-10E□-6			6				11.9	20.1				51
VSP-D2x4-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D2x4-15E□-6			6				11.9	20.1				57
VSP-D2x4-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D2x4-20E□-6			6				11.9	20.1				67
VSP-D3.5x7E□-4	3.5	7	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D3.5x7E□-6			6				11.9	20.1				47
VSP-D3.5x7-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D3.5x7-10E□-6			6				11.9	20.1				51
VSP-D3.5x7-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D3.5x7-15E□-6			6				11.9	20.1				57
VSP-D3.5x7-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D3.5x7-20E□-6			6				11.9	20.1				67
VSP-D4x10E□-4	4	10	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D4x10E□-6			6				11.9	20.1				47
VSP-D4x10-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D4x10-10E□-6			6				11.9	20.1				51
VSP-D4x10-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D4x10-15E□-6			6				11.9	20.1				57
VSP-D4x10-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D4x10-20E□-6			6				11.9	20.1				67
VSP-D4x20E□-4		20	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D4x20E□-6			6				11.9	20.1				47
VSP-D4x20-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D4x20-10E□-6			6				11.9	20.1				51
VSP-D4x20-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D4x20-15E□-6			6				11.9	20.1				57
VSP-D4x20-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D4x20-20E□-6			6				11.9	20.1				67
VSP-D4x30E□-4		30	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	47
VSP-D4x30E□-6			6				11.9	20.1				48
VSP-D4x30-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	51
VSP-D4x30-10E□-6			6				11.9	20.1				52
VSP-D4x30-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	57
VSP-D4x30-15E□-6			6				11.9	20.1				58
VSP-D4x30-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	67
VSP-D4x30-20E□-6			6				11.9	20.1				68

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D□E□-4/6
●VSP-D□-□E□-4/6

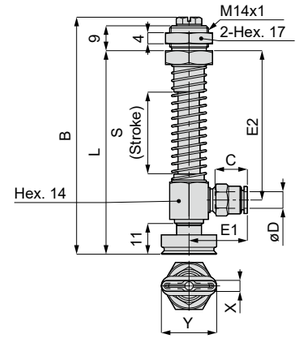


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D5x10E□-4	5	10	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D5x10E□-6			6				11.9	20.1				47
VSP-D5x10-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D5x10-10E□-6			6				11.9	20.1				51
VSP-D5x10-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D5x10-15E□-6			6				11.9	20.1				57
VSP-D5x10-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D5x10-20E□-6			6				11.9	20.1				67
VSP-D5x20E□-4		20	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D5x20E□-6			6				11.9	20.1				47
VSP-D5x20-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D5x20-10E□-6			6				11.9	20.1				51
VSP-D5x20-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D5x20-15E□-6			6				11.9	20.1				57
VSP-D5x20-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D5x20-20E□-6			6				11.9	20.1				67
VSP-D5x30E□-4		30	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	47
VSP-D5x30E□-6			6				11.9	20.1				48
VSP-D5x30-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	51
VSP-D5x30-10E□-6			6				11.9	20.1				52
VSP-D5x30-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	57
VSP-D5x30-15E□-6			6				11.9	20.1				58
VSP-D5x30-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	67
VSP-D5x30-20E□-6			6				11.9	20.1				68
VSP-D6x10E□-4	6	10	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D6x10E□-6			6				11.9	20.1				47
VSP-D6x10-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D6x10-10E□-6			6				11.9	20.1				51
VSP-D6x10-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D6x10-15E□-6			6				11.9	20.1				57
VSP-D6x10-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D6x10-20E□-6			6				11.9	20.1				67
VSP-D6x20E□-4		20	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D6x20E□-6			6				11.9	20.1				47
VSP-D6x20-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D6x20-10E□-6			6				11.9	20.1				51
VSP-D6x20-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D6x20-15E□-6			6				11.9	20.1				57
VSP-D6x20-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D6x20-20E□-6			6				11.9	20.1				67
VSP-D6x30E□-4		30	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	47
VSP-D6x30E□-6			6				11.9	20.1				48
VSP-D6x30-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	51
VSP-D6x30-10E□-6			6				11.9	20.1				52
VSP-D6x30-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	57
VSP-D6x30-15E□-6			6				11.9	20.1				58
VSP-D6x30-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	67
VSP-D6x30-20E□-6			6				11.9	20.1				68
VSP-D8x20E□-4	8	20	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	46
VSP-D8x20E□-6			6				11.9	20.1				47
VSP-D8x20-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	50
VSP-D8x20-10E□-6			6				11.9	20.1				51
VSP-D8x20-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	56
VSP-D8x20-15E□-6			6				11.9	20.1				57
VSP-D8x20-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	66
VSP-D8x20-20E□-6			6				11.9	20.1				67
VSP-D8x30E□-4		30	4	61.1	38	20	11.2	18.8	18.5	6	7.0 to 12.6	47
VSP-D8x30E□-6			6				11.9	20.1				48
VSP-D8x30-10E□-4			4	67.1	44		11.2	18.8	24.5	10	3.3 to 10.0	51
VSP-D8x30-10E□-6			6				11.9	20.1				52
VSP-D8x30-15E□-4			4	77.1	49	25	11.2	18.8	29.5	15	3.3 to 10.4	57
VSP-D8x30-15E□-6			6				11.9	20.1				58
VSP-D8x30-20E□-4			4	93.1	56	34	11.2	18.8	36.5	20	2.0 to 8.7	67
VSP-D8x30-20E□-6			6				11.9	20.1				68

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D□-□E□-4C/6C

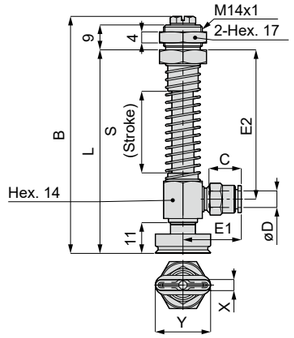


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D2x4-20E□-4C	2	4	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D2x4-20E□-6C			6			11.9	21.1				65
VSP-D2x4-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D2x4-30E□-6C			6			11.9	21.1				72
VSP-D2x4-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D2x4-40E□-6C			6			11.9	21.1				79
VSP-D2x4-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D2x4-50E□-6C			6			11.9	21.1				85
VSP-D3.5x7-20E□-4C	3.5	7	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D3.5x7-20E□-6C			6			11.9	21.1				65
VSP-D3.5x7-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D3.5x7-30E□-6C			6			11.9	21.1				72
VSP-D3.5x7-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D3.5x7-40E□-6C			6			11.9	21.1				79
VSP-D3.5x7-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D3.5x7-50E□-6C			6			11.9	21.1				85
VSP-D4x10-20E□-4C	4	10	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D4x10-20E□-6C			6			11.9	21.1				65
VSP-D4x10-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D4x10-30E□-6C			6			11.9	21.1				72
VSP-D4x10-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D4x10-40E□-6C			6			11.9	21.1				79
VSP-D4x10-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D4x10-50E□-6C			6			11.9	21.1				85
VSP-D4x20-20E□-4C		20	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D4x20-20E□-6C			6			11.9	21.1				66
VSP-D4x20-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D4x20-30E□-6C			6			11.9	21.1				72
VSP-D4x20-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D4x20-40E□-6C			6			11.9	21.1				79
VSP-D4x20-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D4x20-50E□-6C			6			11.9	21.1				85
VSP-D4x30-20E□-4C		30	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D4x30-20E□-6C			6			11.9	21.1				66
VSP-D4x30-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	72
VSP-D4x30-30E□-6C			6			11.9	21.1				73
VSP-D4x30-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	79
VSP-D4x30-40E□-6C			6			11.9	21.1				80
VSP-D4x30-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	85
VSP-D4x30-50E□-6C			6			11.9	21.1				86

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D□-□E□-4C/6C

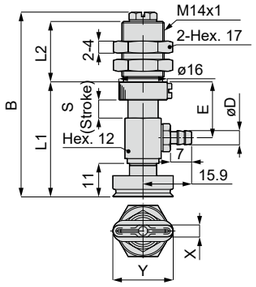


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D5x10-20E□-4C	5	10	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D5x10-20E□-6C			6			11.9	21.1				65
VSP-D5x10-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D5x10-30E□-6C			6			11.9	21.1				72
VSP-D5x10-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D5x10-40E□-6C			6			11.9	21.1				79
VSP-D5x10-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D5x10-50E□-6C			6			11.9	21.1				85
VSP-D5x20-20E□-4C		20	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D5x20-20E□-6C			6			11.9	21.1				66
VSP-D5x20-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D5x20-30E□-6C			6			11.9	21.1				72
VSP-D5x20-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D5x20-40E□-6C			6			11.9	21.1				79
VSP-D5x20-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D5x20-50E□-6C			6			11.9	21.1				85
VSP-D5x30-20E□-4C		30	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D5x30-20E□-6C			6			11.9	21.1				66
VSP-D5x30-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	72
VSP-D5x30-30E□-6C			6			11.9	21.1				73
VSP-D5x30-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	79
VSP-D5x30-40E□-6C			6			11.9	21.1				80
VSP-D5x30-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	85
VSP-D5x30-50E□-6C			6			11.9	21.1				86
VSP-D6x10-20E□-4C	6	10	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	64
VSP-D6x10-20E□-6C			6			11.9	21.1				65
VSP-D6x10-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D6x10-30E□-6C			6			11.9	21.1				72
VSP-D6x10-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D6x10-40E□-6C			6			11.9	21.1				79
VSP-D6x10-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D6x10-50E□-6C			6			11.9	21.1				85
VSP-D6x20-20E□-4C		20	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D6x20-20E□-6C			6			11.9	21.1				66
VSP-D6x20-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D6x20-30E□-6C			6			11.9	21.1				72
VSP-D6x20-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D6x20-40E□-6C			6			11.9	21.1				79
VSP-D6x20-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D6x20-50E□-6C			6			11.9	21.1				85
VSP-D6x30-20E□-4C		30	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D6x30-20E□-6C			6			11.9	21.1				66
VSP-D6x30-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	72
VSP-D6x30-30E□-6C			6			11.9	21.1				73
VSP-D6x30-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	79
VSP-D6x30-40E□-6C			6			11.9	21.1				80
VSP-D6x30-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	85
VSP-D6x30-50E□-6C			6			11.9	21.1				86
VSP-D8x20-20E□-4C	8	20	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D8x20-20E□-6C			6			11.9	21.1				66
VSP-D8x20-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	71
VSP-D8x20-30E□-6C			6			11.9	21.1				72
VSP-D8x20-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	78
VSP-D8x20-40E□-6C			6			11.9	21.1				79
VSP-D8x20-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	84
VSP-D8x20-50E□-6C			6			11.9	21.1				85
VSP-D8x30-20E□-4C		30	4	72.6	60.5	11.2	19.8	41	20	1.5 to 4.9	65
VSP-D8x30-20E□-6C			6			11.9	21.1				66
VSP-D8x30-30E□-4C			4	85.6	73.5	11.2	19.8	54	30	1.1 to 4.8	72
VSP-D8x30-30E□-6C			6			11.9	21.1				73
VSP-D8x30-40E□-4C			4	98.6	86.5	11.2	19.8	67	40	1.0 to 4.5	79
VSP-D8x30-40E□-6C			6			11.9	21.1				80
VSP-D8x30-50E□-4C			4	111.6	99.5	11.2	19.8	80	50	0.9 to 4.5	85
VSP-D8x30-50E□-6C			6			11.9	21.1				86

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D□E□-4T/6T
●VSP-D□-□E□-4T/6T

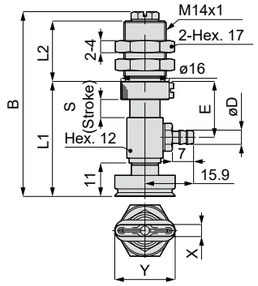


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D2x4E□-4T	2	4	4	61.1	38	20	18.5	6	7.0 to 12.6	47
VSP-D2x4E□-6T			6							
VSP-D2x4-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	51
VSP-D2x4-10E□-6T			6							
VSP-D2x4-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	57
VSP-D2x4-15E□-6T			6							
VSP-D2x4-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	67
VSP-D2x4-20E□-6T			6							
VSP-D3.5x7E□-4T	3.5	7	4	61.1	38	20	18.5	6	7.0 to 12.6	47
VSP-D3.5x7E□-6T			6							
VSP-D3.5x7-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	51
VSP-D3.5x7-10E□-6T			6							
VSP-D3.5x7-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	57
VSP-D3.5x7-15E□-6T			6							
VSP-D3.5x7-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	67
VSP-D3.5x7-20E□-6T			6							
VSP-D4x10E□-4T	4	10	4	61.1	38	20	18.5	6	7.0 to 12.6	47
VSP-D4x10E□-6T			6							
VSP-D4x10-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	51
VSP-D4x10-10E□-6T			6							
VSP-D4x10-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	57
VSP-D4x10-15E□-6T			6							
VSP-D4x10-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	67
VSP-D4x10-20E□-6T			6							
VSP-D4x20E□-4T		20	4	61.1	38	20	18.5	6	7.0 to 12.6	47
VSP-D4x20E□-6T			6							
VSP-D4x20-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	51
VSP-D4x20-10E□-6T			6							
VSP-D4x20-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	57
VSP-D4x20-15E□-6T			6							
VSP-D4x20-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	67
VSP-D4x20-20E□-6T			6							
VSP-D4x30E□-4T		30	4	61.1	38	20	18.5	6	7.0 to 12.6	48
VSP-D4x30E□-6T			6							
VSP-D4x30-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	52
VSP-D4x30-10E□-6T			6							
VSP-D4x30-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	58
VSP-D4x30-15E□-6T			6							
VSP-D4x30-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	68
VSP-D4x30-20E□-6T			6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D□E□-4T/6T
●VSP-D□-□E□-4T/6T

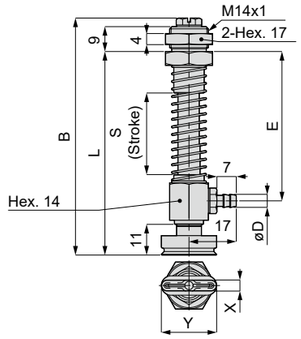


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D5x10E□-4T	5	10	4	61.1	38	20	18.5	6	7.0 to 12.6	45
VSP-D5x10E□-6T			6							
VSP-D5x10-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	49
VSP-D5x10-10E□-6T			6							
VSP-D5x10-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	55
VSP-D5x10-15E□-6T			6							
VSP-D5x10-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	65
VSP-D5x10-20E□-6T			6							
VSP-D5x20E□-4T		20	4	61.1	38	20	18.5	6	7.0 to 12.6	45
VSP-D5x20E□-6T			6							
VSP-D5x20-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	49
VSP-D5x20-10E□-6T			6							
VSP-D5x20-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	55
VSP-D5x20-15E□-6T			6							
VSP-D5x20-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	65
VSP-D5x20-20E□-6T			6							
VSP-D5x30E□-4T		30	4	61.1	38	20	18.5	6	7.0 to 12.6	46
VSP-D5x30E□-6T			6							
VSP-D5x30-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	50
VSP-D5x30-10E□-6T			6							
VSP-D5x30-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	56
VSP-D5x30-15E□-6T			6							
VSP-D5x30-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	66
VSP-D5x30-20E□-6T			6							
VSP-D6x10E□-4T	6	10	4	61.1	38	20	18.5	6	7.0 to 12.6	45
VSP-D6x10E□-6T			6							
VSP-D6x10-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	49
VSP-D6x10-10E□-6T			6							
VSP-D6x10-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	55
VSP-D6x10-15E□-6T			6							
VSP-D6x10-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	65
VSP-D6x10-20E□-6T			6							
VSP-D6x20E□-4T		20	4	61.1	38	20	18.5	6	7.0 to 12.6	45
VSP-D6x20E□-6T			6							
VSP-D6x20-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	49
VSP-D6x20-10E□-6T			6							
VSP-D6x20-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	55
VSP-D6x20-15E□-6T			6							
VSP-D6x20-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	65
VSP-D6x20-20E□-6T			6							
VSP-D6x30E□-4T		30	4	61.1	38	20	18.5	6	7.0 to 12.6	46
VSP-D6x30E□-6T			6							
VSP-D6x30-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	50
VSP-D6x30-10E□-6T			6							
VSP-D6x30-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	56
VSP-D6x30-15E□-6T			6							
VSP-D6x30-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	66
VSP-D6x30-20E□-6T			6							
VSP-D8x20E□-4T	8	20	4	61.1	38	20	18.5	6	7.0 to 12.6	45
VSP-D8x20E□-6T			6							
VSP-D8x20-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	49
VSP-D8x20-10E□-6T			6							
VSP-D8x20-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	55
VSP-D8x20-15E□-6T			6							
VSP-D8x20-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	65
VSP-D8x20-20E□-6T			6							
VSP-D8x30E□-4T		30	4	61.1	38	20	18.5	6	7.0 to 12.6	46
VSP-D8x30E□-6T			6							
VSP-D8x30-10E□-4T			4	67.1	44		24.5	10	3.3 to 10.0	50
VSP-D8x30-10E□-6T			6							
VSP-D8x30-15E□-4T			4	77.1	49	25	29.5	15	3.3 to 10.4	56
VSP-D8x30-15E□-6T			6							
VSP-D8x30-20E□-4T			4	93.1	56	34	36.5	20	2.0 to 8.7	66
VSP-D8x30-20E□-6T			6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D□-□E□-4TC/6TC

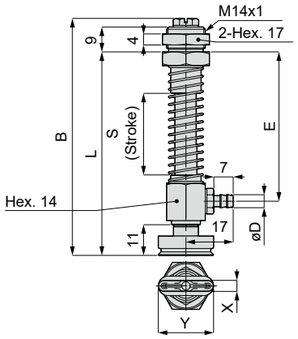


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D2x4-20E□-4TC	2	4	4	72.6	60.5	41	20	1.5 to 4.9	63
VSP-D2x4-20E□-6TC			6						
VSP-D2x4-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D2x4-30E□-6TC			6						
VSP-D2x4-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D2x4-40E□-6TC			6						
VSP-D2x4-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	83
VSP-D2x4-50E□-6TC			6						
VSP-D3.5x7-20E□-4TC	3.5	7	4	72.6	60.5	41	20	1.5 to 4.9	63
VSP-D3.5x7-20E□-6TC			6						
VSP-D3.5x7-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D3.5x7-30E□-6TC			6						
VSP-D3.5x7-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D3.5x7-40E□-6TC			6						
VSP-D3.5x7-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	83
VSP-D3.5x7-50E□-6TC			6						
VSP-D4x10-20E□-4TC	4	10	4	72.6	60.5	41	20	1.5 to 4.9	63
VSP-D4x10-20E□-6TC			6						
VSP-D4x10-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D4x10-30E□-6TC			6						
VSP-D4x10-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D4x10-40E□-6TC			6						
VSP-D4x10-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	83
VSP-D4x10-50E□-6TC			6						
VSP-D4x20-20E□-4TC		20	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D4x20-20E□-6TC			6						
VSP-D4x20-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D4x20-30E□-6TC			6						
VSP-D4x20-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D4x20-40E□-6TC			6						
VSP-D4x20-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D4x20-50E□-6TC			6						
VSP-D4x30-20E□-4TC		30	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D4x30-20E□-6TC			6						
VSP-D4x30-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	71
VSP-D4x30-30E□-6TC			6						
VSP-D4x30-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	78
VSP-D4x30-40E□-6TC			6						
VSP-D4x30-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D4x30-50E□-6TC			6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D□-□E□-4TC/6TC

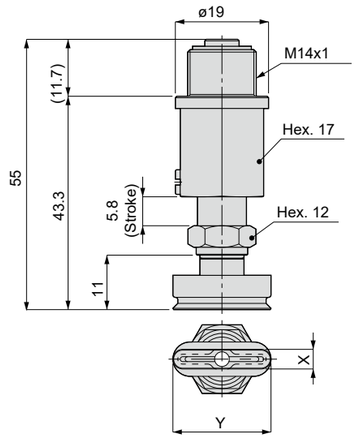


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D5x10-20E□-4TC	5	10	4	72.6	60.5	41	20	1.5 to 4.9	63
VSP-D5x10-20E□-6TC			6						
VSP-D5x10-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D5x10-30E□-6TC			6						
VSP-D5x10-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D5x10-40E□-6TC			6						
VSP-D5x10-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	83
VSP-D5x10-50E□-6TC			6						
VSP-D5x20-20E□-4TC		20	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D5x20-20E□-6TC			6						
VSP-D5x20-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D5x20-30E□-6TC			6						
VSP-D5x20-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D5x20-40E□-6TC			6						
VSP-D5x20-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D5x20-50E□-6TC			6						
VSP-D5x30-20E□-4TC		30	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D5x30-20E□-6TC			6						
VSP-D5x30-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	71
VSP-D5x30-30E□-6TC			6						
VSP-D5x30-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	78
VSP-D5x30-40E□-6TC			6						
VSP-D5x30-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D5x30-50E□-6TC			6						
VSP-D6x10-20E□-4TC	6	10	4	72.6	60.5	41	20	1.5 to 4.9	63
VSP-D6x10-20E□-6TC			6						
VSP-D6x10-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D6x10-30E□-6TC			6						
VSP-D6x10-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D6x10-40E□-6TC			6						
VSP-D6x10-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	83
VSP-D6x10-50E□-6TC			6						
VSP-D6x20-20E□-4TC		20	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D6x20-20E□-6TC			6						
VSP-D6x20-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	70
VSP-D6x20-30E□-6TC			6						
VSP-D6x20-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D6x20-40E□-6TC			6						
VSP-D6x20-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	83
VSP-D6x20-50E□-6TC			6						
VSP-D6x30-20E□-4TC		30	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D6x30-20E□-6TC			6						
VSP-D6x30-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	71
VSP-D6x30-30E□-6TC			6						
VSP-D6x30-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	78
VSP-D6x30-40E□-6TC			6						
VSP-D6x30-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D6x30-50E□-6TC			6						
VSP-D8x20-20E□-4TC	8	20	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D8x20-20E□-6TC			6						
VSP-D8x20-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	71
VSP-D8x20-30E□-6TC			6						
VSP-D8x20-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	77
VSP-D8x20-40E□-6TC			6						
VSP-D8x20-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D8x20-50E□-6TC			6						
VSP-D8x30-20E□-4TC		30	4	72.6	60.5	41	20	1.5 to 4.9	64
VSP-D8x30-20E□-6TC			6						
VSP-D8x30-30E□-4TC			4	85.6	73.5	54	30	1.1 to 4.8	71
VSP-D8x30-30E□-6TC			6						
VSP-D8x30-40E□-4TC			4	98.6	86.5	67	40	1.0 to 4.5	78
VSP-D8x30-40E□-6TC			6						
VSP-D8x30-50E□-4TC			4	111.6	99.5	80	50	0.9 to 4.5	84
VSP-D8x30-50E□-6TC			6						

External Dimension Diagram (Direct Mount, Buffer Type, VSP-F Male Thread Type)

●VSP-F □E□

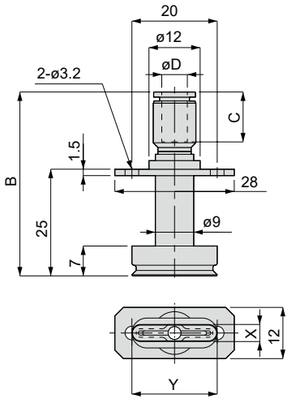


Unit: mm

Model No.	Pad Size X	Pad Size Y	Spring Force (N)	Weight (g)
VSP-F2x4E□	2	4	7.9 to 15	54
VSP-F3.5x7E□	3.5	7	7.9 to 15	54
VSP-F4x10E□	4	10	7.9 to 15	54
VSP-F4x20E□		20		55
VSP-F4x30E□		30		
VSP-F5x10E□	5	10	7.9 to 15	54
VSP-F5x20E□		20		55
VSP-F5x30E□		30		
VSP-F6x10E□	6	10	7.9 to 15	54
VSP-F6x20E□		20		55
VSP-F6x30E□		30		
VSP-F8x20E□	8	20	7.9 to 15	55
VSP-F8x30E□		30		

External Dimension Diagram (Screw Mount, Fixed Type, Vacuum Outlet on Top, VSP-AE)

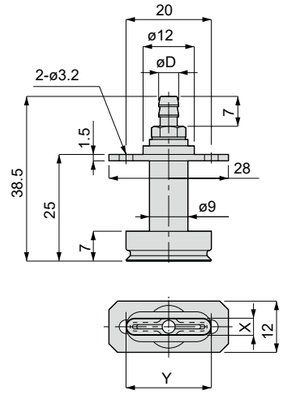
●Push-in fitting VSP-AE□E□-2/4/6



Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	Tube End C	Weight (g)
VSP-AE2x4E□-2	2	4	1.8	37.3	8.4	5
VSP-AE2x4E□-4			4	41.4	11.2	6
VSP-AE2x4E□-6			6	42.7	11.9	7
VSP-AE3.5x7E□-2	3.5	7	1.8	37.3	8.4	5
VSP-AE3.5x7E□-4			4	41.4	11.2	6
VSP-AE3.5x7E□-6			6	42.7	11.9	7
VSP-AE4x10E□-2	4	10	1.8	37.3	8.4	5
VSP-AE4x10E□-4			4	41.4	11.2	6
VSP-AE4x10E□-6			6	42.7	11.9	7
VSP-AE4x20E□-2		20	1.8	37.3	8.4	5.5
VSP-AE4x20E□-4			4	41.4	11.2	6.5
VSP-AE4x20E□-6			6	42.7	11.9	7.5
VSP-AE4x30E□-2		30	1.8	37.3	8.4	6
VSP-AE4x30E□-4			4	41.4	11.2	7
VSP-AE4x30E□-6			6	42.7	11.9	8
VSP-AE5x10E□-2	5	10	1.8	37.3	8.4	5
VSP-AE5x10E□-4			4	41.4	11.2	6
VSP-AE5x10E□-6			6	42.7	11.9	7
VSP-AE5x20E□-2		20	1.8	37.3	8.4	5.5
VSP-AE5x20E□-4			4	41.4	11.2	6.5
VSP-AE5x20E□-6			6	42.7	11.9	7.5
VSP-AE5x30E□-2		30	1.8	37.3	8.4	6
VSP-AE5x30E□-4			4	41.4	11.2	7
VSP-AE5x30E□-6			6	42.7	11.9	8
VSP-AE6x10E□-2	6	10	1.8	37.3	8.4	5
VSP-AE6x10E□-4			4	41.4	11.2	6
VSP-AE6x10E□-6			6	42.7	11.9	7
VSP-AE6x20E□-2		20	1.8	37.3	8.4	5.5
VSP-AE6x20E□-4			4	41.4	11.2	6.5
VSP-AE6x20E□-6			6	42.7	11.9	7.5
VSP-AE6x30E□-2		30	1.8	37.3	8.4	6
VSP-AE6x30E□-4			4	41.4	11.2	7
VSP-AE6x30E□-6			6	42.7	11.9	8
VSP-AE8x20E□-2	8	20	1.8	37.3	8.4	5.5
VSP-AE8x20E□-4			4	41.4	11.2	6.5
VSP-AE8x20E□-6			6	42.7	11.9	7.5
VSP-AE8x30E□-2		30	1.8	37.3	8.4	6
VSP-AE8x30E□-4			4	41.4	11.2	7
VSP-AE8x30E□-6			6	42.7	11.9	8

●Barbed fitting VSP-AE□E□-4T/6T

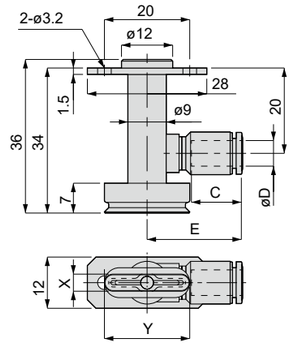


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Weight (g)
VSP-AE2x4E□-4T	2	4	2.5	5
VSP-AE2x4E□-6T			4	
VSP-AE3.5x7E□-4T	3.5	7	2.5	5
VSP-AE3.5x7E□-6T			4	
VSP-AE4x10E□-4T	4	10	2.5	5
VSP-AE4x10E□-6T			4	
VSP-AE4x20E□-4T		20	2.5	5.5
VSP-AE4x20E□-6T			4	
VSP-AE4x30E□-4T		30	2.5	6
VSP-AE4x30E□-6T			4	
VSP-AE5x10E□-4T	5	10	2.5	5
VSP-AE5x10E□-6T			4	
VSP-AE5x20E□-4T		20	2.5	5.5
VSP-AE5x20E□-6T			4	
VSP-AE5x30E□-4T		30	2.5	6
VSP-AE5x30E□-6T			4	
VSP-AE6x10E□-4T	6	10	2.5	5
VSP-AE6x10E□-6T			4	
VSP-AE6x20E□-4T		20	2.5	5.5
VSP-AE6x20E□-6T			4	
VSP-AE6x30E□-4T		30	2.5	6
VSP-AE6x30E□-6T			4	
VSP-AE8x20E□-4T	8	20	2.5	5.5
VSP-AE8x20E□-6T			4	
VSP-AE8x30E□-4T		30	2.5	6
VSP-AE8x30E□-6T			4	

External Dimension Diagram (Screw Mount, Fixed Type, Vacuum Outlet on Side, VSP-BE)

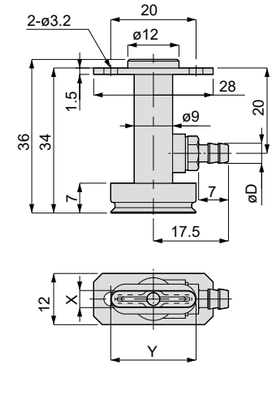
●Push-in fitting VSP-BE□E□-2/4/6



Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	Tube End C	Weight (g)
VSP-BE2x4E□-2	2	4	1.8	16.3	8.4	6
VSP-BE2x4E□-4			4	20.4	11.2	7
VSP-BE2x4E□-6			6	21.7	11.9	8
VSP-BE3.5x7E□-2	3.5	7	1.8	16.3	8.4	6
VSP-BE3.5x7E□-4			4	20.4	11.2	7
VSP-BE3.5x7E□-6			6	21.7	11.9	8
VSP-BE4x10E□-2	4	10	1.8	16.3	8.4	6
VSP-BE4x10E□-4			4	20.4	11.2	7
VSP-BE4x10E□-6			6	21.7	11.9	8
VSP-BE4x20E□-2		20	1.8	16.3	8.4	6
VSP-BE4x20E□-4			4	20.4	11.2	7
VSP-BE4x20E□-6			6	21.7	11.9	8
VSP-BE4x30E□-2		30	1.8	16.3	8.4	6.5
VSP-BE4x30E□-4			4	20.4	11.2	7.5
VSP-BE4x30E□-6			6	21.7	11.9	8.5
VSP-BE5x10E□-2	5	10	1.8	16.3	8.4	6
VSP-BE5x10E□-4			4	20.4	11.2	7
VSP-BE5x10E□-6			6	21.7	11.9	8
VSP-BE5x20E□-2		20	1.8	16.3	8.4	6
VSP-BE5x20E□-4			4	20.4	11.2	7
VSP-BE5x20E□-6			6	21.7	11.9	8
VSP-BE5x30E□-2		30	1.8	16.3	8.4	6.5
VSP-BE5x30E□-4			4	20.4	11.2	7.5
VSP-BE5x30E□-6			6	21.7	11.9	8.5
VSP-BE6x10E□-2	6	10	1.8	16.3	8.4	6
VSP-BE6x10E□-4			4	20.4	11.2	7
VSP-BE6x10E□-6			6	21.7	11.9	8
VSP-BE6x20E□-2		20	1.8	16.3	8.4	6
VSP-BE6x20E□-4			4	20.4	11.2	7
VSP-BE6x20E□-6			6	21.7	11.9	8
VSP-BE6x30E□-2		30	1.8	16.3	8.4	6.5
VSP-BE6x30E□-4			4	20.4	11.2	7.5
VSP-BE6x30E□-6			6	21.7	11.9	8.5
VSP-BE8x20E□-2	8	20	1.8	16.3	8.4	6
VSP-BE8x20E□-4			4	20.4	11.2	7
VSP-BE8x20E□-6			6	21.7	11.9	8
VSP-BE8x30E□-2		30	1.8	16.3	8.4	6.5
VSP-BE8x30E□-4			4	20.4	11.2	7.5
VSP-BE8x30E□-6			6	21.7	11.9	8.5

●Barbed fitting VSP-BE□E□-4T/6T

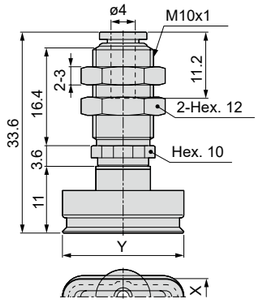


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Weight (g)
VSP-BE2x4E□-4T	2	4	2.5	6
VSP-BE2x4E□-6T			4	
VSP-BE3.5x7E□-4T	3.5	7	2.5	6
VSP-BE3.5x7E□-6T			4	
VSP-BE4x10E□-4T	4	10	2.5	6
VSP-BE4x10E□-6T			4	
VSP-BE4x20E□-4T		20	2.5	6
VSP-BE4x20E□-6T			4	
VSP-BE4x30E□-4T		30	2.5	6.5
VSP-BE4x30E□-6T			4	
VSP-BE5x10E□-4T	5	10	2.5	6
VSP-BE5x10E□-6T			4	
VSP-BE5x20E□-4T		20	2.5	6
VSP-BE5x20E□-6T			4	
VSP-BE5x30E□-4T		30	2.5	6.5
VSP-BE5x30E□-6T			4	
VSP-BE6x10E□-4T	6	10	2.5	6
VSP-BE6x10E□-6T			4	
VSP-BE6x20E□-4T		20	2.5	6
VSP-BE6x20E□-6T			4	
VSP-BE6x30E□-4T		30	2.5	6.5
VSP-BE6x30E□-6T			4	
VSP-BE8x20E□-4T	8	20	2.5	6
VSP-BE8x20E□-6T			4	
VSP-BE8x30E□-4T		30	2.5	6.5
VSP-BE8x30E□-6T			4	

External Dimension Diagram (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA)

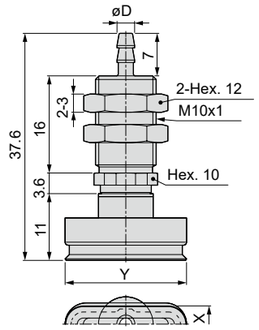
●Push-in fitting VSP-MA□E□-4



Unit: mm

Model No.	Pad Size X	Pad Size Y	Weight (g)
VSP-MA2x4E□-4	2	4	6
VSP-MA3.5x7E□-4	3.5	7	6
VSP-MA4x10E□-4	4	10	6
VSP-MA4x20E□-4		20	6.3
VSP-MA4x30E□-4		30	6.7
VSP-MA5x10E□-4	5	10	6
VSP-MA5x20E□-4		20	6.3
VSP-MA5x30E□-4		30	6.6
VSP-MA6x10E□-4	6	10	6
VSP-MA6x20E□-4		20	6.3
VSP-MA6x30E□-4		30	6.7
VSP-MA8x20E□-4	8	20	6.3
VSP-MA8x30E□-4		30	6.8

●Barbed fitting VSP-MA□E□-4T/6T

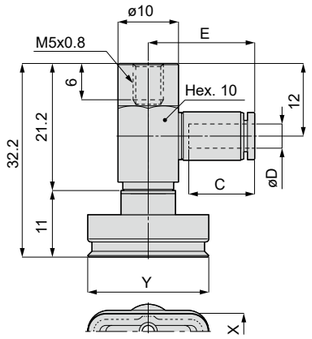


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Weight (g)
VSP-MA2x4E□-4T	2	4	2.5	6
VSP-MA2x4E□-6T			4	
VSP-MA3.5x7E□-4T	3.5	7	2.5	6
VSP-MA3.5x7E□-6T			4	
VSP-MA4x10E□-4T	4	10	2.5	6
VSP-MA4x10E□-6T			4	
VSP-MA4x20E□-4T		20	2.5	6.3
VSP-MA4x20E□-6T			4	
VSP-MA4x30E□-4T		30	2.5	6.7
VSP-MA4x30E□-6T			4	
VSP-MA5x10E□-4T	5	10	2.5	6
VSP-MA5x10E□-6T			4	
VSP-MA5x20E□-4T		20	2.5	6.3
VSP-MA5x20E□-6T			4	
VSP-MA5x30E□-4T		30	2.5	6.7
VSP-MA5x30E□-6T			4	
VSP-MA6x10E□-4T	6	10	2.5	6
VSP-MA6x10E□-6T			4	
VSP-MA6x20E□-4T		20	2.5	6.3
VSP-MA6x20E□-6T			4	
VSP-MA6x30E□-4T		30	2.5	6.7
VSP-MA6x30E□-6T			4	
VSP-MA8x20E□-4T	8	20	2.5	6.4
VSP-MA8x20E□-6T			4	
VSP-MA8x30E□-4T		30	2.5	6.9
VSP-MA8x30E□-6T			4	

External Dimension Diagram (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB)

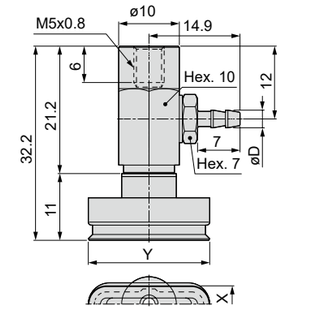
●Push-in fitting VSP-MB□E□-2/4/6



Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	Tube End C	E	Weight (g)
VSP-MB2x4E□-2	2	4	1.8	8.4	13.7	6.8
VSP-MB2x4E□-4			4	11.2	17.8	6.9
VSP-MB2x4E□-6			6	11.9	19.6	7.0
VSP-MB3.5x7E□-2	3.5	7	1.8	8.4	13.7	6.8
VSP-MB3.5x7E□-4			4	11.2	17.8	6.9
VSP-MB3.5x7E□-6			6	11.9	19.6	7.0
VSP-MB4x10E□-2	4	10	1.8	8.4	13.7	6.8
VSP-MB4x10E□-4			4	11.2	17.8	6.9
VSP-MB4x10E□-6			6	11.9	19.6	7.0
VSP-MB4x20E□-2		20	1.8	8.4	13.7	7.1
VSP-MB4x20E□-4			4	11.2	17.8	7.2
VSP-MB4x20E□-6			6	11.9	19.6	7.3
VSP-MB4x30E□-2		30	1.8	8.4	13.7	7.5
VSP-MB4x30E□-4			4	11.2	17.8	7.6
VSP-MB4x30E□-6			6	11.9	19.6	7.7
VSP-MB5x10E□-2	5	10	1.8	8.4	13.7	6.8
VSP-MB5x10E□-4			4	11.2	17.8	6.9
VSP-MB5x10E□-6			6	11.9	19.6	7.0
VSP-MB5x20E□-2		20	1.8	8.4	13.7	7.1
VSP-MB5x20E□-4			4	11.2	17.8	7.2
VSP-MB5x20E□-6			6	11.9	19.6	7.3
VSP-MB5x30E□-2		30	1.8	8.4	13.7	7.5
VSP-MB5x30E□-4			4	11.2	17.8	7.6
VSP-MB5x30E□-6			6	11.9	19.6	7.7
VSP-MB6x10E□-2	6	10	1.8	8.4	13.7	6.8
VSP-MB6x10E□-4			4	11.2	17.8	6.9
VSP-MB6x10E□-6			6	11.9	19.6	7.0
VSP-MB6x20E□-2		20	1.8	8.4	13.7	7.1
VSP-MB6x20E□-4			4	11.2	17.8	7.2
VSP-MB6x20E□-6			6	11.9	19.6	7.3
VSP-MB6x30E□-2		30	1.8	8.4	13.7	7.5
VSP-MB6x30E□-4			4	11.2	17.8	7.6
VSP-MB6x30E□-6			6	11.9	19.6	7.7
VSP-MB8x20E□-2	8	20	1.8	8.4	13.7	7.2
VSP-MB8x20E□-4			4	11.2	17.8	7.3
VSP-MB8x20E□-6			6	11.9	19.6	7.4
VSP-MB8x30E□-2		30	1.8	8.4	13.7	7.6
VSP-MB8x30E□-4			4	11.2	17.8	7.7
VSP-MB8x30E□-6			6	11.9	19.6	7.8

●Barbed fitting VSP-MB□E□-4T/6T

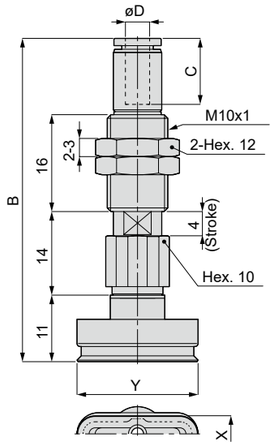


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Weight (g)
VSP-MB2x4E□-4T	2	4	2.5	5.7
VSP-MB2x4E□-6T			4	
VSP-MB3.5x7E□-4T	3.5	7	2.5	5.7
VSP-MB3.5x7E□-6T			4	
VSP-MB4x10E□-4T	4	10	2.5	5.7
VSP-MB4x10E□-6T			4	
VSP-MB4x20E□-4T		20	2.5	6.0
VSP-MB4x20E□-6T			4	
VSP-MB4x30E□-4T		30	2.5	6.4
VSP-MB4x30E□-6T			4	
VSP-MB5x10E□-4T	5	10	2.5	5.7
VSP-MB5x10E□-6T			4	
VSP-MB5x20E□-4T		20	2.5	6.1
VSP-MB5x20E□-6T			4	
VSP-MB5x30E□-4T		30	2.5	6.4
VSP-MB5x30E□-6T			4	
VSP-MB6x10E□-4T	6	10	2.5	5.8
VSP-MB6x10E□-6T			4	
VSP-MB6x20E□-4T		20	2.5	6.1
VSP-MB6x20E□-6T			4	
VSP-MB6x30E□-4T		30	2.5	6.5
VSP-MB6x30E□-6T			4	
VSP-MB8x20E□-4T	8	20	2.5	6.1
VSP-MB8x20E□-6T			4	
VSP-MB8x30E□-4T		30	2.5	6.6
VSP-MB8x30E□-6T			4	

External Dimension Diagram (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC)

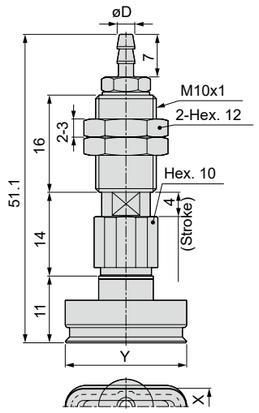
●Push-in fitting VSP-MC□E□-2/4



Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	Tube End C	Spring Force (N)	Weight (g)
VSP-MC2x4E□-2	2	4	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC2x4E□-4			4	54	11.2		22
VSP-MC3.5x7E□-2	3.5	7	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC3.5x7E□-4			4	54	11.2		22
VSP-MC4x10E□-2	4	10	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC4x10E□-4			4	54	11.2		22
VSP-MC4x20E□-2		20	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC4x20E□-4			4	54	11.2		22
VSP-MC4x30E□-2		30	1.8	49.9	8.4	1.0 to 1.3	22
VSP-MC4x30E□-4			4	54	11.2		23
VSP-MC5x10E□-2	5	10	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC5x10E□-4			4	54	11.2		22
VSP-MC5x20E□-2		20	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC5x20E□-4			4	54	11.2		22
VSP-MC5x30E□-2		30	1.8	49.9	8.4	1.0 to 1.3	22
VSP-MC5x30E□-4			4	54	11.2		23
VSP-MC6x10E□-2	6	10	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC6x10E□-4			4	54	11.2		22
VSP-MC6x20E□-2		20	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC6x20E□-4			4	54	11.2		22
VSP-MC6x30E□-2		30	1.8	49.9	8.4	1.0 to 1.3	22
VSP-MC6x30E□-4			4	54	11.2		23
VSP-MC8x20E□-2	8	20	1.8	49.9	8.4	1.0 to 1.3	21
VSP-MC8x20E□-4			4	54	11.2		22
VSP-MC8x30E□-2		30	1.8	49.9	8.4	1.0 to 1.3	22
VSP-MC8x30E□-4			4	54	11.2		23

●Barbed fitting VSP-MC□E□-4T/6T

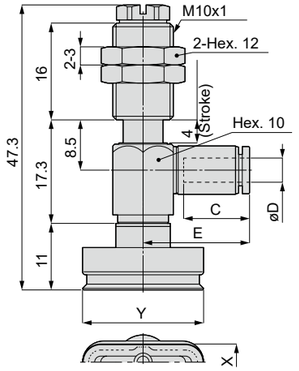


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Spring Force (N)	Weight (g)
VSP-MC2x4E□-4T	2	4	2.5	1 to 1.3	17
VSP-MC2x4E□-6T			4		
VSP-MC3.5x7E□-4T	3.5	7	2.5	1 to 1.3	17
VSP-MC3.5x7E□-6T			4		
VSP-MC4x10E□-4T	4	10	2.5	1 to 1.3	17
VSP-MC4x10E□-6T			4		
VSP-MC4x20E□-4T		20	2.5		17
VSP-MC4x20E□-6T			4		
VSP-MC4x30E□-4T		30	2.5		18
VSP-MC4x30E□-6T			4		
VSP-MC5x10E□-4T	5	10	2.5	1 to 1.3	17
VSP-MC5x10E□-6T			4		
VSP-MC5x20E□-4T		20	2.5		17
VSP-MC5x20E□-6T			4		
VSP-MC5x30E□-4T		30	2.5		18
VSP-MC5x30E□-6T			4		
VSP-MC6x10E□-4T	6	10	2.5	1 to 1.3	17
VSP-MC6x10E□-6T			4		
VSP-MC6x20E□-4T		20	2.5		17
VSP-MC6x20E□-6T			4		
VSP-MC6x30E□-4T		30	2.5		18
VSP-MC6x30E□-6T			4		
VSP-MC8x20E□-4T	8	20	2.5	1 to 1.3	18
VSP-MC8x20E□-6T			4		
VSP-MC8x30E□-4T		30	2.5		
VSP-MC8x30E□-6T			4		

External Dimension Diagram (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD)

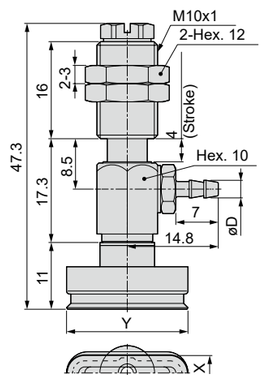
●Push-in fitting VSP-MD□E□-2/4/6



Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD2x4E□-2	2	4	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD2x4E□-4			4	11.2	17.7		22
VSP-MD2x4E□-6			6	11.9	19.5		23
VSP-MD3.5x7E□-2	3.5	7	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD3.5x7E□-4			4	11.2	17.7		22
VSP-MD3.5x7E□-6			6	11.9	19.5		23
VSP-MD4x10E□-2	4	10	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD4x10E□-4			4	11.2	17.7		22
VSP-MD4x10E□-6			6	11.9	19.5		23
VSP-MD4x20E□-2		20	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD4x20E□-4			4	11.2	17.7		22
VSP-MD4x20E□-6			6	11.9	19.5		23
VSP-MD4x30E□-2		30	1.8	8.4	13.7	1.0 to 1.3	22
VSP-MD4x30E□-4			4	11.2	17.7		23
VSP-MD4x30E□-6			6	11.9	19.5		24
VSP-MD5x10E□-2	5	10	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD5x10E□-4			4	11.2	17.7		22
VSP-MD5x10E□-6			6	11.9	19.5		23
VSP-MD5x20E□-2		20	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD5x20E□-4			4	11.2	17.7		22
VSP-MD5x20E□-6			6	11.9	19.5		23
VSP-MD5x30E□-2		30	1.8	8.4	13.7	1.0 to 1.3	22
VSP-MD5x30E□-4			4	11.2	17.7		23
VSP-MD5x30E□-6			6	11.9	19.5		24
VSP-MD6x10E□-2	6	10	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD6x10E□-4			4	11.2	17.7		22
VSP-MD6x10E□-6			6	11.9	19.5		23
VSP-MD6x20E□-2		20	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD6x20E□-4			4	11.2	17.7		22
VSP-MD6x20E□-6			6	11.9	19.5		23
VSP-MD6x30E□-2		30	1.8	8.4	13.7	1.0 to 1.3	22
VSP-MD6x30E□-4			4	11.2	17.7		23
VSP-MD6x30E□-6			6	11.9	19.5		24
VSP-MD8x20E□-2	8	20	1.8	8.4	13.7	1.0 to 1.3	21
VSP-MD8x20E□-4			4	11.2	17.7		22
VSP-MD8x20E□-6			6	11.9	19.5		23
VSP-MD8x30E□-2		30	1.8	8.4	13.7	1.0 to 1.3	22
VSP-MD8x30E□-4			4	11.2	17.7		23
VSP-MD8x30E□-6			6	11.9	19.5		24

●Barbed fitting VSP-MD□E□-4T/6T

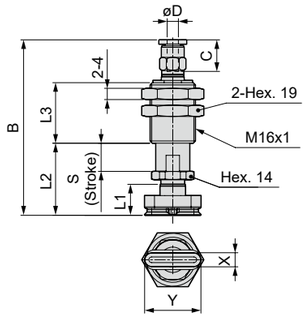


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	Spring Force (N)	Weight (g)
VSP-MD2x4E□-4T	2	4	2.5	1 to 1.3	21
VSP-MD2x4E□-6T			4		
VSP-MD3.5x7E□-4T	3.5	7	2.5	1 to 1.3	21
VSP-MD3.5x7E□-6T			4		
VSP-MD4x10E□-4T	4	10	2.5	1 to 1.3	21
VSP-MD4x10E□-6T			4		
VSP-MD4x20E□-4T		20	2.5		
VSP-MD4x20E□-6T			4		
VSP-MD4x30E□-4T		30	2.5		
VSP-MD4x30E□-6T			4		
VSP-MD5x10E□-4T	5	10	2.5	1 to 1.3	21
VSP-MD5x10E□-6T			4		
VSP-MD5x20E□-4T		20	2.5		
VSP-MD5x20E□-6T			4		
VSP-MD5x30E□-4T		30	2.5		
VSP-MD5x30E□-6T			4		
VSP-MD6x10E□-4T	6	10	2.5	1 to 1.3	20
VSP-MD6x10E□-6T			4		
VSP-MD6x20E□-4T		20	2.5		21
VSP-MD6x20E□-6T			4		
VSP-MD6x30E□-4T		30	2.5		21
VSP-MD6x30E□-6T			4		
VSP-MD8x20E□-4T	8	20	2.5	1 to 1.3	21
VSP-MD8x20E□-6T			4		
VSP-MD8x30E□-4T		30	2.5		
VSP-MD8x30E□-6T			4		

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC2x4-□E□-2/4/6
●VSP-HC3.5x7-□E□-2/4/6

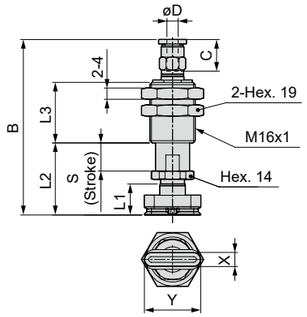


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC2x4-10E□-2			1.8	58.2				8.4			22
VSP-HC2x4-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	23
VSP-HC2x4-10E□-6			6	63.6				11.9			24
VSP-HC2x4-15E□-2			1.8	68.2				8.4			24
VSP-HC2x4-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	25
VSP-HC2x4-15E□-6			6	73.6				11.9			26
VSP-HC2x4-20E□-2			1.8	78.2				8.4			26
VSP-HC2x4-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	27
VSP-HC2x4-20E□-6			6	83.6				11.9			28
VSP-HC2x4-25E□-2			1.8	88.7				8.4			28
VSP-HC2x4-25E□-4	2.5	4	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	29
VSP-HC2x4-25E□-6			6	94.1				11.9			30
VSP-HC2x4-30E□-2			1.8	99.7				8.4			30
VSP-HC2x4-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	31
VSP-HC2x4-30E□-6			6	105.1				11.9			32
VSP-HC2x4-40E□-2			1.8	121.7				8.4			34
VSP-HC2x4-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	35
VSP-HC2x4-40E□-6			6	117.2				11.9			36
VSP-HC2x4-50E□-2			1.8	143.2				8.4			38
VSP-HC2x4-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	39
VSP-HC2x4-50E□-6			6	148.6				11.9			40
VSP-HC3.5x7-10E□-2			1.8	58.2				8.4			22
VSP-HC3.5x7-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	23
VSP-HC3.5x7-10E□-6			6	63.6				11.9			24
VSP-HC3.5x7-15E□-2			1.8	68.2				8.4			24
VSP-HC3.5x7-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	25
VSP-HC3.5x7-15E□-6			6	73.6				11.9			26
VSP-HC3.5x7-20E□-2			1.8	78.2				8.4			26
VSP-HC3.5x7-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	27
VSP-HC3.5x7-20E□-6			6	83.6				11.9			28
VSP-HC3.5x7-25E□-2			1.8	88.7				8.4			28
VSP-HC3.5x7-25E□-4	3.5	7	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	29
VSP-HC3.5x7-25E□-6			6	94.1				11.9			30
VSP-HC3.5x7-30E□-2			1.8	99.7				8.4			30
VSP-HC3.5x7-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	31
VSP-HC3.5x7-30E□-6			6	105.1				11.9			32
VSP-HC3.5x7-40E□-2			1.8	121.7				8.4			34
VSP-HC3.5x7-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	35
VSP-HC3.5x7-40E□-6			6	117.2				11.9			36
VSP-HC3.5x7-50E□-2			1.8	143.2				8.4			38
VSP-HC3.5x7-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	39
VSP-HC3.5x7-50E□-6			6	148.6				11.9			40

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC4x10-□E□-2/4/6
●VSP-HC4x20-□E□-2/4/6
●VSP-HC4x30-□E□-2/4/6

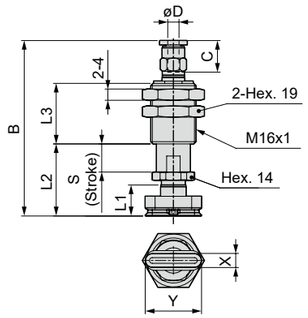


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC4x10-10E□-2			1.8	58.2				8.4			22
VSP-HC4x10-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	23
VSP-HC4x10-10E□-6			6	63.6				11.9			24
VSP-HC4x10-15E□-2			1.8	68.2				8.4			24
VSP-HC4x10-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	25
VSP-HC4x10-15E□-6			6	73.6				11.9			26
VSP-HC4x10-20E□-2			1.8	78.2				8.4			26
VSP-HC4x10-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	27
VSP-HC4x10-20E□-6			6	83.6				11.9			28
VSP-HC4x10-25E□-2			1.8	88.7				8.4			28
VSP-HC4x10-25E□-4		10	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	29
VSP-HC4x10-25E□-6			6	94.1				11.9			30
VSP-HC4x10-30E□-2			1.8	99.7				8.4			30
VSP-HC4x10-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	31
VSP-HC4x10-30E□-6			6	105.1				11.9			32
VSP-HC4x10-40E□-2			1.8	121.7				8.4			34
VSP-HC4x10-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	35
VSP-HC4x10-40E□-6			6	117.2				11.9			36
VSP-HC4x10-50E□-2			1.8	143.2				8.4			38
VSP-HC4x10-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	39
VSP-HC4x10-50E□-6			6	148.6				11.9			40
VSP-HC4x20-10E□-2			1.8	58.2				8.4			23
VSP-HC4x20-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC4x20-10E□-6			6	63.6				11.9			25
VSP-HC4x20-15E□-2			1.8	68.2				8.4			25
VSP-HC4x20-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC4x20-15E□-6			6	73.6				11.9			27
VSP-HC4x20-20E□-2			1.8	78.2				8.4			27
VSP-HC4x20-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC4x20-20E□-6			6	83.6				11.9			29
VSP-HC4x20-25E□-2			1.8	88.7				8.4			29
VSP-HC4x20-25E□-4	4	20	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC4x20-25E□-6			6	94.1				11.9			31
VSP-HC4x20-30E□-2			1.8	99.7				8.4			31
VSP-HC4x20-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC4x20-30E□-6			6	105.1				11.9			33
VSP-HC4x20-40E□-2			1.8	121.7				8.4			35
VSP-HC4x20-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC4x20-40E□-6			6	117.2				11.9			37
VSP-HC4x20-50E□-2			1.8	143.2				8.4			39
VSP-HC4x20-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC4x20-50E□-6			6	148.6				11.9			41
VSP-HC4x30-10E□-2			1.8	58.2				8.4			23
VSP-HC4x30-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC4x30-10E□-6			6	63.6				11.9			25
VSP-HC4x30-15E□-2			1.8	68.2				8.4			25
VSP-HC4x30-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC4x30-15E□-6			6	73.6				11.9			27
VSP-HC4x30-20E□-2			1.8	78.2				8.4			27
VSP-HC4x30-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC4x30-20E□-6			6	83.6				11.9			29
VSP-HC4x30-25E□-2			1.8	88.7				8.4			29
VSP-HC4x30-25E□-4		30	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC4x30-25E□-6			6	94.1				11.9			31
VSP-HC4x30-30E□-2			1.8	99.7				8.4			31
VSP-HC4x30-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC4x30-30E□-6			6	105.1				11.9			33
VSP-HC4x30-40E□-2			1.8	121.7				8.4			35
VSP-HC4x30-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC4x30-40E□-6			6	117.2				11.9			37
VSP-HC4x30-50E□-2			1.8	143.2				8.4			39
VSP-HC4x30-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC4x30-50E□-6			6	148.6				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC5x10-□E□-2/4/6
●VSP-HC5x20-□E□-2/4/6
●VSP-HC5x30-□E□-2/4/6

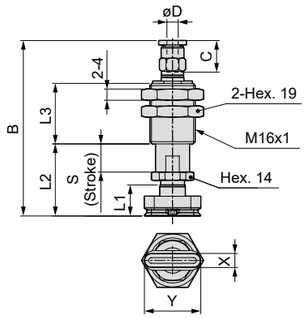


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC5x10-10E□-2			1.8	58.2				8.4			22
VSP-HC5x10-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	23
VSP-HC5x10-10E□-6			6	63.6				11.9			24
VSP-HC5x10-15E□-2			1.8	68.2				8.4			24
VSP-HC5x10-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	25
VSP-HC5x10-15E□-6			6	73.6				11.9			26
VSP-HC5x10-20E□-2			1.8	78.2				8.4			26
VSP-HC5x10-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	27
VSP-HC5x10-20E□-6			6	83.6				11.9			28
VSP-HC5x10-25E□-2			1.8	88.7				8.4			28
VSP-HC5x10-25E□-4		10	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	29
VSP-HC5x10-25E□-6			6	94.1				11.9			30
VSP-HC5x10-30E□-2			1.8	99.7				8.4			30
VSP-HC5x10-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	31
VSP-HC5x10-30E□-6			6	105.1				11.9			32
VSP-HC5x10-40E□-2			1.8	121.7				8.4			34
VSP-HC5x10-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	35
VSP-HC5x10-40E□-6			6	117.2				11.9			36
VSP-HC5x10-50E□-2			1.8	143.2				8.4			38
VSP-HC5x10-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	39
VSP-HC5x10-50E□-6			6	148.6				11.9			40
VSP-HC5x20-10E□-2			1.8	58.2				8.4			23
VSP-HC5x20-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC5x20-10E□-6			6	63.6				11.9			25
VSP-HC5x20-15E□-2			1.8	68.2				8.4			25
VSP-HC5x20-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC5x20-15E□-6			6	73.6				11.9			27
VSP-HC5x20-20E□-2			1.8	78.2				8.4			27
VSP-HC5x20-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC5x20-20E□-6			6	83.6				11.9			29
VSP-HC5x20-25E□-2			1.8	88.7				8.4			29
VSP-HC5x20-25E□-4	5	20	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC5x20-25E□-6			6	94.1				11.9			31
VSP-HC5x20-30E□-2			1.8	99.7				8.4			31
VSP-HC5x20-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC5x20-30E□-6			6	105.1				11.9			33
VSP-HC5x20-40E□-2			1.8	121.7				8.4			35
VSP-HC5x20-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC5x20-40E□-6			6	117.2				11.9			37
VSP-HC5x20-50E□-2			1.8	143.2				8.4			39
VSP-HC5x20-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC5x20-50E□-6			6	148.6				11.9			41
VSP-HC5x30-10E□-2			1.8	58.2				8.4			23
VSP-HC5x30-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC5x30-10E□-6			6	63.6				11.9			25
VSP-HC5x30-15E□-2			1.8	68.2				8.4			25
VSP-HC5x30-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC5x30-15E□-6			6	73.6				11.9			27
VSP-HC5x30-20E□-2			1.8	78.2				8.4			27
VSP-HC5x30-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC5x30-20E□-6			6	83.6				11.9			29
VSP-HC5x30-25E□-2			1.8	88.7				8.4			29
VSP-HC5x30-25E□-4		30	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC5x30-25E□-6			6	94.1				11.9			31
VSP-HC5x30-30E□-2			1.8	99.7				8.4			31
VSP-HC5x30-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC5x30-30E□-6			6	105.1				11.9			33
VSP-HC5x30-40E□-2			1.8	121.7				8.4			35
VSP-HC5x30-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC5x30-40E□-6			6	117.2				11.9			37
VSP-HC5x30-50E□-2			1.8	143.2				8.4			39
VSP-HC5x30-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC5x30-50E□-6			6	148.6				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC6x10-□E□-2/4/6
●VSP-HC6x20-□E□-2/4/6
●VSP-HC6x30-□E□-2/4/6

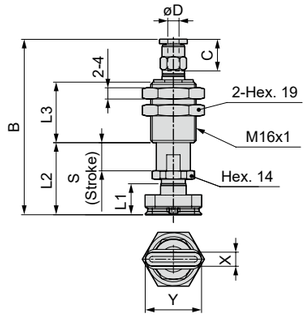


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC6x10-10E□-2			1.8	58.2				8.4			22
VSP-HC6x10-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	23
VSP-HC6x10-10E□-6			6	63.6				11.9			24
VSP-HC6x10-15E□-2			1.8	68.2				8.4			24
VSP-HC6x10-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	25
VSP-HC6x10-15E□-6			6	73.6				11.9			26
VSP-HC6x10-20E□-2			1.8	78.2				8.4			26
VSP-HC6x10-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	27
VSP-HC6x10-20E□-6			6	83.6				11.9			28
VSP-HC6x10-25E□-2			1.8	88.7				8.4			28
VSP-HC6x10-25E□-4		10	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	29
VSP-HC6x10-25E□-6			6	94.1				11.9			30
VSP-HC6x10-30E□-2			1.8	99.7				8.4			30
VSP-HC6x10-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	31
VSP-HC6x10-30E□-6			6	105.1				11.9			32
VSP-HC6x10-40E□-2			1.8	121.7				8.4			34
VSP-HC6x10-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	35
VSP-HC6x10-40E□-6			6	117.2				11.9			36
VSP-HC6x10-50E□-2			1.8	143.2				8.4			38
VSP-HC6x10-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	39
VSP-HC6x10-50E□-6			6	148.6				11.9			40
VSP-HC6x20-10E□-2			1.8	58.2				8.4			23
VSP-HC6x20-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC6x20-10E□-6			6	63.6				11.9			25
VSP-HC6x20-15E□-2			1.8	68.2				8.4			25
VSP-HC6x20-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC6x20-15E□-6			6	73.6				11.9			27
VSP-HC6x20-20E□-2			1.8	78.2				8.4			27
VSP-HC6x20-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC6x20-20E□-6			6	83.6				11.9			29
VSP-HC6x20-25E□-2			1.8	88.7				8.4			29
VSP-HC6x20-25E□-4	6	20	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC6x20-25E□-6			6	94.1				11.9			31
VSP-HC6x20-30E□-2			1.8	99.7				8.4			31
VSP-HC6x20-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC6x20-30E□-6			6	105.1				11.9			33
VSP-HC6x20-40E□-2			1.8	121.7				8.4			35
VSP-HC6x20-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC6x20-40E□-6			6	117.2				11.9			37
VSP-HC6x20-50E□-2			1.8	143.2				8.4			39
VSP-HC6x20-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC6x20-50E□-6			6	148.6				11.9			41
VSP-HC6x30-10E□-2			1.8	58.2				8.4			23
VSP-HC6x30-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC6x30-10E□-6			6	63.6				11.9			25
VSP-HC6x30-15E□-2			1.8	68.2				8.4			25
VSP-HC6x30-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC6x30-15E□-6			6	73.6				11.9			27
VSP-HC6x30-20E□-2			1.8	78.2				8.4			27
VSP-HC6x30-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC6x30-20E□-6			6	83.6				11.9			29
VSP-HC6x30-25E□-2			1.8	88.7				8.4			29
VSP-HC6x30-25E□-4		30	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC6x30-25E□-6			6	94.1				11.9			31
VSP-HC6x30-30E□-2			1.8	99.7				8.4			31
VSP-HC6x30-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC6x30-30E□-6			6	105.1				11.9			33
VSP-HC6x30-40E□-2			1.8	121.7				8.4			35
VSP-HC6x30-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC6x30-40E□-6			6	117.2				11.9			37
VSP-HC6x30-50E□-2			1.8	143.2				8.4			39
VSP-HC6x30-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC6x30-50E□-6			6	148.6				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC8x20-□E□-2/4/6
●VSP-HC8x30-□E□-2/4/6

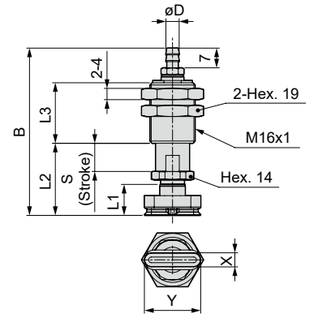


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC8x20-10E□-2			1.8	58.2				8.4			23
VSP-HC8x20-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC8x20-10E□-6			6	63.6				11.9			25
VSP-HC8x20-15E□-2			1.8	68.2				8.4			25
VSP-HC8x20-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC8x20-15E□-6			6	73.6				11.9			27
VSP-HC8x20-20E□-2			1.8	78.2				8.4			27
VSP-HC8x20-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC8x20-20E□-6			6	83.6				11.9			29
VSP-HC8x20-25E□-2			1.8	88.7				8.4			29
VSP-HC8x20-25E□-4		20	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC8x20-25E□-6			6	94.1				11.9			31
VSP-HC8x20-30E□-2			1.8	99.7				8.4			31
VSP-HC8x20-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC8x20-30E□-6			6	105.1				11.9			33
VSP-HC8x20-40E□-2			1.8	121.7				8.4			35
VSP-HC8x20-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC8x20-40E□-6			6	117.2				11.9			37
VSP-HC8x20-50E□-2			1.8	143.2				8.4			39
VSP-HC8x20-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC8x20-50E□-6			6	148.6				11.9			41
VSP-HC8x30-10E□-2	8		1.8	58.2				8.4			23
VSP-HC8x30-10E□-4			4	62.3		25.6	21.5	11.2	10	1.0 to 2.4	24
VSP-HC8x30-10E□-6			6	63.6				11.9			25
VSP-HC8x30-15E□-2			1.8	68.2				8.4			25
VSP-HC8x30-15E□-4			4	72.3		30.6	26.5	11.2	15	1.0 to 2.7	26
VSP-HC8x30-15E□-6			6	73.6				11.9			27
VSP-HC8x30-20E□-2			1.8	78.2				8.4			27
VSP-HC8x30-20E□-4			4	82.3		35.6	31.5	11.2	20	1.0 to 3.0	28
VSP-HC8x30-20E□-6			6	83.6				11.9			29
VSP-HC8x30-25E□-2			1.8	88.7				8.4			29
VSP-HC8x30-25E□-4		30	4	92.8	11	40.6	37	11.2	25	1.0 to 3.0	30
VSP-HC8x30-25E□-6			6	94.1				11.9			31
VSP-HC8x30-30E□-2			1.8	99.7				8.4			31
VSP-HC8x30-30E□-4			4	103.8		45.6	43	11.2	30	1.0 to 3.0	32
VSP-HC8x30-30E□-6			6	105.1				11.9			33
VSP-HC8x30-40E□-2			1.8	121.7				8.4			35
VSP-HC8x30-40E□-4			4	125.8		55.6	55	11.2	40	1.0 to 3.0	36
VSP-HC8x30-40E□-6			6	117.2				11.9			37
VSP-HC8x30-50E□-2			1.8	143.2				8.4			39
VSP-HC8x30-50E□-4			4	147.3		65.6	66.5	11.2	50	1.0 to 3.1	40
VSP-HC8x30-50E□-6			6	148.6				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC2x4-□E□-4T/6T
●VSP-HC3.5x7-□E□-4T/6T

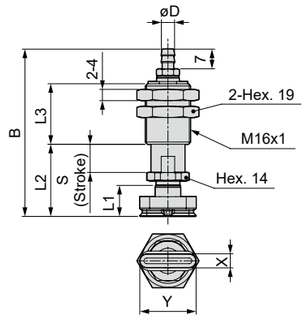


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC2x4-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	21
VSP-HC2x4-10E□-6T			4							
VSP-HC2x4-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	23
VSP-HC2x4-15E□-6T			4							
VSP-HC2x4-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	25
VSP-HC2x4-20E□-6T			4							
VSP-HC2x4-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	27
VSP-HC2x4-25E□-6T			4							
VSP-HC2x4-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	30
VSP-HC2x4-30E□-6T			4							
VSP-HC2x4-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	34
VSP-HC2x4-40E□-6T			4							
VSP-HC2x4-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	38
VSP-HC2x4-50E□-6T			4							
VSP-HC3.5x7-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	21
VSP-HC3.5x7-10E□-6T			4							
VSP-HC3.5x7-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	23
VSP-HC3.5x7-15E□-6T			4							
VSP-HC3.5x7-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	25
VSP-HC3.5x7-20E□-6T			4							
VSP-HC3.5x7-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	27
VSP-HC3.5x7-25E□-6T			4							
VSP-HC3.5x7-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	30
VSP-HC3.5x7-30E□-6T			4							
VSP-HC3.5x7-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	34
VSP-HC3.5x7-40E□-6T			4							
VSP-HC3.5x7-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	38
VSP-HC3.5x7-50E□-6T			4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC4x10-□E□-4T/6T
●VSP-HC4x20-□E□-4T/6T
●VSP-HC4x30-□E□-4T/6T

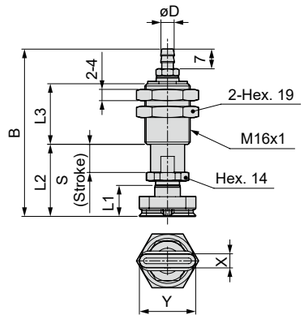


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC4x10-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	21
VSP-HC4x10-10E□-6T			4							
VSP-HC4x10-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	23
VSP-HC4x10-15E□-6T			4							
VSP-HC4x10-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	25
VSP-HC4x10-20E□-6T			4							
VSP-HC4x10-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	27
VSP-HC4x10-25E□-6T			4							
VSP-HC4x10-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	30
VSP-HC4x10-30E□-6T			4							
VSP-HC4x10-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	34
VSP-HC4x10-40E□-6T			4							
VSP-HC4x10-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	38
VSP-HC4x10-50E□-6T			4							
VSP-HC4x20-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC4x20-10E□-6T			4							
VSP-HC4x20-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC4x20-15E□-6T			4							
VSP-HC4x20-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC4x20-20E□-6T			4							
VSP-HC4x20-25E□-4T	4	20	2.5	89.9	11	40.6	37	25	1.0 to 3.0	28
VSP-HC4x20-25E□-6T			4							
VSP-HC4x20-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC4x20-30E□-6T			4							
VSP-HC4x20-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC4x20-40E□-6T			4							
VSP-HC4x20-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC4x20-50E□-6T			4							
VSP-HC4x30-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC4x30-10E□-6T			4							
VSP-HC4x30-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC4x30-15E□-6T			4							
VSP-HC4x30-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC4x30-20E□-6T			4							
VSP-HC4x30-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	28
VSP-HC4x30-25E□-6T		30	4		11					
VSP-HC4x30-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC4x30-30E□-6T			4							
VSP-HC4x30-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC4x30-40E□-6T			4							
VSP-HC4x30-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC4x30-50E□-6T			4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC5x10-□E□-4T/6T
●VSP-HC5x20-□E□-4T/6T
●VSP-HC5x30-□E□-4T/6T

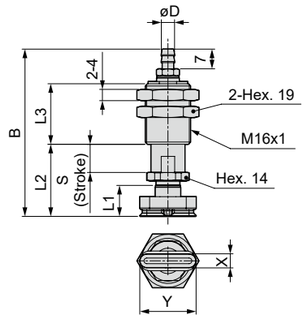


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC5x10-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	21
VSP-HC5x10-10E□-6T			4							
VSP-HC5x10-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	23
VSP-HC5x10-15E□-6T			4							
VSP-HC5x10-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	25
VSP-HC5x10-20E□-6T			4							
VSP-HC5x10-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	27
VSP-HC5x10-25E□-6T			4							
VSP-HC5x10-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	30
VSP-HC5x10-30E□-6T			4							
VSP-HC5x10-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	34
VSP-HC5x10-40E□-6T			4							
VSP-HC5x10-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	38
VSP-HC5x10-50E□-6T			4							
VSP-HC5x20-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC5x20-10E□-6T			4							
VSP-HC5x20-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC5x20-15E□-6T			4							
VSP-HC5x20-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC5x20-20E□-6T			4							
VSP-HC5x20-25E□-4T	5	20	2.5	89.9	11	40.6	37	25	1.0 to 3.0	28
VSP-HC5x20-25E□-6T			4							
VSP-HC5x20-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC5x20-30E□-6T			4							
VSP-HC5x20-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC5x20-40E□-6T			4							
VSP-HC5x20-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC5x20-50E□-6T			4							
VSP-HC5x30-10E□-4T			2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC5x30-10E□-6T			4							
VSP-HC5x30-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC5x30-15E□-6T			4							
VSP-HC5x30-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC5x30-20E□-6T			4							
VSP-HC5x30-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	28
VSP-HC5x30-25E□-6T		30	4		11					
VSP-HC5x30-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC5x30-30E□-6T			4							
VSP-HC5x30-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC5x30-40E□-6T			4							
VSP-HC5x30-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC5x30-50E□-6T			4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC6x10-□E□-4T/6T
●VSP-HC6x20-□E□-4T/6T
●VSP-HC6x30-□E□-4T/6T

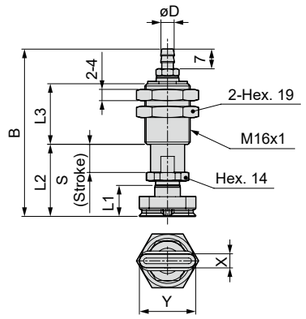


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC6x10-10E□-4T	6	10	2.5	59.4	11	25.6	21.5	10	1.0 to 2.4	21
VSP-HC6x10-10E□-6T			4							
VSP-HC6x10-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	23
VSP-HC6x10-15E□-6T			4							
VSP-HC6x10-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	25
VSP-HC6x10-20E□-6T			4							
VSP-HC6x10-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	27
VSP-HC6x10-25E□-6T			4							
VSP-HC6x10-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	30
VSP-HC6x10-30E□-6T			4							
VSP-HC6x10-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	34
VSP-HC6x10-40E□-6T			4							
VSP-HC6x10-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	38
VSP-HC6x10-50E□-6T			4							
VSP-HC6x20-10E□-4T		20	2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC6x20-10E□-6T			4							
VSP-HC6x20-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC6x20-15E□-6T			4							
VSP-HC6x20-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC6x20-20E□-6T			4							
VSP-HC6x20-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	28
VSP-HC6x20-25E□-6T			4							
VSP-HC6x20-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC6x20-30E□-6T			4							
VSP-HC6x20-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC6x20-40E□-6T			4							
VSP-HC6x20-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC6x20-50E□-6T			4							
VSP-HC6x30-10E□-4T		30	2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC6x30-10E□-6T			4							
VSP-HC6x30-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC6x30-15E□-6T			4							
VSP-HC6x30-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC6x30-20E□-6T			4							
VSP-HC6x30-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	28
VSP-HC6x30-25E□-6T			4							
VSP-HC6x30-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC6x30-30E□-6T			4							
VSP-HC6x30-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC6x30-40E□-6T			4							
VSP-HC6x30-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC6x30-50E□-6T			4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC8x20-□E□-4T/6T
●VSP-HC8x30-□E□-4T/6T

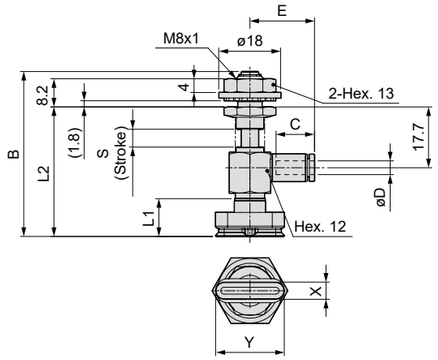


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC8x20-10E□-4T	8	20	2.5	59.4	11	25.6	21.5	10	1.0 to 2.4	22
VSP-HC8x20-10E□-6T			4							
VSP-HC8x20-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC8x20-15E□-6T			4							
VSP-HC8x20-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC8x20-20E□-6T			4							
VSP-HC8x20-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	28
VSP-HC8x20-25E□-6T			4							
VSP-HC8x20-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC8x20-30E□-6T			4							
VSP-HC8x20-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC8x20-40E□-6T			4							
VSP-HC8x20-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC8x20-50E□-6T			4							
VSP-HC8x30-10E□-4T		30	2.5	59.4		25.6	21.5	10	1.0 to 2.4	22
VSP-HC8x30-10E□-6T			4							
VSP-HC8x30-15E□-4T			2.5	69.4		30.6	26.5	15	1.0 to 2.7	24
VSP-HC8x30-15E□-6T			4							
VSP-HC8x30-20E□-4T			2.5	79.4		35.6	31.5	20	1.0 to 3.0	26
VSP-HC8x30-20E□-6T			4							
VSP-HC8x30-25E□-4T			2.5	89.9		40.6	37	25	1.0 to 3.0	28
VSP-HC8x30-25E□-6T			4							
VSP-HC8x30-30E□-4T			2.5	100.9		45.6	43	30	1.0 to 3.0	31
VSP-HC8x30-30E□-6T			4							
VSP-HC8x30-40E□-4T			2.5	122.9		55.6	55	40	1.0 to 3.0	35
VSP-HC8x30-40E□-6T			4							
VSP-HC8x30-50E□-4T			2.5	144.4		65.6	66.5	50	1.0 to 3.1	39
VSP-HC8x30-50E□-6T			4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD□E□-2/4/6

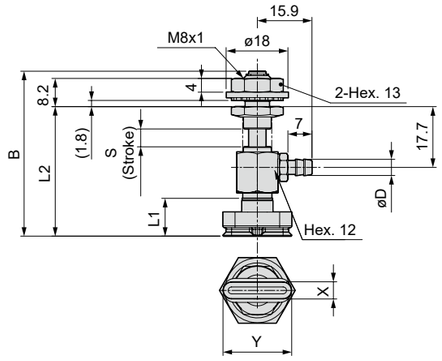


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD2x4E□-2	2	4	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD2x4E□-4			4				11.2	18.8			32
VSP-HD2x4E□-6			6				11.9	20.6			33
VSP-HD3.5x7E□-2	3.5	7	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD3.5x7E□-4			4				11.2	18.8			32
VSP-HD3.5x7E□-6			6				11.9	20.6			33
VSP-HD4x10E□-2	4	10	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD4x10E□-4			4				11.2	18.8			32
VSP-HD4x10E□-6			6				11.9	20.6			33
VSP-HD4x20E□-2		20	1.8				8.4	14.7			32
VSP-HD4x20E□-4			4				11.2	18.8			33
VSP-HD4x20E□-6			6				11.9	20.6			34
VSP-HD4x30E□-2		30	1.8				8.4	14.7			32
VSP-HD4x30E□-4			4				11.2	18.8			33
VSP-HD4x30E□-6			6				11.9	20.6			34
VSP-HD5x10E□-2	5	10	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD5x10E□-4			4				11.2	18.8			32
VSP-HD5x10E□-6			6				11.9	20.6			33
VSP-HD5x20E□-2		20	1.8				8.4	14.7			32
VSP-HD5x20E□-4			4				11.2	18.8			33
VSP-HD5x20E□-6			6				11.9	20.6			34
VSP-HD5x30E□-2		30	1.8				8.4	14.7			32
VSP-HD5x30E□-4			4				11.2	18.8			33
VSP-HD5x30E□-6			6				11.9	20.6			34
VSP-HD6x10E□-2	6	10	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD6x10E□-4			4				11.2	18.8			32
VSP-HD6x10E□-6			6				11.9	20.6			33
VSP-HD6x20E□-2		20	1.8				8.4	14.7			32
VSP-HD6x20E□-4			4				11.2	18.8			33
VSP-HD6x20E□-6			6				11.9	20.6			34
VSP-HD6x30E□-2		30	1.8				8.4	14.7			32
VSP-HD6x30E□-4			4				11.2	18.8			33
VSP-HD6x30E□-6			6				11.9	20.6			34
VSP-HD8x20E□-2	8	20	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	32
VSP-HD8x20E□-4			4				11.2	18.8			33
VSP-HD8x20E□-6			6				11.9	20.6			34
VSP-HD8x30E□-2		30	1.8				8.4	14.7			32
VSP-HD8x30E□-4			4				11.2	18.8			33
VSP-HD8x30E□-6			6				11.9	20.6			34

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD□E□-4T/6T

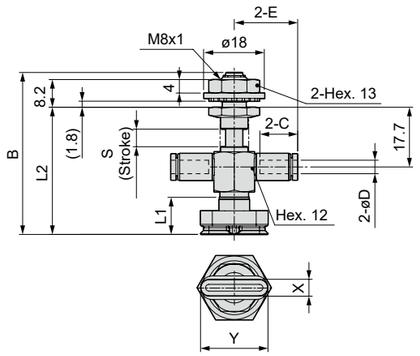


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD2x4E□-4T	2	4	1.8	48	11	37.7	5.2	1.6 to 2.9	30
VSP-HD2x4E□-6T			6						31
VSP-HD3.5x7E□-4T	3.5	7	1.8	48	11	37.7	5.2	1.6 to 2.9	30
VSP-HD3.5x7E□-6T			6						31
VSP-HD4x10E□-4T	4	10	1.8	48	11	37.7	5.2	1.6 to 2.9	30
VSP-HD4x10E□-6T			6						31
VSP-HD4x20E□-4T		20	1.8						31
VSP-HD4x20E□-6T			6						32
VSP-HD4x30E□-4T		30	1.8						31
VSP-HD4x30E□-6T			6						32
VSP-HD5x10E□-4T	5	10	1.8	48	11	37.7	5.2	1.6 to 2.9	30
VSP-HD5x10E□-6T			6						31
VSP-HD5x20E□-4T		20	1.8						31
VSP-HD5x20E□-6T			6						32
VSP-HD5x30E□-4T		30	1.8						31
VSP-HD5x30E□-6T			6						32
VSP-HD6x10E□-4T	6	10	1.8	48	11	37.7	5.2	1.6 to 2.9	30
VSP-HD6x10E□-6T			6						31
VSP-HD6x20E□-4T		20	1.8						31
VSP-HD6x20E□-6T			6						32
VSP-HD6x30E□-4T		30	1.8						31
VSP-HD6x30E□-6T			6						32
VSP-HD8x20E□-4T	8	20	1.8	48	11	37.7	5.2	1.6 to 2.9	31
VSP-HD8x20E□-6T			6						32
VSP-HD8x30E□-4T		30	1.8						31
VSP-HD8x30E□-6T			6						32

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW□E□-2/4/6

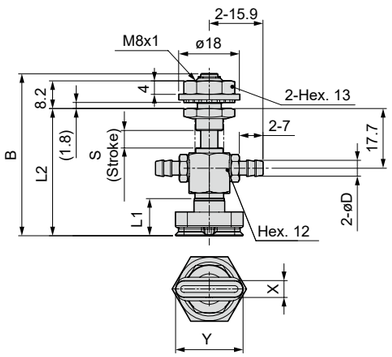


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW2x4E□-2	2	4	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW2x4E□-4			4				11.2	18.8			35
VSP-HDW2x4E□-6			6				11.9	20.6			37
VSP-HDW3.5x7E□-2	3.5	7	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW3.5x7E□-4			4				11.2	18.8			35
VSP-HDW3.5x7E□-6			6				11.9	20.6			37
VSP-HDW4x10E□-2	4	10	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW4x10E□-4			4				11.2	18.8			35
VSP-HDW4x10E□-6			6				11.9	20.6			37
VSP-HDW4x20E□-2		20	1.8				8.4	14.7			34
VSP-HDW4x20E□-4			4				11.2	18.8			36
VSP-HDW4x20E□-6			6				11.9	20.6			38
VSP-HDW4x30E□-2		30	1.8				8.4	14.7			34
VSP-HDW4x30E□-4			4				11.2	18.8			36
VSP-HDW4x30E□-6			6				11.9	20.6			38
VSP-HDW5x10E□-2	5	10	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW5x10E□-4			4				11.2	18.8			35
VSP-HDW5x10E□-6			6				11.9	20.6			37
VSP-HDW5x20E□-2		20	1.8				8.4	14.7			34
VSP-HDW5x20E□-4			4				11.2	18.8			36
VSP-HDW5x20E□-6			6				11.9	20.6			38
VSP-HDW5x30E□-2		30	1.8				8.4	14.7			34
VSP-HDW5x30E□-4			4				11.2	18.8			36
VSP-HDW5x30E□-6			6				11.9	20.6			38
VSP-HDW6x10E□-2	6	10	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW6x10E□-4			4				11.2	18.8			35
VSP-HDW6x10E□-6			6				11.9	20.6			37
VSP-HDW6x20E□-2		20	1.8				8.4	14.7			34
VSP-HDW6x20E□-4			4				11.2	18.8			36
VSP-HDW6x20E□-6			6				11.9	20.6			38
VSP-HDW6x30E□-2		30	1.8				8.4	14.7			34
VSP-HDW6x30E□-4			4				11.2	18.8			36
VSP-HDW6x30E□-6			6				11.9	20.6			38
VSP-HDW8x20E□-2	8	20	1.8	48	11	37.7	8.4	14.7	5.2	1.6 to 2.9	34
VSP-HDW8x20E□-4			4				11.2	18.8			36
VSP-HDW8x20E□-6			6				11.9	20.6			38
VSP-HDW8x30E□-2		30	1.8				8.4	14.7			34
VSP-HDW8x30E□-4			4				11.2	18.8			36
VSP-HDW8x30E□-6			6				11.9	20.6			38

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW□E□-4T/6T

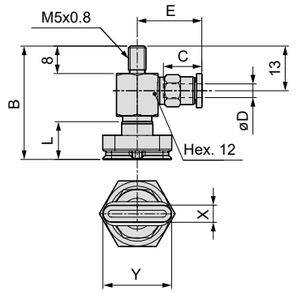


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW2x4E□-4T	2	4	1.8	48	11	37.7	5.2	1.6 to 2.9	32
VSP-HDW2x4E□-6T			6						
VSP-HDW3.5x7E□-4T	3.5	7	1.8	48	11	37.7	5.2	1.6 to 2.9	32
VSP-HDW3.5x7E□-6T			6						
VSP-HDW4x10E□-4T	4	10	1.8	48	11	37.7	5.2	1.6 to 2.9	32
VSP-HDW4x10E□-6T			6						
VSP-HDW4x20E□-4T		20	1.8						33
VSP-HDW4x20E□-6T			6						
VSP-HDW4x30E□-4T		30	1.8						33
VSP-HDW4x30E□-6T			6						
VSP-HDW5x10E□-4T	5	10	1.8	48	11	37.7	5.2	1.6 to 2.9	32
VSP-HDW5x10E□-6T			6						
VSP-HDW5x20E□-4T		20	1.8						33
VSP-HDW5x20E□-6T			6						
VSP-HDW5x30E□-4T		30	1.8						33
VSP-HDW5x30E□-6T			6						
VSP-HDW6x10E□-4T	6	10	1.8	48	11	37.7	5.2	1.6 to 2.9	32
VSP-HDW6x10E□-6T			6						
VSP-HDW6x20E□-4T		20	1.8						33
VSP-HDW6x20E□-6T			6						
VSP-HDW6x30E□-4T		30	1.8						33
VSP-HDW6x30E□-6T			6						
VSP-HDW8x20E□-4T	8	20	1.8	48	11	37.7	5.2	1.6 to 2.9	33
VSP-HDW8x20E□-6T			6						
VSP-HDW8x30E□-4T		30	1.8						
VSP-HDW8x30E□-6T			6						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE□E□-2/4/6

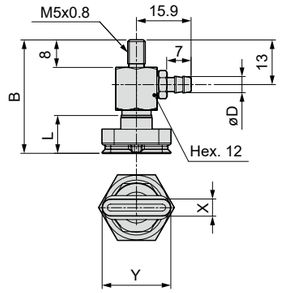


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE2x4E□-2	2	4	1.8	48	11	8.4	14.7	16
VSP-HE2x4E□-4			4			11.2	18.8	17
VSP-HE2x4E□-6			6			11.9	20.6	18
VSP-HE3.5x7E□-2	3.5	7	1.8	48	11	8.4	14.7	16
VSP-HE3.5x7E□-4			4			11.2	18.8	17
VSP-HE3.5x7E□-6			6			11.9	20.6	18
VSP-HE4x10E□-2	4	10	1.8	48	11	8.4	14.7	16
VSP-HE4x10E□-4			4			11.2	18.8	17
VSP-HE4x10E□-6			6			11.9	20.6	18
VSP-HE4x20E□-2		20	1.8			8.4	14.7	17
VSP-HE4x20E□-4			4			11.2	18.8	18
VSP-HE4x20E□-6			6			11.9	20.6	19
VSP-HE4x30E□-2		30	1.8			8.4	14.7	17
VSP-HE4x30E□-4			4			11.2	18.8	18
VSP-HE4x30E□-6			6			11.9	20.6	19
VSP-HE5x10E□-2	5	10	1.8	48	11	8.4	14.7	16
VSP-HE5x10E□-4			4			11.2	18.8	17
VSP-HE5x10E□-6			6			11.9	20.6	18
VSP-HE5x20E□-2		20	1.8			8.4	14.7	17
VSP-HE5x20E□-4			4			11.2	18.8	18
VSP-HE5x20E□-6			6			11.9	20.6	19
VSP-HE5x30E□-2		30	1.8			8.4	14.7	17
VSP-HE5x30E□-4			4			11.2	18.8	18
VSP-HE5x30E□-6			6			11.9	20.6	19
VSP-HE6x10E□-2	6	10	1.8	48	11	8.4	14.7	16
VSP-HE6x10E□-4			4			11.2	18.8	17
VSP-HE6x10E□-6			6			11.9	20.6	18
VSP-HE6x20E□-2		20	1.8			8.4	14.7	17
VSP-HE6x20E□-4			4			11.2	18.8	18
VSP-HE6x20E□-6			6			11.9	20.6	19
VSP-HE6x30E□-2		30	1.8			8.4	14.7	17
VSP-HE6x30E□-4			4			11.2	18.8	18
VSP-HE6x30E□-6			6			11.9	20.6	19
VSP-HE8x20E□-2	8	20	1.8	48	11	8.4	14.7	17
VSP-HE8x20E□-4			4			11.2	18.8	18
VSP-HE8x20E□-6			6			11.9	20.6	19
VSP-HE8x30E□-2		30	1.8			8.4	14.7	17
VSP-HE8x30E□-4			4			11.2	18.8	18
VSP-HE8x30E□-6			6			11.9	20.6	19

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE□E□-4T/6T



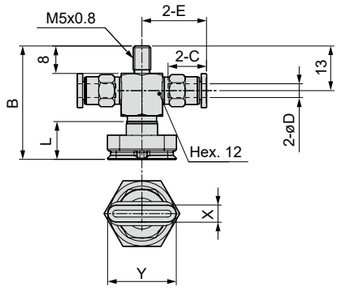
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Weight (g)
VSP-HE2x4E□-4T	2	4	1.8	48	11	16
VSP-HE2x4E□-6T			6			
VSP-HE3.5x7E□-4T	3.5	7	1.8	48	11	16
VSP-HE3.5x7E□-6T			6			
VSP-HE4x10E□-4T	4	10	1.8	48	11	16
VSP-HE4x10E□-6T			6			
VSP-HE4x20E□-4T		20	1.8			17
VSP-HE4x20E□-6T			6			
VSP-HE4x30E□-4T		30	1.8			17
VSP-HE4x30E□-6T			6			
VSP-HE5x10E□-4T	5	10	1.8	48	11	16
VSP-HE5x10E□-6T			6			
VSP-HE5x20E□-4T		20	1.8			17
VSP-HE5x20E□-6T			6			
VSP-HE5x30E□-4T		30	1.8			17
VSP-HE5x30E□-6T			6			
VSP-HE6x10E□-4T	6	10	1.8	48	11	16
VSP-HE6x10E□-6T			6			
VSP-HE6x20E□-4T		20	1.8			17
VSP-HE6x20E□-6T			6			
VSP-HE6x30E□-4T		30	1.8			17
VSP-HE6x30E□-6T			6			
VSP-HE8x20E□-4T	8	20	1.8	48	11	17
VSP-HE8x20E□-6T			6			
VSP-HE8x30E□-4T		30	1.8			17
VSP-HE8x30E□-6T			6			

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW□E□-2/4/6

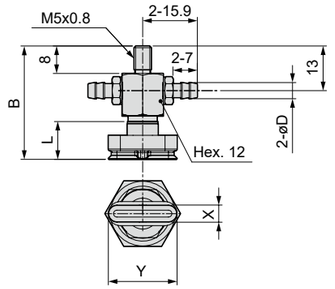


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW2x4E□-2	2	4	1.8	48	11	8.4	14.7	17
VSP-HEW2x4E□-4			4			11.2	18.8	19
VSP-HEW2x4E□-6			6			11.9	20.6	21
VSP-HEW3.5x7E□-2	3.5	7	1.8	48	11	8.4	14.7	17
VSP-HEW3.5x7E□-4			4			11.2	18.8	19
VSP-HEW3.5x7E□-6			6			11.9	20.6	21
VSP-HEW4x10E□-2	4	10	1.8	48	11	8.4	14.7	17
VSP-HEW4x10E□-4			4			11.2	18.8	19
VSP-HEW4x10E□-6			6			11.9	20.6	21
VSP-HEW4x20E□-2		20	1.8			8.4	14.7	18
VSP-HEW4x20E□-4			4			11.2	18.8	20
VSP-HEW4x20E□-6			6			11.9	20.6	22
VSP-HEW4x30E□-2		30	1.8			8.4	14.7	18
VSP-HEW4x30E□-4			4			11.2	18.8	20
VSP-HEW4x30E□-6			6			11.9	20.6	22
VSP-HEW5x10E□-2	5	10	1.8	48	11	8.4	14.7	17
VSP-HEW5x10E□-4			4			11.2	18.8	19
VSP-HEW5x10E□-6			6			11.9	20.6	21
VSP-HEW5x20E□-2		20	1.8			8.4	14.7	18
VSP-HEW5x20E□-4			4			11.2	18.8	20
VSP-HEW5x20E□-6			6			11.9	20.6	22
VSP-HEW5x30E□-2		30	1.8			8.4	14.7	18
VSP-HEW5x30E□-4			4			11.2	18.8	20
VSP-HEW5x30E□-6			6			11.9	20.6	22
VSP-HEW6x10E□-2	6	10	1.8	48	11	8.4	14.7	17
VSP-HEW6x10E□-4			4			11.2	18.8	19
VSP-HEW6x10E□-6			6			11.9	20.6	21
VSP-HEW6x20E□-2		20	1.8			8.4	14.7	18
VSP-HEW6x20E□-4			4			11.2	18.8	20
VSP-HEW6x20E□-6			6			11.9	20.6	22
VSP-HEW6x30E□-2		30	1.8			8.4	14.7	18
VSP-HEW6x30E□-4			4			11.2	18.8	20
VSP-HEW6x30E□-6			6			11.9	20.6	22
VSP-HEW8x20E□-2	8	20	1.8	48	11	8.4	14.7	18
VSP-HEW8x20E□-4			4			11.2	18.8	20
VSP-HEW8x20E□-6			6			11.9	20.6	22
VSP-HEW8x30E□-2		30	1.8			8.4	14.7	18
VSP-HEW8x30E□-4			4			11.2	18.8	20
VSP-HEW8x30E□-6			6			11.9	20.6	22

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW□E□-4T/6T



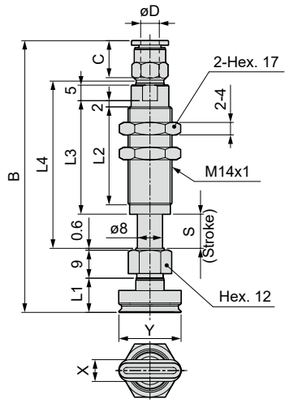
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L	Weight (g)
VSP-HEW2x4E□-4T	2	4	1.8	48	11	17
VSP-HEW2x4E□-6T			6			
VSP-HEW3.5x7E□-4T	3.5	7	1.8	48	11	17
VSP-HEW3.5x7E□-6T			6			
VSP-HEW4x10E□-4T	4	10	1.8	48	11	17
VSP-HEW4x10E□-6T			6			
VSP-HEW4x20E□-4T		20	1.8			18
VSP-HEW4x20E□-6T			6			
VSP-HEW4x30E□-4T		30	1.8			18
VSP-HEW4x30E□-6T			6			
VSP-HEW5x10E□-4T	5	10	1.8	48	11	17
VSP-HEW5x10E□-6T			6			
VSP-HEW5x20E□-4T		20	1.8			18
VSP-HEW5x20E□-6T			6			
VSP-HEW5x30E□-4T		30	1.8			18
VSP-HEW5x30E□-6T			6			
VSP-HEW6x10E□-4T	6	10	1.8	48	11	17
VSP-HEW6x10E□-6T			6			
VSP-HEW6x20E□-4T		20	1.8			18
VSP-HEW6x20E□-6T			6			
VSP-HEW6x30E□-4T		30	1.8			18
VSP-HEW6x30E□-6T			6			
VSP-HEW8x20E□-4T	8	20	1.8	48	11	18
VSP-HEW8x20E□-6T			6			
VSP-HEW8x30E□-4T		30	1.8			18
VSP-HEW8x30E□-6T			6			

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC2x4-□E□-4/6
●VSP-LFC3.5x7-□E□-4/6
●VSP-LFC4x□-□E□-4/6



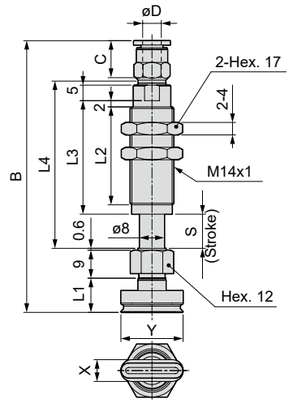
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC2x4-5E□-4	2	4	4	76.1	11	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC2x4-5E□-6			6	77.4					11.9			54
VSP-LFC2x4-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC2x4-10E□-6			6	87.4					11.9			56
VSP-LFC2x4-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC2x4-15E□-6			6	97.4					11.9			59
VSP-LFC2x4-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC2x4-20E□-6			6	107.4					11.9			62
VSP-LFC3.5x7-5E□-4	3.5	7	4	76.1	11	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC3.5x7-5E□-6			6	77.4					11.9			54
VSP-LFC3.5x710E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC3.5x7-10E□-6			6	87.4					11.9			56
VSP-LFC3.5x7-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC3.5x7-15E□-6			6	97.4					11.9			59
VSP-LFC3.5x7-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC3.5x7-20E□-6			6	107.4					11.9			62
VSP-LFC4x10-5E□-4	4	10	4	76.1	11	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC4x10-5E□-6			6	77.4					11.9			54
VSP-LFC4x10-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC4x10-10E□-6			6	87.4					11.9			56
VSP-LFC4x10-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC4x10-15E□-6			6	97.4					11.9			59
VSP-LFC4x10-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC4x10-20E□-6			6	107.4					11.9			62
VSP-LFC4x20-5E□-4		20	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC4x20-5E□-6			6	77.4					11.9			55
VSP-LFC4x20-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC4x20-10E□-6			6	87.4					11.9			57
VSP-LFC4x20-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC4x20-15E□-6			6	97.4					11.9			60
VSP-LFC4x20-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC4x20-20E□-6			6	107.4					11.9			63
VSP-LFC4x30-5E□-4		30	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC4x30-5E□-6			6	77.4					11.9			55
VSP-LFC4x30-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC4x30-10E□-6			6	87.4					11.9			57
VSP-LFC4x30-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC4x30-15E□-6			6	97.4					11.9			60
VSP-LFC4x30-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC4x30-20E□-6			6	107.4					11.9			63

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC5x□-□E□-4/6
●VSP-LFC6x□-□E□-4/6



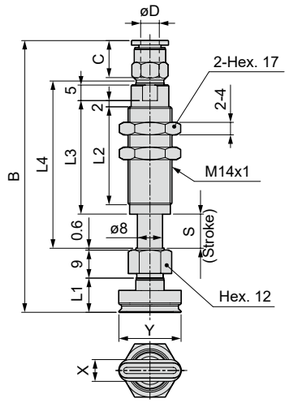
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC5x10-5E□-4	5	10	4	76.1	11	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC5x10-5E□-6			6	77.4					11.9			54
VSP-LFC5x10-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC5x10-10E□-6			6	87.4					11.9			56
VSP-LFC5x10-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC5x10-15E□-6			6	97.4					11.9			59
VSP-LFC5x10-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC5x10-20E□-6			6	107.4					11.9			62
VSP-LFC5x20-5E□-4		20	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC5x20-5E□-6			6	77.4					11.9			55
VSP-LFC5x20-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC5x20-10E□-6			6	87.4					11.9			57
VSP-LFC5x20-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC5x20-15E□-6			6	97.4					11.9			60
VSP-LFC5x20-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC5x20-20E□-6			6	107.4					11.9			63
VSP-LFC5x30-5E□-4		30	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC5x30-5E□-6			6	77.4					11.9			55
VSP-LFC5x30-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC5x30-10E□-6			6	87.4					11.9			57
VSP-LFC5x30-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC5x30-15E□-6			6	97.4					11.9			60
VSP-LFC5x30-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC5x30-20E□-6			6	107.4					11.9			63
VSP-LFC6x10-5E□-4	6	10	4	76.1	11	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC6x10-5E□-6			6	77.4					11.9			54
VSP-LFC6x10-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC6x10-10E□-6			6	87.4					11.9			56
VSP-LFC6x10-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC6x10-15E□-6			6	97.4					11.9			59
VSP-LFC6x10-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC6x10-20E□-6			6	107.4					11.9			62
VSP-LFC6x20-5E□-4		20	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC6x20-5E□-6			6	77.4					11.9			55
VSP-LFC6x20-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC6x20-10E□-6			6	87.4					11.9			57
VSP-LFC6x20-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC6x20-15E□-6			6	97.4					11.9			60
VSP-LFC6x20-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC6x20-20E□-6			6	107.4					11.9			63
VSP-LFC6x30-5E□-4		30	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC6x30-5E□-6			6	77.4					11.9			55
VSP-LFC6x30-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC6x30-10E□-6			6	87.4					11.9			57
VSP-LFC6x30-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC6x30-15E□-6			6	97.4					11.9			60
VSP-LFC6x30-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC6x30-20E□-6			6	107.4					11.9			63

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC8x□-□E□-4/6



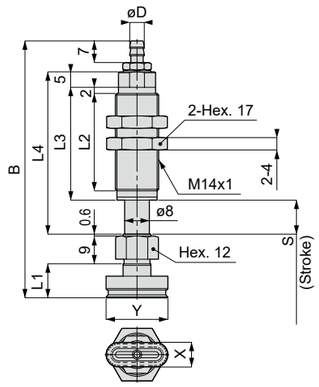
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC8x20-5E□-4	8	20	4	76.1	11	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC8x20-5E□-6			6	77.4					11.9			55
VSP-LFC8x20-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC8x20-10E□-6			6	87.4					11.9			57
VSP-LFC8x20-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC8x20-15E□-6			6	97.4					11.9			60
VSP-LFC8x20-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC8x20-20E□-6			6	107.4					11.9			63
VSP-LFC8x30-5E□-4		30	4	76.1		26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC8x30-5E□-6			6	77.4					11.9			55
VSP-LFC8x30-10E□-4			4	86.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC8x30-10E□-6			6	87.4					11.9			57
VSP-LFC8x30-15E□-4			4	96.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC8x30-15E□-6			6	97.4					11.9			60
VSP-LFC8x30-20E□-4			4	106.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC8x30-20E□-6			6	107.4					11.9			63

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC2x4-□E□-4T/6T
●VSP-LFC3.5x7-□E□-4T/6T
●VSP-LFC4x□-□E□-4T/6T



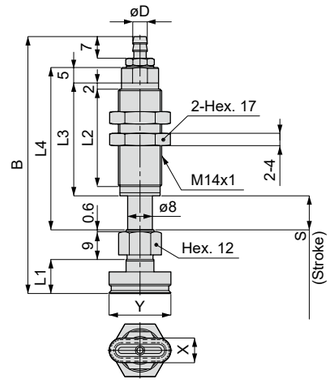
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC2x4-5E□-4T	2	4	2.5	73.2	11	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	48
VSP-LFC2x4-5E□-6T			4								
VSP-LFC2x4-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	50
VSP-LFC2x4-10E□-6T			4								
VSP-LFC2x4-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	53
VSP-LFC2x4-15E□-6T			4								
VSP-LFC2x4-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	56
VSP-LFC2x4-20E□-6T			4								
VSP-LFC3.5x7-5E□-4T	3.5	7	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	48
VSP-LFC3.5x7-5E□-6T			4								
VSP-LFC3.5x7-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	50
VSP-LFC3.5x7-10E□-6T			4								
VSP-LFC3.5x7-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	53
VSP-LFC3.5x7-15E□-6T			4								
VSP-LFC3.5x7-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	56
VSP-LFC3.5x7-20E□-6T			4								
VSP-LFC4x10-5E□-4T	4	10	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	48
VSP-LFC4x10-5E□-6T			4								
VSP-LFC4x10-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	50
VSP-LFC4x10-10E□-6T			4								
VSP-LFC4x10-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	53
VSP-LFC4x10-15E□-6T			4								
VSP-LFC4x10-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	56
VSP-LFC4x10-20E□-6T			4								
VSP-LFC4x20-5E□-4T		20	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC4x20-5E□-6T			4								
VSP-LFC4x20-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC4x20-10E□-6T			4								
VSP-LFC4x20-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC4x20-15E□-6T			4								
VSP-LFC4x20-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC4x20-20E□-6T			4								
VSP-LFC4x30-5E□-4T		30	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC4x30-5E□-6T			4								
VSP-LFC4x30-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC4x30-10E□-6T			4								
VSP-LFC4x30-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC4x30-15E□-6T			4								
VSP-LFC4x30-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC4x30-20E□-6T			4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC5x□-□E□-4T/6T
●VSP-LFC6x□-□E□-4T/6T



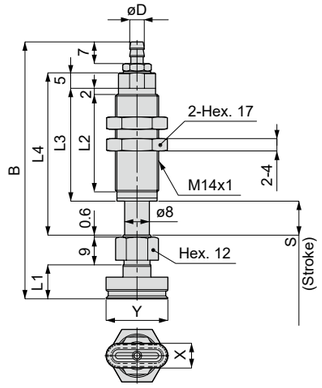
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC5x10-5E□-4T	5	10	2.5	73.2	11	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	48
VSP-LFC5x10-5E□-6T			4								
VSP-LFC5x10-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	50
VSP-LFC5x10-10E□-6T			4								
VSP-LFC5x10-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	53
VSP-LFC5x10-15E□-6T			4								
VSP-LFC5x10-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	56
VSP-LFC5x10-20E□-6T			4								
VSP-LFC5x20-5E□-4T		20	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC5x20-5E□-6T			4								
VSP-LFC5x20-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC5x20-10E□-6T			4								
VSP-LFC5x20-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC5x20-15E□-6T			4								
VSP-LFC5x20-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC5x20-20E□-6T			4								
VSP-LFC5x30-5E□-4T		30	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC5x30-5E□-6T			4								
VSP-LFC5x30-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC5x30-10E□-6T			4								
VSP-LFC5x30-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC5x30-15E□-6T			4								
VSP-LFC5x30-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC5x30-20E□-6T			4								
VSP-LFC6x10-5E□-4T	6	10	2.5	73.2	11	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	48
VSP-LFC6x10-5E□-6T			4								
VSP-LFC6x10-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	50
VSP-LFC6x10-10E□-6T			4								
VSP-LFC6x10-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	53
VSP-LFC6x10-15E□-6T			4								
VSP-LFC6x10-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	56
VSP-LFC6x10-20E□-6T			4								
VSP-LFC6x20-5E□-4T		20	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC6x20-5E□-6T			4								
VSP-LFC6x20-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC6x20-10E□-6T			4								
VSP-LFC6x20-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC6x20-15E□-6T			4								
VSP-LFC6x20-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC6x20-20E□-6T			4								
VSP-LFC6x30-5E□-4T		30	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC6x30-5E□-6T			4								
VSP-LFC6x30-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC6x30-10E□-6T			4								
VSP-LFC6x30-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC6x30-15E□-6T			4								
VSP-LFC6x30-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC6x30-20E□-6T			4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC8x□-□E□-4T/6T



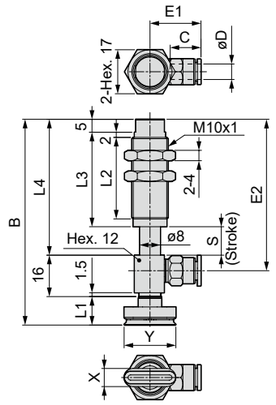
Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC8x20-5E□-4T	8	20	2.5	73.2	11	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC8x20-5E□-6T			4								
VSP-LFC8x20-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC8x20-10E□-6T			4								
VSP-LFC8x20-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC8x20-15E□-6T			4								
VSP-LFC8x20-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC8x20-20E□-6T			4								
VSP-LFC8x30-5E□-4T		30	2.5	73.2		26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	49
VSP-LFC8x30-5E□-6T			4								
VSP-LFC8x30-10E□-4T			2.5	83.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	51
VSP-LFC8x30-10E□-6T			4								
VSP-LFC8x30-15E□-4T			2.5	93.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	54
VSP-LFC8x30-15E□-6T			4								
VSP-LFC8x30-20E□-4T			2.5	103.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	57
VSP-LFC8x30-20E□-6T			4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD2x4-□E□-4/6
●VSP-LFD3.5x7-□E□-4/6
●VSP-LFD4x□-□E□-4/6

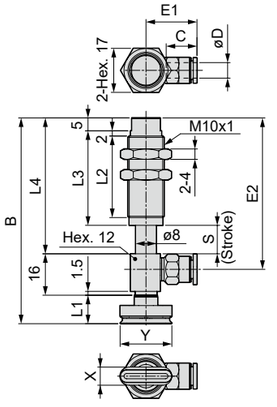


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD2x4-5E□-4	2	4	4	69.5	11	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	50
VSP-LFD2x4-5E□-6			6						11.9	19.7				
VSP-LFD2x4-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	53
VSP-LFD2x4-10E□-6			6						11.9	19.7				
VSP-LFD2x4-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	57
VSP-LFD2x4-15E□-6			6						11.9	19.7				
VSP-LFD2x4-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	61
VSP-LFD2x4-20E□-6			6						11.9	19.7				
VSP-LFD3.5x7-5E□-4	3.5	7	4	69.5	11	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	50
VSP-LFD3.5x7-5E□-6			6						11.9	19.7				
VSP-LFD3.5x7-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	53
VSP-LFD3.5x7-10E□-6			6						11.9	19.7				
VSP-LFD3.5x7-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	57
VSP-LFD3.5x7-15E□-6			6						11.9	19.7				
VSP-LFD3.5x7-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	61
VSP-LFD3.5x7-20E□-6			6						11.9	19.7				
VSP-LFD4x10-5E□-4	4	10	4	69.5	11	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	50
VSP-LFD4x10-5E□-6			6						11.9	19.7				
VSP-LFD4x10-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	53
VSP-LFD4x10-10E□-6			6						11.9	19.7				
VSP-LFD4x10-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	57
VSP-LFD4x10-15E□-6			6						11.9	19.7				
VSP-LFD4x10-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	61
VSP-LFD4x10-20E□-6			6						11.9	19.7				
VSP-LFD4x20-5E□-4		20	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD4x20-5E□-6			6						11.9	19.7				
VSP-LFD4x20-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD4x20-10E□-6			6						11.9	19.7				
VSP-LFD4x20-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD4x20-15E□-6			6						11.9	19.7				
VSP-LFD4x20-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD4x20-20E□-6			6						11.9	19.7				
VSP-LFD4x30-5E□-4		30	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD4x30-5E□-6			6						11.9	19.7				
VSP-LFD4x30-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD4x30-10E□-6			6						11.9	19.7				
VSP-LFD4x30-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD4x30-15E□-6			6						11.9	19.7				
VSP-LFD4x30-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD4x30-20E□-6			6						11.9	19.7				

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD5x□-□E□-4/6
●VSP-LFD6x□-□E□-4/6

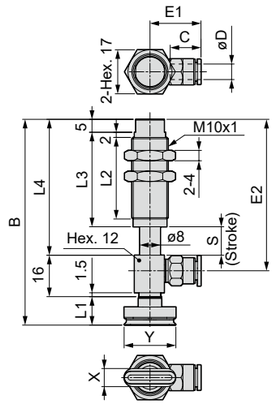


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD5x10-5E□-4	5	10	4	69.5	11	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	50
VSP-LFD5x10-5E□-6			6						11.9	19.7				
VSP-LFD5x10-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	53
VSP-LFD5x10-10E□-6			6						11.9	19.7				
VSP-LFD5x10-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	57
VSP-LFD5x10-15E□-6			6						11.9	19.7				
VSP-LFD5x10-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	61
VSP-LFD5x10-20E□-6			6						11.9	19.7				
VSP-LFD5x20-5E□-4		20	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD5x20-5E□-6			6						11.9	19.7				
VSP-LFD5x20-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD5x20-10E□-6			6						11.9	19.7				
VSP-LFD5x20-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD5x20-15E□-6			6						11.9	19.7				
VSP-LFD5x20-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD5x20-20E□-6			6						11.9	19.7				
VSP-LFD5x30-5E□-4		30	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD5x30-5E□-6			6						11.9	19.7				
VSP-LFD5x30-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD5x30-10E□-6			6						11.9	19.7				
VSP-LFD5x30-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD5x30-15E□-6			6						11.9	19.7				
VSP-LFD5x30-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD5x30-20E□-6			6						11.9	19.7				
VSP-LFD6x10-5E□-4	6	10	4	69.5	11	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	50
VSP-LFD6x10-5E□-6			6						11.9	19.7				
VSP-LFD6x10-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	53
VSP-LFD6x10-10E□-6			6						11.9	19.7				
VSP-LFD6x10-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	57
VSP-LFD6x10-15E□-6			6						11.9	19.7				
VSP-LFD6x10-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	61
VSP-LFD6x10-20E□-6			6						11.9	19.7				
VSP-LFD6x20-5E□-4		20	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD6x20-5E□-6			6						11.9	19.7				
VSP-LFD6x20-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD6x20-10E□-6			6						11.9	19.7				
VSP-LFD6x20-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD6x20-15E□-6			6						11.9	19.7				
VSP-LFD6x20-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD6x20-20E□-6			6						11.9	19.7				
VSP-LFD6x30-5E□-4		30	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD6x30-5E□-6			6						11.9	19.7				
VSP-LFD6x30-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD6x30-10E□-6			6						11.9	19.7				
VSP-LFD6x30-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD6x30-15E□-6			6						11.9	19.7				
VSP-LFD6x30-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD6x30-20E□-6			6						11.9	19.7				

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD8x□-□E□-4/6

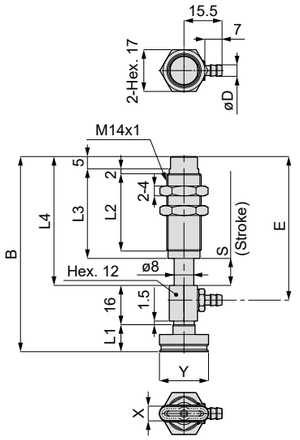


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD8x20-5E□-4	8	20	4	69.5	11	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD8x20-5E□-6			6						11.9	19.7				
VSP-LFD8x20-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD8x20-10E□-6			6						11.9	19.7				
VSP-LFD8x20-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD8x20-15E□-6			6						11.9	19.7				
VSP-LFD8x20-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD8x20-20E□-6			6						11.9	19.7				
VSP-LFD8x30-5E□-4		30	4	69.5		26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	51
VSP-LFD8x30-5E□-6			6						11.9	19.7				
VSP-LFD8x30-10E□-4			4	79.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	54
VSP-LFD8x30-10E□-6			6						11.9	19.7				
VSP-LFD8x30-15E□-4			4	89.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	58
VSP-LFD8x30-15E□-6			6						11.9	19.7				
VSP-LFD8x30-20E□-4			4	99.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	62
VSP-LFD8x30-20E□-6			6						11.9	19.7				

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD2x4-□E□-4T/6T
●VSP-LFD3.5x7-□E□-4T/6T
●VSP-LFD4x□-□E□-4T/6T

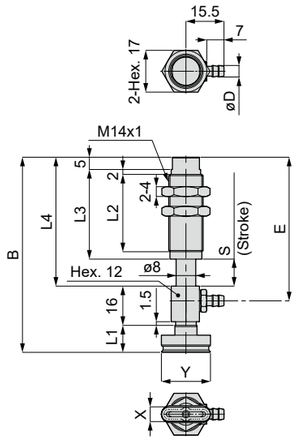


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD2x4-5E□-4T	2	4	2.5	69.5	11	26.5	31.5	42.5	48.5	5	4.5 to 6.5	50
VSP-LFD2x4-5E□-6T			4									
VSP-LFD2x4-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	53
VSP-LFD2x4-10E□-6T			4									
VSP-LFD2x4-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	57
VSP-LFD2x4-15E□-6T			4									
VSP-LFD2x4-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	61
VSP-LFD2x4-20E□-6T			4									
VSP-LFD3.5x7-5E□-4T	3.5	7	2.5	69.5	11	26.5	31.5	42.5	48.5	5	4.5 to 6.5	50
VSP-LFD3.5x7-5E□-6T			4									
VSP-LFD3.5x7-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	53
VSP-LFD3.5x7-10E□-6T			4									
VSP-LFD3.5x7-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	57
VSP-LFD3.5x7-15E□-6T			4									
VSP-LFD3.5x7-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	61
VSP-LFD3.5x7-20E□-6T			4									
VSP-LFD4x10-5E□-4T	4	10	2.5	69.5	11	26.5	31.5	42.5	48.5	5	4.5 to 6.5	50
VSP-LFD4x10-5E□-6T			4									
VSP-LFD4x10-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	53
VSP-LFD4x10-10E□-6T			4									
VSP-LFD4x10-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	57
VSP-LFD4x10-15E□-6T			4									
VSP-LFD4x10-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	61
VSP-LFD4x10-20E□-6T			4									
VSP-LFD4x20-5E□-4T		20	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD4x20-5E□-6T			4									
VSP-LFD4x20-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD4x20-10E□-6T			4									
VSP-LFD4x20-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD4x20-15E□-6T			4									
VSP-LFD4x20-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD4x20-20E□-6T			4									
VSP-LFD4x30-5E□-4T		30	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD4x30-5E□-6T			4									
VSP-LFD4x30-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD4x30-10E□-6T			4									
VSP-LFD4x30-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD4x30-15E□-6T			4									
VSP-LFD4x30-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD4x30-20E□-6T			4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD5x□-□E□-4T/6T
●VSP-LFD6x□-□E□-4T/6T

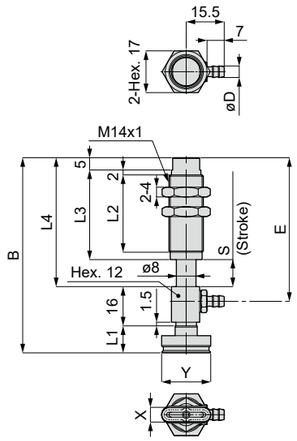


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD5x10-5E□-4T	5	10	2.5	69.5	11	26.5	31.5	42.5	48.5	5	4.5 to 6.5	50
VSP-LFD5x10-5E□-6T			4									
VSP-LFD5x10-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	53
VSP-LFD5x10-10E□-6T			4									
VSP-LFD5x10-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	57
VSP-LFD5x10-15E□-6T			4									
VSP-LFD5x10-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	61
VSP-LFD5x10-20E□-6T			4									
VSP-LFD5x20-5E□-4T		20	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD5x20-5E□-6T			4									
VSP-LFD5x20-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD5x20-10E□-6T			4									
VSP-LFD5x20-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD5x20-15E□-6T			4									
VSP-LFD5x20-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD5x20-20E□-6T			4									
VSP-LFD5x30-5E□-4T		30	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD5x30-5E□-6T			4									
VSP-LFD5x30-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD5x30-10E□-6T			4									
VSP-LFD5x30-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD5x30-15E□-6T			4									
VSP-LFD5x30-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD5x30-20E□-6T			4									
VSP-LFD6x10-5E□-4T	6	10	2.5	69.5	11	26.5	31.5	42.5	48.5	5	4.5 to 6.5	50
VSP-LFD6x10-5E□-6T			4									
VSP-LFD6x10-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	53
VSP-LFD6x10-10E□-6T			4									
VSP-LFD6x10-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	57
VSP-LFD6x10-15E□-6T			4									
VSP-LFD6x10-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	61
VSP-LFD6x10-20E□-6T			4									
VSP-LFD6x20-5E□-4T		20	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD6x20-5E□-6T			4									
VSP-LFD6x20-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD6x20-10E□-6T			4									
VSP-LFD6x20-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD6x20-15E□-6T			4									
VSP-LFD6x20-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD6x20-20E□-6T			4									
VSP-LFD6x30-5E□-4T		30	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD6x30-5E□-6T			4									
VSP-LFD6x30-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD6x30-10E□-6T			4									
VSP-LFD6x30-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD6x30-15E□-6T			4									
VSP-LFD6x30-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD6x30-20E□-6T			4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD8x□-□E□-4T/6T

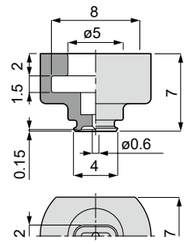


Unit: mm

Model No.	Pad Size X	Pad Size Y	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD8x20-5E□-4T	8	20	2.5	69.5	11	26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD8x20-5E□-6T			4									
VSP-LFD8x20-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD8x20-10E□-6T			4									
VSP-LFD8x20-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD8x20-15E□-6T			4									
VSP-LFD8x20-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD8x20-20E□-6T			4									
VSP-LFD8x30-5E□-4T		30	2.5	69.5		26.5	31.5	42.5	48.5	5	4.5 to 6.5	51
VSP-LFD8x30-5E□-6T			4									
VSP-LFD8x30-10E□-4T			2.5	79.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	54
VSP-LFD8x30-10E□-6T			4									
VSP-LFD8x30-15E□-4T			2.5	89.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	58
VSP-LFD8x30-15E□-6T			4									
VSP-LFD8x30-20E□-4T			2.5	99.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	62
VSP-LFD8x30-20E□-6T			4									

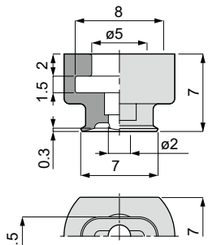
Pad Rubber Only External Dimension Diagram

●VSPG-2x4E□



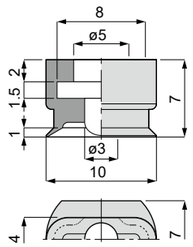
Weight: 0.3 g [0.4 g]

●VSPG-3.5x7E□



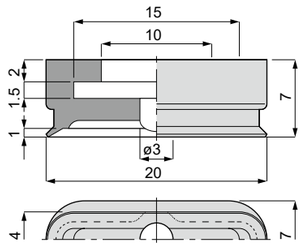
Weight: 0.3 g [0.4 g]

●VSPG-4x10E□



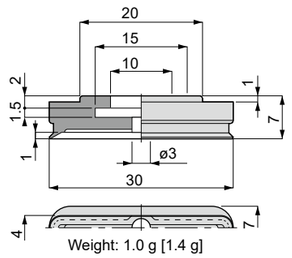
Weight: 0.3 g [0.4 g]

●VSPG-4x20E□



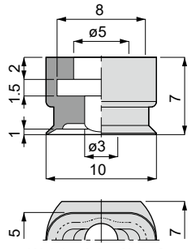
Weight: 0.6 g [0.9 g]

●VSPG-4x30E□



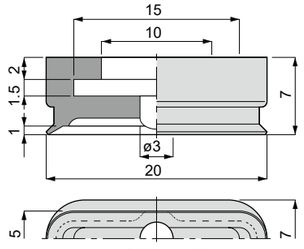
Weight: 1.0 g [1.4 g]

●VSPG-5x10E□



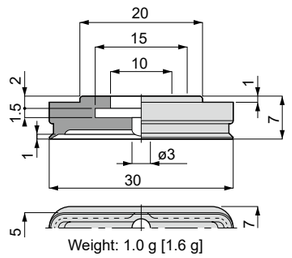
Weight: 0.3 g [0.5 g]

●VSPG-5x20E□



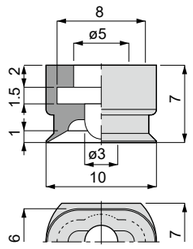
Weight: 0.6 g [1.0 g]

●VSPG-5x30E□



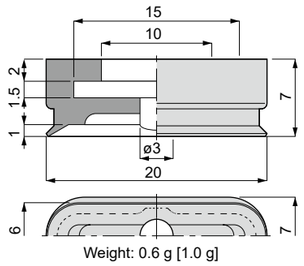
Weight: 1.0 g [1.6 g]

●VSPG-6x10E□



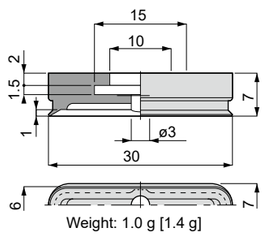
Weight: 0.3 g [0.5 g]

●VSPG-6x20E□



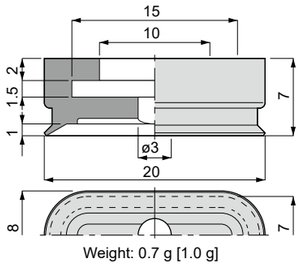
Weight: 0.6 g [1.0 g]

●VSPG-6x30E□



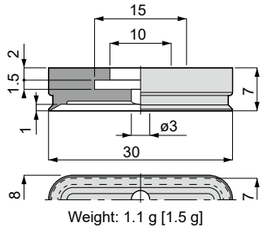
Weight: 1.0 g [1.4 g]

●VSPG-8x20E□



Weight: 0.7 g [1.0 g]

●VSPG-8x30E□

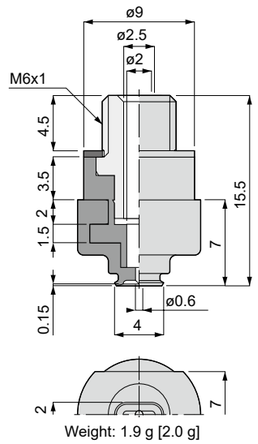


Weight: 1.1 g [1.5 g]

Weight: Only for fluoro rubber, values are inside [ ].

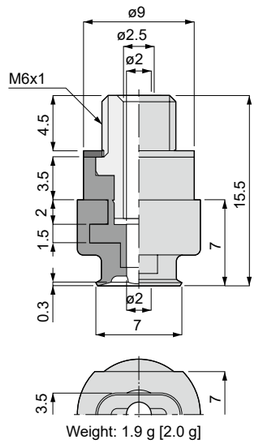
Pad Rubber + Set with Fixing Screw External Dimension Diagram

●VSPG-2x4E□A



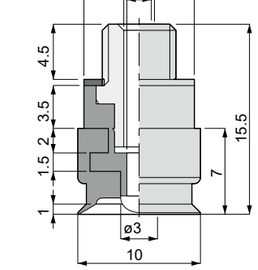
Weight: 1.9 g [2.0 g]

●VSPG-3.5x7E□A



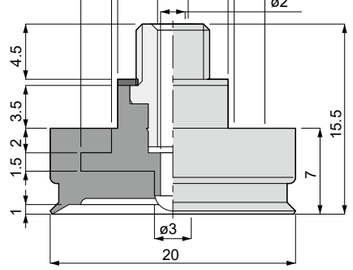
Weight: 1.9 g [2.0 g]

●VSPG-4x10E□A



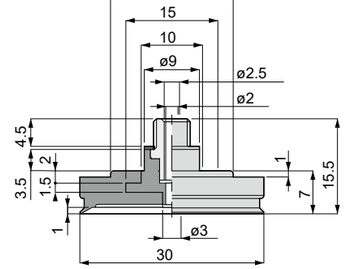
Weight: 1.9 g [2.0 g]

●VSPG-4x20E□A



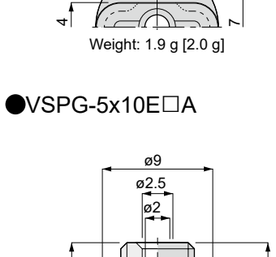
Weight: 2.4 g [2.7 g]

●VSPG-4x30E□A



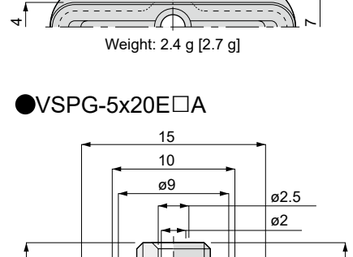
Weight: 2.8 g [3.2 g]

●VSPG-5x10E□A



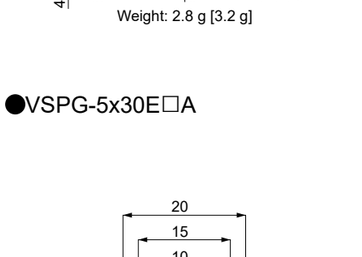
Weight: 1.9 g [2.1 g]

●VSPG-5x20E□A



Weight: 2.4 g [2.8 g]

●VSPG-5x30E□A

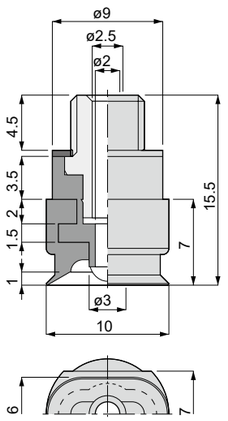


Weight: 2.7 g [3.3 g]

Weight: Only for fluoro rubber, values are inside [ ].

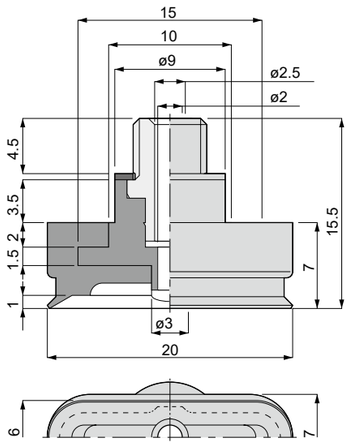
Pad Rubber + Set with Fixing Screw External Dimension Diagram

●VSPG-6x10E□A



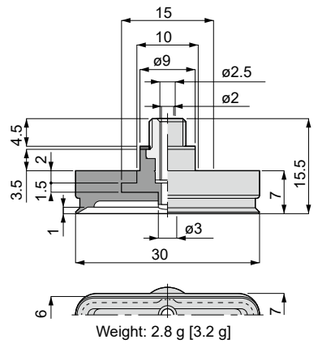
Weight: 1.9 g [2.0 g]

●VSPG-6x20E□A



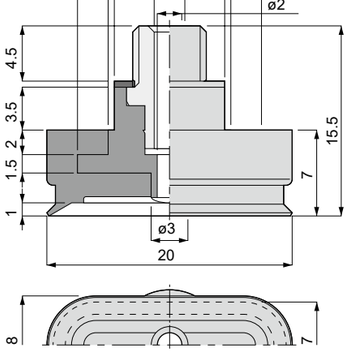
Weight: 2.4 g [2.8 g]

●VSPG-6x30E□A



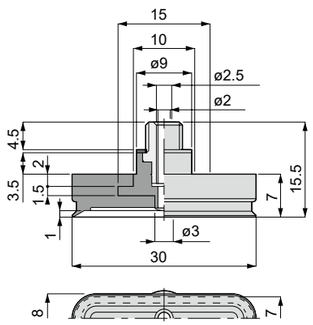
Weight: 2.8 g [3.2 g]

●VSPG-8x20E□A



Weight: 2.5 g [2.8 g]

●VSPG-8x30E□A

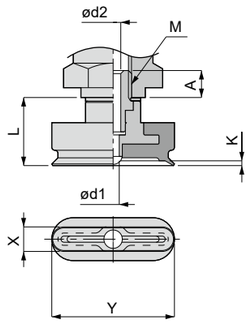


Weight: 2.9 g [3.3 g]

Weight: Only for fluoro rubber, values are inside [ ].

Detailed Diagram of Pad and Holder Connection Part

●VSPG-□E□A

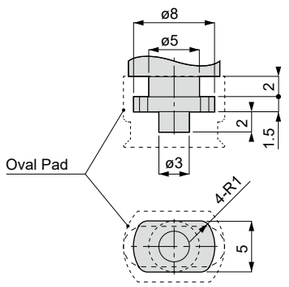


Unit: mm

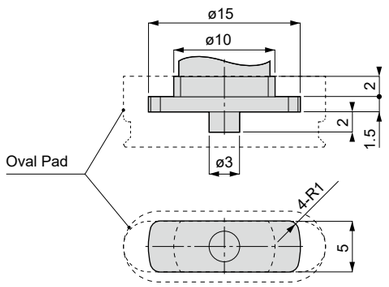
Model No.	Pad Size X	Pad Size Y	Fixing Screw M	A	Lip Internal Height K	L	ød1	ød2
VSPG-2x4E□	2	4	-	-	0.15	-	-	-
VSPG-3.5x7E□	3.5	7	-	-	0.3	-	-	-
VSPG-4x10E□	4	10	-	-	0.8	-	-	-
VSPG-4x20E□		20						
VSPG-4x30E□		30						
VSPG-5x10E□	5	10	-	-	0.8	-	-	-
VSPG-5x20E□		20						
VSPG-5x30E□		30						
VSPG-6x10E□	6	10	-	-	1	-	-	-
VSPG-6x20E□		20						
VSPG-6x30E□		30						
VSPG-8x20E□	8	20	-	-	1	-	-	-
VSPG-8x30E□		30						
VSPG-2x4EøA	2	4	M6x1	3.4	0.15	11	2	2.5
VSPG-3.5x7EøA	3.5	7	M6x1	3.4	0.3	11	2	2.5
VSPG-4x10EøA	4	10	M6x1	3.4	0.8	11	2	2.5
VSPG-4x20EøA		20						
VSPG-4x30EøA		30						
VSPG-5x10EøA	5	10	M6x1	3.4	0.8	11	2	2.5
VSPG-5x20EøA		20						
VSPG-5x30EøA		30						
VSPG-6x10EøA	6	10	M6x1	3.4	1	11	2	2.5
VSPG-6x20EøA		20						
VSPG-6x30EøA		30						
VSPG-8x20EøA	8	20	M6x1	3.4	1	11	2	2.5
VSPG-8x30EøA		30						

Pad Rubber Fitting Part Dimension

●VSPG-2x4E□
3.5x7E□
□x10E□



●VSPG-□x20E□
□x30E□



Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Oblong Type, VSP-□E□Series

Design / Selection

Warning

■Use appropriate torque to tighten and fix the oval pad rubber holder. Also, tighten using a tool that does not damage the frame, and confirm there is no looseness.

Model	Fixing Screw Size	Tightening Torque
All oblong type models	M6x1	0.27 to 0.33 N·m

Caution

■The oval pad fixing holder has no conductivity. When using vacuum pads made of conductive material, take measures to dissipate electricity directly from the pad rubber.

MEMO

Suction Pad Soft Type

VSP-□L□ Series

Suction pad with excellent flexibility, gentle on workpieces

RoHS

Ideal for removing molded products and transporting easily scratched workpieces

Abundant holder variations

Shape 16 types
- ●Standard...5 types
- ●Compact...Class 4
- ●Low dust generation .....2 types
- ●Lightweight..3 types
- ●Low back..2 types

Piping Connection 5 types
- ●Push-in fitting (ø1.8 to ø6)3 types
- ●Barbed fitting (ø4, ø6) .....2 types

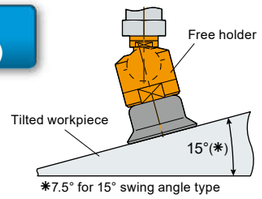
Stroke 12 types

2 mm to 50 mm
(Depending on pad size, holder type)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

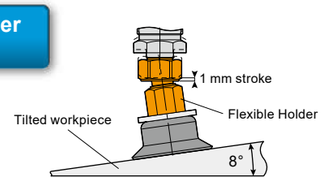
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

Free holder (F1:30°, F2:15°)



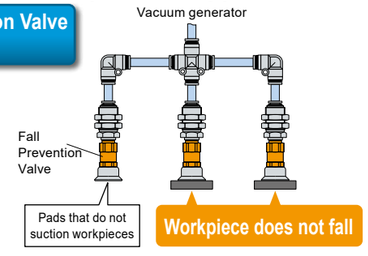
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

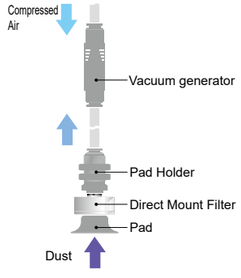
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



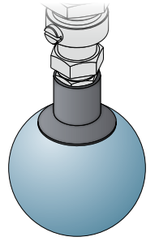
Pad surface treatment (option) with special processing to reduce adsorption marks is available

	-NF	-SF	-DL	-ER	-FG
Surface Treatment	Fiber Raised		Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
	Nylon	Silk			
Compatible Material	Silicone	Silicone	Silicone Conductive Silicone	Nitrile Conductive NBR (Low Resistance-type)	Silicone Conductive Silicone
Features	Fibers(nylon or silk) on the pad surface prevent direct contact with the workpiece, thus preventing rubber material transfer.		Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

Softness that does not scratch workpieces

Available from rubber hardness A40. The lip is soft and closely follows workpieces with irregular shapes.



Recommended Workpiece

Easily scratched workpieces such as molded products

Pad Diameter

8 types 4 | 6 | 8 | 10 | 15 | 20 | 30 | 40

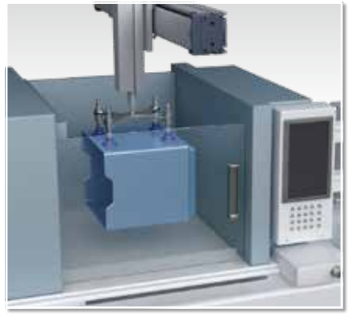
Pad Material

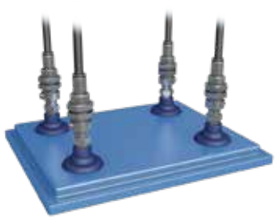
5 types Nitrile | Silicone | Conductive Silicone | Conductive NBR (Low Resistance-type) | Fluorosilicone

*Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

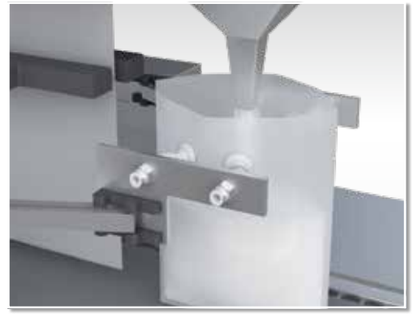
Delicate resin molded products, etc.
Easily scratched workpieces can be gently unloaded.





Opening/closing packaging bags, etc.

The soft lip follows even workpieces with irregular shapes such as packaging bags.



Model No. Notation

●Soft Type

Suction Pad

VSP – C – 30 – -20 – L – N – -ER – 6 – [ ] – F1 – V – T1

VSP	C	30	-20	L	N	-ER	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Size/Shape	❽ Buffer Load	❾ Pad Swivel	❿ Drop Prevention Valve	⓫ Direct Mount Filter

Pad Rubber Only

VSPG – 30 – L – N – -ER

VSPG	30	L	N	-ER
Model No.	❷	❹	❺	❻

Pad Rubber + Set with Fixing Screw

VSPG – 30 – L – N – -ER **A**

VSPG	30	L	N	-ER	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
			HD	
	Lightweight	Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
4	ø4
6	ø6
8	ø8
10	ø10
15	ø15
20	ø20
30	ø30
40	ø40

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●	●			Blank	*1, *2
Stroke 2 mm				●		-2	*3
Stroke 5 mm				●	●	-5	
Stroke 10 mm	●	●	●	●	●	-10	
Stroke 15 mm	●	●	●	●	●	-15	
Stroke 20 mm	●	●	●	●	●	-20	
Stroke 25 mm			●			-25	
Stroke 30 mm	●	●	●			-30	
Stroke 40 mm	●	●	●			-40	
Stroke 50 mm	●	●	●			-50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 4 to 15, -2 can be selected for ❸.

❹ Pad Shape

Code	Content	
L	Soft Type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
FS	Fluorosilicone Rubber
SE	Conductive Silicone Rubber
NE	Conductive NBR (Low Resistance-type)

❻ Surface Treatment

Content	Compatible Pad Material N	S	SE	NE	Compatible Pad Diameter Soft (L)	Code
No surface treatment	All pad materials, all pad diameters					Blank
Fiber Raised (Nylon)		●			*10 to *40	-NF
Fiber Raised (Silk)		●			*10 to *40	-SF
Anti-Adhesion Special Coating		●	●		All sizes	-DL
Suction Mark Reduction Surface Modification	●			●	All sizes	-ER
Fluorine Coating		●	●		All sizes	-FG

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP – ..... – P4□

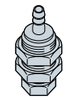
*Please inquire for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and resin/rubber materials compliant with the Food Sanitation Act, suitable for food manufacturing processes.

VSP – ..... – FP□

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8, Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●												4C	
ø6, Push-in fitting, without spring cover			●	●												6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●												4TC	
ø6, Barb fitting, without spring cover			●	●												6TC	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❼s. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

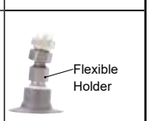
*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

⓫ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1: For ❶ Holder Shape HD, HE, HDW, and HEW, ⓫is 'Blank'.
*2: For ❶ Holder Shape HC with ❸ Stroke Option 'Blank', ⓫ is 'Blank'.
*3: ⓫T2 can be selected when ❷ Pad Diameter is 20 to 40.
*4: For dimensions with the direct mount filter, please refer to P. 1064.

❾ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
CF	With Flexible Holder (Angle 8°)	 Flexible Holder

*1: For ❶ HD, HE, HDW, and HEW, ❾ is 'Blank'.
*2: For ❶ Holder Shape HC with ❸ Stroke Option 'Blank', ❾ is 'Blank'.
*3: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❿ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*1: For ❶ Holder Shape HD, HE, HDW, and HEW, ❿ is 'Blank'.
*2: For ❶ Holder Shape HC with ❸ Stroke Option 'Blank', ❿ is 'Blank'.
*3: For ❻ Surface Treatment -NF and -SF, ❿ is 'Blank'.
*4: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

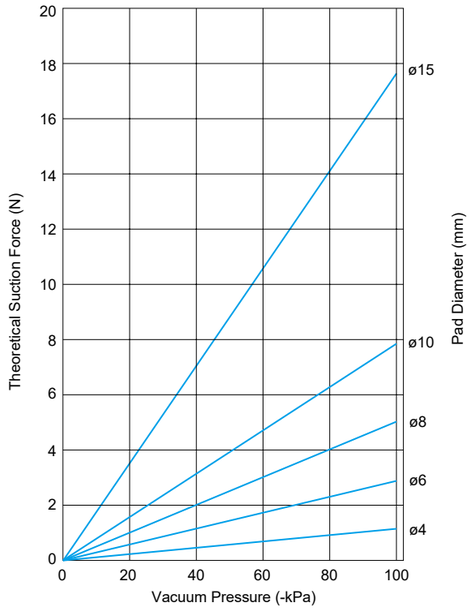
Holder Shape	Pad Diameter	Push-in fitting ø4 4	ø4 4C	ø6 6	ø6 6C	Barb fitting ø4 4T	ø4 4TC	ø6 6T	ø6 6TC
A	ø4 to ø15			●				●	
	ø20 to ø40	●		●		●		●	
B	All sizes	●		●		●		●	
C	All sizes	●	●	●	●	●	●	●	●
D	All sizes	●	●	●	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M14	Blank
F	All sizes		●

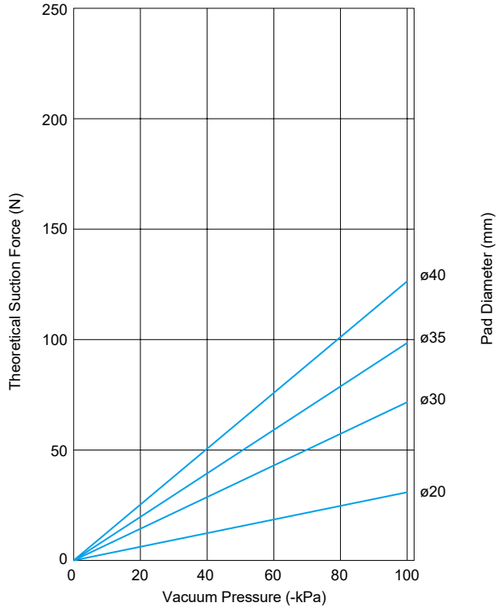
Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø4 to ø15		●		●	
	ø20 to ø40		●		●	●
MB	All sizes	●	●	●	●	●
MC	All sizes	●	●		●	●
MD	All sizes	●	●	●	●	●
LFC	ø4 to ø15		●		●	●
	ø20 to ø40		●	●	●	●
LFD	ø4 to ø15		●		●	●
	ø20 to ø40		●	●	●	●
HC	All sizes	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

Theoretical Suction Force

●Pad diameter: ø4 mm to ø15 mm



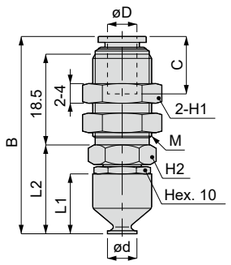
●Pad diameter: ø20 mm to ø40 mm



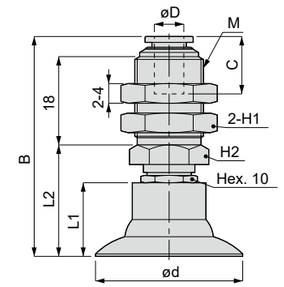
Regarding the suction force of the soft type, due to pad characteristics, influenced by factors such as vacuum level, pad material, and adsorbed object, it may not be possible to secure the calculated suction force (theoretical suction force x safety factor). Refer to "Suction Pads selection method" (P. 412) Use the suction force obtained with this formula as a guide, and make sure that there is no problem with the suction capacity on the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A4 to 15L□-6



●VSP-A20 to 40L□-4/6

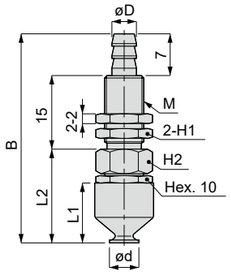


Unit: mm

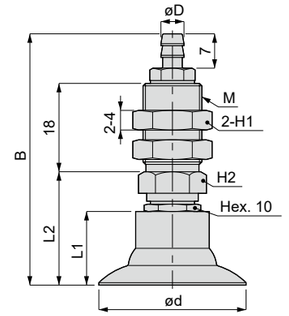
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A4L□-6	4	6	M12x1	40.6	12.2	18.3	11.9	14	12	24
VSP-A6L□-6	6	6	M12x1	40.6	12.2	18.3	11.9	14	12	24
VSP-A8L□-6	8	6	M12x1	40.6	12.2	18.3	11.9	14	12	24
VSP-A10L□-6	10	6	M12x1	42.4	14	20.1	11.9	14	12	25
VSP-A15L□-6	15	6	M12x1	42.4	14	20.1	11.9	14	12	25
VSP-A20L□-4	20	4	M12x1	53.9	15	23	11.2	14	12	35
VSP-A20L□-6		6	M14x1	44.9		22.6	11.9	17	14	41
VSP-A30L□-4	30	4	M12x1	53.9	15	23	11.2	14	12	38
VSP-A30L□-6		6	M14x1	44.9		22.6	11.9	17	14	44
VSP-A40L□-4	40	4	M12x1	53.9	15	23	11.2	14	12	44
VSP-A40L□-6		6	M14x1	44.9		22.6	11.9	17	14	50

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A4 to 15L□-6T



●VSP-A20 to 40L□-4T/6T

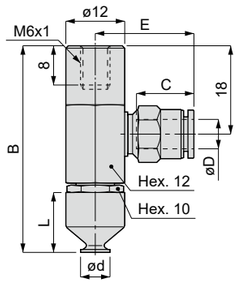


Unit: mm

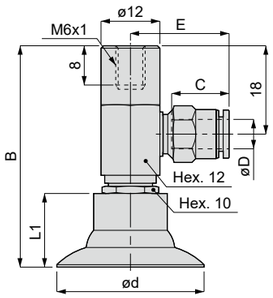
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A4L□-6T	4	4	M8x0.75	41.3	12.2	19.3	10	10	14
VSP-A6L□-6T	6	4	M8x0.75	41.3	12.2	19.3	10	10	14
VSP-A8L□-6T	8	4	M8x0.75	41.3	12.2	19.3	10	10	14
VSP-A10L□-6T	10	4	M8x0.75	43.1	14	21.1	10	10	15
VSP-A15L□-6T	15	4	M8x0.75	43.1	14	21.1	10	10	15
VSP-A20L□-4T	20	2.5	M12x1	51	15	23	14	12	34
VSP-A20L□-6T		4							
VSP-A30L□-4T	30	2.5	M12x1	51	15	23	14	12	37
VSP-A30L□-6T		4							
VSP-A40L□-4T	40	2.5	M12x1	51	15	23	14	12	44
VSP-A40L□-6T		4							

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B4 to 15L□-4/6



●VSP-B20 to 40L□-4/6

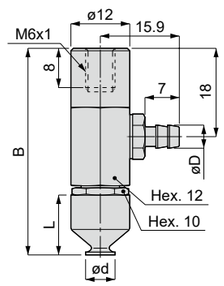


Unit: mm

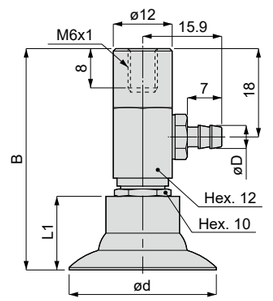
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B4L□-4	4	4	42.3	12.2	11.2	18.8	32
VSP-B4L□-6		6			11.9	20.1	33
VSP-B6L□-4	6	4	42.3	12.2	11.2	18.8	32
VSP-B6L□-6		6			11.9	20.1	33
VSP-B8L□-4	8	4	42.3	12.2	11.2	18.8	32
VSP-B8L□-6		6			11.9	20.1	33
VSP-B10L□-4	10	4	44.1	14	11.2	18.8	33
VSP-B10L□-6		6			11.9	20.1	34
VSP-B15L□-4	15	4	44.1	14	11.2	18.8	33
VSP-B15L□-6		6			11.9	20.1	34
VSP-B20L□-4	20	4	45	15	11.2	18.8	37
VSP-B20L□-6		6			11.9	20.1	38
VSP-B30L□-4	30	4	45	15	11.2	18.8	40
VSP-B30L□-6		6			11.9	20.1	41
VSP-B40L□-4	40	4	45	15	11.2	18.8	47
VSP-B40L□-6		6			11.9	20.1	48

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B4 to 15L□-4T/6T



●VSP-B20 to 40L□-4T/6T

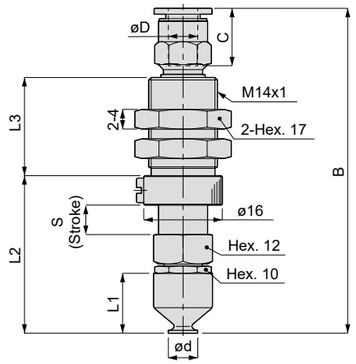


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B4L□-4T	4	2.5	42.3	12.2	31
VSP-B4L□-6T		4			
VSP-B6L□-4T	6	2.5	42.3	12.2	32
VSP-B6L□-6T		4			
VSP-B8L□-4T	8	2.5	42.3	12.2	32
VSP-B8L□-6T		4			
VSP-B10L□-4T	10	2.5	44.1	14	32
VSP-B10L□-6T		4			
VSP-B15L□-4T	15	2.5	44.1	14	32
VSP-B15L□-6T		4			
VSP-B20L□-4T	20	2.5	45	15	36
VSP-B20L□-6T		4			
VSP-B30L□-4T	30	2.5	45	15	39
VSP-B30L□-6T		4			
VSP-B40L□-4T	40	2.5	45	15	46
VSP-B40L□-6T		4			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C4 to 15L□-4/6
●VSP-C4 to 15-□L□-4/6

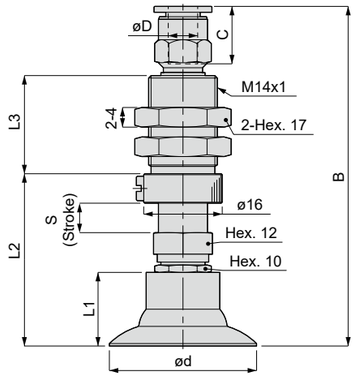


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C4L□-4	4	4	65.3	12.2	32.3	20	11.2	6	4.0 to 7.1	37
VSP-C4L□-6		6	66.6				11.9			38
VSP-C4-10L□-4		4	69.8		36.8		11.2	10	2.0 to 5.2	39
VSP-C4-10L□-6		6	71.1				11.9			40
VSP-C4-15L□-4		4	79.8		41.8	25	11.2	15	2.0 to 5.9	44
VSP-C4-15L□-6		6	81.1				11.9			45
VSP-C4-20L□-4		4	95.8		48.8	34	11.2	20	1.1 to 4.8	51
VSP-C4-20L□-6		6	97.1				11.9			52
VSP-C6L□-4	6	4	65.3	12.2	32.3	20	11.2	6	4.0 to 7.1	37
VSP-C6L□-6		6	66.6				11.9			38
VSP-C6-10L□-4		4	69.8		36.8		11.2	10	2.0 to 5.2	39
VSP-C6-10L□-6		6	71.1				11.9			40
VSP-C6-15L□-4		4	79.8		41.8	25	11.2	15	2.0 to 5.9	44
VSP-C6-15L□-6		6	81.1				11.9			45
VSP-C6-20L□-4		4	95.8		48.8	34	11.2	20	1.1 to 4.8	51
VSP-C6-20L□-6		6	97.1				11.9			52
VSP-C8L□-4	8	4	65.3	12.2	32.3	20	11.2	6	4.0 to 7.1	37
VSP-C8L□-6		6	66.6				11.9			38
VSP-C8-10L□-4		4	69.8		36.8		11.2	10	2.0 to 5.2	39
VSP-C8-10L□-6		6	71.1				11.9			40
VSP-C8-15L□-4		4	79.8		41.8	25	11.2	15	2.0 to 5.9	44
VSP-C8-15L□-6		6	81.1				11.9			45
VSP-C8-20L□-4		4	95.8		48.8	34	11.2	20	1.1 to 4.8	51
VSP-C8-20L□-6		6	97.1				11.9			52
VSP-C10L□-4	10	4	67.1	14	34.1	20	11.2	6	4.0 to 7.1	38
VSP-C10L□-6		6	68.5				11.9			39
VSP-C10-10L□-4		4	71.6		38.6		11.2	10	2.0 to 5.2	40
VSP-C10-10L□-6		6	72.9				11.9			41
VSP-C10-15L□-4		4	81.6		43.6	25	11.2	15	2.0 to 5.9	45
VSP-C10-15L□-6		6	82.9				11.9			46
VSP-C10-20L□-4		4	97.6		50.6	34	11.2	20	1.1 to 4.8	52
VSP-C10-20L□-6		6	98.9				11.9			53
VSP-C15L□-4	15	4	67.1	14	34.1	20	11.2	6	4.0 to 7.1	38
VSP-C15L□-6		6	68.5				11.9			39
VSP-C15-10L□-4		4	71.6		38.6		11.2	10	2.0 to 5.2	40
VSP-C15-10L□-6		6	72.9				11.9			41
VSP-C15-15L□-4		4	81.6		43.6	25	11.2	15	2.0 to 5.9	45
VSP-C15-15L□-6		6	82.9				11.9			46
VSP-C15-20L□-4		4	97.6		50.6	34	11.2	20	1.1 to 4.8	52
VSP-C15-20L□-6		6	98.9				11.9			53

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C20 to 40L□-4/6
●VSP-C20 to 40-□L□-4/6

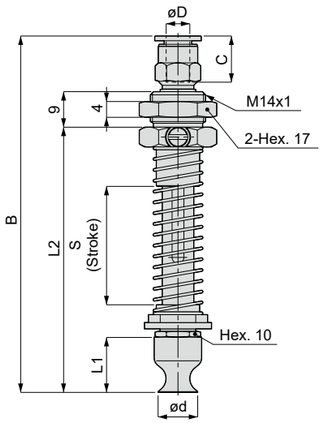


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C20L□-4	20	4	68	15	35	20	11.2	6	7.0 to 12.6	43
VSP-C20L□-6		6	69.3				11.9			44
VSP-C20-10L□-4		4	74		41		11.2	10	3.3 to 10.0	47
VSP-C20-10L□-6		6	75.3				11.9			48
VSP-C20-15L□-4		4	84		46	25	11.2	15	3.3 to 10.4	52
VSP-C20-15L□-6		6	85.3				11.9			53
VSP-C20-20L□-4		4	100		53	34	11.2	20	2.0 to 8.7	58
VSP-C20-20L□-6		6	101.3				11.9			59
VSP-C30L□-4	30	4	68	15	35	20	11.2	6	7.0 to 12.6	46
VSP-C30L□-6		6	69.3				11.9			47
VSP-C30-10L□-4		4	74		41		11.2	10	3.3 to 10.0	50
VSP-C30-10L□-6		6	75.3				11.9			51
VSP-C30-15L□-4		4	84		46	25	11.2	15	3.3 to 10.4	55
VSP-C30-15L□-6		6	85.3				11.9			56
VSP-C30-20L□-4		4	100		53	34	11.2	20	2.0 to 8.7	61
VSP-C30-20L□-6		6	101.3				11.9			62
VSP-C40L□-4	40	4	68	15	35	20	11.2	6	7.0 to 12.6	53
VSP-C40L□-6		6	69.3				11.9			54
VSP-C40-10L□-4		4	74		41		11.2	10	3.3 to 10.0	57
VSP-C40-10L□-6		6	75.3				11.9			58
VSP-C40-15L□-4		4	84		46	25	11.2	15	3.3 to 10.4	62
VSP-C40-15L□-6		6	85.3				11.9			63
VSP-C40-20L□-4		4	100		53	34	11.2	20	2.0 to 8.7	68
VSP-C40-20L□-6		6	101.3				11.9			69

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in Fitting without Spring Cover)

●VSP-C4 to 15-□L□-4C/6C

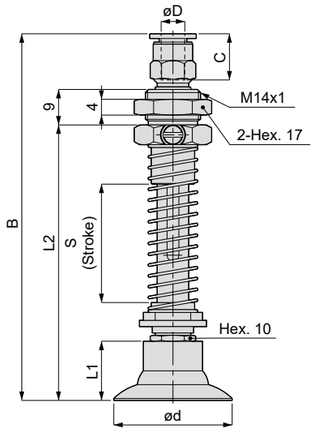


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C4-20L□-4C	4	4	72.8	12.2	50.8	11.2	20	1.5 to 4.9	45
VSP-C4-20L□-6C		6	74.1			11.9			46
VSP-C4-30L□-4C		4	85.8		63.8	11.2	30	1.1 to 4.8	51
VSP-C4-30L□-6C		6	87.1			11.9			52
VSP-C4-40L□-4C		4	98.8		76.8	11.2	40	1.0 to 4.5	56
VSP-C4-40L□-6C		6	100.1			11.9			57
VSP-C4-50L□-4C		4	111.8		89.8	11.2	50	0.9 to 4.5	61
VSP-C4-50L□-6C		6	113.1			11.9			62
VSP-C6-20L□-4C	6	4	72.8	12.2	50.8	11.2	20	1.5 to 4.9	45
VSP-C6-20L□-6C		6	74.1			11.9			46
VSP-C6-30L□-4C		4	85.8		63.8	11.2	30	1.1 to 4.8	51
VSP-C6-30L□-6C		6	87.1			11.9			52
VSP-C6-40L□-4C		4	98.8		76.8	11.2	40	1.0 to 4.5	56
VSP-C6-40L□-6C		6	100.1			11.9			57
VSP-C6-50L□-4C		4	111.8		89.8	11.2	50	0.9 to 4.5	61
VSP-C6-50L□-6C		6	113.1			11.9			62
VSP-C8-20L□-4C	8	4	72.8	12.2	50.8	11.2	20	1.5 to 4.9	45
VSP-C8-20L□-6C		6	74.1			11.9			46
VSP-C8-30L□-4C		4	85.8		63.8	11.2	30	1.1 to 4.8	51
VSP-C8-30L□-6C		6	87.1			11.9			52
VSP-C8-40L□-4C		4	98.8		76.8	11.2	40	1.0 to 4.5	56
VSP-C8-40L□-6C		6	100.1			11.9			57
VSP-C8-50L□-4C		4	111.8		89.8	11.2	50	0.9 to 4.5	61
VSP-C8-50L□-6C		6	113.1			11.9			62
VSP-C10-20L□-4C	10	4	74.6	14	52.6	11.2	20	1.5 to 4.9	45
VSP-C10-20L□-6C		6	75.9			11.9			46
VSP-C10-30L□-4C		4	87.6		65.6	11.2	30	1.1 to 4.8	51
VSP-C10-30L□-6C		6	88.9			11.9			52
VSP-C10-40L□-4C		4	100.6		78.6	11.2	40	1.0 to 4.5	56
VSP-C10-40L□-6C		6	101.9			11.9			57
VSP-C10-50L□-4C		4	113.6		91.6	11.2	50	0.9 to 4.5	61
VSP-C10-50L□-6C		6	114.9			11.9			62
VSP-C15-20L□-4C	15	4	74.6	14	52.6	11.2	20	1.5 to 4.9	45
VSP-C15-20L□-6C		6	75.9			11.9			46
VSP-C15-30L□-4C		4	87.6		65.6	11.2	30	1.1 to 4.8	51
VSP-C15-30L□-6C		6	88.9			11.9			52
VSP-C15-40L□-4C		4	100.6		78.6	11.2	40	1.0 to 4.5	56
VSP-C15-40L□-6C		6	101.9			11.9			57
VSP-C15-50L□-4C		4	113.6		91.6	11.2	50	0.9 to 4.5	61
VSP-C15-50L□-6C		6	114.9			11.9			62

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in Fitting without Spring Cover)

●VSP-C20 to 40-□L□-4C/6C

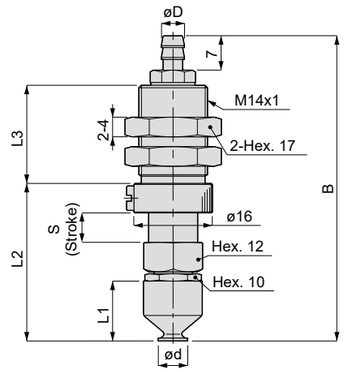


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C20-20L□-4C	20	4	77	15	55	11.2	20	1.5 to 4.9	50
VSP-C20-20L□-6C		6	78.3			11.9			51
VSP-C20-30L□-4C		4	90		68	11.2	30	1.1 to 4.8	55
VSP-C20-30L□-6C		6	91.3			11.9			56
VSP-C20-40L□-4C		4	103		81	11.2	40	1.0 to 4.5	60
VSP-C20-40L□-6C		6	104.3			11.9			61
VSP-C20-50L□-4C		4	116		94	11.2	50	0.9 to 4.5	65
VSP-C20-50L□-6C		6	117.3			11.9			66
VSP-C30-20L□-4C	30	4	77	15	55	11.2	20	1.5 to 4.9	53
VSP-C30-20L□-6C		6	78.3			11.9			54
VSP-C30-30L□-4C		4	90		68	11.2	30	1.1 to 4.8	58
VSP-C30-30L□-6C		6	91.3			11.9			59
VSP-C30-40L□-4C		4	103		81	11.2	40	1.0 to 4.5	63
VSP-C30-40L□-6C		6	104.3			11.9			64
VSP-C30-50L□-4C		4	116		94	11.2	50	0.9 to 4.5	68
VSP-C30-50L□-6C		6	117.3			11.9			69
VSP-C40-20L□-4C	40	4	77	15	55	11.2	20	1.5 to 4.9	57
VSP-C40-20L□-6C		6	78.3			11.9			58
VSP-C40-30L□-4C		4	90		68	11.2	30	1.1 to 4.8	62
VSP-C40-30L□-6C		6	91.3			11.9			63
VSP-C40-40L□-4C		4	103		81	11.2	40	1.0 to 4.5	67
VSP-C40-40L□-6C		6	104.3			11.9			68
VSP-C40-50L□-4C		4	116		94	11.2	50	0.9 to 4.5	72
VSP-C40-50L□-6C		6	117.3			11.9			73

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C4 to 15L□-4T/6T
●VSP-C4 to 15-□L□-4T/6T

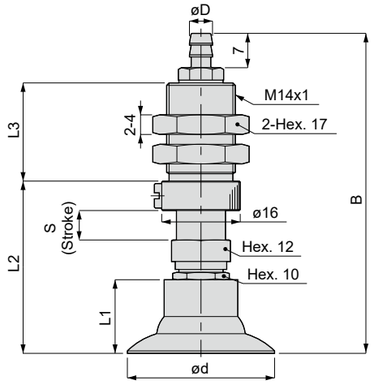


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C4L□-4T	4	4	62.4	12.2	32.3	20	6	4.0 to 7.1	37
VSP-C4L□-6T		6							
VSP-C4-10L□-4T		4	66.9		36.8		10	2.0 to 5.2	40
VSP-C4-10L□-6T		6							
VSP-C4-15L□-4T		4	76.9		41.8	25	15	2.0 to 5.9	45
VSP-C4-15L□-6T		6							
VSP-C4-20L□-4T		4	92.9		48.8	34	20	1.1 to 4.8	51
VSP-C4-20L□-6T		6							
VSP-C6L□-4T	6	4	62.4	12.2	32.3	20	6	4.0 to 7.1	37
VSP-C6L□-6T		6							
VSP-C6-10L□-4T		4	66.9		36.8		10	2.0 to 5.2	40
VSP-C6-10L□-6T		6							
VSP-C6-15L□-4T		4	76.9		41.8	25	15	2.0 to 5.9	45
VSP-C6-15L□-6T		6							
VSP-C6-20L□-4T		4	92.9		48.8	34	20	1.1 to 4.8	51
VSP-C6-20L□-6T		6							
VSP-C8L□-4T	8	4	62.4	12.2	32.3	20	6	4.0 to 7.1	37
VSP-C8L□-6T		6							
VSP-C8-10L□-4T		4	66.9		36.8		10	2.0 to 5.2	40
VSP-C8-10L□-6T		6							
VSP-C8-15L□-4T		4	76.9		41.8	25	15	2.0 to 5.9	45
VSP-C8-15L□-6T		6							
VSP-C8-20L□-4T		4	92.9		48.8	34	20	1.1 to 4.8	51
VSP-C8-20L□-6T		6							
VSP-C10L□-4T	10	4	64.2	14	34.1	20	6	4.0 to 7.1	37
VSP-C10L□-6T		6							
VSP-C10-10L□-4T		4	68.7		38.6		10	2.0 to 5.2	40
VSP-C10-10L□-6T		6							
VSP-C10-15L□-4T		4	78.7		43.6	25	15	2.0 to 5.9	45
VSP-C10-15L□-6T		6							
VSP-C10-20L□-4T		4	94.7		50.6	34	20	1.1 to 4.8	51
VSP-C10-20L□-6T		6							
VSP-C15L□-4T	15	4	64.2	14	34.1	20	6	4.0 to 7.1	37
VSP-C15L□-6T		6							
VSP-C15-10L□-4T		4	68.7		38.6		10	2.0 to 5.2	40
VSP-C15-10L□-6T		6							
VSP-C15-15L□-4T		4	78.7		43.6	25	15	2.0 to 5.9	45
VSP-C15-15L□-6T		6							
VSP-C15-20L□-4T		4	94.7		50.6	34	20	1.1 to 4.8	51
VSP-C15-20L□-6T		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C20 to 40L□-4T/6T
●VSP-C20 to 40-□L□-4T/6T

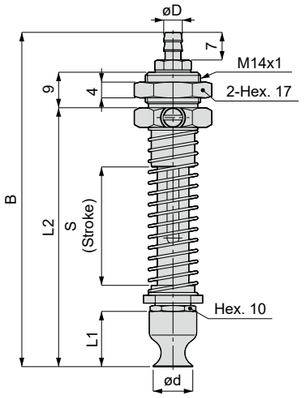


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C20L□-4T	20	4	65.1	15	35	20	11.2	6	7.0 to 12.6	42
VSP-C20L□-6T		6					11.9			
VSP-C20-10L□-4T		4	71.1		41		11.2	10	3.3 to 10.0	46
VSP-C20-10L□-6T		6					11.9			
VSP-C20-15L□-4T		4	81.1		46	25	11.2	15	3.3 to 10.4	51
VSP-C20-15L□-6T		6					11.9			
VSP-C20-20L□-4T		4	97.1		53	34	11.2	20	2.0 to 8.7	57
VSP-C20-20L□-6T		6					11.9			
VSP-C30L□-4T	30	4	65.1	15	35	20	11.2	6	7.0 to 12.6	45
VSP-C30L□-6T		6					11.9			
VSP-C30-10L□-4T		4	71.1		41		11.2	10	3.3 to 10.0	49
VSP-C30-10L□-6T		6					11.9			
VSP-C30-15L□-4T		4	81.1		46	25	11.2	15	3.3 to 10.4	54
VSP-C30-15L□-6T		6					11.9			
VSP-C30-20L□-4T		4	97.1		53	34	11.2	20	2.0 to 8.7	60
VSP-C30-20L□-6T		6					11.9			
VSP-C40L□-4T	40	4	65.1	15	35	20	11.2	6	7.0 to 12.6	51
VSP-C40L□-6T		6					11.9			
VSP-C40-10L□-4T		4	71.1		41		11.2	10	3.3 to 10.0	55
VSP-C40-10L□-6T		6					11.9			
VSP-C40-15L□-4T		4	81.1		46	25	11.2	15	3.3 to 10.4	59
VSP-C40-15L□-6T		6					11.9			
VSP-C40-20L□-4T		4	97.1		53	34	11.2	20	2.0 to 8.7	65
VSP-C40-20L□-6T		6					11.9			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C4 to 15-□L□-4TC/6TC

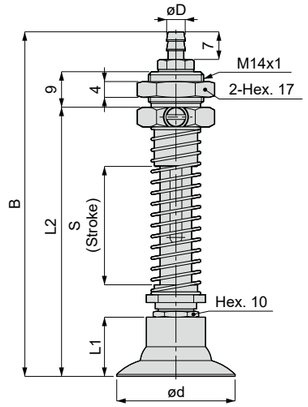


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C4-20L□-4TC	4	4	69.9	12.2	50.8	20	1.5 to 4.9	44
VSP-C4-20L□-6TC		6						
VSP-C4-30L□-4TC		4	82.9		63.8	30	1.1 to 4.8	50
VSP-C4-30L□-6TC		6						
VSP-C4-40L□-4TC		4	95.9		76.8	40	1.0 to 4.5	55
VSP-C4-40L□-6TC		6						
VSP-C4-50L□-4TC		4	108.9		89.8	50	0.9 to 4.5	60
VSP-C4-50L□-6TC		6						
VSP-C6-20L□-4TC	6	4	69.9	12.2	50.8	20	1.5 to 4.9	44
VSP-C6-20L□-6TC		6						
VSP-C6-30L□-4TC		4	82.9		63.8	30	1.1 to 4.8	50
VSP-C6-30L□-6TC		6						
VSP-C6-40L□-4TC		4	95.9		76.8	40	1.0 to 4.5	55
VSP-C6-40L□-6TC		6						
VSP-C6-50L□-4TC		4	108.9		89.8	50	0.9 to 4.5	60
VSP-C6-50L□-6TC		6						
VSP-C8-20L□-4TC	8	4	69.9	12.2	50.8	20	1.5 to 4.9	44
VSP-C8-20L□-6TC		6						
VSP-C8-30L□-4TC		4	82.9		63.8	30	1.1 to 4.8	50
VSP-C8-30L□-6TC		6						
VSP-C8-40L□-4TC		4	95.9		76.8	40	1.0 to 4.5	55
VSP-C8-40L□-6TC		6						
VSP-C8-50L□-4TC		4	108.9		89.8	50	0.9 to 4.5	60
VSP-C8-50L□-6TC		6						
VSP-C10-20L□-4TC	10	4	71.7	14	52.6	20	1.5 to 4.9	44
VSP-C10-20L□-6TC		6						
VSP-C10-30L□-4TC		4	84.7		65.6	30	1.1 to 4.8	50
VSP-C10-30L□-6TC		6						
VSP-C10-40L□-4TC		4	97.7		78.6	40	1.0 to 4.5	55
VSP-C10-40L□-6TC		6						
VSP-C10-50L□-4TC		4	110.7		91.6	50	0.9 to 4.5	60
VSP-C10-50L□-6TC		6						
VSP-C15-20L□-4TC	15	4	71.7	14	52.6	20	1.5 to 4.9	44
VSP-C15-20L□-6TC		6						
VSP-C15-30L□-4TC		4	84.7		65.6	30	1.1 to 4.8	50
VSP-C15-30L□-6TC		6						
VSP-C15-40L□-4TC		4	97.7		78.6	40	1.0 to 4.5	55
VSP-C15-40L□-6TC		6						
VSP-C15-50L□-4TC		4	110.7		91.6	50	0.9 to 4.5	60
VSP-C15-50L□-6TC		6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C20 to 40-□L□-4TC/6TC

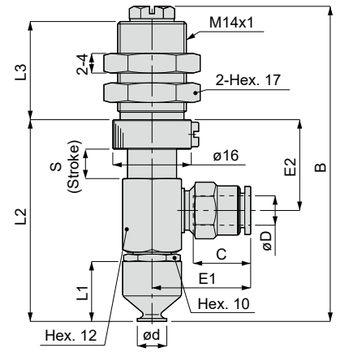


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C20-20L□-4TC	20	4	74.1	15	55	20	1.5 to 4.9	44
VSP-C20-20L□-6TC		6						
VSP-C20-30L□-4TC		4	87.1		68	30	1.1 to 4.8	50
VSP-C20-30L□-6TC		6						
VSP-C20-40L□-4TC		4	110.1		81	40	1.0 to 4.5	55
VSP-C20-40L□-6TC		6						
VSP-C20-50L□-4TC		4	123.1		94	50	0.9 to 4.5	60
VSP-C20-50L□-6TC		6						
VSP-C30-20L□-4TC	30	4	74.1	15	55	20	1.5 to 4.9	44
VSP-C30-20L□-6TC		6						
VSP-C30-30L□-4TC		4	87.1		68	30	1.1 to 4.8	50
VSP-C30-30L□-6TC		6						
VSP-C30-40L□-4TC		4	110.1		81	40	1.0 to 4.5	55
VSP-C30-40L□-6TC		6						
VSP-C30-50L□-4TC		4	123.1		94	50	0.9 to 4.5	60
VSP-C30-50L□-6TC		6						
VSP-C40-20L□-4TC	40	4	74.1	15	55	20	1.5 to 4.9	44
VSP-C40-20L□-6TC		6						
VSP-C40-30L□-4TC		4	87.1		68	30	1.1 to 4.8	50
VSP-C40-30L□-6TC		6						
VSP-C40-40L□-4TC		4	110.1		81	40	1.0 to 4.5	55
VSP-C40-40L□-6TC		6						
VSP-C40-50L□-4TC		4	123.1		94	50	0.9 to 4.5	60
VSP-C40-50L□-6TC		6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D4 to 15L□-4/6
●VSP-D4 to 15-□L□-4/6

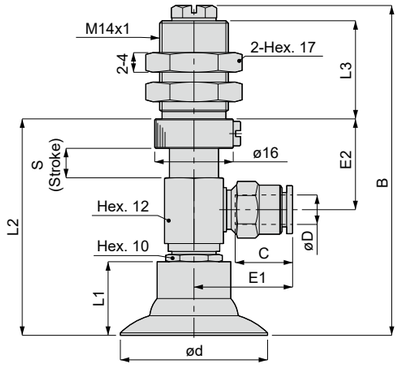


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D4L□-4	4	4	64.4	12.2	41.3	20	11.2	18.8	18.5	6	4.0 to 7.1	49
VSP-D4L□-6		6					11.9	20.1				50
VSP-D4-10L□-4		4	69.4		46.3		11.2	18.8	25	10	2.0 to 5.2	52
VSP-D4-10L□-6		6					11.9	20.1				53
VSP-D4-15L□-4		4	79.4		51.3	25	11.2	18.8	30	15	2.0 to 5.9	58
VSP-D4-15L□-6		6					11.9	20.1				59
VSP-D4-20L□-4		4	95.4		58.3	34	11.2	18.8	37	20	1.1 to 4.8	68
VSP-D4-20L□-6		6					11.9	20.1				69
VSP-D6L□-4	6	4	64.4	12.2	41.3	20	11.2	18.8	18.5	6	4.0 to 7.1	49
VSP-D6L□-6		6					11.9	20.1				50
VSP-D6-10L□-4		4	69.4		46.3		11.2	18.8	25	10	2.0 to 5.2	52
VSP-D6-10L□-6		6					11.9	20.1				53
VSP-D6-15L□-4		4	79.4		51.3	25	11.2	18.8	30	15	2.0 to 5.9	58
VSP-D6-20L□-6		6					11.9	20.1				59
VSP-D6-20L□-4		4	95.4		58.3	34	11.2	18.8	37	20	1.1 to 4.8	68
VSP-D6-20L□-6		6					11.9	20.1				69
VSP-D8L□-4	8	4	64.4	12.2	41.3	20	11.2	18.8	18.5	6	4.0 to 7.1	49
VSP-D8L□-6		6					11.9	20.1				50
VSP-D8-10L□-4		4	69.4		46.3		11.2	18.8	25	10	2.0 to 5.2	52
VSP-D8-10L□-6		6					11.9	20.1				53
VSP-D8-15L□-4		4	79.4		51.3	25	11.2	18.8	30	15	2.0 to 5.9	58
VSP-D8-20L□-6		6					11.9	20.1				59
VSP-D8-20L□-4		4	95.4		58.3	34	11.2	18.8	37	20	1.1 to 4.8	68
VSP-D8-20L□-6		6					11.9	20.1				69
VSP-D10L□-4	10	4	66.2	14	43.1	20	11.2	18.8	18.5	6	4.0 to 7.1	50
VSP-D10L□-6		6					11.9	20.1				51
VSP-D10-10L□-4		4	71.2		48.1		11.2	18.8	25	10	2.0 to 5.2	53
VSP-D10-10L□-6		6					11.9	20.1				54
VSP-D10-15L□-4		4	81.2		53.1	25	11.2	18.8	30	15	2.0 to 5.9	59
VSP-D10-20L□-6		6					11.9	20.1				60
VSP-D10-20L□-4		4	97.2		60.1	34	11.2	18.8	37	20	1.1 to 4.8	69
VSP-D10-20L□-6		6					11.9	20.1				70
VSP-D15L□-4	15	4	66.2	14	43.1	20	11.2	18.8	18.5	6	4.0 to 7.1	50
VSP-D15L□-6		6					11.9	20.1				51
VSP-D15-10L□-4		4	71.2		48.1		11.2	18.8	25	10	2.0 to 5.2	53
VSP-D15-10L□-6		6					11.9	20.1				54
VSP-D15-15L□-4		4	81.2		53.1	25	11.2	18.8	30	15	2.0 to 5.9	59
VSP-D15-20L□-6		6					11.9	20.1				60
VSP-D15-20L□-4		4	97.2		60.1	34	11.2	18.8	37	20	1.1 to 4.8	69
VSP-D15-20L□-6		6					11.9	20.1				70

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D20 to 40L□-4/6
●VSP-D20 to 40-□L□-4/6

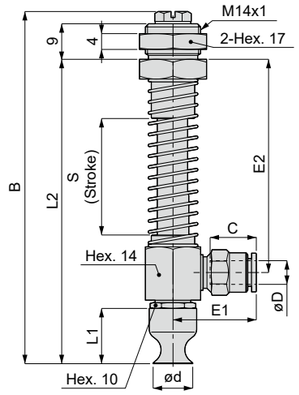


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D20L□-4	20	4	67.1	15	44	20	11.2	18.8	18.5	6	7.0 to 12.6	55
VSP-D20L□-6		6					11.9	20.1				56
VSP-D20-10L□-4		4	73.1		50		11.2	18.8	24.5	10	3.3 to 10.0	58
VSP-D20-10L□-6		6					11.9	20.1				59
VSP-D20-15L□-4		4	83.1		55	25	11.2	18.8	29.5	15	3.3 to 10.4	63
VSP-D20-15L□-6		6					11.9	20.1				64
VSP-D20-20L□-4		4	99.1		62	34	11.2	18.8	36.5	20	2.0 to 8.7	73
VSP-D20-20L□-6		6					11.9	20.1				74
VSP-D30L□-4	30	4	67.1	15	44	20	11.2	18.8	18.5	6	7.0 to 12.6	58
VSP-D30L□-6		6					11.9	20.1				59
VSP-D30-10L□-4		4	73.1		50		11.2	18.8	24.5	10	3.3 to 10.0	61
VSP-D30-10L□-6		6					11.9	20.1				62
VSP-D30-15L□-4		4	83.1		55	25	11.2	18.8	29.5	15	3.3 to 10.4	66
VSP-D30-15L□-6		6					11.9	20.1				67
VSP-D30-20L□-4		4	99.1		62	34	11.2	18.8	36.5	20	2.0 to 8.7	76
VSP-D30-20L□-6		6					11.9	20.1				77
VSP-D40L□-4	40	4	67.1	15	44	20	11.2	18.8	18.5	6	7.0 to 12.6	59
VSP-D40L□-6		6					11.9	20.1				60
VSP-D40-10L□-4		4	73.1		50		11.2	18.8	24.5	10	3.3 to 10.0	62
VSP-D40-10L□-6		6					11.9	20.1				63
VSP-D40-15L□-4		4	83.1		55	25	11.2	18.8	29.5	15	3.3 to 10.4	67
VSP-D40-15L□-6		6					11.9	20.1				68
VSP-D40-20L□-4		4	99.1		62	34	11.2	18.8	36.5	20	2.0 to 8.7	77
VSP-D40-20L□-6		6					11.9	20.1				78

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D4 to 15-□L□-4C/6C

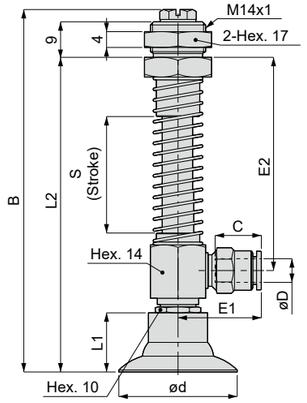


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D4-20L□-4C	4	4	74.4	12.2	62.3	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D4-20L□-6C		6				11.9	21.1				72
VSP-D4-30L□-4C		4	87.4		75.3	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D4-30L□-6C		6				11.9	21.1				78
VSP-D4-40L□-4C		4	100.4		88.3	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D4-40L□-6C		6				11.9	21.1				85
VSP-D4-50L□-4C		4	113.4		101.3	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D4-50L□-6C		6				11.9	21.1				92
VSP-D6-20L□-4C	6	4	74.4	12.2	62.3	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D6-20L□-6C		6				11.9	21.1				72
VSP-D6-30L□-4C		4	87.4		75.3	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D6-30L□-6C		6				11.9	21.1				78
VSP-D6-40L□-4C		4	100.4		88.3	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D6-40L□-6C		6				11.9	21.1				85
VSP-D6-50L□-4C		4	113.4		101.3	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D6-50L□-6C		6				11.9	21.1				92
VSP-D8-20L□-4C	8	4	74.4	12.2	62.3	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D8-20L□-6C		6				11.9	21.1				72
VSP-D8-30L□-4C		4	87.4		75.3	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D8-30L□-6C		6				11.9	21.1				78
VSP-D8-40L□-4C		4	100.4		88.3	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D8-40L□-6C		6				11.9	21.1				85
VSP-D8-50L□-4C		4	113.4		101.3	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D8-50L□-6C		6				11.9	21.1				92
VSP-D10-20L□-4C	10	4	76.2	14	64.1	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D10-20L□-6C		6				11.9	21.1				72
VSP-D10-30L□-4C		4	89.2		77.1	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D10-30L□-6C		6				11.9	21.1				78
VSP-D10-40L□-4C		4	102.2		90.1	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D10-40L□-6C		6				11.9	21.1				85
VSP-D10-50L□-4C		4	115.2		103.1	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D10-50L□-6C		6				11.9	21.1				92
VSP-D15-20L□-4C	15	4	76.2	14	64.1	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D15-20L□-6C		6				11.9	21.1				72
VSP-D15-30L□-4C		4	89.2		77.1	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D15-30L□-6C		6				11.9	21.1				78
VSP-D15-40L□-4C		4	102.2		90.1	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D15-40L□-6C		6				11.9	21.1				85
VSP-D15-50L□-4C		4	115.2		103.1	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D15-50L□-6C		6				11.9	21.1				92

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D20 to 40-□L□-4C/6C

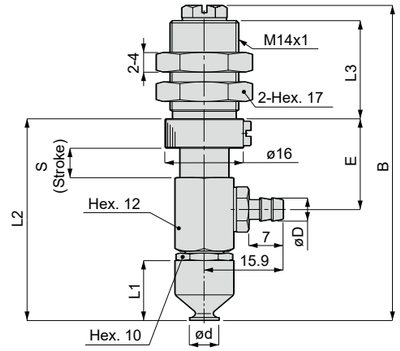


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D20-20L□-4C	20	4	78.6	15	66.5	11.2	19.8	41	20	1.5 to 4.9	72
VSP-D20-20L□-6C		6				11.9	21.1				73
VSP-D20-30L□-4C		4	91.6		79.5	11.2	19.8	54	30	1.1 to 4.8	79
VSP-D20-30L□-6C		6				11.9	21.1				80
VSP-D20-40L□-4C		4	104.6		92.5	11.2	19.8	67	40	1.0 to 4.5	84
VSP-D20-40L□-6C		6				11.9	21.1				85
VSP-D20-50L□-4C		4	117.6		105.5	11.2	19.8	80	50	0.9 to 4.5	92
VSP-D20-50L□-6C		6				11.9	21.1				93
VSP-D30-20L□-4C	30	4	78.6	15	66.5	11.2	19.8	41	20	1.5 to 4.9	75
VSP-D30-20L□-6C		6				11.9	21.1				76
VSP-D30-30L□-4C		4	91.6		79.5	11.2	19.8	54	30	1.1 to 4.8	82
VSP-D30-30L□-6C		6				11.9	21.1				83
VSP-D30-40L□-4C		4	104.6		92.5	11.2	19.8	67	40	1.0 to 4.5	87
VSP-D30-40L□-6C		6				11.9	21.1				88
VSP-D30-50L□-4C		4	117.6		105.5	11.2	19.8	80	50	0.9 to 4.5	95
VSP-D30-50L□-6C		6				11.9	21.1				96
VSP-D40-20L□-4C	40	4	78.6	15	66.5	11.2	19.8	41	20	1.5 to 4.9	79
VSP-D40-20L□-6C		6				11.9	21.1				80
VSP-D40-30L□-4C		4	91.6		79.5	11.2	19.8	54	30	1.1 to 4.8	86
VSP-D40-30L□-6C		6				11.9	21.1				87
VSP-D40-40L□-4C		4	104.6		92.5	11.2	19.8	67	40	1.0 to 4.5	91
VSP-D40-40L□-6C		6				11.9	21.1				92
VSP-D40-50L□-4C		4	117.6		105.5	11.2	19.8	80	50	0.9 to 4.5	99
VSP-D40-50L□-6C		6				11.9	21.1				100

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D4 to 15L□-4T/6T
●VSP-D4 to 15-□L□-4T/6T

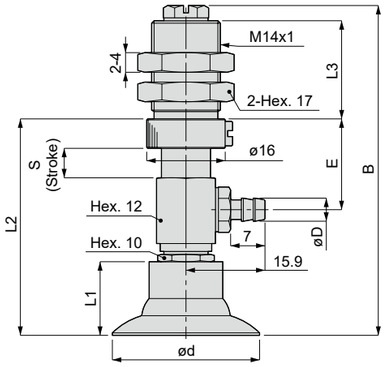


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D4L□-4T	4	2.5	64.4	12.2	41.3	20	18.5	6	4.0 to 7.1	48
VSP-D4L□-6T		4								
VSP-D4-10L□-4T		2.5	69.4		46.3		25	10	2.0 to 5.2	49
VSP-D4-10L□-6T		4								
VSP-D4-15L□-4T		2.5	79.4		51.3	25	30	15	2.0 to 5.9	55
VSP-D4-15L□-6T		4								
VSP-D4-20L□-4T		2.5	95.4		58.3	34	37	20	1.1 to 4.8	65
VSP-D4-20L□-6T		4								
VSP-D6L□-4T	6	2.5	64.4	12.2	41.3	20	18.5	6	4.0 to 7.1	49
VSP-D6L□-6T		4								
VSP-D6-10L□-4T		2.5	69.4		46.3		25	10	2.0 to 5.2	50
VSP-D6-10L□-6T		4								
VSP-D6-15L□-4T		2.5	79.4		51.3	25	30	15	2.0 to 5.9	56
VSP-D6-15L□-6T		4								
VSP-D6-20L□-4T		2.5	95.4		58.3	34	37	20	1.1 to 4.8	66
VSP-D6-20L□-6T		4								
VSP-D8L□-4T	8	2.5	64.4	12.2	41.3	20	18.5	6	4.0 to 7.1	49
VSP-D8L□-6T		4								
VSP-D8-10L□-4T		2.5	69.4		46.3		25	10	2.0 to 5.2	50
VSP-D8-10L□-6T		4								
VSP-D8-15L□-4T		2.5	79.4		51.3	25	30	15	2.0 to 5.9	56
VSP-D8-15L□-6T		4								
VSP-D8-20L□-4T		2.5	95.4		58.3	34	37	20	1.1 to 4.8	66
VSP-D8-20L□-6T		4								
VSP-D10L□-4T	10	2.5	66.2	14	43.1	20	18.5	6	4.0 to 7.1	49
VSP-D10L□-6T		4								
VSP-D10-10L□-4T		2.5	71.2		48.1		25	10	2.0 to 5.2	50
VSP-D10-10L□-6T		4								
VSP-D10-15L□-4T		2.5	81.2		53.1	25	30	15	2.0 to 5.9	56
VSP-D10-15L□-6T		4								
VSP-D10-20L□-4T		2.5	97.2		60.1	34	37	20	1.1 to 4.8	66
VSP-D10-20L□-6T		4								
VSP-D15L□-4T	15	2.5	66.2	14	43.1	20	18.5	6	4.0 to 7.1	49
VSP-D15L□-6T		4								
VSP-D15-10L□-4T		2.5	71.2		48.1		25	10	2.0 to 5.2	50
VSP-D15-10L□-6T		4								
VSP-D15-15L□-4T		2.5	81.2		53.1	25	30	15	2.0 to 5.9	56
VSP-D15-15L□-6T		4								
VSP-D15-20L□-4T		2.5	97.2		60.1	34	37	20	1.1 to 4.8	66
VSP-D15-20L□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D20 to 40L□-4T/6T
●VSP-D20 to 40-□L□-4T/6T

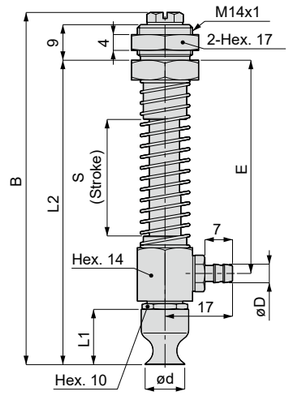


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D20L□-4T	20	2.5	67.1	15	44	20	18.5	6	7.0 to 12.6	53
VSP-D20L□-6T		4								
VSP-D20-10L□-4T		2.5	73.1		50		24.5	10	3.3 to 10.0	54
VSP-D20-10L□-6T		4								
VSP-D20-15L□-4T		2.5	83.1		55	25	29.5	15	3.3 to 10.4	61
VSP-D20-15L□-6T		4								
VSP-D20-20L□-4T		2.5	99.1		62	34	36.5	20	2.0 to 8.7	71
VSP-D20-20L□-6T		4								
VSP-D30L□-4T	30	2.5	67.1	15	44	20	18.5	6	7.0 to 12.6	56
VSP-D30L□-6T		4								
VSP-D30-10L□-4T		2.5	73.1		50		24.5	10	3.3 to 10.0	57
VSP-D30-10L□-6T		4								
VSP-D30-15L□-4T		2.5	83.1		55	25	29.5	15	3.3 to 10.4	64
VSP-D30-15L□-6T		4								
VSP-D30-20L□-4T		2.5	99.1		62	34	36.5	20	2.0 to 8.7	74
VSP-D30-20L□-6T		4								
VSP-D40L□-4T	40	2.5	67.1	15	44	20	18.5	6	7.0 to 12.6	61
VSP-D40L□-6T		4								
VSP-D40-10L□-4T		2.5	73.1		50		24.5	10	3.3 to 10.0	62
VSP-D40-10L□-6T		4								
VSP-D40-15L□-4T		2.5	83.1		55	25	29.5	15	3.3 to 10.4	69
VSP-D40-15L□-6T		4								
VSP-D40-20L□-4T		2.5	99.1		62	34	36.5	20	2.0 to 8.7	79
VSP-D40-20L□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D4 to 15-□L□-4TC/6TC

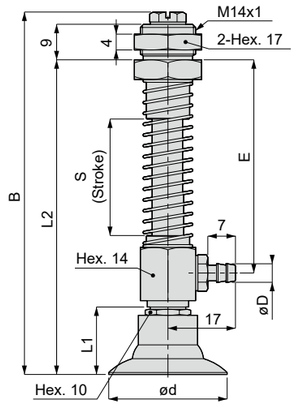


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D4-20L□-4TC	4	2.5	74.4	12.2	62.3	40.5	20	1.5 to 4.9	67
VSP-D4-20L□-6TC		4							
VSP-D4-30L□-4TC		2.5	87.4		75.3	53.5	30	1.1 to 4.8	74
VSP-D4-30L□-6TC		4							
VSP-D4-40L□-4TC		2.5	100.4		88.3	66.5	40	1.0 to 4.5	81
VSP-D4-40L□-6TC		4							
VSP-D4-50L□-4TC		2.5	113.4		101.3	79.5	50	0.9 to 4.5	87
VSP-D4-50L□-6TC		4							
VSP-D6-20L□-4TC	6	2.5	74.4	12.2	62.3	40.5	20	1.5 to 4.9	68
VSP-D6-20L□-6TC		4							
VSP-D6-30L□-4TC		2.5	87.4		75.3	53.5	30	1.1 to 4.8	75
VSP-D6-30L□-6TC		4							
VSP-D6-40L□-4TC		2.5	100.4		88.3	66.5	40	1.0 to 4.5	82
VSP-D6-40L□-6TC		4							
VSP-D6-50L□-4TC		2.5	113.4		101.3	79.5	50	0.9 to 4.5	88
VSP-D6-50L□-6TC		4							
VSP-D8-20L□-4TC	8	2.5	74.4	12.2	62.3	40.5	20	1.5 to 4.9	68
VSP-D8-20L□-6TC		4							
VSP-D8-30L□-4TC		2.5	87.4		75.3	53.5	30	1.1 to 4.8	75
VSP-D8-30L□-6TC		4							
VSP-D8-40L□-4TC		2.5	100.4		88.3	66.5	40	1.0 to 4.5	82
VSP-D8-40L□-6TC		4							
VSP-D8-50L□-4TC		2.5	113.4		101.3	79.5	50	0.9 to 4.5	88
VSP-D8-50L□-6TC		4							
VSP-D10-20L□-4TC	10	2.5	76.2	14	64.1	40.5	20	1.5 to 4.9	68
VSP-D10-20L□-6TC		4							
VSP-D10-30L□-4TC		2.5	89.4		77.1	53.5	30	1.1 to 4.8	75
VSP-D10-30L□-6TC		4							
VSP-D10-40L□-4TC		2.5	102.4		90.1	66.5	40	1.0 to 4.5	82
VSP-D10-40L□-6TC		4							
VSP-D10-50L□-4TC		2.5	115.4		103.1	79.5	50	0.9 to 4.5	88
VSP-D10-50L□-6TC		4							
VSP-D15-20L□-4TC	15	2.5	76.2	14	64.1	40.5	20	1.5 to 4.9	68
VSP-D15-20L□-6TC		4							
VSP-D15-30L□-4TC		2.5	89.4		77.1	53.5	30	1.1 to 4.8	75
VSP-D15-30L□-6TC		4							
VSP-D15-40L□-4TC		2.5	102.4		90.1	66.5	40	1.0 to 4.5	82
VSP-D15-40L□-6TC		4							
VSP-D15-50L□-4TC		2.5	115.4		103.1	79.5	50	0.9 to 4.5	88
VSP-D15-50L□-6TC		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D20 to 50-□L□-4TC/6TC

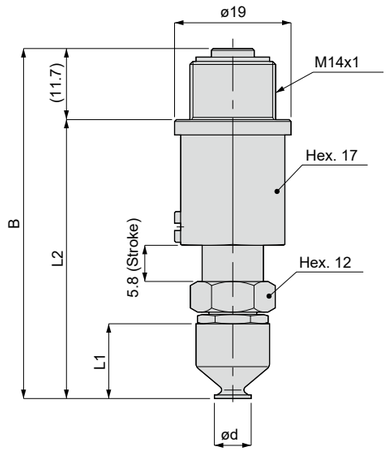


Unit: mm

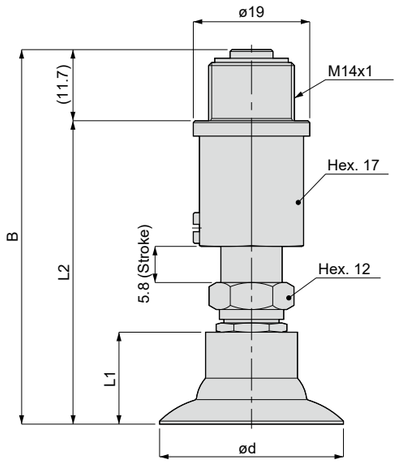
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D20-20L□-4TC	20	4	78.6	15	66.5	41	20	1.5 to 4.9	70
VSP-D20-20L□-6TC		6							
VSP-D20-30L□-4TC		4	91.6		79.5	54	30	1.1 to 4.8	77
VSP-D20-30L□-6TC		6							
VSP-D20-40L□-4TC		4	104.6		92.5	67	40	1.0 to 4.5	84
VSP-D20-40L□-6TC		6							
VSP-D20-50L□-4TC		4	117.6		105.5	80	50	0.9 to 4.5	90
VSP-D20-50L□-6TC		6							
VSP-D30-20L□-4TC	30	4	78.6	15	66.5	41	20	1.5 to 4.9	70
VSP-D30-20L□-6TC		6							
VSP-D30-30L□-4TC		4	91.6		79.5	54	30	1.1 to 4.8	77
VSP-D30-30L□-6TC		6							
VSP-D30-40L□-4TC		4	104.6		92.5	67	40	1.0 to 4.5	84
VSP-D30-40L□-6TC		6							
VSP-D30-50L□-4TC		4	117.6		105.5	80	50	0.9 to 4.5	90
VSP-D30-50L□-6TC		6							
VSP-D40-20L□-4TC	40	4	78.6	15	66.5	41	20	1.5 to 4.9	70
VSP-D40-20L□-6TC		6							
VSP-D40-30L□-4TC		4	91.6		79.5	54	30	1.1 to 4.8	77
VSP-D40-30L□-6TC		6							
VSP-D40-40L□-4TC		4	104.6		92.5	67	40	1.0 to 4.5	84
VSP-D40-40L□-6TC		6							
VSP-D40-50L□-4TC		4	117.6		105.5	80	50	0.9 to 4.5	90
VSP-D40-50L□-6TC		6							

External Dimension Diagram (Direct Mount, Buffer Type, VSP-F Male Thread Type)

●VSP-F4 to 15L□



●VSP-F20 to 40L□

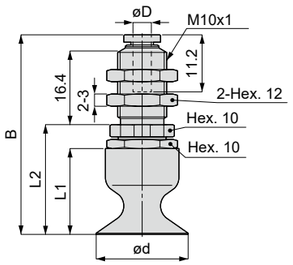


Unit: mm

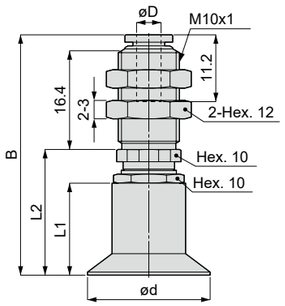
Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F4L□	4	57.3	12.2	45.6	7.9 to 15	58
VSP-F6L□	6	57.3	12.2	45.6	7.9 to 15	58
VSP-F8L□	8	57.3	12.2	45.6	7.9 to 15	58
VSP-F10L□	10	59.1	14	47.4	7.9 to 15	59
VSP-F15L□	15	59.1	14	47.4	7.9 to 15	59
VSP-F20L□	20	61.2	15	49.5	7.9 to 15	63
VSP-F30L□	30	61.2	15	49.5	7.9 to 15	66
VSP-F40L□	40	61.2	15	49.5	7.9 to 15	72

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA4 to 15L□-4



●VSP-MA20 to 40L□-4

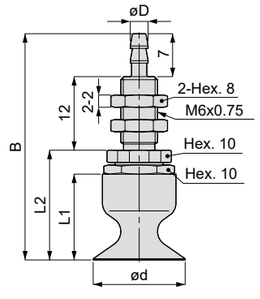


Unit: mm

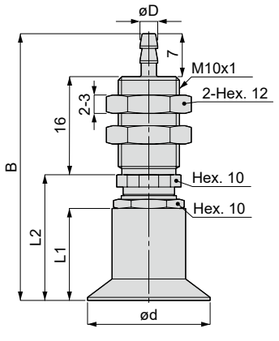
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Weight (g)
VSP-MA4L□-4	4	4	35.3	12.2	16.3	8.7
VSP-MA6L□-4	6	4	35.3	12.2	16.3	8.6
VSP-MA8L□-4	8	4	35.3	12.2	16.3	8.5
VSP-MA10L□-4	10	4	37.1	14	18.1	8.6
VSP-MA15L□-4	15	4	37.1	14	18.1	8.6
VSP-MA20L□-4	20	4	39.6	15	20.6	11
VSP-MA30L□-4	30	4	39.6	15	20.6	13
VSP-MA40L□-4	40	4	39.6	15	20.6	19

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA4 to 15L□-4T



●VSP-MA20 to 40L□-4T/6T

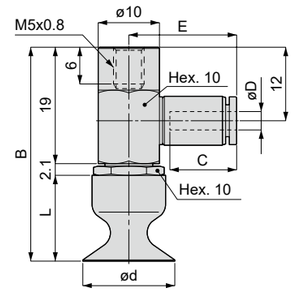


Unit: mm

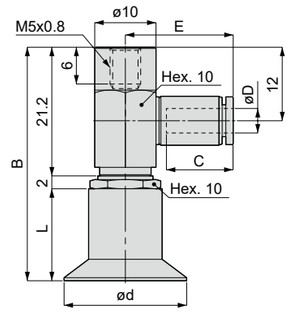
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Weight (g)
VSP-MA4L□-4T	4	2.5	35.3	12.2	16.3	5.9
VSP-MA6L□-4T	6	2.5	35.3	12.2	16.3	5.8
VSP-MA8L□-4T	8	2.5	35.3	12.2	16.3	5.7
VSP-MA10L□-4T	10	2.5	37.1	14	18.1	5.8
VSP-MA15L□-4T	15	2.5	37.1	14	18.1	5.8
VSP-MA20L□-4T	20	2.5	43.6	15	20.6	11
VSP-MA20L□-6T		4				
VSP-MA30L□-4T	30	2.5	43.6	15	20.6	13
VSP-MA30L□-6T		4				
VSP-MA40L□-4T	40	2.5	43.6	15	20.6	19
VSP-MA40L□-6T		4				

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB4 to 15L□-2/4/6



●VSP-MB20 to 40L□-2/4/6

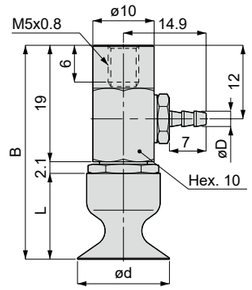


Unit: mm

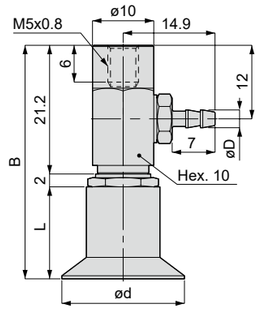
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB4L□-2	4	1.8	33.3	12.2	8.4	13.7	10
VSP-MB4L□-4		4			11.2	17.8	11
VSP-MB4L□-6		6			11.9	19.6	12
VSP-MB6L□-2	6	1.8	33.3	12.2	8.4	13.7	10
VSP-MB6L□-4		4			11.2	17.8	11
VSP-MB6L□-6		6			11.9	19.6	12
VSP-MB8L□-2	8	1.8	33.3	12.2	8.4	13.7	10
VSP-MB8L□-4		4			11.2	17.8	11
VSP-MB8L□-6		6			11.9	19.6	12
VSP-MB10L□-2	10	1.8	35.1	14	8.4	13.7	10
VSP-MB10L□-4		4			11.2	17.8	11
VSP-MB10L□-6		6			11.9	19.6	12
VSP-MB15L□-2	15	1.8	35.1	14	8.4	13.7	10
VSP-MB15L□-4		4			11.2	17.8	11
VSP-MB15L□-6		6			11.9	19.6	12
VSP-MB20L□-2	20	1.8	38.2	15	8.4	13.7	11
VSP-MB20L□-4		4			11.2	17.8	12
VSP-MB20L□-6		6			11.9	19.6	13
VSP-MB30L□-2	30	1.8	38.2	15	8.4	13.7	13
VSP-MB30L□-4		4			11.2	17.8	14
VSP-MB30L□-6		6			11.9	19.6	15
VSP-MB40L□-2	40	1.8	38.2	15	8.4	13.7	19
VSP-MB40L□-4		4			11.2	17.8	20
VSP-MB40L□-6		6			11.9	19.6	21

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB4 to 15L□-4T/6T



●VSP-MB20 to 40L□-4T/6T

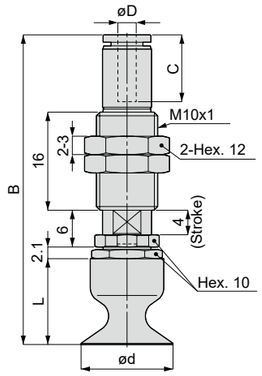


Unit: mm

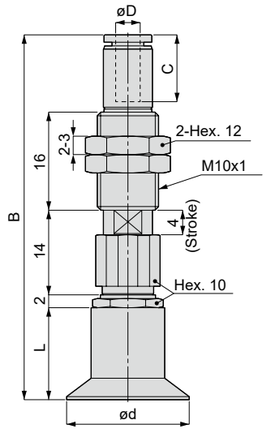
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MB4L□-4T	4	2.5	33.3	12.2	9
VSP-MB4L□-6T		4			
VSP-MB6L□-4T	6	2.5	33.3	12.2	8.9
VSP-MB6L□-6T		4			
VSP-MB8L□-4T	8	2.5	33.3	12.2	8.8
VSP-MB8L□-6T		4			
VSP-MB10L□-4T	10	2.5	35.1	14	8.9
VSP-MB10L□-6T		4			
VSP-MB15L□-4T	15	2.5	35.1	14	8.9
VSP-MB15L□-6T		4			
VSP-MB20L□-4T	20	2.5	38.2	15	11
VSP-MB20L□-6T		4			
VSP-MB30L□-4T	30	2.5	38.2	15	13
VSP-MB30L□-6T		4			
VSP-MB40L□-4T	40	2.5	38.2	15	19
VSP-MB40L□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC4 to 15L□-2/4



●VSP-MC20 to 40L□-2/4

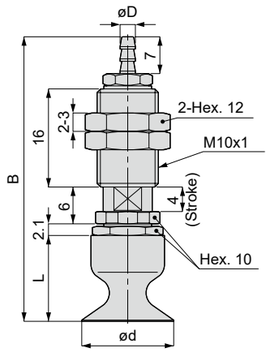


Unit: mm

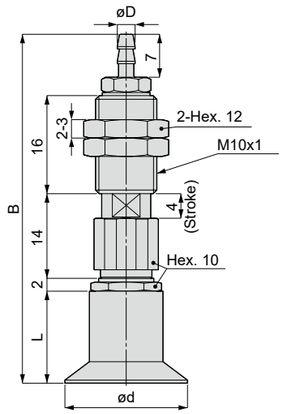
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC4L□-2	4	1.8	45.2	12.2	8.4	1 to 1.3	17
VSP-MC4L□-4		4	49.3		11.2		18
VSP-MC6L□-2	6	1.8	45.2	12.2	8.4	1 to 1.3	17
VSP-MC6L□-4		4	49.3		11.2		18
VSP-MC8L□-2	8	1.8	45.2	12.2	8.4	1 to 1.3	17
VSP-MC8L□-4		4	49.3		11.2		18
VSP-MC10L□-2	10	1.8	47	14	8.4	1 to 1.3	17
VSP-MC10L□-4		4	51.1		11.2		18
VSP-MC15L□-2	15	1.8	47	14	8.4	1 to 1.3	17
VSP-MC15L□-4		4	51.1		11.2		18
VSP-MC20L□-2	20	1.8	55.9	15	8.4	1 to 1.3	22
VSP-MC20L□-4		4	60		11.2		23
VSP-MC30L□-2	30	1.8	55.9	15	8.4	1 to 1.3	22
VSP-MC30L□-4		4	60		11.2		23
VSP-MC40L□-2	40	1.8	55.9	15	8.4	1 to 1.3	28
VSP-MC40L□-4		4	60		11.2		29

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC4 to 15L□-4T/6T



●VSP-MC20 to 40L□-4T/6T

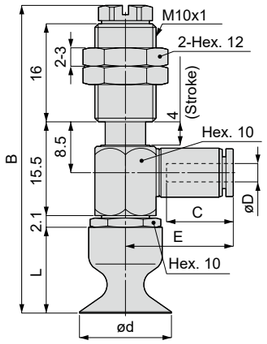


Unit: mm

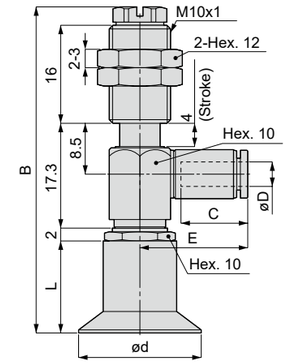
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC4L□-4T	4	2.5	46.4	12.2	0.5 to 0.6	17
VSP-MC4L□-6T		4				
VSP-MC6L□-4T	6	2.5	46.4	12.2	0.5 to 0.6	17
VSP-MC6L□-6T		4				
VSP-MC8L□-4T	8	2.5	46.4	12.2	0.5 to 0.6	17
VSP-MC8L□-6T		4				
VSP-MC10L□-4T	10	2.5	48.2	14	0.5 to 0.6	17
VSP-MC10L□-6T		4				
VSP-MC15L□-4T	15	2.5	48.2	14	0.5 to 0.6	17
VSP-MC15L□-6T		4				
VSP-MC20L□-4T	20	2.5	57.1	15	1 to 1.3	22
VSP-MC20L□-6T		4				
VSP-MC30L□-4T	30	2.5	57.1	15	1 to 1.3	24
VSP-MC30L□-6T		4				
VSP-MC40L□-4T	40	2.5	57.1	15	1 to 1.3	30
VSP-MC40L□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD4 to 15L□-2/4/6



●VSP-MD20 to 40L□-2/4/6

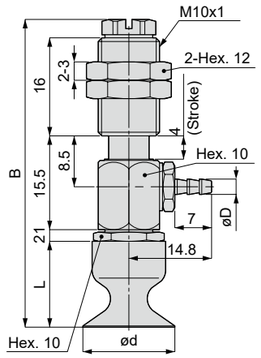


Unit: mm

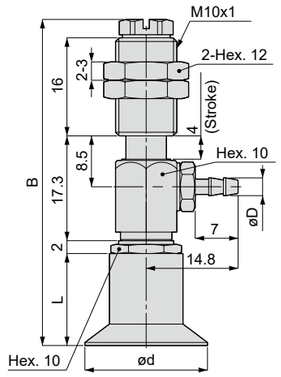
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD4L□-2	4	1.8	48.8	12.2	8.4	13.6	1 to 1.3	25
VSP-MD4L□-4		4			11.2	17.7		26
VSP-MD4L□-6		6			11.9	19.5		27
VSP-MD6L□-2	6	1.8	48.8	12.2	8.4	13.6	1 to 1.3	25
VSP-MD6L□-4		4			11.2	17.7		26
VSP-MD6L□-6		6			11.9	19.5		27
VSP-MD8L□-2	8	1.8	48.8	12.2	8.4	13.6	1 to 1.3	25
VSP-MD8L□-4		4			11.2	17.7		26
VSP-MD8L□-6		6			11.9	19.5		27
VSP-MD10L□-2	10	1.8	50.6	14	8.4	13.6	1 to 1.3	25
VSP-MD10L□-4		4			11.2	17.7		26
VSP-MD10L□-6		6			11.9	19.5		27
VSP-MD15L□-2	15	1.8	50.6	14	8.4	13.6	1 to 1.3	25
VSP-MD15L□-4		4			11.2	17.7		26
VSP-MD15L□-6		6			11.9	19.5		27
VSP-MD20L□-2	20	1.8	53.3	15	8.4	13.6	1 to 1.3	26
VSP-MD20L□-4		4			11.2	17.7		27
VSP-MD20L□-6		6			11.9	19.5		28
VSP-MD30L□-2	30	1.8	53.3	15	8.4	13.6	1 to 1.3	27
VSP-MD30L□-4		4			11.2	17.7		28
VSP-MD30L□-6		6			11.9	19.5		29
VSP-MD40L□-2	40	1.8	53.3	15	8.4	13.6	1 to 1.3	33
VSP-MD40L□-4		4			11.2	17.7		34
VSP-MD40L□-6		6			11.9	19.5		35

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD4 to 15L□-4T/6T



●VSP-MD20 to 40L□-4T/6T

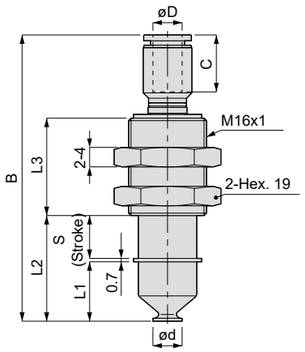


Unit: mm

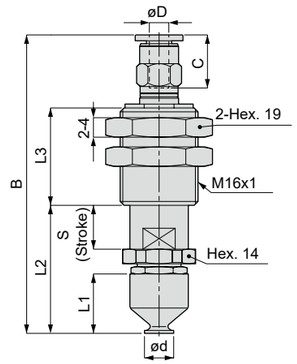
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD4L□-4T	4	2.5	48.8	12.2	1 to 1.3	24
VSP-MD4L□-6T		4				
VSP-MD6L□-4T	6	2.5	48.8	12.2	1 to 1.3	24
VSP-MD6L□-6T		4				
VSP-MD8L□-4T	8	2.5	48.8	12.2	1 to 1.3	24
VSP-MD8L□-6T		4				
VSP-MD10L□-4T	10	2.5	50.6	14	1 to 1.3	24
VSP-MD10L□-6T		4				
VSP-MD15L□-4T	15	2.5	50.6	14	1 to 1.3	24
VSP-MD15L□-6T		4				
VSP-MD20L□-4T	20	2.5	53.3	15	1 to 1.3	26
VSP-MD20L□-6T		4				
VSP-MD30L□-4T	30	2.5	53.3	15	1 to 1.3	27
VSP-MD30L□-6T		4				
VSP-MD40L□-4T	40	2.5	53.3	15	1 to 1.3	33
VSP-MD40L□-6T		4				

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC4L□-2/4/6



●VSP-HC4-□L□-2/4/6

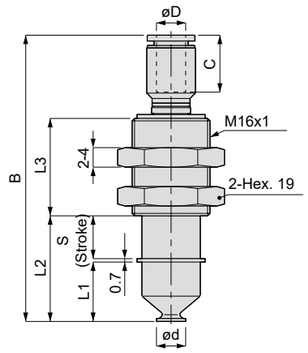


Unit: mm

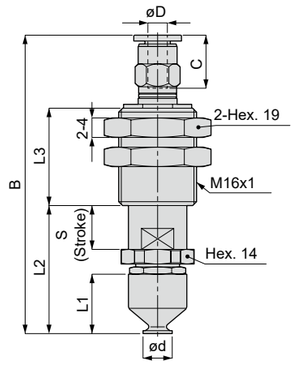
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC4L□-2	4	1.8	53.1	12.2	21.9	20	8.4	9	0.9 to 2.7	19
VSP-HC4L□-4		4	57.1				11.2			20
VSP-HC4L□-6		6	58.4				11.9			21
VSP-HC4-10L□-2		1.8	59.9		27.3	21.5	8.4	10	1.0 to 2.4	24
VSP-HC4-10L□-4		4	64				11.2			25
VSP-HC4-10L□-6		6	65.3				11.9			26
VSP-HC4-15L□-2		1.8	69.9		32.3	26.5	8.4	15	1.0 to 2.7	26
VSP-HC4-15L□-4		4	74				11.2			27
VSP-HC4-15L□-6		6	75.3				11.9			28
VSP-HC4-20L□-2		1.8	79.9		37.3	31.5	8.4	20	1.0 to 3.0	28
VSP-HC4-20L□-4		4	84				11.2			29
VSP-HC4-20L□-6		6	85.3				11.9			30
VSP-HC4-25L□-2		1.8	90.4		42.3	37	8.4	25	1.0 to 3.0	30
VSP-HC4-25L□-4		4	94.5				11.2			31
VSP-HC4-25L□-6		6	95.8				11.9			32
VSP-HC4-30L□-2		1.8	101.4		47.3	43	8.4	30	1.0 to 3.0	32
VSP-HC4-30L□-4		4	105.5				11.2			33
VSP-HC4-30L□-6		6	106.8				11.9			34
VSP-HC4-40L□-2		1.8	123.4		57.3	55	8.4	40	1.0 to 3.0	35
VSP-HC4-40L□-4		4	127.5				11.2			36
VSP-HC4-40L□-6		6	128.8				11.9			37
VSP-HC4-50L□-2		1.8	144.9		67.3	66.5	8.4	50	1.0 to 3.1	39
VSP-HC4-50L□-4		4	149				11.2			40
VSP-HC4-50L□-6		6	150.3				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC6, 8L□-2/4/6



●VSP-HC6, 8-□L□-2/4/6

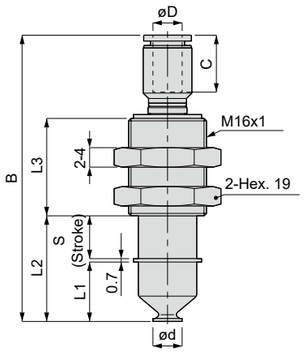


Unit: mm

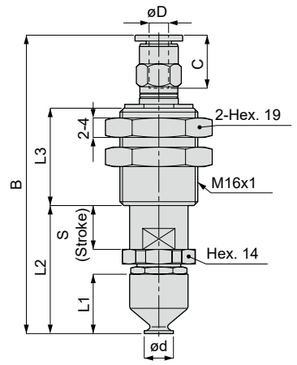
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC6L□-2	6	1.8	53.1	12.2	21.9	20	8.4	9	0.9 to 2.7	20
VSP-HC6L□-4		4	57.1				11.2			21
VSP-HC6L□-6		6	58.4				11.9			22
VSP-HC6-10L□-2		1.8	59.9		27.3	21.5	8.4	10	1.0 to 2.4	24
VSP-HC6-10L□-4		4	64				11.2			25
VSP-HC6-10L□-6		6	65.3				11.9			26
VSP-HC6-15L□-2		1.8	69.9		32.3	26.5	8.4	15	1.0 to 2.7	26
VSP-HC6-15L□-4		4	74				11.2			27
VSP-HC6-15L□-6		6	75.3				11.9			28
VSP-HC6-20L□-2		1.8	79.9		37.3	31.5	8.4	20	1.0 to 3.0	28
VSP-HC6-20L□-4		4	84				11.2			29
VSP-HC6-20L□-6		6	85.3				11.9			30
VSP-HC6-25L□-2		1.8	90.4		42.3	37	8.4	25	1.0 to 3.0	30
VSP-HC6-25L□-4		4	94.5				11.2			31
VSP-HC6-25L□-6		6	95.8				11.9			32
VSP-HC6-30L□-2		1.8	101.4		47.3	43	8.4	30	1.0 to 3.0	32
VSP-HC6-30L□-4		4	105.5				11.2			33
VSP-HC6-30L□-6		6	106.8				11.9			34
VSP-HC6-40L□-2		1.8	123.4		57.3	55	8.4	40	1.0 to 3.0	35
VSP-HC6-40L□-4		4	127.5				11.2			36
VSP-HC6-40L□-6		6	128.8				11.9			37
VSP-HC6-50L□-2		1.8	144.9		67.3	66.5	8.4	50	1.0 to 3.1	39
VSP-HC6-50L□-4		4	149				11.2			40
VSP-HC6-50L□-6		6	150.3				11.9			41
VSP-HC8L□-2	8	1.8	53.1	12.2	21.9	20	8.4	9	0.9 to 2.7	20
VSP-HC8L□-4		4	57.1				11.2			21
VSP-HC8L□-6		6	58.4				11.9			22
VSP-HC8-10L□-2		1.8	59.9		27.3	21.5	8.4	10	1.0 to 2.4	24
VSP-HC8-10L□-4		4	64				11.2			25
VSP-HC8-10L□-6		6	65.3				11.9			26
VSP-HC8-15L□-2		1.8	69.9		32.3	26.5	8.4	15	1.0 to 2.7	26
VSP-HC8-15L□-4		4	74				11.2			27
VSP-HC8-15L□-6		6	75.3				11.9			28
VSP-HC8-20L□-2		1.8	79.9		37.3	31.5	8.4	20	1.0 to 3.0	28
VSP-HC8-20L□-4		4	84				11.2			29
VSP-HC8-20L□-6		6	85.3				11.9			30
VSP-HC8-25L□-2		1.8	90.4		42.3	37	8.4	25	1.0 to 3.0	30
VSP-HC8-25L□-4		4	94.5				11.2			31
VSP-HC8-25L□-6		6	95.8				11.9			32
VSP-HC8-30L□-2		1.8	101.4		47.3	43	8.4	30	1.0 to 3.0	32
VSP-HC8-30L□-4		4	105.5				11.2			33
VSP-HC8-30L□-6		6	106.8				11.9			34
VSP-HC8-40L□-2		1.8	123.4		57.3	55	8.4	40	1.0 to 3.0	35
VSP-HC8-40L□-4		4	127.5				11.2			36
VSP-HC8-40L□-6		6	128.8				11.9			37
VSP-HC8-50L□-2		1.8	144.9		67.3	66.5	8.4	50	1.0 to 3.1	39
VSP-HC8-50L□-4		4	149				11.2			40
VSP-HC8-50L□-6		6	150.3				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10, 15L□-2/4/6



●VSP-HC10, 15-□L□-2/4/6

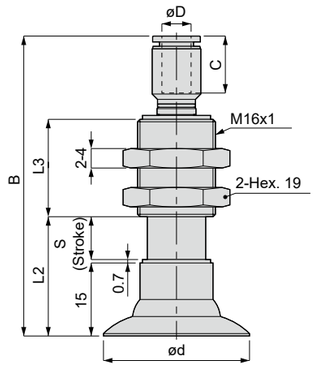


Unit: mm

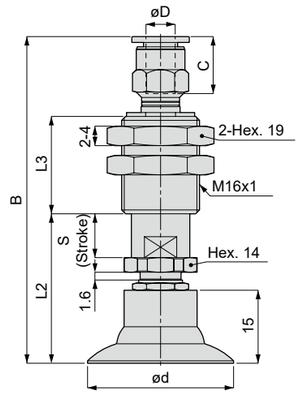
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10L□-2	10	1.8	54.9	14	23.7	20	8.4	9	0.9 to 2.7	20
VSP-HC10L□-4		4	58.9				11.2			21
VSP-HC10L□-6		6	60.2				11.9			22
VSP-HC10-10L□-2		1.8	61.7		29.1	21.5	8.4	10	1.0 to 2.4	24
VSP-HC10-10L□-4		4	65.8				11.2			25
VSP-HC10-10L□-6		6	67.1				11.9			26
VSP-HC10-15L□-2		1.8	71.7		34.1	26.5	8.4	15	1.0 to 2.7	26
VSP-HC10-15L□-4		4	75.8				11.2			27
VSP-HC10-15L□-6		6	77.1				11.9			28
VSP-HC10-20L□-2		1.8	81.7		39.1	31.5	8.4	20	1.0 to 3.0	28
VSP-HC10-20L□-4		4	85.8				11.2			29
VSP-HC10-20L□-6		6	87.1				11.9			30
VSP-HC10-25L□-2		1.8	92.2		44.1	37	8.4	25	1.0 to 3.0	30
VSP-HC10-25L□-4		4	96.3				11.2			31
VSP-HC10-25L□-6		6	97.6				11.9			32
VSP-HC10-30L□-2		1.8	103.2		49.1	43	8.4	30	1.0 to 3.0	32
VSP-HC10-30L□-4		4	107.3				11.2			33
VSP-HC10-30L□-6		6	108.6				11.9			34
VSP-HC10-40L□-2		1.8	125.2		59.1	55	8.4	40	1.0 to 3.0	35
VSP-HC10-40L□-4		4	129.3				11.2			36
VSP-HC10-40L□-6		6	130.6				11.9			37
VSP-HC10-50L□-2		1.8	146.7		69.1	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50L□-4		4	150.8				11.2			40
VSP-HC10-50L□-6		6	152.1				11.9			41
VSP-HC15L□-2	15	1.8	54.9	14	23.7	20	8.4	9	0.9 to 2.7	20
VSP-HC15L□-4		4	58.9				11.2			21
VSP-HC15L□-6		6	60.2				11.9			22
VSP-HC15-10L□-2		1.8	61.7		29.1	21.5	8.4	10	1.0 to 2.4	24
VSP-HC15-10L□-4		4	65.8				11.2			25
VSP-HC15-10L□-6		6	67.1				11.9			26
VSP-HC15-15L□-2		1.8	71.7		34.1	26.5	8.4	15	1.0 to 2.7	26
VSP-HC15-15L□-4		4	75.8				11.2			27
VSP-HC15-15L□-6		6	77.1				11.9			28
VSP-HC15-20L□-2		1.8	81.7		39.1	31.5	8.4	20	1.0 to 3.0	28
VSP-HC15-20L□-4		4	85.8				11.2			29
VSP-HC15-20L□-6		6	87.1				11.9			30
VSP-HC15-25L□-2		1.8	92.2		44.1	37	8.4	25	1.0 to 3.0	30
VSP-HC15-25L□-4		4	96.3				11.2			31
VSP-HC15-25L□-6		6	97.6				11.9			32
VSP-HC15-30L□-2		1.8	103.2		49.1	43	8.4	30	1.0 to 3.0	32
VSP-HC15-30L□-4		4	107.3				11.2			33
VSP-HC15-30L□-6		6	108.6				11.9			34
VSP-HC15-40L□-2		1.8	125.2		59.1	55	8.4	40	1.0 to 3.0	35
VSP-HC15-40L□-4		4	129.3				11.2			36
VSP-HC15-40L□-6		6	130.6				11.9			37
VSP-HC15-50L□-2		1.8	146.7		69.1	66.5	8.4	50	1.0 to 3.1	39
VSP-HC15-50L□-4		4	150.8				11.2			40
VSP-HC15-50L□-6		6	152.1				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 30L□-2/4/6



●VSP-HC20, 30-□L□-2/4/6

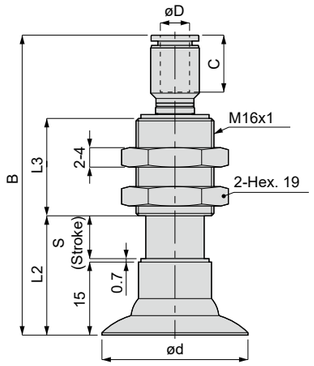


Unit: mm

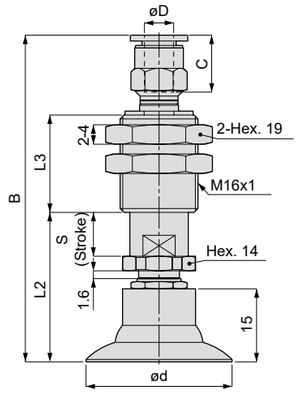
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20L□-2	20	1.8	55.9	15	24.7	20	8.4	9	0.9 to 2.7	21
VSP-HC20L□-4		4	59.9				11.2			22
VSP-HC20L□-6		6	61.2				11.9			23
VSP-HC20-10L□-2		1.8	64.2		30	21.5	8.4	10	1.0 to 2.4	27
VSP-HC20-10L□-4		4	68.3				11.2			28
VSP-HC20-10L□-6		6	69.6				11.9			29
VSP-HC20-15L□-2		1.8	74.2		35	26.5	8.4	15	1.0 to 2.7	29
VSP-HC20-15L□-4		4	78.3				11.2			30
VSP-HC20-15L□-6		6	79.6				11.9			31
VSP-HC20-20L□-2		1.8	84.2		40	31.5	8.4	20	1.0 to 3.0	31
VSP-HC20-20L□-4		4	88.3				11.2			32
VSP-HC20-20L□-6		6	89.6				11.9			33
VSP-HC20-25L□-2		1.8	94.7		45	37	8.4	25	1.0 to 3.0	33
VSP-HC20-25L□-4		4	98.8				11.2			34
VSP-HC20-25L□-6		6	100.1				11.9			35
VSP-HC20-30L□-2		1.8	105.7		50	43	8.4	30	1.0 to 3.0	35
VSP-HC20-30L□-4		4	109.8				11.2			36
VSP-HC20-30L□-6		6	111.1				11.9			37
VSP-HC20-40L□-2		1.8	127.7		60	55	8.4	40	1.0 to 3.0	39
VSP-HC20-40L□-4		4	131.8				11.2			40
VSP-HC20-40L□-6		6	133.1				11.9			41
VSP-HC20-50L□-2		1.8	149.2		70	66.5	8.4	50	1.0 to 3.1	43
VSP-HC20-50L□-4		4	153.3				11.2			44
VSP-HC20-50L□-6		6	154.6				11.9			45
VSP-HC30L□-2	30	1.8	55.9	15	24.7	20	8.4	9	0.9 to 2.7	22
VSP-HC30L□-4		4	59.9				11.2			23
VSP-HC30L□-6		6	61.2				11.9			24
VSP-HC30-10L□-2		1.8	64.2		30	21.5	8.4	10	1.0 to 2.4	29
VSP-HC30-10L□-4		4	68.3				11.2			30
VSP-HC30-10L□-6		6	69.6				11.9			31
VSP-HC30-15L□-2		1.8	74.2		35	26.5	8.4	15	1.0 to 2.7	31
VSP-HC30-15L□-4		4	78.3				11.2			32
VSP-HC30-15L□-6		6	79.6				11.9			33
VSP-HC30-20L□-2		1.8	84.2		40	31.5	8.4	20	1.0 to 3.0	33
VSP-HC30-20L□-4		4	88.3				11.2			34
VSP-HC30-20L□-6		6	89.6				11.9			35
VSP-HC30-25L□-2		1.8	94.7		45	37	8.4	25	1.0 to 3.0	35
VSP-HC30-25L□-4		4	98.8				11.2			36
VSP-HC30-25L□-6		6	100.1				11.9			37
VSP-HC30-30L□-2		1.8	105.7		50	43	8.4	30	1.0 to 3.0	37
VSP-HC30-30L□-4		4	109.8				11.2			38
VSP-HC30-30L□-6		6	111.1				11.9			39
VSP-HC30-40L□-2		1.8	127.7		60	55	8.4	40	1.0 to 3.0	41
VSP-HC30-40L□-4		4	131.8				11.2			42
VSP-HC30-40L□-6		6	133.1				11.9			43
VSP-HC30-50L□-2		1.8	149.2		70	66.5	8.4	50	1.0 to 3.1	45
VSP-HC30-50L□-4		4	153.3				11.2			46
VSP-HC30-50L□-6		6	154.6				11.9			47

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC40L□-2/4/6



●VSP-HC40-□L□-2/4/6

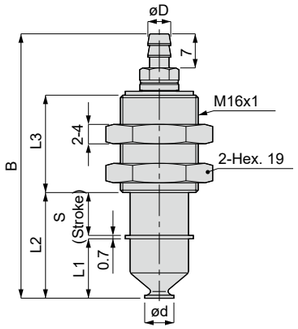


Unit: mm

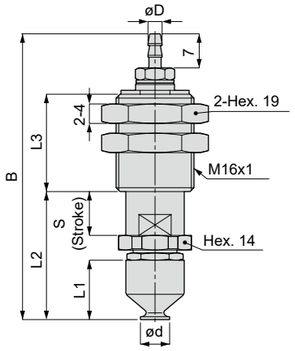
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC40L□-2	40	1.8	55.9	15	24.7	20	8.4	9	0.9 to 2.7	26
VSP-HC40L□-4		4	59.9				11.2			27
VSP-HC40L□-6		6	61.2				11.9			28
VSP-HC40-10L□-2		1.8	64.2		30	21.5	8.4	10	1.0 to 2.4	33
VSP-HC40-10L□-4		4	68.3				11.2			34
VSP-HC40-10L□-6		6	69.6				11.9			35
VSP-HC40-15L□-2		1.8	74.2		35	26.5	8.4	15	1.0 to 2.7	35
VSP-HC40-15L□-4		4	78.3				11.2			36
VSP-HC40-15L□-6		6	79.6				11.9			37
VSP-HC40-20L□-2		1.8	84.2		40	31.5	8.4	20	1.0 to 3.0	37
VSP-HC40-20L□-4		4	88.3				11.2			38
VSP-HC40-20L□-6		6	89.6				11.9			39
VSP-HC40-25L□-2		1.8	94.7		45	37	8.4	25	1.0 to 3.0	39
VSP-HC40-25L□-4		4	98.8				11.2			40
VSP-HC40-25L□-6		6	100.1				11.9			41
VSP-HC40-30L□-2		1.8	105.7		50	43	8.4	30	1.0 to 3.0	41
VSP-HC40-30L□-4		4	109.8				11.2			42
VSP-HC40-30L□-6		6	111.1				11.9			43
VSP-HC40-40L□-2		1.8	127.7		60	55	8.4	40	1.0 to 3.0	45
VSP-HC40-40L□-4		4	131.8				11.2			46
VSP-HC40-40L□-6		6	133.1				11.9			47
VSP-HC40-50L□-2		1.8	149.2		70	66.5	8.4	50	1.0 to 3.1	49
VSP-HC40-50L□-4		4	153.3				11.2			50
VSP-HC40-50L□-6		6	154.6				11.9			51

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC4 to 8L□-4T/6T



●VSP-HC4 to 8-□L□-4T/6T

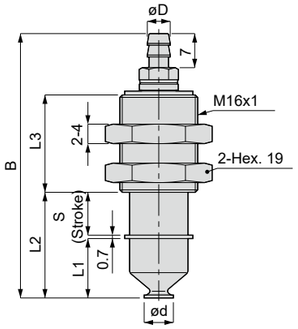


Unit: mm

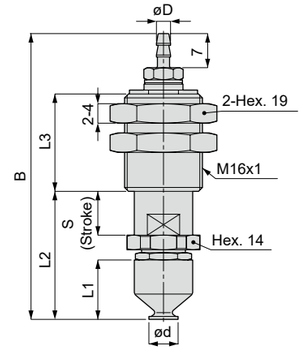
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC4L□-4T	4	2.5	54.3	12.2	21.9	20	9	0.9 to 2.7	18
VSP-HC4L□-6T		4							
VSP-HC4-10L□-4T		2.5	61.1		27.3	21.5	10	1.0 to 2.4	23
VSP-HC4-10L□-6T		4							
VSP-HC4-15L□-4T		2.5	71.1		32.3	26.5	15	1.0 to 2.7	25
VSP-HC4-15L□-6T		4							
VSP-HC4-20L□-4T		2.5	81.1		37.3	31.5	20	1.0 to 3.0	27
VSP-HC4-20L□-6T		4							
VSP-HC4-25L□-4T		2.5	91.6		42.3	37	25	1.0 to 3.0	30
VSP-HC4-25L□-6T		4							
VSP-HC4-30L□-4T		2.5	102.6		47.3	43	30	1.0 to 3.0	32
VSP-HC4-30L□-6T		4							
VSP-HC4-40L□-4T		2.5	124.6		57.3	55	40	1.0 to 3.0	36
VSP-HC4-40L□-6T		4							
VSP-HC4-50L□-4T		2.5	146.1		67.3	66.5	50	1.0 to 3.1	40
VSP-HC4-50L□-6T		4							
VSP-HC6L□-4T	6	2.5	54.3	12.2	21.9	20	9	0.9 to 2.7	20
VSP-HC6L□-6T		4							
VSP-HC6-10L□-4T		2.5	61.1		27.3	21.5	10	1.0 to 2.4	24
VSP-HC6-10L□-6T		4							
VSP-HC6-15L□-4T		2.5	71.1		32.3	26.5	15	1.0 to 2.7	26
VSP-HC6-15L□-6T		4							
VSP-HC6-20L□-4T		2.5	81.1		37.3	31.5	20	1.0 to 3.0	28
VSP-HC6-20L□-6T		4							
VSP-HC6-25L□-4T		2.5	91.6		42.3	37	25	1.0 to 3.0	31
VSP-HC6-25L□-6T		4							
VSP-HC6-30L□-4T		2.5	102.6		47.3	43	30	1.0 to 3.0	33
VSP-HC6-30L□-6T		4							
VSP-HC6-40L□-4T		2.5	124.6		57.3	55	40	1.0 to 3.0	37
VSP-HC6-40L□-6T		4							
VSP-HC6-50L□-4T		2.5	146.1		67.3	66.5	50	1.0 to 3.1	41
VSP-HC6-50L□-6T		4							
VSP-HC8L□-4T	8	2.5	54.3	12.2	21.9	20	9	0.9 to 2.7	20
VSP-HC8L□-6T		4							
VSP-HC8-10L□-4T		2.5	61.1		27.3	21.5	10	1.0 to 2.4	24
VSP-HC8-10L□-6T		4							
VSP-HC8-15L□-4T		2.5	71.1		32.3	26.5	15	1.0 to 2.7	26
VSP-HC8-15L□-6T		4							
VSP-HC8-20L□-4T		2.5	81.1		37.3	31.5	20	1.0 to 3.0	28
VSP-HC8-20L□-6T		4							
VSP-HC8-25L□-4T		2.5	91.6		42.3	37	25	1.0 to 3.0	31
VSP-HC8-25L□-6T		4							
VSP-HC8-30L□-4T		2.5	102.6		47.3	43	30	1.0 to 3.0	33
VSP-HC8-30L□-6T		4							
VSP-HC8-40L□-4T		2.5	124.6		57.3	55	40	1.0 to 3.0	37
VSP-HC8-40L□-6T		4							
VSP-HC8-50L□-4T		2.5	146.1		67.3	66.5	50	1.0 to 3.1	41
VSP-HC8-50L□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10, 15L□-4T/6T



●VSP-HC10, 15-□L□-4T/6T

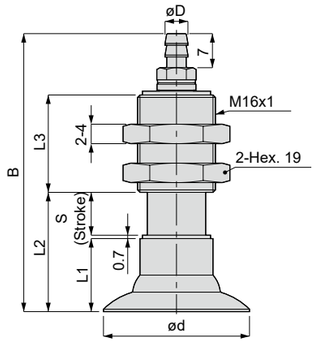


Unit: mm

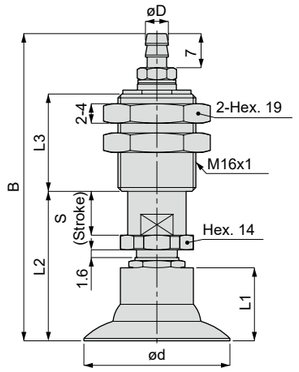
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10L□-4T	10	2.5	56.1	14	23.7	20	9	0.9 to 2.7	20
VSP-HC10L□-6T		4							
VSP-HC10-10L□-4T		2.5	62.9		29.1	21.5	10	1.0 to 2.4	24
VSP-HC10-10L□-6T		4							
VSP-HC10-15L□-4T		2.5	72.9		34.1	26.5	15	1.0 to 2.7	26
VSP-HC10-15L□-6T		4							
VSP-HC10-20L□-4T		2.5	82.9		39.1	31.5	20	1.0 to 3.0	28
VSP-HC10-20L□-6T		4							
VSP-HC10-25L□-4T		2.5	93.4		44.1	37	25	1.0 to 3.0	31
VSP-HC10-25L□-6T		4							
VSP-HC10-30L□-4T		2.5	104.4		49.1	43	30	1.0 to 3.0	33
VSP-HC10-30L□-6T		4							
VSP-HC10-40L□-4T		2.5	126.4		59.1	55	40	1.0 to 3.0	37
VSP-HC10-40L□-6T		4							
VSP-HC10-50L□-4T		2.5	147.9		69.1	66.5	50	1.0 to 3.1	41
VSP-HC10-50L□-6T		4							
VSP-HC15L□-4T	15	2.5	56.1	14	23.7	20	9	0.9 to 2.7	20
VSP-HC15L□-6T		4							
VSP-HC15-10L□-4T		2.5	62.9		29.1	21.5	10	1.0 to 2.4	24
VSP-HC15-10L□-6T		4							
VSP-HC15-15L□-4T		2.5	72.9		34.1	26.5	15	1.0 to 2.7	26
VSP-HC15-15L□-6T		4							
VSP-HC15-20L□-4T		2.5	82.9		39.1	31.5	20	1.0 to 3.0	28
VSP-HC15-20L□-6T		4							
VSP-HC15-25L□-4T		2.5	93.4		44.1	37	25	1.0 to 3.0	31
VSP-HC15-25L□-6T		4							
VSP-HC15-30L□-4T		2.5	104.4		49.1	43	30	1.0 to 3.0	33
VSP-HC15-30L□-6T		4							
VSP-HC15-40L□-4T		2.5	126.4		59.1	55	40	1.0 to 3.0	37
VSP-HC15-40L□-6T		4							
VSP-HC15-50L□-4T		2.5	147.9		69.1	66.5	50	1.0 to 3.1	41
VSP-HC15-50L□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20 to 40L□-4T/6T



●VSP-HC20 to 40-□L□-4T/6T

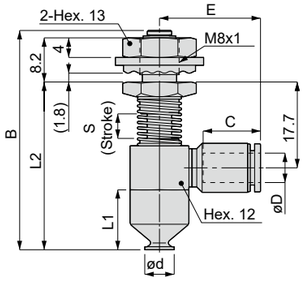


Unit: mm

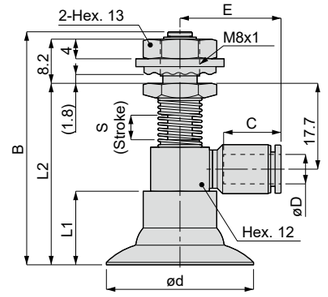
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20L□-4T	20	2.5	57.1	15	24.7	20	9	0.9 to 2.7	21
VSP-HC20L□-6T		4							
VSP-HC20-10L□-4T		2.5	65.4		30	21.5	10	1.0 to 2.4	26
VSP-HC20-10L□-6T		4							
VSP-HC20-15L□-4T		2.5	75.4		35	26.5	15	1.0 to 2.7	28
VSP-HC20-15L□-6T		4							
VSP-HC20-20L□-4T		2.5	85.4		40	31.5	20	1.0 to 3.0	30
VSP-HC20-20L□-6T		4							
VSP-HC20-25L□-4T		2.5	95.9		45	37	25	1.0 to 3.0	32
VSP-HC20-25L□-6T		4							
VSP-HC20-30L□-4T		2.5	106.9		50	43	30	1.0 to 3.0	35
VSP-HC20-30L□-6T		4							
VSP-HC20-40L□-4T		2.5	128.9		60	55	40	1.0 to 3.0	39
VSP-HC20-40L□-6T		4							
VSP-HC20-50L□-4T		2.5	150.4		70	66.5	50	1.0 to 3.1	43
VSP-HC20-50L□-6T		4							
VSP-HC30L□-4T	30	2.5	57.1	15	24.7	20	9	0.9 to 2.7	23
VSP-HC30L□-6T		4							
VSP-HC30-10L□-4T		2.5	65.4		30	21.5	10	1.0 to 2.4	28
VSP-HC30-10L□-6T		4							
VSP-HC30-15L□-4T		2.5	75.4		35	26.5	15	1.0 to 2.7	30
VSP-HC30-15L□-6T		4							
VSP-HC30-20L□-4T		2.5	85.4		40	31.5	20	1.0 to 3.0	32
VSP-HC30-20L□-6T		4							
VSP-HC30-25L□-4T		2.5	95.9		45	37	25	1.0 to 3.0	34
VSP-HC30-25L□-6T		4							
VSP-HC30-30L□-4T		2.5	106.9		50	43	30	1.0 to 3.0	37
VSP-HC30-30L□-6T		4							
VSP-HC30-40L□-4T		2.5	128.9		60	55	40	1.0 to 3.0	41
VSP-HC30-40L□-6T		4							
VSP-HC30-50L□-4T		2.5	150.4		70	66.5	50	1.0 to 3.1	45
VSP-HC30-50L□-6T		4							
VSP-HC40L□-4T	40	2.5	57.1	15	24.7	20	9	0.9 to 2.7	27
VSP-HC40L□-6T		4							
VSP-HC40-10L□-4T		2.5	65.4		30	21.5	10	1.0 to 2.4	32
VSP-HC40-10L□-6T		4							
VSP-HC40-15L□-4T		2.5	75.4		35	26.5	15	1.0 to 2.7	34
VSP-HC40-15L□-6T		4							
VSP-HC40-20L□-4T		2.5	85.4		40	31.5	20	1.0 to 3.0	36
VSP-HC40-20L□-6T		4							
VSP-HC40-25L□-4T		2.5	95.9		45	37	25	1.0 to 3.0	38
VSP-HC40-25L□-6T		4							
VSP-HC40-30L□-4T		2.5	106.9		50	43	30	1.0 to 3.0	41
VSP-HC40-30L□-6T		4							
VSP-HC40-40L□-4T		2.5	128.9		60	55	40	1.0 to 3.0	45
VSP-HC40-40L□-6T		4							
VSP-HC40-50L□-4T		2.5	150.4		70	66.5	50	1.0 to 3.1	49
VSP-HC40-50L□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD4 to 15L□-2/4/6



●VSP-HD20 to 40L□-2/4/6

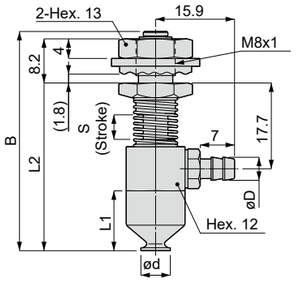


Unit: mm

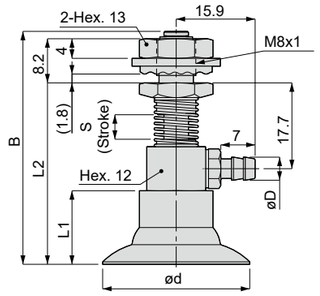
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD4L□-2	4	1.8	44.7	12.2	34.4	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD4L□-4		4				11.2	18.8			30
VSP-HD4L□-6		6				11.9	20.6			31
VSP-HD6L□-2	6	1.8	44.7	12.2	34.4	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD6L□-4		4				11.2	18.8			30
VSP-HD6L□-6		6				11.9	20.6			31
VSP-HD8L□-2	8	1.8	44.7	12.2	34.4	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD8L□-4		4				11.2	18.8			30
VSP-HD8L□-6		6				11.9	20.6			31
VSP-HD10L□-2	10	1.8	46.5	14	36.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD10L□-4		4				11.2	18.8			30
VSP-HD10L□-6		6				11.9	20.6			31
VSP-HD15L□-2	15	1.8	46.5	14	36.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD15L□-4		4				11.2	18.8			30
VSP-HD15L□-6		6				11.9	20.6			31
VSP-HD20L□-2	20	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD20L□-4		4				11.2	18.8			32
VSP-HD20L□-6		6				11.9	20.6			33
VSP-HD30L□-2	30	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HD30L□-4		4				11.2	18.8			34
VSP-HD30L□-6		6				11.9	20.6			35
VSP-HD40L□-2	40	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HD40L□-4		4				11.2	18.8			38
VSP-HD40L□-6		6				11.9	20.6			39

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD4 to 15L□-4T/6T



●VSP-HD20 to 40L□-4T/6T

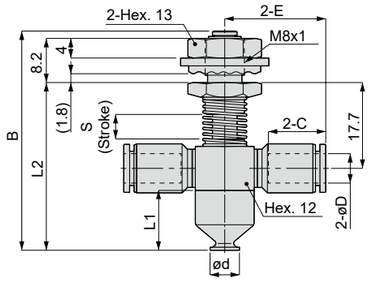


Unit: mm

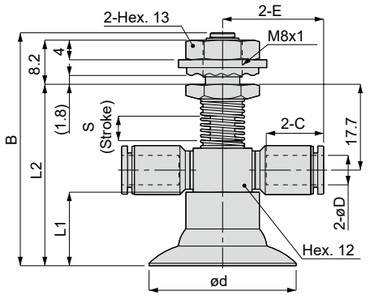
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD4L□-4T	4	2.5	44.7	12.2	34.4	5.2	1.6 to 2.9	27
VSP-HD4L□-6T		4						
VSP-HD6L□-4T	6	2.5	44.7	12.2	34.4	5.2	1.6 to 2.9	30
VSP-HD6L□-6T		4						
VSP-HD8L□-4T	8	2.5	44.7	12.2	34.4	5.2	1.6 to 2.9	30
VSP-HD8L□-6T		4						
VSP-HD10L□-4T	10	2.5	46.5	14	36.2	5.2	1.6 to 2.9	30
VSP-HD10L□-6T		4						
VSP-HD15L□-4T	15	2.5	46.5	14	36.2	5.2	1.6 to 2.9	30
VSP-HD15L□-6T		4						
VSP-HD20L□-4T	20	2.5	47.5	15	37.2	5.2	1.6 to 2.9	32
VSP-HD20L□-6T		4						
VSP-HD30L□-4T	30	2.5	47.5	15	37.2	5.2	1.6 to 2.9	33
VSP-HD30L□-6T		4						
VSP-HD40L□-4T	40	2.5	47.5	15	37.2	5.2	1.6 to 2.9	37
VSP-HD40L□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW4 to 15L□-2/4/6



●VSP-HDW20 to 40L□-2/4/6

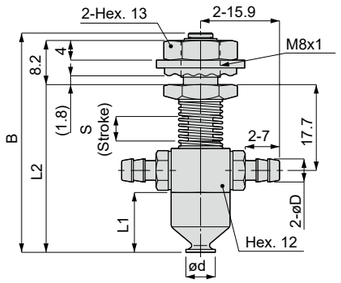


Unit: mm

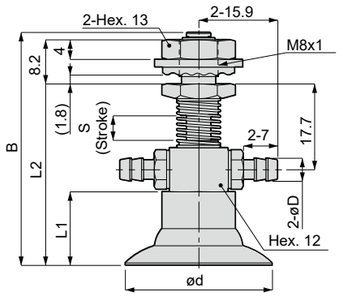
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW4L□-2	4	1.8	44.7	12.2	34.4	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW4L□-4		4				11.2	18.8			30
VSP-HDW4L□-6		6				11.9	20.6			31
VSP-HDW6L□-2	6	1.8	44.7	12.2	34.4	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW6L□-4		4				11.2	18.8			30
VSP-HDW6L□-6		6				11.9	20.6			31
VSP-HDW8L□-2	8	1.8	44.7	12.2	34.4	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW8L□-4		4				11.2	18.8			30
VSP-HDW8L□-6		6				11.9	20.6			31
VSP-HDW10L□-2	10	1.8	46.5	14	36.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW10L□-4		4				11.2	18.8			30
VSP-HDW10L□-6		6				11.9	20.6			31
VSP-HDW15L□-2	15	1.8	46.5	14	36.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW15L□-4		4				11.2	18.8			30
VSP-HDW15L□-6		6				11.9	20.6			31
VSP-HDW20L□-2	20	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HDW20L□-4		4				11.2	18.8			32
VSP-HDW20L□-6		6				11.9	20.6			33
VSP-HDW30L□-2	30	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW30L□-4		4				11.2	18.8			34
VSP-HDW30L□-6		6				11.9	20.6			35
VSP-HDW40L□-2	40	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HDW40L□-4		4				11.2	18.8			38
VSP-HDW40L□-6		6				11.9	20.6			39

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW4 to 15L□-4T/6T



●VSP-HDW20 to 40L□-4T/6T

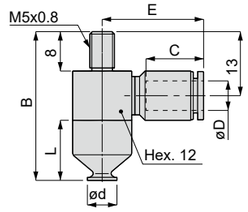


Unit: mm

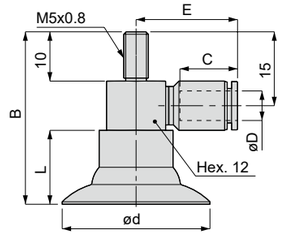
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW4L□-4T	4	2.5	44.7	12.2	34.4	5.2	1.6 to 2.9	27
VSP-HDW4L□-6T		4						
VSP-HDW6L□-4T	6	2.5	44.7	12.2	34.4	5.2	1.6 to 2.9	30
VSP-HDW6L□-6T		4						
VSP-HDW8L□-4T	8	2.5	44.7	12.2	34.4	5.2	1.6 to 2.9	30
VSP-HDW8L□-6T		4						
VSP-HDW10L□-4T	10	2.5	46.5	14	36.2	5.2	1.6 to 2.9	30
VSP-HDW10L□-6T		4						
VSP-HDW15L□-4T	15	2.5	46.5	14	36.2	5.2	1.6 to 2.9	30
VSP-HDW15L□-6T		4						
VSP-HDW20L□-4T	20	2.5	47.5	15	37.2	5.2	1.6 to 2.9	32
VSP-HDW20L□-6T		4						
VSP-HDW30L□-4T	30	2.5	47.5	15	37.2	5.2	1.6 to 2.9	33
VSP-HDW30L□-6T		4						
VSP-HDW40L□-4T	40	2.5	47.5	15	37.2	5.2	1.6 to 2.9	37
VSP-HDW40L□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE4 to 15L□-2/4/6



●VSP-HE20 to 40L□-2/4/6

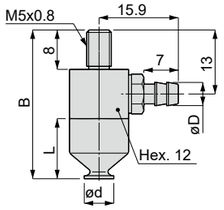


Unit: mm

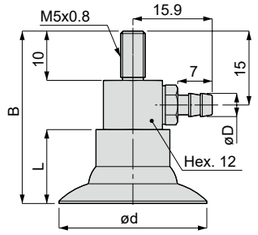
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE4L□-2	4	1.8	30.2	12.2	8.4	14.7	14
VSP-HE4L□-4		4			11.2	18.8	15
VSP-HE4L□-6		6			11.9	20.6	16
VSP-HE6L□-2	6	1.8	30.2	12.2	8.4	14.7	15
VSP-HE6L□-4		4			11.2	18.8	16
VSP-HE6L□-6		6			11.9	20.6	17
VSP-HE8L□-2	8	1.8	30.2	12.2	8.4	14.7	15
VSP-HE8L□-4		4			11.2	18.8	16
VSP-HE8L□-6		6			11.9	20.6	17
VSP-HE10L□-2	10	1.8	32	12.2	8.4	14.7	14
VSP-HE10L□-4		4			11.2	18.8	15
VSP-HE10L□-6		6			11.9	20.6	17
VSP-HE15L□-2	15	1.8	32	14	8.4	14.7	14
VSP-HE15L□-4		4			11.2	18.8	15
VSP-HE15L□-6		6			11.9	20.6	17
VSP-HE20L□-2	20	1.8	35	14	8.4	14.7	17
VSP-HE20L□-4		4			11.2	18.8	18
VSP-HE20L□-6		6			11.9	20.6	19
VSP-HE30L□-2	30	1.8	35	15	8.4	14.7	19
VSP-HE30L□-4		4			11.2	18.8	20
VSP-HE30L□-6		6			11.9	20.6	21
VSP-HE40L□-2	40	1.8	35	15	8.4	14.7	23
VSP-HE40L□-4		4			11.2	18.8	24
VSP-HE40L□-6		6			11.9	20.6	25

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE4 to 15L□-4T/6T



●VSP-HE20 to 40L□-4T/6T

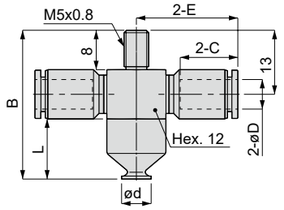


Unit: mm

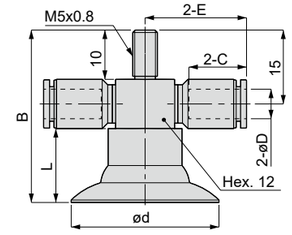
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE4L□-4T	4	2.5	30.2	12.2	13
VSP-HE4L□-6T		4			
VSP-HE6L□-4T	6	2.5	30.2	12.2	15
VSP-HE6L□-6T		4			
VSP-HE8L□-4T	8	2.5	30.2	12.2	15
VSP-HE8L□-6T		4			
VSP-HE10L□-4T	10	2.5	32	14	15
VSP-HE10L□-6T		4			
VSP-HE15L□-4T	15	2.5	32	14	15
VSP-HE15L□-6T		4			
VSP-HE20L□-4T	20	2.5	35	15	18
VSP-HE20L□-6T		4			
VSP-HE30L□-4T	30	2.5	35	15	19
VSP-HE30L□-6T		4			
VSP-HE40L□-4T	40	2.5	35	15	23
VSP-HE40L□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW4 to 15L□-2/4/6



●VSP-HEW20 to 40L□-2/4/6

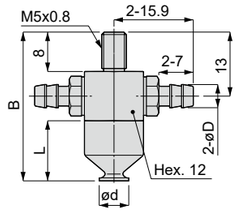


Unit: mm

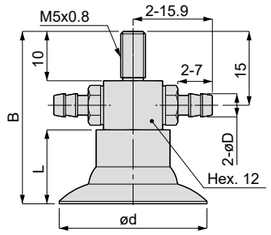
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW4L□-2	4	1.8	30.2	12.2	8.4	14.7	14
VSP-HEW4L□-4		4			11.2	18.8	15
VSP-HEW4L□-6		6			11.9	20.6	16
VSP-HEW6L□-2	6	1.8	30.2	12.2	8.4	14.7	15
VSP-HEW6L□-4		4			11.2	18.8	16
VSP-HEW6L□-6		6			11.9	20.6	17
VSP-HEW8L□-2	8	1.8	30.2	12.2	8.4	14.7	15
VSP-HEW8L□-4		4			11.2	18.8	16
VSP-HEW8L□-6		6			11.9	20.6	17
VSP-HEW10L□-2	10	1.8	32	12.2	8.4	14.7	15
VSP-HEW10L□-4		4			11.2	18.8	16
VSP-HEW10L□-6		6			11.9	20.6	17
VSP-HEW15L□-2	15	1.8	32	14	8.4	14.7	15
VSP-HEW15L□-4		4			11.2	18.8	16
VSP-HEW15L□-6		6			11.9	20.6	17
VSP-HEW20L□-2	20	1.8	35	14	8.4	14.7	17
VSP-HEW20L□-4		4			11.2	18.8	18
VSP-HEW20L□-6		6			11.9	20.6	19
VSP-HEW30L□-2	30	1.8	35	15	8.4	14.7	19
VSP-HEW30L□-4		4			11.2	18.8	20
VSP-HEW30L□-6		6			11.9	20.6	21
VSP-HEW40L□-2	40	1.8	35	15	8.4	14.7	23
VSP-HEW40L□-4		4			11.2	18.8	24
VSP-HEW40L□-6		6			11.9	20.6	25

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW4 to 15L□-4T/6T



●VSP-HEW20 to 40L□-4T/6T

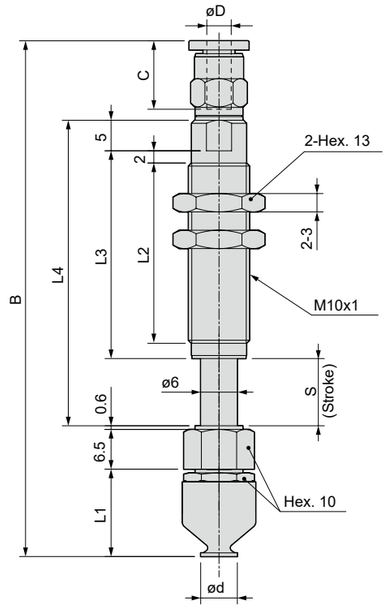


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW4L□-4T	4	2.5	30.2	12.2	13
VSP-HEW4L□-6T		4			
VSP-HEW6L□-4T	6	2.5	30.2	12.2	15
VSP-HEW6L□-6T		4			
VSP-HEW8L□-4T	8	2.5	30.2	12.2	15
VSP-HEW8L□-6T		4			
VSP-HEW10L□-4T	10	2.5	32	14	15
VSP-HEW10L□-6T		4			
VSP-HEW15L□-4T	15	2.5	32	14	15
VSP-HEW15L□-6T		4			
VSP-HEW20L□-4T	20	2.5	35	15	18
VSP-HEW20L□-6T		4			
VSP-HEW30L□-4T	30	2.5	35	15	19
VSP-HEW30L□-6T		4			
VSP-HEW40L□-4T	40	2.5	35	15	23
VSP-HEW40L□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC4 to 15-□L□-4



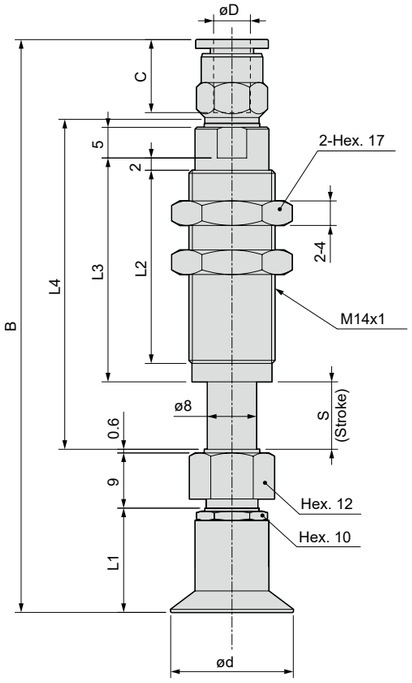
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC4-2L□-4	4	4	68.4	12.2	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC4-5L□-4			74.4		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC4-10L□-4			84.4		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC4-15L□-4			94.4		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC4-20L□-4			104.4		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC6-2L□-4	6	4	68.4	12.2	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC6-5L□-4			74.4		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC6-10L□-4			84.4		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC6-15L□-4			94.4		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC6-20L□-4			104.4		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC8-2L□-4	8	4	68.4	12.2	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC8-5L□-4			74.4		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC8-10L□-4			84.4		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC8-15L□-4			94.4		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC8-20L□-4			104.4		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC10-2L□-4	10	4	70.2	14	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC10-5L□-4			76.2		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC10-10L□-4			86.2		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC10-15L□-4			96.2		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC10-20L□-4			106.2		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC15-2L□-4	15	4	70.2	14	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC15-5L□-4			76.2		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC15-10L□-4			86.2		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC15-15L□-4			96.2		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC15-20L□-4			106.2		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC20 to 40-□L□-4/6



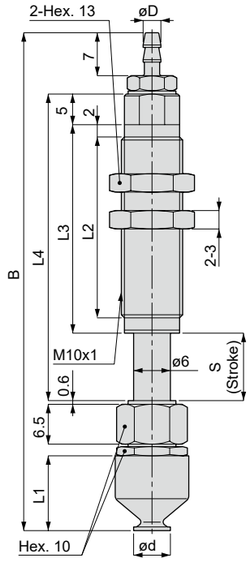
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5L□-4	20	4	82.1	15	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57
VSP-LFC20-5L□-6		6	83.4					11.9			58
VSP-LFC20-10L□-4		4	92.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59
VSP-LFC20-10L□-6		6	93.4					11.9			60
VSP-LFC20-15L□-4		4	102.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62
VSP-LFC20-15L□-6		6	103.4					11.9			63
VSP-LFC20-20L□-4		4	112.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65
VSP-LFC20-20L□-6		6	113.4					11.9			66
VSP-LFC30-5L□-4	30	4	82.1	15	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	59
VSP-LFC30-5L□-6		6	83.4					11.9			60
VSP-LFC30-10L□-4		4	92.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	61
VSP-LFC30-10L□-6		6	93.4					11.9			62
VSP-LFC30-15L□-4		4	102.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	64
VSP-LFC30-15L□-6		6	103.4					11.9			65
VSP-LFC30-20L□-4		4	112.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	67
VSP-LFC30-20L□-6		6	113.4					11.9			68
VSP-LFC40-5L□-4	40	4	82.1	15	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	64
VSP-LFC40-5L□-6		6	83.4					11.9			65
VSP-LFC40-10L□-4		4	92.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	66
VSP-LFC40-10L□-6		6	93.4					11.9			67
VSP-LFC40-15L□-4		4	102.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	69
VSP-LFC40-15L□-6		6	103.4					11.9			70
VSP-LFC40-20L□-4		4	112.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	72
VSP-LFC40-20L□-6		6	113.4					11.9			73

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC4 to 8-□L□-4T/6T



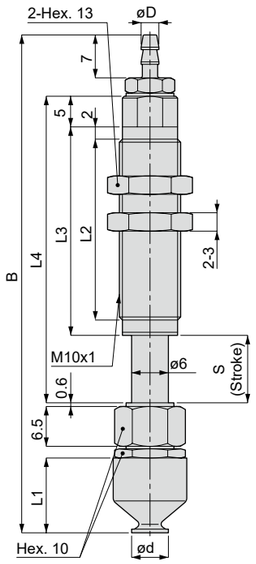
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC4-2L□-4T	4	2.5	65.5	12.2	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC4-2L□-6T		4								
VSP-LFC4-5L□-4T		2.5	71.5		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC4-5L□-6T		4								
VSP-LFC4-10L□-4T		2.5	81.5		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC4-10L□-6T		4								
VSP-LFC4-15L□-4T		2.5	91.5		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC4-15L□-6T		4								
VSP-LFC4-20L□-4T		2.5	101.5		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC4-20L□-6T		4								
VSP-LFC6-2L□-4T	6	2.5	65.5	12.2	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC6-2L□-6T		4								
VSP-LFC6-5L□-4T		2.5	71.5		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC6-5L□-6T		4								
VSP-LFC6-10L□-4T		2.5	81.5		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC6-10L□-6T		4								
VSP-LFC6-15L□-4T		2.5	91.5		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC6-15L□-6T		4								
VSP-LFC6-20L□-4T		2.5	101.5		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC6-20L□-6T		4								
VSP-LFC8-2L□-4T	8	2.5	65.5	12.2	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC8-2L□-6T		4								
VSP-LFC8-5L□-4T		2.5	71.5		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC8-5L□-6T		4								
VSP-LFC8-10L□-4T		2.5	81.5		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC8-10L□-6T		4								
VSP-LFC8-15L□-4T		2.5	91.5		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC8-15L□-6T		4								
VSP-LFC8-20L□-4T		2.5	101.5		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC8-20L□-6T		4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC10, 15-□L□-4T/6T



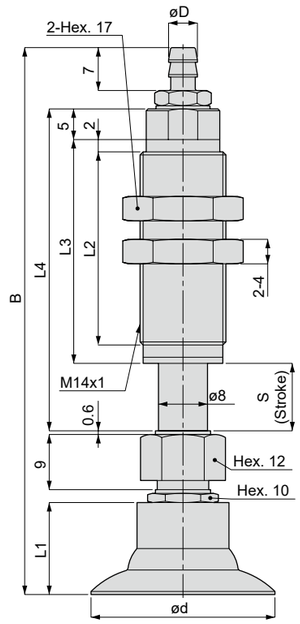
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2L□-4T	10	2.5	67.3	14	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC10-2L□-6T		4								
VSP-LFC10-5L□-4T		2.5	73.3		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-5L□-6T		4								
VSP-LFC10-10L□-4T		2.5	83.3		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-10L□-6T		4								
VSP-LFC10-15L□-4T		2.5	93.3		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-15L□-6T		4								
VSP-LFC10-20L□-4T		2.5	103.3		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC10-20L□-6T		4								
VSP-LFC15-2L□-4T	15	2.5	67.3	14	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC15-2L□-6T		4								
VSP-LFC15-5L□-4T		2.5	73.3		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC15-5L□-6T		4								
VSP-LFC15-10L□-4T		2.5	83.3		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC15-10L□-6T		4								
VSP-LFC15-15L□-4T		2.5	93.3		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC15-15L□-6T		4								
VSP-LFC15-20L□-4T		2.5	103.3		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC15-20L□-6T		4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC20 to 40-□L□-4T/6T



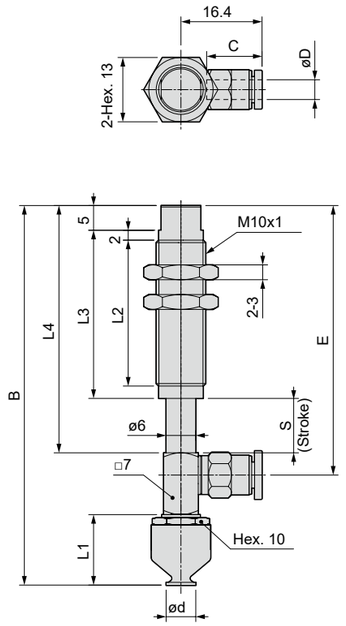
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC20-5L□-4T	20	2.5	79.2	15	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	52
VSP-LFC20-5L□-6T		4								
VSP-LFC20-10L□-4T		2.5	89.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	54
VSP-LFC20-10L□-6T		4								
VSP-LFC20-15L□-4T		2.5	99.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	57
VSP-LFC20-15L□-6T		4								
VSP-LFC20-20L□-4T		2.5	109.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	60
VSP-LFC20-20L□-6T		4								
VSP-LFC30-5L□-4T	30	2.5	79.2	15	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	54
VSP-LFC30-5L□-6T		4								
VSP-LFC30-10L□-4T		2.5	89.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	56
VSP-LFC30-10L□-6T		4								
VSP-LFC30-15L□-4T		2.5	99.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	59
VSP-LFC30-15L□-6T		4								
VSP-LFC30-20L□-4T		2.5	109.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	62
VSP-LFC30-20L□-6T		4								
VSP-LFC40-5L□-4T	40	2.5	79.2	15	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	59
VSP-LFC40-5L□-6T		4								
VSP-LFC40-10L□-4T		2.5	89.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	61
VSP-LFC40-10L□-6T		4								
VSP-LFC40-15L□-4T		2.5	99.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	64
VSP-LFC40-15L□-6T		4								
VSP-LFC40-20L□-4T		2.5	109.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	67
VSP-LFC40-20L□-6T		4								

* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD4 to 15-□L□-4

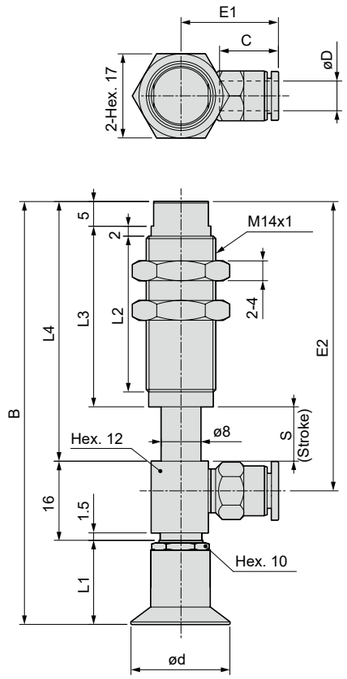


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD4-5L□-4	4	4	66.8	12.2	24.5	29	40	11.2	44.5	5	1.3 to 2.4	28
VSP-LFD4-10L□-4			76.8		29.5	34	50		54.5	10	1.3 to 3.3	30
VSP-LFD4-15L□-4			86.8		34.5	39	60		64.5	15	1.3 to 4.2	32
VSP-LFD4-20L□-4			96.8		39.5	44	70		74.5	20	1.3 to 5.1	34
VSP-LFD6-5L□-4	6	4	66.8	12.2	24.5	29	40	11.2	44.5	5	1.3 to 2.4	28
VSP-LFD6-10L□-4			76.8		29.5	34	50		54.5	10	1.3 to 3.3	30
VSP-LFD6-15L□-4			86.8		34.5	39	60		64.5	15	1.3 to 4.2	32
VSP-LFD6-20L□-4			96.8		39.5	44	70		74.5	20	1.3 to 5.1	34
VSP-LFD8-5L□-4	8	4	66.8	12.2	24.5	29	40	11.2	44.5	5	1.3 to 2.4	28
VSP-LFD8-10L□-4			76.8		29.5	34	50		54.5	10	1.3 to 3.3	30
VSP-LFD8-15L□-4			86.8		34.5	39	60		64.5	15	1.3 to 4.2	32
VSP-LFD8-20L□-4			96.8		39.5	44	70		74.5	20	1.3 to 5.1	34
VSP-LFD10-5L□-4	10	4	68.6	14	24.5	29	40	11.2	44.5	5	1.3 to 2.4	28
VSP-LFD10-10L□-4			78.6		29.5	34	50		54.5	10	1.3 to 3.3	30
VSP-LFD10-15L□-4			88.6		34.5	39	60		64.5	15	1.3 to 4.2	32
VSP-LFD10-20L□-4			98.6		39.5	44	70		74.5	20	1.3 to 5.1	34
VSP-LFD15-5L□-4	15	4	68.6	14	24.5	29	40	11.2	44.5	5	1.3 to 2.4	28
VSP-LFD15-10L□-4			78.6		29.5	34	50		54.5	10	1.3 to 3.3	30
VSP-LFD15-15L□-4			88.6		34.5	39	60		64.5	15	1.3 to 4.2	32
VSP-LFD15-20L□-4			98.6		39.5	44	70		74.5	20	1.3 to 5.1	34

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD20 to 40-□L□-4/6

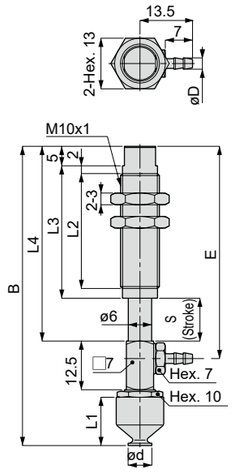


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5L□-4	20	4	75.5	15	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58
VSP-LFD20-5L□-6		6						11.9	19.7				59
VSP-LFD20-10L□-4		4	85.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62
VSP-LFD20-10L□-6		6						11.9	19.7				63
VSP-LFD20-15L□-4		4	95.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66
VSP-LFD20-15L□-6		6						11.9	19.7				67
VSP-LFD20-20L□-4		4	105.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70
VSP-LFD20-20L□-6		6						11.9	19.7				71
VSP-LFD30-5L□-4	30	4	75.5	15	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	60
VSP-LFD30-5L□-6		6						11.9	19.7				61
VSP-LFD30-10L□-4		4	85.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	64
VSP-LFD30-10L□-6		6						11.9	19.7				65
VSP-LFD30-15L□-4		4	95.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	68
VSP-LFD30-15L□-6		6						11.9	19.7				69
VSP-LFD30-20L□-4		4	105.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	72
VSP-LFD30-20L□-6		6						11.9	19.7				73
VSP-LFD40-5L□-4	40	4	75.5	15	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	65
VSP-LFD40-5L□-6		6						11.9	19.7				66
VSP-LFD40-10L□-4		4	85.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	69
VSP-LFD40-10L□-6		6						11.9	19.7				70
VSP-LFD40-15L□-4		4	95.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	73
VSP-LFD40-15L□-6		6						11.9	19.7				74
VSP-LFD40-20L□-4		4	105.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	77
VSP-LFD40-20L□-6		6						11.9	19.7				78

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD4 to 15-□L□-4T/6T

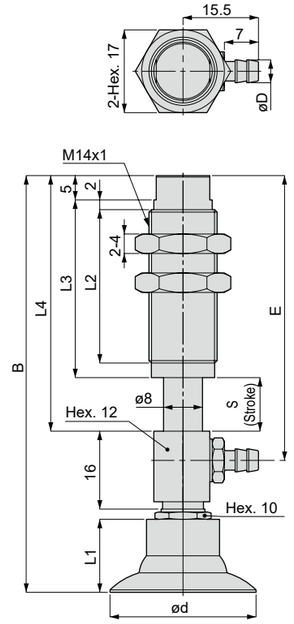


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD4-5L□-4T	4	2.5	66.8	12.2	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD4-5L□-6T		4									
VSP-LFD4-10L□-4T		2.5	76.8		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD4-10L□-6T		4									
VSP-LFD4-15L□-4T		2.5	86.8		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD4-15L□-6T		4									
VSP-LFD4-20L□-4T		2.5	96.8		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD4-20L□-6T		4									
VSP-LFD6-5L□-4T	6	2.5	66.8	12.2	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD6-5L□-6T		4									
VSP-LFD6-10L□-4T		2.5	76.8		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD6-10L□-6T		4									
VSP-LFD6-15L□-4T		2.5	86.8		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD6-15L□-6T		4									
VSP-LFD6-20L□-4T		2.5	96.8		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD6-20L□-6T		4									
VSP-LFD8-5L□-4T	8	2.5	66.8	12.2	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD8-5L□-6T		4									
VSP-LFD8-10L□-4T		2.5	76.8		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD8-10L□-6T		4									
VSP-LFD8-15L□-4T		2.5	86.8		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD8-15L□-6T		4									
VSP-LFD8-20L□-4T		2.5	96.8		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD8-20L□-6T		4									
VSP-LFD10-5L□-4T	10	2.5	68.6	14	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD10-5L□-6T		4									
VSP-LFD10-10L□-4T		2.5	78.6		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD10-10L□-6T		4									
VSP-LFD10-15L□-4T		2.5	88.6		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD10-15L□-6T		4									
VSP-LFD10-20L□-4T		2.5	98.6		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD10-20L□-6T		4									
VSP-LFD15-5L□-4T	15	2.5	68.6	14	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD15-5L□-6T		4									
VSP-LFD15-10L□-4T		2.5	78.6		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD15-10L□-6T		4									
VSP-LFD15-15L□-4T		2.5	88.6		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD15-15L□-6T		4									
VSP-LFD15-20L□-4T		2.5	98.6		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD15-20L□-6T		4									

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD20 to 40-□L□-4T/6T

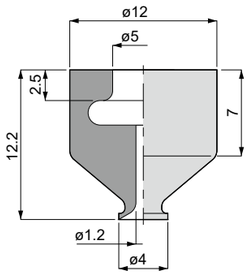


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD20-5L□-4T	20	2.5	75.5	15	26.5	31.5	42.5	48.5	5	4.5 to 6.5	54
VSP-LFD20-5L□-6T		4									
VSP-LFD20-10L□-4T		2.5	85.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57
VSP-LFD20-10L□-6T		4									
VSP-LFD20-15L□-4T		2.5	95.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61
VSP-LFD20-15L□-6T		4									
VSP-LFD20-20L□-4T		2.5	105.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65
VSP-LFD20-20L□-6T		4									
VSP-LFD30-5L□-4T	30	2.5	75.5	15	26.5	31.5	42.5	48.5	5	4.5 to 6.5	56
VSP-LFD30-5L□-6T		4									
VSP-LFD30-10L□-4T		2.5	85.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	59
VSP-LFD30-10L□-6T		4									
VSP-LFD30-15L□-4T		2.5	95.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	63
VSP-LFD30-15L□-6T		4									
VSP-LFD30-20L□-4T		2.5	105.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	67
VSP-LFD30-20L□-6T		4									
VSP-LFD40-5L□-4T	40	2.5	75.5	15	26.5	31.5	42.5	48.5	5	4.5 to 6.5	61
VSP-LFD40-5L□-6T		4									
VSP-LFD40-10L□-4T		2.5	85.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	64
VSP-LFD40-10L□-6T		4									
VSP-LFD40-15L□-4T		2.5	95.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	68
VSP-LFD40-15L□-6T		4									
VSP-LFD40-20L□-4T		2.5	105.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	72
VSP-LFD40-20L□-6T		4									

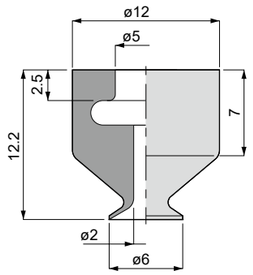
Pad Rubber Only External Dimension Diagram

●VSPG-4L□



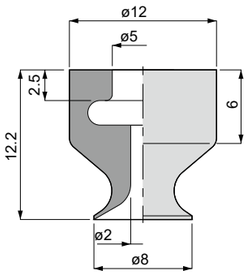
Weight: 1.2 g

●VSPG-6L□



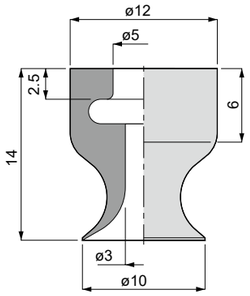
Weight: 1.2 g

●VSPG-8L□



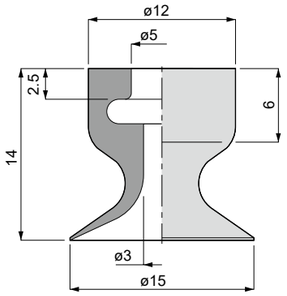
Weight: 1.1 g

●VSPG-10L□



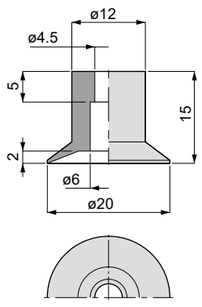
Weight: 1.2 g

●VSPG-15L□



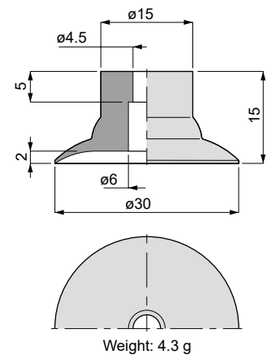
Weight: 1.2 g

●VSPG-20L□



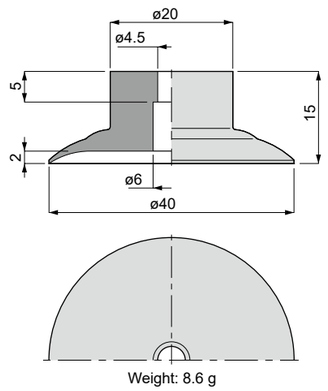
Weight: 2 g

●VSPG-30L□



Weight: 4.3 g

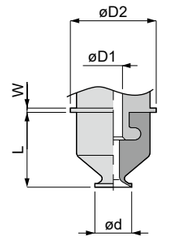
●VSPG-40L□



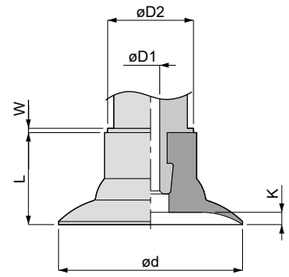
Weight: 8.6 g

Detailed Diagram of Pad and Holder Connection Part

●VSPG-4 to 15L□A



●VSPG-20 to 40L□A



Unit: mm

Model No.	Pad Diameter ød	L	Lip Internal Height K	øD1	øD2	W
VSPG-4L□A	4	12.2	-	3	14	0.7
VSPG-6L□A	6	12.2	-	3	14	0.7
VSPG-8L□A	8	12.2	-	3	14	0.7
VSPG-10L□A	10	14	-	3	14	0.7
VSPG-15L□A	15	14	-	3	14	0.7
VSPG-20L□A	20	15	2	3	14	0.7
VSPG-30L□A	30	15	2	3	14	0.7
VSPG-40L□A	40	15	2	3	14	0.7

* The D2 and W dimensions in the dimension table are only for the VSP-HC type.

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Soft Type, VSP-□L□Series

Design / Selection

Caution

▪The VPHC type holder is not conductive. When using suction pads made of conductive material, take measures to discharge electricity directly from the pad rubber.

▪When replacing the pad adapter of the soft type, check the suction pad configuration diagram in the main text, refer to the recommended tightening torque below, use appropriate tools, utilize the holder outer diameter hexagonal part, and confirm there is no looseness after tightening.

●Recommended Tightening Torque

Pad Thread Size (mm)	Tightening Torque
M4x0.7	0.7 to 0.8 N·m
M6x1	1.5 to 2.0 N·m

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad Soft Bellows Type

VSP-□LB□ Series

Suction pad with excellent pad rubber flexibility and a bellows structure that softly conforms to the workpiece.

RoHS

The bellows part expands and contracts on easily scratched or tilted molded products, reducing the load on the workpiece.

Abundant holder variations

Shape 16 types
- Standard....5 types
- Compact... Class 4
- Low dust generation ..... 2 types
- Lightweight. 3 types
- Low back.... 2 types

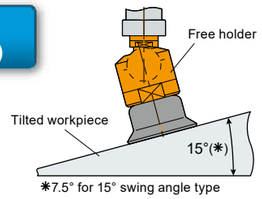
Piping Connection 5 types
- Push-in fitting (ø1.8 to ø6)3 types
- Barbed fitting (ø4, ø6) ..... 2 types

Stroke 12 types
2 mm to 50 mm
(Depends on pad diameter, holder type)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

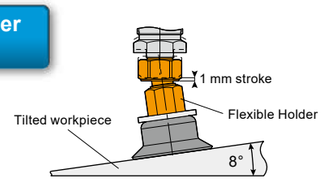
Free holder (F1:30°, F2:15°)



✱7.5° for 15° swing angle type

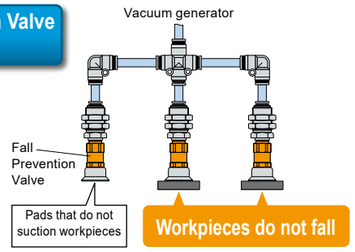
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

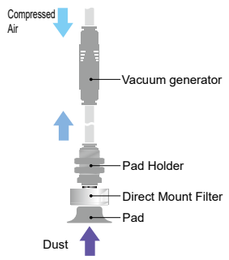
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



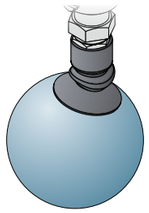
Pad surface treatment (option) with special processing to reduce adsorption marks is available

	-NF	-SF	-DL	-ER	-FG
Surface Treatment	Fiber Raised: Nylon	Fiber Raised: Silk	Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
Compatible Material	Silicone	Silicone	Silicone Conductive Silicone	Nitrile Nitrile Conductive NBR	Silicone Conductive Silicone
Features	Fibers(nylon or silk) on the pad surface prevent direct contact with the workpiece, thus preventing rubber material transfer.		Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

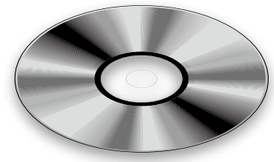
Softness that doesn't scratch the workpiece + 1-stage bellows structure

Available from rubber hardness A40. The lip is soft and closely follows workpieces with irregular shapes. It also has a bellows structure, enabling it to follow changes in the height of the contacting workpiece and surface inclination.



Recommended Workpiece

Easily scratched workpieces such as molded products



Pad Diameter

5 types 6 | 8 | 10 | 15 | 20

Pad Material

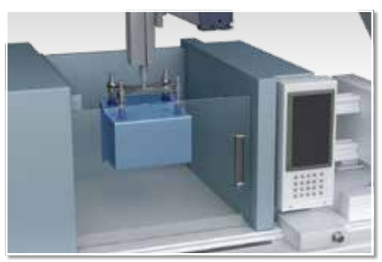
7 types
- Nitrile
- Silicone
- Urethane
- Conductive Silicone
- Conductive NBR (Low Resistance-type)
- HNBR
- EPDM

*Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Delicate resin molded products, etc.

Easily scratched workpieces can be gently unloaded. Furthermore, the bellows structure follows height differences and workpiece inclination.



Transport of pharmaceuticals, etc.

The bellows structure expands and contracts on easily scratched or tilted workpieces, reducing the load on the workpiece.

Model No. Notation

●Soft Bellows Type

Suction Pad

VSP – C – 20 – -20 – LB – N – -ER – 6 – [ ] – F1 – V – T1

VSP	C	20	-20	LB	N	-ER	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Size/Shape	❽ Buffer Load	❾ Pad Swing	❿ Drop Prevention Valve	⓫ Direct Mount Filter

Pad Rubber Only

VSPG – 20 — LB – N – -ER

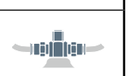
VSPG	20	LB	N	-ER
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment

Pad Rubber + Set with Fixing Screw

VSPG – 20 — LB – N – -ER A

VSPG	20	LB	N	-ER	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
	Lightweight	Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
6	ø6
8	ø8
10	ø10
15	ø15
20	ø20

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●	●			Blank	*1, *2
Stroke 2 mm				●		–2	*3
Stroke 5 mm				●	●	–5	
Stroke 10 mm	●	●	●	●	●	–10	
Stroke 15 mm	●	●	●	●	●	–15	
Stroke 20 mm	●	●	●	●	●	–20	
Stroke 25 mm			●			–25	
Stroke 30 mm	●	●	●			–30	
Stroke 40 mm	●	●	●			–40	
Stroke 50 mm	●	●	●			–50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 6 to 15, -2 can be selected for ❸.

❹ Pad Shape

Code	Content	
LB	Soft Bellows Type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
U	Urethane rubber
SE	Conductive Silicone Rubber
NE	Conductive NBR (Low Resistance-type)
HN	HNBR
EP	EPDM

❻ Surface Treatment

Content	Compatible Pad Material N	S	SE	NE	Compatible Pad Diameter Soft Bellows (LB)	Code
No surface treatment	All pad materials, all pad diameters					Blank
Fiber Raised (Nylon)		●			*10 to *20	–NF
Fiber Raised (Silk)		●			*10 to *20	–SF
Anti-Adhesion Special Coating		●	●		All sizes	–DL
Suction Mark Reduction Surface Modification	●			●	All sizes	–ER
Fluorine Coating		●	●		All sizes	–FG

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP –..... – P4*

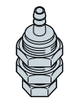
*Please inquire for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP –..... – FP*

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8, Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●												4C	
ø6, Push-in fitting, without spring cover			●	●												6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●												4TC	
ø6, Barb fitting, without spring cover			●	●												6TC	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❼. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

⓫ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1: For ❶ Holder Shape HD, HE, HDW, and HEW, ⓫ is 'Blank'.
*2: For ❶ Holder Shape HC with ❸ Stroke Option 'Blank', ⓫ is 'Blank'.
*3: ⓫ T2 can be selected when ❷ Pad Diameter is 20.
*4: For dimensions with the direct mount filter, please refer to P. 1064.

❾ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
CF	With Flexible Holder (Angle 8°)	Flex-ible Holder

*1: For ❶ HD, HE, HDW, and HEW, ❾ is 'Blank'.
*2: For ❶ Holder Shape HC with ❸ Stroke Option 'Blank', ❾ is 'Blank'.
*3: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❿ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*1: For ❶ Holder Shape HD, HE, HDW, and HEW, ❿ is 'Blank'.
*2: For ❶ HC with ❸ Stroke Option 'Blank', ❿ is 'Blank'.
*3: For ❻ Surface Treatment -NF and -SF, ❿ is 'Blank'.
*4: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

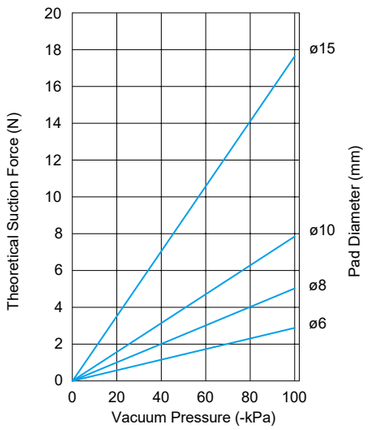
Holder Shape	Pad Diameter	Push-in fitting ø4 4	4C	ø6 6	6C	Barb fitting ø4 4T	4TC	ø6 6T	6TC
A	ø6 to ø15			●				●	
	ø20	●		●		●		●	
B	All sizes	●		●		●		●	
C	All sizes	●	●	●	●	●	●	●	●
D	All sizes	●	●	●	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M14	Blank
F	All sizes		●

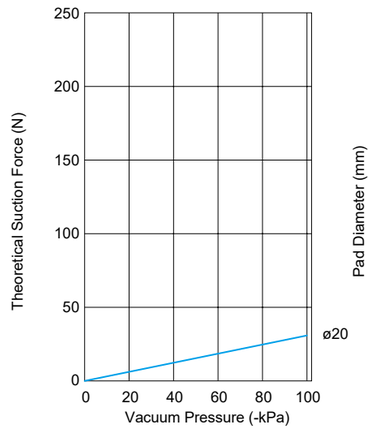
Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø6 to ø15		●		●	
	ø20		●		●	●
MB	All sizes	●	●	●	●	●
MC	All sizes	●	●		●	●
MD	All sizes	●	●	●	●	●
LFC	ø6 to ø15		●		●	●
	ø20		●	●	●	●
LFD	ø6 to ø15		●		●	●
	ø20		●	●	●	●
HC	All sizes	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

Theoretical Suction Force

●Pad diameter: ø6 mm to ø15 mm



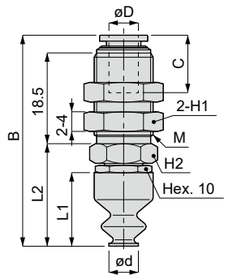
●Pad diameter: ø20 mm



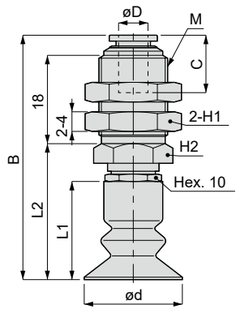
Regarding the suction force of the soft bellows type, due to pad characteristics, it may not be possible to secure the calculated suction force (theoretical suction force x safety factor) due to factors such as vacuum level, pad material, and adsorbed object. Refer to "Suction Pads selection method" (P. 412) Use the suction force obtained with this formula as a guide, and make sure that there is no problem with the suction capacity on the actual machine. Also, the soft bellows type is not suitable for vertical lifting. When using, please sufficiently check with the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A6 to 15LB□-6



●VSP-A20LB□4/6

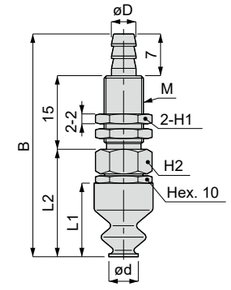


Unit: mm

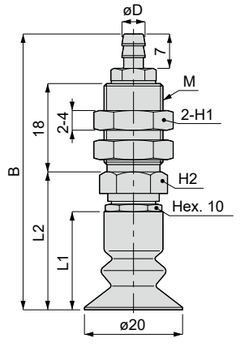
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A6LB□-6	6	6	M12x1	43.4	15	21.1	11.9	14	12	24
VSP-A8LB□-6	8	6	M12x1	43.4	15	21.1	11.9	14	12	24
VSP-A10LB□-6	10	6	M12x1	43.9	15.5	21.6	11.9	14	12	25
VSP-A15LB□-6	15	6	M12x1	45.9	17.5	23.6	11.9	14	12	25
VSP-A20LB□-4	20	4	M12x1	58.9	20	28	11.2	14	12	35
VSP-A20LB□-6		6	M14x1	49.9		27.6	11.9	17	14	41

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A6 to 15LB□-6T



●VSP-A20LB□-4T/6T

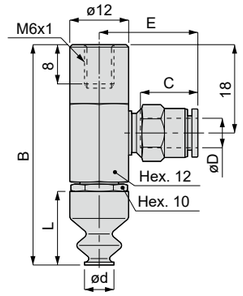


Unit: mm

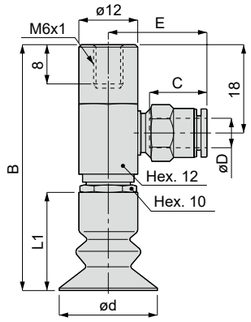
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A6LB□-6T	6	4	M8x0.75	44.1	15	22.1	10	10	14
VSP-A8LB□-6T	8	4	M8x0.75	44.1	15	22.1	10	10	14
VSP-A10LB□-6T	10	4	M8x0.75	44.6	15.5	22.6	10	10	15
VSP-A15LB□-6T	15	4	M8x0.75	46.6	17.5	24.6	10	10	16
VSP-A20LB□-4T	20	2.5	M12x1	56	20	28	14	12	34
VSP-A20LB□-6T		4							

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B6 to 15LB□-4/6



●VSP-B20LB□4/6

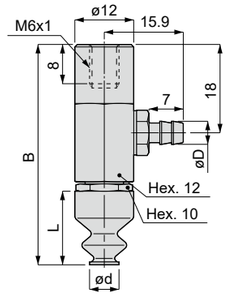


Unit: mm

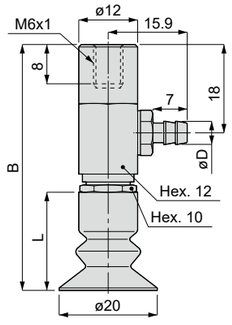
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B6LB□-4	6	4	45.1	15	11.2	18.8	32
VSP-B6LB□-6		6			11.9	20.1	33
VSP-B8LB□-4	8	4	45.1	15	11.2	18.8	32
VSP-B8LB□-6		6			11.9	20.1	33
VSP-B10LB□-4	10	4	45.6	15.5	11.2	18.8	33
VSP-B10LB□-6		6			11.9	20.1	34
VSP-B15LB□-4	15	4	47.6	17.5	11.2	18.8	33
VSP-B15LB□-6		6			11.9	20.1	34
VSP-B20LB□-4	20	4	50	20	11.2	18.8	37
VSP-B20LB□-6		6			11.9	20.1	38

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B6 to 15LB□-4T/6T



●VSP-B20LB□-4T/6T

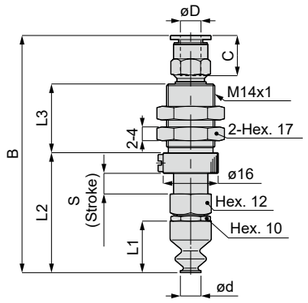


Unit: mm

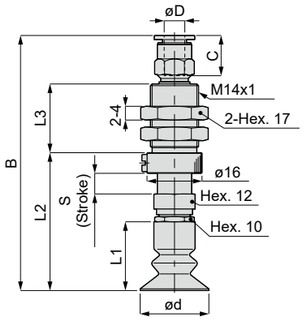
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B6LB□-4T	6	2.5	42.3	12.2	32
VSP-B6LB□-6T		4			
VSP-B8LB□-4T	8	2.5	42.3	12.2	32
VSP-B8LB□-6T		4			
VSP-B10LB□-4T	10	2.5	44.1	14	32
VSP-B10LB□-6T		4			
VSP-B15LB□-4T	15	2.5	44.1	14	33
VSP-B15LB□-6T		4			
VSP-B20LB□-4T	20	2.5	45	15	38
VSP-B20LB□-6T		4			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C6 to 15LB□-4/6
●VSP-C6 to 15-□LB□-4/6



●VSP-C20LB□4/6
●VSP-C20-□LB□-4/6

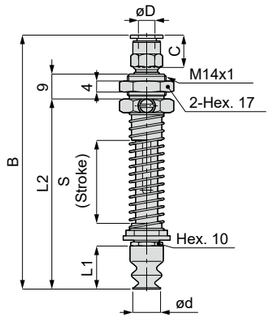


Unit: mm

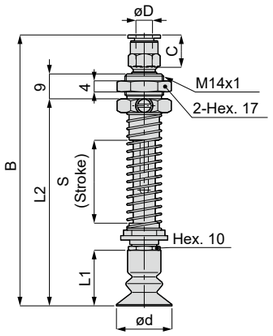
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6LB□-4	6	4	68.1	15	35.1	20	11.2	6	4.0 to 7.1	38
VSP-C6LB□-6		6	69.4				11.9			39
VSP-C6-10LB□-4		4	72.6		39.6		11.2	10	2.0 to 5.2	40
VSP-C6-10LB□-6		6	73.9				11.9			41
VSP-C6-15LB□-4		4	82.6		44.6	25	11.2	15	2.0 to 5.9	46
VSP-C6-15LB□-6		6	83.9				11.9			47
VSP-C6-20LB□-4		4	98.5		51.6	34	11.2	20	1.1 to 4.8	53
VSP-C6-20LB□-6		6	99.9				11.9			54
VSP-C8LB□-4	8	4	68.1	15	35.1	20	11.2	6	4.0 to 7.1	38
VSP-C8LB□-6		6	69.4				11.9			39
VSP-C8-10LB□-4		4	72.6		39.6		11.2	10	2.0 to 5.2	40
VSP-C8-10LB□-6		6	73.9				11.9			41
VSP-C8-15LB□-4		4	82.6		44.6	25	11.2	15	2.0 to 5.9	46
VSP-C8-15LB□-6		6	83.9				11.9			47
VSP-C8-20LB□-4		4	98.5		51.6	34	11.2	20	1.1 to 4.8	53
VSP-C8-20LB□-6		6	99.9				11.9			54
VSP-C10LB□-4	10	4	68.6	15.5	35.6	20	11.2	6	4.0 to 7.1	38
VSP-C10LB□-6		6	69.9				11.9			39
VSP-C10-10LB□-4		4	73.1		40.1		11.2	10	2.0 to 5.2	40
VSP-C10-10LB□-6		6	74.4				11.9			41
VSP-C10-15LB□-4		4	83.1		45.1	25	11.2	15	2.0 to 5.9	45
VSP-C10-15LB□-6		6	84.4				11.9			46
VSP-C10-20LB□-4		4	99.1		52.1	34	11.2	20	1.1 to 4.8	52
VSP-C10-20LB□-6		6	100.4				11.9			53
VSP-C15LB□-4	15	4	70.6	17.5	37.6	20	11.2	6	4.0 to 7.1	39
VSP-C15LB□-6		6	71.9				11.9			40
VSP-C15-10LB□-4		4	75.1		42.1		11.2	10	2.0 to 5.2	41
VSP-C15-10LB□-6		6	76.4				11.9			42
VSP-C15-15LB□-4		4	85.1		47.1	25	11.2	15	2.0 to 5.9	46
VSP-C15-15LB□-6		6	86.4				11.9			47
VSP-C15-20LB□-4		4	101.1		54.1	34	11.2	20	1.1 to 4.8	53
VSP-C15-20LB□-6		6	102.4				11.9			54
VSP-C20LB□-4	20	4	73	20	40	20	11.2	6	7.0 to 12.6	43
VSP-C20LB□-6		6	74.3				11.9			44
VSP-C20-10LB□-4		4	79		46		11.2	10	3.3 to 10.0	47
VSP-C20-10LB□-6		6	80.3				11.9			48
VSP-C20-15LB□-4		4	89		51	25	11.2	15	3.3 to 10.4	52
VSP-C20-15LB□-6		6	90.3				11.9			53
VSP-C20-20LB□-4		4	105		58	34	11.2	20	2.0 to 8.7	58
VSP-C20-20LB□-6		6	106.3				11.9			59

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in Fitting without Spring Cover)

●VSP-C6 to 15-□LB□-4C/6C



●VSP-C20-□LB□-4C/6C

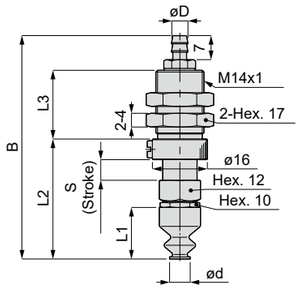


Unit: mm

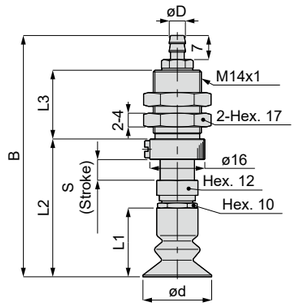
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20LB□-4C	6	4	75.6	15	53.6	11.2	20	1.5 to 4.9	45
VSP-C6-20LB□-6C		6	76.9			11.9			46
VSP-C6-30LB□-4C		4	88.6		66.6	11.2	30	1.1 to 4.8	51
VSP-C6-30LB□-6C		6	89.9			11.9			52
VSP-C6-40LB□-4C		4	101.6		79.6	11.2	40	1.0 to 4.5	56
VSP-C6-40LB□-6C		6	102.9			11.9			57
VSP-C6-50LB□-4C		4	114.6		92.6	11.2	50	0.9 to 4.5	61
VSP-C6-50LB□-6C		6	115.9			11.9			62
VSP-C8-20LB□-4C	8	4	75.6	15	53.6	11.2	20	1.5 to 4.9	45
VSP-C8-20LB□-6C		6	76.9			11.9			46
VSP-C8-30LB□-4C		4	88.6		66.6	11.2	30	1.1 to 4.8	51
VSP-C8-30LB□-6C		6	89.9			11.9			52
VSP-C8-40LB□-4C		4	101.6		79.6	11.2	40	1.0 to 4.5	56
VSP-C8-40LB□-6C		6	102.9			11.9			57
VSP-C8-50LB□-4C		4	114.6		92.6	11.2	50	0.9 to 4.5	61
VSP-C8-50LB□-6C		6	115.9			11.9			62
VSP-C10-20LB□-4C	10	4	76.1	15.5	54.1	11.2	20	1.5 to 4.9	45
VSP-C10-20LB□-6C		6	77.4			11.9			46
VSP-C10-30LB□-4C		4	89.1		67.1	11.2	30	1.1 to 4.8	51
VSP-C10-30LB□-6C		6	90.4			11.9			52
VSP-C10-40LB□-4C		4	102.1		80.1	11.2	40	1.0 to 4.5	56
VSP-C10-40LB□-6C		6	103.4			11.9			57
VSP-C10-50LB□-4C		4	115.1		93.1	11.2	50	0.9 to 4.5	61
VSP-C10-50LB□-6C		6	116.4			11.9			62
VSP-C15-20LB□-4C	15	4	78.1	17.5	56.1	11.2	20	1.5 to 4.9	45
VSP-C15-20LB□-6C		6	79.4			11.9			46
VSP-C15-30LB□-4C		4	91.1		69.1	11.2	30	1.1 to 4.8	51
VSP-C15-30LB□-6C		6	92.4			11.9			52
VSP-C15-40LB□-4C		4	104.1		82.1	11.2	40	1.0 to 4.5	56
VSP-C15-40LB□-6C		6	105.4			11.9			57
VSP-C15-50LB□-4C		4	117.1		95.1	11.2	50	0.9 to 4.5	61
VSP-C15-50LB□-6C		6	118.4			11.9			62
VSP-C20-20LB□-4C	20	4	82	20	60	11.2	20	1.5 to 4.9	50
VSP-C20-20LB□-6C		6	83.3			11.9			51
VSP-C20-30LB□-4C		4	95		73	11.2	30	1.1 to 4.8	55
VSP-C20-30LB□-6C		6	96.3			11.9			56
VSP-C20-40LB□-4C		4	108		86	11.2	40	1.0 to 4.5	60
VSP-C20-40LB□-6C		6	109.3			11.9			61
VSP-C20-50LB□-4C		4	121		99	11.2	50	0.9 to 4.5	65
VSP-C20-50LB□-6C		6	122.3			11.9			66

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C6 to 15LB□-4T/6T
●VSP-C6 to 15-□LB□-4T/6T



●VSP-C20LB□-4T/6T
●VSP-C20-□LB□-4T/6T

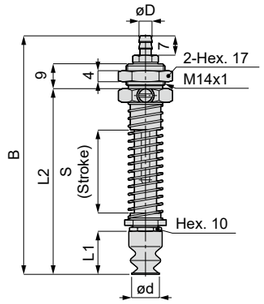


Unit: mm

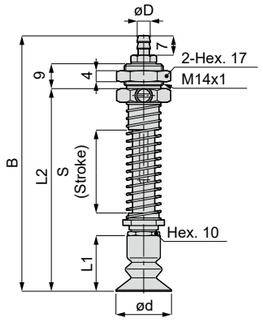
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C6LB□-4T	6	4	65.2	15	35.1	20	6	4.0 to 7.1	37
VSP-C6LB□-6T		6							
VSP-C6-10LB□-4T		4	69.7		39.6		10	2.0 to 5.2	40
VSP-C6-10LB□-6T		6							
VSP-C6-15LB□-4T		4	79.7		44.6	25	15	2.0 to 5.9	45
VSP-C6-15LB□-6T		6							
VSP-C6-20LB□-4T		4	95.7		51.6	34	20	1.1 to 4.8	51
VSP-C6-20LB□-6T		6							
VSP-C8LB□-4T	8	4	65.2	15	35.1	20	6	4.0 to 7.1	37
VSP-C8LB□-6T		6							
VSP-C8-10LB□-4T		4	69.7		39.6		10	2.0 to 5.2	40
VSP-C8-10LB□-6T		6							
VSP-C8-15LB□-4T		4	79.7		44.6	25	15	2.0 to 5.9	45
VSP-C8-15LB□-6T		6							
VSP-C8-20LB□-4T		4	95.7		51.6	34	20	1.1 to 4.8	51
VSP-C8-20LB□-6T		6							
VSP-C10LB□-4T	10	4	65.7	15.5	35.6	20	6	4.0 to 7.1	37
VSP-C10LB□-6T		6							
VSP-C10-10LB□-4T		4	70.2		40.1		10	2.0 to 5.2	40
VSP-C10-10LB□-6T		6							
VSP-C10-15LB□-4T		4	80.2		45.1	25	15	2.0 to 5.9	45
VSP-C10-15LB□-6T		6							
VSP-C10-20LB□-4T		4	96.2		52.1	34	20	1.1 to 4.8	51
VSP-C10-20LB□-6T		6							
VSP-C15LB□-4T	15	4	67.7	17.5	37.6	20	6	4.0 to 7.1	38
VSP-C15LB□-6T		6							
VSP-C15-10LB□-4T		4	72.2		42.1		10	2.0 to 5.2	41
VSP-C15-10LB□-6T		6							
VSP-C15-15LB□-4T		4	82.2		47.1	25	15	2.0 to 5.9	46
VSP-C15-15LB□-6T		6							
VSP-C15-20LB□-4T		4	98.2		54.1	34	20	1.1 to 4.8	52
VSP-C15-20LB□-6T		6							
VSP-C20LB□-4T	20	4	70.1	20	40	20	6	7.0 to 12.6	42
VSP-C20LB□-6T		6							
VSP-C20-10LB□-4T		4	76.1		46		10	3.3 to 10.0	46
VSP-C20-10LB□-6T		6							
VSP-C20-15LB□-4T		4	86.1		51	25	15	3.3 to 10.4	51
VSP-C20-15LB□-6T		6							
VSP-C20-20LB□-4T		4	102.1		58	34	20	2.0 to 8.7	57
VSP-C20-20LB□-6T		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C6 to 15-□LB□-4TC/6TC



●VSP-C20-□LB□-4TC/6TC

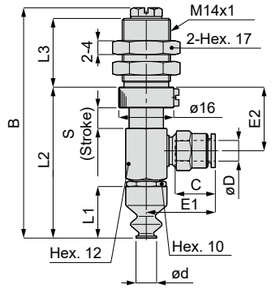


Unit: mm

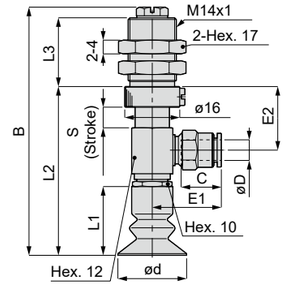
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C6-20LB□-4TC	6	4	72.7	15	53.6	20	1.5 to 4.9	44
VSP-C6-20LB□-6TC		6						
VSP-C6-30LB□-4TC		4	85.7		66.6	30	1.1 to 4.8	50
VSP-C6-30LB□-6TC		6						
VSP-C6-40LB□-4TC		4	98.7		79.6	40	1.0 to 4.5	55
VSP-C6-40LB□-6TC		6						
VSP-C6-50LB□-4TC		4	111.7		92.6	50	0.9 to 4.5	60
VSP-C6-50LB□-6TC		6						
VSP-C8-20LB□-4TC	8	4	72.7	15	53.6	20	1.5 to 4.9	44
VSP-C8-20LB□-6TC		6						
VSP-C8-30LB□-4TC		4	85.7		66.6	30	1.1 to 4.8	50
VSP-C8-30LB□-6TC		6						
VSP-C8-40LB□-4TC		4	98.7		79.6	40	1.0 to 4.5	55
VSP-C8-40LB□-6TC		6						
VSP-C8-50LB□-4TC		4	111.7		92.6	50	0.9 to 4.5	60
VSP-C8-50LB□-6TC		6						
VSP-C10-20LB□-4TC	10	4	73.2	15.5	54.1	20	1.5 to 4.9	44
VSP-C10-20LB□-6TC		6						
VSP-C10-30LB□-4TC		4	86.2		67.1	30	1.1 to 4.8	50
VSP-C10-30LB□-6TC		6						
VSP-C10-40LB□-4TC		4	99.2		80.1	40	1.0 to 4.5	55
VSP-C10-40LB□-6TC		6						
VSP-C10-50LB□-4TC		4	112.2		93.1	50	0.9 to 4.5	60
VSP-C10-50LB□-6TC		6						
VSP-C15-20LB□-4TC	15	4	75.2	17.5	56.1	20	1.5 to 4.9	44
VSP-C15-20LB□-6TC		6						
VSP-C15-30LB□-4TC		4	88.2		69.1	30	1.1 to 4.8	50
VSP-C15-30LB□-6TC		6						
VSP-C15-40LB□-4TC		4	101.2		82.1	40	1.0 to 4.5	55
VSP-C15-40LB□-6TC		6						
VSP-C15-50LB□-4TC		4	114.2		95.1	50	0.9 to 4.5	60
VSP-C15-50LB□-6TC		6						
VSP-C20-20LB□-4TC	20	4	79.1	20	60	20	1.5 to 4.9	53
VSP-C20-20LB□-6TC		6						
VSP-C20-30LB□-4TC		4	92.1		73	30	1.1 to 4.8	58
VSP-C20-30LB□-6TC		6						
VSP-C20-40LB□-4TC		4	105.1		86	40	1.0 to 4.5	63
VSP-C20-40LB□-6TC		6						
VSP-C20-50LB□-4TC		4	118.1		99	50	0.9 to 4.5	68
VSP-C20-50LB□-6TC		6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D6 to 15LB□-4/6
●VSP-D6 to 15-□LB□-4/6



●VSP-D20LB□4/6
●VSP-D20-□LB□-4/6

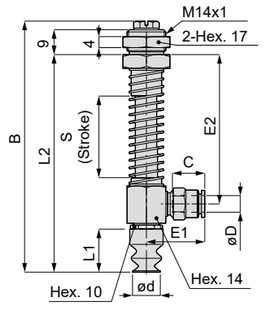


Unit: mm

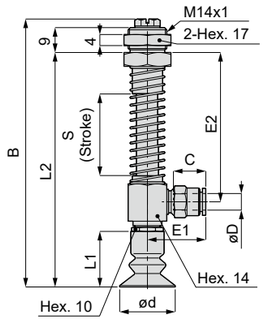
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D6LB□-4	6	4	67.2	15	44.1	20	11.2	18.8	18.5	6	4.0 to 7.1	49
VSP-D6LB□-6		6					11.9	20.1				50
VSP-D6-10LB□-4		4	72.2		49.1		11.2	18.8	25	10	2.0 to 5.2	52
VSP-D6-10LB□-6		6					11.9	20.1				53
VSP-D6-15LB□-4		4	82.2		54.1	25	11.2	18.8	30	15	2.0 to 5.9	58
VSP-D6-15LB□-6		6					11.9	20.1				59
VSP-D6-20LB□-4		4	98.2		61.1	34	11.2	18.8	37	20	1.1 to 4.8	68
VSP-D6-20LB□-6		6					11.9	20.1				69
VSP-D8LB□-4	8	4	67.2	15	44.1	20	11.2	18.8	18.5	6	4.0 to 7.1	49
VSP-D8LB□-6		6					11.9	20.1				50
VSP-D8-10LB□-4		4	72.2		49.1		11.2	18.8	25	10	2.0 to 5.2	52
VSP-D8-10LB□-6		6					11.9	20.1				53
VSP-D8-15LB□-4		4	82.2		54.1	25	11.2	18.8	30	15	2.0 to 5.9	58
VSP-D8-15LB□-6		6					11.9	20.1				59
VSP-D8-20LB□-4		4	98.2		61.1	34	11.2	18.8	37	20	1.1 to 4.8	68
VSP-D8-20LB□-6		6					11.9	20.1				69
VSP-D10LB□-4	10	4	67.7	15.5	44.6	20	11.2	18.8	18.5	6	4.0 to 7.1	50
VSP-D10LB□-6		6					11.9	20.1				51
VSP-D10-10LB□-4		4	72.7		49.6		11.2	18.8	25	10	2.0 to 5.2	53
VSP-D10-10LB□-6		6					11.9	20.1				54
VSP-D10-15LB□-4		4	82.7		54.6	25	11.2	18.8	30	15	2.0 to 5.9	59
VSP-D10-15LB□-6		6					11.9	20.1				60
VSP-D10-20LB□-4		4	98.7		61.6	34	11.2	18.8	37	20	1.1 to 4.8	69
VSP-D10-20LB□-6		6					11.9	20.1				70
VSP-D15LB□-4	15	4	69.7	17.5	46.6	20	11.2	18.8	18.5	6	4.0 to 7.1	51
VSP-D15LB□-6		6					11.9	20.1				52
VSP-D15-10LB□-4		4	74.7		51.6		11.2	18.8	25	10	2.0 to 5.2	54
VSP-D15-10LB□-6		6					11.9	20.1				55
VSP-D15-15LB□-4		4	84.7		56.6	25	11.2	18.8	30	15	2.0 to 5.9	60
VSP-D15-15LB□-6		6					11.9	20.1				61
VSP-D15-20LB□-4		4	100.7		63.6	34	11.2	18.8	37	20	1.1 to 4.8	70
VSP-D15-20LB□-6		6					11.9	20.1				71
VSP-D20LB□-4	20	4	72.1	20	49	20	11.2	18.8	18.5	6	7.0 to 12.6	55
VSP-D20LB□-6		6					11.9	20.1				56
VSP-D20-10LB□-4		4	78.1		55		11.2	18.8	24.5	10	3.3 to 10.0	58
VSP-D20-10LB□-6		6					11.9	20.1				59
VSP-D20-15LB□-4		4	88.1		60	25	11.2	18.8	29.5	15	3.3 to 10.4	63
VSP-D20-15LB□-6		6					11.9	20.1				64
VSP-D20-20LB□-4		4	104.1		67	34	11.2	18.8	36.5	20	2.0 to 8.7	73
VSP-D20-20LB□-6		6					11.9	20.1				74

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D6 to 15-□LB□-4C/6C



●VSP-D20-□LB□-4C/6C

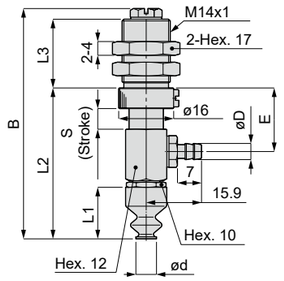


Unit: mm

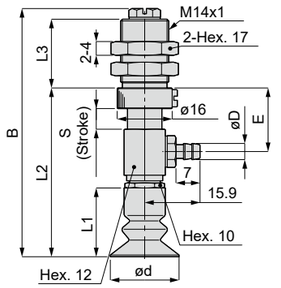
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20LB□-4C	6	4	77.2	15	65.1	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D6-20LB□-6C		6				11.9	21.1				72
VSP-D6-30LB□-4C		4	90.2		78.1	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D6-30LB□-6C		6				11.9	21.1				78
VSP-D6-40LB□-4C		4	103.2		91.1	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D6-40LB□-6C		6				11.9	21.1				85
VSP-D6-50LB□-4C		4	116.2		104.1	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D6-50LB□-6C		6				11.9	21.1				92
VSP-D8-20LB□-4C	8	4	77.2	15	65.1	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D8-20LB□-6C		6				11.9	21.1				72
VSP-D8-30LB□-4C		4	90.2		78.1	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D8-30LB□-6C		6				11.9	21.1				78
VSP-D8-40LB□-4C		4	103.2		91.1	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D8-40LB□-6C		6				11.9	21.1				85
VSP-D8-50LB□-4C		4	116.2		104.1	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D8-50LB□-6C		6				11.9	21.1				92
VSP-D10-20LB□-4C	10	4	77.7	15.5	65.6	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D10-20LB□-6C		6				11.9	21.1				72
VSP-D10-30LB□-4C		4	90.7		78.6	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D10-30LB□-6C		6				11.9	21.1				78
VSP-D10-40LB□-4C		4	103.7		91.6	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D10-40LB□-6C		6				11.9	21.1				85
VSP-D10-50LB□-4C		4	116.7		104.6	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D10-50LB□-6C		6				11.9	21.1				92
VSP-D15-20LB□-4C	15	4	79.7	17.5	67.6	11.2	19.8	40.5	20	1.5 to 4.9	71
VSP-D15-20LB□-6C		6				11.9	21.1				72
VSP-D15-30LB□-4C		4	92.7		80.6	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D15-30LB□-6C		6				11.9	21.1				78
VSP-D15-40LB□-4C		4	105.7		93.6	11.2	19.8	66.5	40	1.0 to 4.5	84
VSP-D15-40LB□-6C		6				11.9	21.1				85
VSP-D15-50LB□-4C		4	118.7		106.6	11.2	19.8	79.5	50	0.9 to 4.5	91
VSP-D15-50LB□-6C		6				11.9	21.1				92
VSP-D20-20LB□-4C	20	4	83.6	20	71.5	11.2	19.8	41	20	1.5 to 4.9	72
VSP-D20-20LB□-6C		6				11.9	21.1				73
VSP-D20-30LB□-4C		4	96.6		84.5	11.2	19.8	54	30	1.1 to 4.8	79
VSP-D20-30LB□-6C		6				11.9	21.1				80
VSP-D20-40LB□-4C		4	109.6		97.5	11.2	19.8	67	40	1.0 to 4.5	84
VSP-D20-40LB□-6C		6				11.9	21.1				85
VSP-D20-50LB□-4C		4	122.6		110.5	11.2	19.8	80	50	0.9 to 4.5	92
VSP-D20-50LB□-6C		6				11.9	21.1				93

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D6 to 15LB□-4T/6T
●VSP-D6 to 15-□LB□-4T/6T



●VSP-D20LB□-4T/6T
●VSP-D20-□LB□-4T/6T

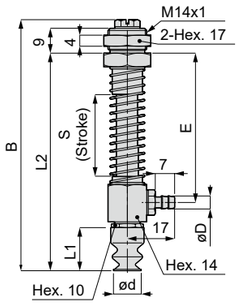


Unit: mm

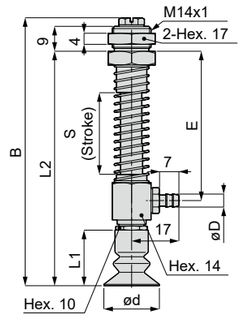
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D6LB□-4T	6	2.5	67.2	15	44.1	20	18.5	6	4.0 to 7.1	49
VSP-D6LB□-6T		4								
VSP-D6-10LB□-4T		2.5	72.2		49.1		25	10	2.0 to 5.2	50
VSP-D6-10LB□-6T		4								
VSP-D6-15LB□-4T		2.5	82.2		54.1	25	30	15	2.0 to 5.9	56
VSP-D6-15LB□-6T		4								
VSP-D6-20LB□-4T		2.5	98.2		61.1	34	37	20	1.1 to 4.8	66
VSP-D6-20LB□-6T		4								
VSP-D8LB□-4T	8	2.5	67.2	15	44.1	20	18.5	6	4.0 to 7.1	48
VSP-D8LB□-6T		4								
VSP-D8-10LB□-4T		2.5	72.2		49.1		25	10	2.0 to 5.2	50
VSP-D8-10LB□-6T		4								
VSP-D8-15LB□-4T		2.5	82.2		54.1	25	30	15	2.0 to 5.9	56
VSP-D8-15LB□-6T		4								
VSP-D8-20LB□-4T		2.5	98.2		61.1	34	37	20	1.1 to 4.8	66
VSP-D8-20LB□-6T		4								
VSP-D10LB□-4T	10	2.5	67.7	15.5	44.6	20	18.5	6	4.0 to 7.1	49
VSP-D10LB□-6T		4								
VSP-D10-10LB□-4T		2.5	72.7		49.6		25	10	2.0 to 5.2	50
VSP-D10-10LB□-6T		4								
VSP-D10-15LB□-4T		2.5	82.7		54.6	25	30	15	2.0 to 5.9	56
VSP-D10-15LB□-6T		4								
VSP-D10-20LB□-4T		2.5	98.2		61.6	34	37	20	1.1 to 4.8	66
VSP-D10-20LB□-6T		4								
VSP-D15LB□-4T	15	2.5	69.7	17.5	46.6	20	18.5	6	4.0 to 7.1	50
VSP-D15LB□-6T		4								
VSP-D15-10LB□-4T		2.5	74.7		51.6		25	10	2.0 to 5.2	51
VSP-D15-10LB□-6T		4								
VSP-D15-15LB□-4T		2.5	84.7		56.6	25	30	15	2.0 to 5.9	57
VSP-D15-15LB□-6T		4								
VSP-D15-20LB□-4T		2.5	100.7		63.6	34	37	20	1.1 to 4.8	67
VSP-D15-20LB□-6T		4								
VSP-D20LB□-4T	20	2.5	72.1	20	49	20	18.5	6	7.0 to 12.6	53
VSP-D20LB□-6T		4								
VSP-D20-10LB□-4T		2.5	78.1		55		24.5	10	3.3 to 10.0	54
VSP-D20-10LB□-6T		4								
VSP-D20-15LB□-4T		2.5	88.1		60	25	29.5	15	3.3 to 10.4	61
VSP-D20-15LB□-6T		4								
VSP-D20-20LB□-4T		2.5	104.1		67	34	36.5	20	2.0 to 8.7	71
VSP-D20-20LB□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D6 to 15-□LB□-4TC/6TC



●VSP-D20-□LB□-4TC/6TC

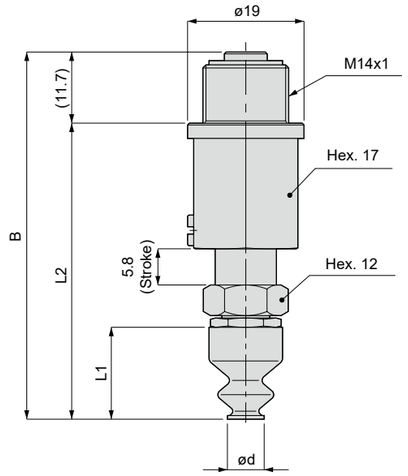


Unit: mm

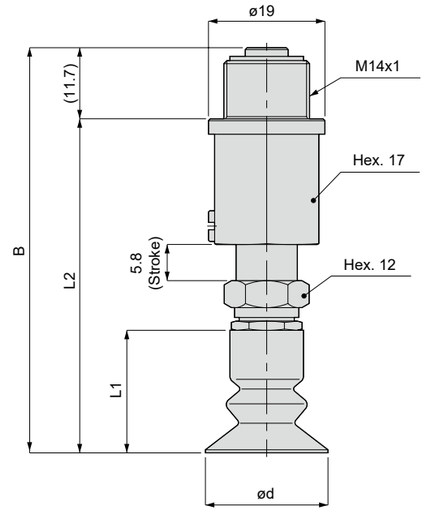
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D6-20LB□-4TC	6	2.5	77.2	15	65.1	40.5	20	1.5 to 4.9	67
VSP-D6-20LB□-6TC		4							
VSP-D6-30LB□-4TC		2.5	90.2		78.1	53.5	30	1.1 to 4.8	74
VSP-D6-30LB□-6TC		4							
VSP-D6-40LB□-4TC		2.5	103.2		91.1	66.5	40	1.0 to 4.5	81
VSP-D6-40LB□-6TC		4							
VSP-D6-50LB□-4TC		2.5	116.2		104.1	79.5	50	0.9 to 4.5	87
VSP-D6-50LB□-6TC		4							
VSP-D8-20LB□-4TC	8	2.5	77.2	15	65.1	40.5	20	1.5 to 4.9	68
VSP-D8-20LB□-6TC		4							
VSP-D8-30LB□-4TC		2.5	90.2		78.1	53.5	30	1.1 to 4.8	75
VSP-D8-30LB□-6TC		4							
VSP-D8-40LB□-4TC		2.5	103.2		91.1	66.5	40	1.0 to 4.5	82
VSP-D8-40LB□-6TC		4							
VSP-D8-50LB□-4TC		2.5	116.2		104.1	79.5	50	0.9 to 4.5	88
VSP-D8-50LB□-6TC		4							
VSP-D10-20LB□-4TC	10	2.5	77.7	15.5	65.6	40.5	20	1.5 to 4.9	68
VSP-D10-20LB□-6TC		4							
VSP-D10-30LB□-4TC		2.5	90.7		78.6	53.5	30	1.1 to 4.8	75
VSP-D10-30LB□-6TC		4							
VSP-D10-40LB□-4TC		2.5	103.7		91.6	66.5	40	1.0 to 4.5	82
VSP-D10-40LB□-6TC		4							
VSP-D10-50LB□-4TC		2.5	116.7		104.6	79.5	50	0.9 to 4.5	88
VSP-D10-50LB□-6TC		4							
VSP-D15-20LB□-4TC	15	2.5	79.7	17.5	67.6	40.5	20	1.5 to 4.9	68
VSP-D15-20LB□-6TC		4							
VSP-D15-30LB□-4TC		2.5	92.7		80.6	53.5	30	1.1 to 4.8	75
VSP-D15-30LB□-6TC		4							
VSP-D15-40LB□-4TC		2.5	105.7		93.6	66.5	40	1.0 to 4.5	82
VSP-D15-40LB□-6TC		4							
VSP-D15-50LB□-4TC		2.5	118.7		106.6	79.5	50	0.9 to 4.5	88
VSP-D15-50LB□-6TC		4							
VSP-D20-20LB□-4TC	20	4	83.6	20	71.5	41	20	1.5 to 4.9	70
VSP-D20-20LB□-6TC		6							
VSP-D20-30LB□-4TC		4	96.6		84.5	54	30	1.1 to 4.8	77
VSP-D20-30LB□-6TC		6							
VSP-D20-40LB□-4TC		4	109.6		97.5	67	40	1.0 to 4.5	84
VSP-D20-40LB□-6TC		6							
VSP-D20-50LB□-4TC		4	122.6		110.5	80	50	0.9 to 4.5	90
VSP-D20-50LB□-6TC		6							

External Dimension Diagram (Direct Mount, Buffer Type, VSP-F, Male Thread Type)

●VSP-F6 to 15LB□



●VSP-F20LB□

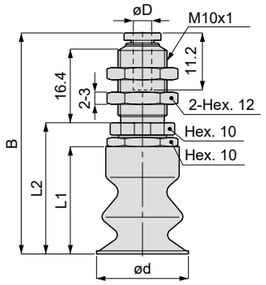


Unit: mm

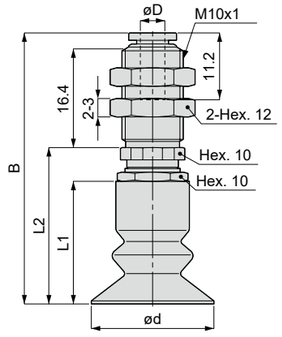
Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F6LB□	6	60.1	15	48.4	8.8 to 12.7	58
VSP-F8LB□	8	60.1	15	48.4	8.8 to 12.7	58
VSP-F10LB□	10	60.6	15.5	48.9	8.8 to 12.7	59
VSP-F15LB□	15	62.6	17.5	50.9	8.8 to 12.7	60
VSP-F20LB□	20	66.2	20	54.5	8.8 to 12.7	63

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA6 to 15LB□-4



●VSP-MA20LB□-4

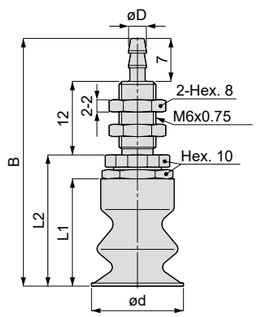


Unit: mm

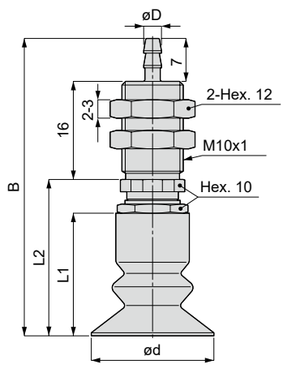
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Weight (g)
VSP-MA6LB□-4	6	4	38.1	15	19.1	8.6
VSP-MA8LB□-4	8	4	38.1	15	19.1	8.6
VSP-MA10LB□-4	10	4	38.6	15.5	19.6	8.6
VSP-MA15LB□-4	15	4	40.6	17.5	21.6	8.8
VSP-MA20LB□-4	20	4	44.6	20	25.6	12

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA6 to 15LB□-4T



●VSP-MA20LB□-4T/6T

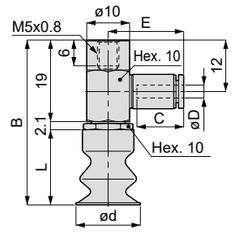


Unit: mm

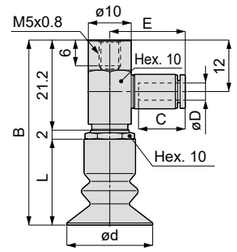
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Weight (g)
VSP-MA6LB□-4T	6	2.5	38.1	15	19.1	5.8
VSP-MA8LB□-4T	8	2.5	38.1	15	19.1	5.8
VSP-MA10LB□-4T	10	2.5	38.6	15.5	19.6	5.8
VSP-MA15LB□-4T	15	2.5	40.6	17.5	21.6	6
VSP-MA20LB□-4T	20	2.5	48.6	20	25.6	12
VSP-MA20LB□-6T		4				

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB6 to 15LB□-2/4/6



●VSP-MB20LB□-2/4/6

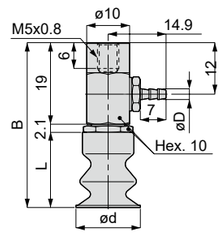


Unit: mm

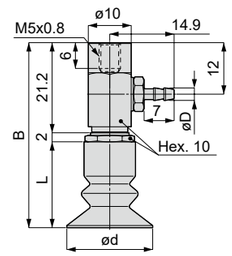
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB6LB□-2	6	1.8	36.1	15	8.4	13.7	10
VSP-MB6LB□-4		4			11.2	17.8	11
VSP-MB6LB□-6		6			11.9	19.6	12
VSP-MB8LB□-2	8	1.8	36.1	15	8.4	13.7	10
VSP-MB8LB□-4		4			11.2	17.8	11
VSP-MB8LB□-6		6			11.9	19.6	12
VSP-MB10LB□-2	10	1.8	36.6	15.5	8.4	13.7	10
VSP-MB10LB□-4		4			11.2	17.8	11
VSP-MB10LB□-6		6			11.9	19.6	12
VSP-MB15LB□-2	15	1.8	38.6	17.5	8.4	13.7	10
VSP-MB15LB□-4		4			11.2	17.8	11
VSP-MB15LB□-6		6			11.9	19.6	12
VSP-MB20LB□-2	20	1.8	43.2	20	8.4	13.7	12
VSP-MB20LB□-4		4			11.2	17.8	13
VSP-MB20LB□-6		6			11.9	19.6	14

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB6 to 15LB□-4T/6T



●VSP-MB20LB□-4T/6T

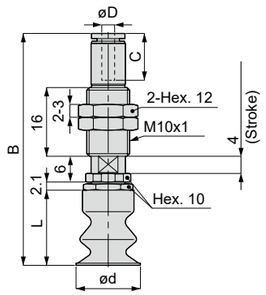


Unit: mm

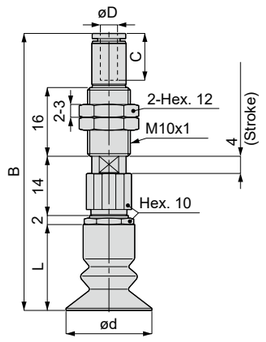
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MB6LB□-4T	6	2.5	36.1	15	8.9
VSP-MB6LB□-6T		4			
VSP-MB8LB□-4T	8	2.5	36.1	15	8.9
VSP-MB8LB□-6T		4			
VSP-MB10LB□-4T	10	2.5	36.6	15.5	9
VSP-MB10LB□-6T		4			
VSP-MB15LB□-4T	15	2.5	38.6	17.5	9.1
VSP-MB15LB□-6T		4			
VSP-MB20LB□-4T	20	2.5	43.2	20	11
VSP-MB20LB□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC6 to 15LB□2/4



●VSP-MC20LB□2/4

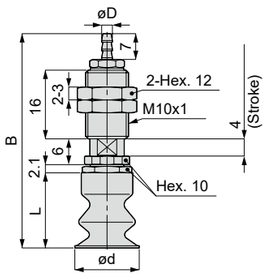


Unit: mm

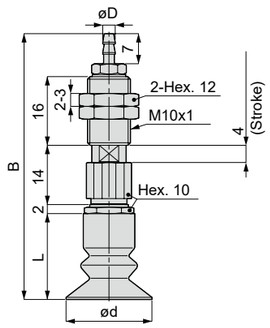
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC6LB□-2	6	1.8	48	15	8.4	1 to 1.3	17
VSP-MC6LB□-4		4	52.1		11.2		18
VSP-MC8LB□-2	8	1.8	48	15	8.4	1 to 1.3	17
VSP-MC8LB□-4		4	52.1		11.2		18
VSP-MC10LB□-2	10	1.8	48.5	15.5	8.4	1 to 1.3	17
VSP-MC10LB□-4		4	52.6		11.2		18
VSP-MC15LB□-2	15	1.8	50.5	17.5	8.4	1 to 1.3	17
VSP-MC15LB□-4		4	54.6		11.2		18
VSP-MC20LB□-2	20	1.8	60.9	20	8.4	1 to 1.3	22
VSP-MC20LB□-4		4	65		11.2		23

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC6 to 15LB□-4T/6T



●VSP-MC20LB□-4T/6T

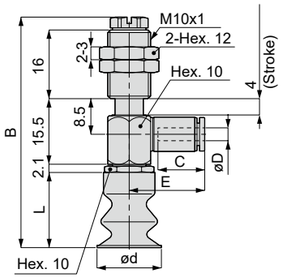


Unit: mm

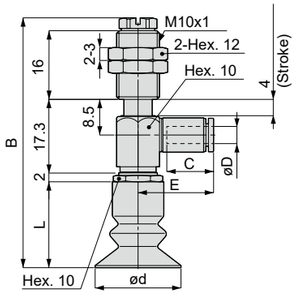
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC6LB□-4T	6	2.5	49.2	15	0.5 to 0.6	17
VSP-MC6LB□-6T		4				
VSP-MC8LB□-4T	8	2.5	49.2	15	0.5 to 0.6	17
VSP-MC8LB□-6T		4				
VSP-MC10LB□-4T	10	2.5	49.7	15.5	0.5 to 0.6	17
VSP-MC10LB□-6T		4				
VSP-MC15LB□-4T	15	2.5	51.7	17.5	0.5 to 0.6	17
VSP-MC15LB□-6T		4				
VSP-MC20LB□-4T	20	2.5	62.1	20	1 to 1.3	22
VSP-MC20LB□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD6 to 15LB□-2/4/6



●VSP-MD20LB□-2/4/6

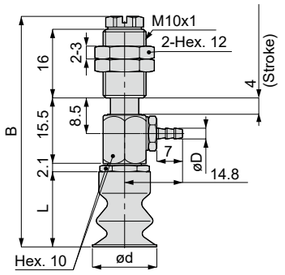


Unit: mm

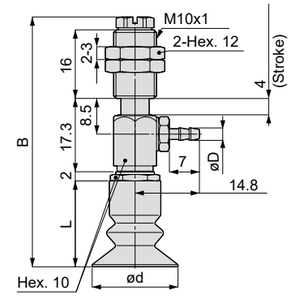
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD6LB□-2	6	1.8	51.6	15	8.4	13.6	1 to 1.3	25
VSP-MD6LB□-4		4			11.2	17.7		26
VSP-MD6LB□-6		6			11.9	19.5		27
VSP-MD8LB□-2	8	1.8	51.6	15	8.4	13.6	1 to 1.3	25
VSP-MD8LB□-4		4			11.2	17.7		26
VSP-MD8LB□-6		6			11.9	19.5		27
VSP-MD10LB□-2	10	1.8	52.1	15.5	8.4	13.6	1 to 1.3	25
VSP-MD10LB□-4		4			11.2	17.7		26
VSP-MD10LB□-6		6			11.9	19.5		27
VSP-MD15LB□-2	15	1.8	54.1	17.5	8.4	13.6	1 to 1.3	25
VSP-MD15LB□-4		4			11.2	17.7		26
VSP-MD15LB□-6		6			11.9	19.5		27
VSP-MD20LB□-2	20	1.8	58.3	20	8.4	13.6	1 to 1.3	26
VSP-MD20LB□-4		4			11.2	17.7		27
VSP-MD20LB□-6		6			11.9	19.5		28

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD6 to 15LB□-4T/6T



●VSP-MD20LB□-4T/6T

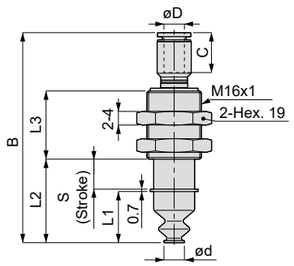


Unit: mm

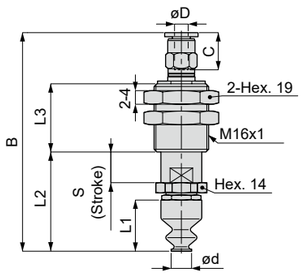
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD6LB□-4T	6	2.5	51.6	15	1 to 1.3	24
VSP-MD6LB□-6T		4				
VSP-MD8LB□-4T	8	2.5	51.6	15	1 to 1.3	24
VSP-MD8LB□-6T		4				
VSP-MD10LB□-4T	10	2.5	52.1	15.5	1 to 1.3	24
VSP-MD10LB□-6T		4				
VSP-MD15LB□-4T	15	2.5	54.1	17.5	1 to 1.3	24
VSP-MD15LB□-6T		4				
VSP-MD20LB□-4T	20	2.5	58.3	20	1 to 1.3	26
VSP-MD20LB□-6T		4				

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC6, 8LB□-2/4/6



●VSP-HC6, 8-□LB□-2/4/6

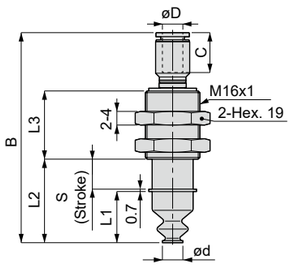


Unit: mm

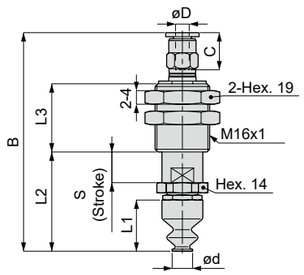
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC6LB□-2	6	1.8	55.9	15	24.7	20	8.4	9	0.9 to 2.7	20
VSP-HC6LB□-4		4	59.9				11.2			21
VSP-HC6LB□-6		6	61.2				11.9			22
VSP-HC6-10LB□-2		1.8	62.7		30.1	21.5	8.4	10	1.0 to 2.4	24
VSP-HC6-10LB□-4		4	66.8				11.2			25
VSP-HC6-10LB□-6		6	68.1				11.9			26
VSP-HC6-15LB□-2		1.8	72.7		35.1	26.5	8.4	15	1.0 to 2.7	26
VSP-HC6-15LB□-4		4	76.8				11.2			27
VSP-HC6-15LB□-6		6	78.1				11.9			28
VSP-HC6-20LB□-2		1.8	82.7		40.1	31.5	8.4	20	1.0 to 3.0	28
VSP-HC6-20LB□-4		4	86.8				11.2			29
VSP-HC6-20LB□-6		6	88.1				11.9			30
VSP-HC6-25LB□-2		1.8	93.2		45.1	37	8.4	25	1.0 to 3.0	30
VSP-HC6-25LB□-4		4	97.3				11.2			31
VSP-HC6-25LB□-6		6	98.6				11.9			32
VSP-HC6-30LB□-2		1.8	104.2		50.1	43	8.4	30	1.0 to 3.0	32
VSP-HC6-30LB□-4		4	108.3				11.2			33
VSP-HC6-30LB□-6		6	109.6				11.9			34
VSP-HC6-40LB□-2		1.8	126.2		60.1	55	8.4	40	1.0 to 3.0	35
VSP-HC6-40LB□-4		4	130.3				11.2			36
VSP-HC6-40LB□-6		6	131.6				11.9			37
VSP-HC6-50LB□-2		1.8	147.7		70.1	66.5	8.4	50	1.0 to 3.1	39
VSP-HC6-50LB□-4		4	151.8				11.2			40
VSP-HC6-50LB□-6		6	153.1				11.9			41
VSP-HC8LB□-2	8	1.8	55.9	15	24.7	20	8.4	9	0.9 to 2.7	20
VSP-HC8LB□-4		4	59.9				11.2			21
VSP-HC8LB□-6		6	61.2				11.9			22
VSP-HC8-10LB□-2		1.8	62.7		30.1	21.5	8.4	10	1.0 to 2.4	24
VSP-HC8-10LB□-4		4	66.8				11.2			25
VSP-HC8-10LB□-6		6	68.1				11.9			26
VSP-HC8-15LB□-2		1.8	72.7		35.1	26.5	8.4	15	1.0 to 2.7	26
VSP-HC8-15LB□-4		4	76.8				11.2			27
VSP-HC8-15LB□-6		6	78.1				11.9			28
VSP-HC8-20LB□-2		1.8	82.7		40.1	31.5	8.4	20	1.0 to 3.0	28
VSP-HC8-20LB□-4		4	86.8				11.2			29
VSP-HC8-20LB□-6		6	88.1				11.9			30
VSP-HC8-25LB□-2		1.8	93.2		45.1	37	8.4	25	1.0 to 3.0	30
VSP-HC8-25LB□-4		4	97.3				11.2			31
VSP-HC8-25LB□-6		6	98.6				11.9			32
VSP-HC8-30LB□-2		1.8	104.2		50.1	43	8.4	30	1.0 to 3.0	32
VSP-HC8-30LB□-4		4	108.3				11.2			33
VSP-HC8-30LB□-6		6	109.6				11.9			34
VSP-HC8-40LB□-2		1.8	126.2		60.1	55	8.4	40	1.0 to 3.0	35
VSP-HC8-40LB□-4		4	130.3				11.2			36
VSP-HC8-40LB□-6		6	131.6				11.9			37
VSP-HC8-50LB□-2		1.8	147.7		70.1	66.5	8.4	50	1.0 to 3.1	39
VSP-HC8-50LB□-4		4	151.8				11.2			40
VSP-HC8-50LB□-6		6	153.1				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10, 15LB□-2/4/6



●VSP-HC10, 15-□LB□-2/4/6

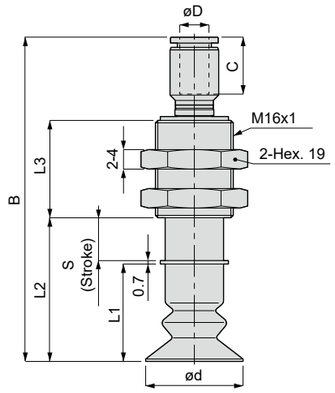


Unit: mm

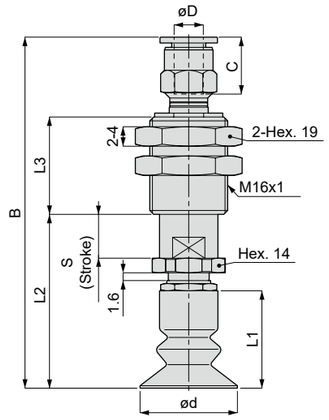
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10LB□-2	10	1.8	56.4	15.5	25.2	20	8.4	9	0.9 to 2.7	20
VSP-HC10LB□-4		4	60.4				11.2			21
VSP-HC10LB□-6		6	61.7				11.9			22
VSP-HC10-10LB□-2		1.8	63.2		30.6	21.5	8.4	10	1.0 to 2.4	24
VSP-HC10-10LB□-4		4	67.3				11.2			25
VSP-HC10-10LB□-6		6	68.6				11.9			26
VSP-HC10-15LB□-2		1.8	73.2		35.6	26.5	8.4	15	1.0 to 2.7	26
VSP-HC10-15LB□-4		4	77.3				11.2			27
VSP-HC10-15LB□-6		6	78.6				11.9			28
VSP-HC10-20LB□-2		1.8	83.2		40.6	31.5	8.4	20	1.0 to 3.0	28
VSP-HC10-20LB□-4		4	87.3				11.2			29
VSP-HC10-20LB□-6		6	88.6				11.9			30
VSP-HC10-25LB□-2		1.8	93.7		45.6	37	8.4	25	1.0 to 3.0	30
VSP-HC10-25LB□-4		4	97.8				11.2			31
VSP-HC10-25LB□-6		6	99.1				11.9			32
VSP-HC10-30LB□-2		1.8	104.7		50.6	43	8.4	30	1.0 to 3.0	32
VSP-HC10-30LB□-4		4	108.8				11.2			33
VSP-HC10-30LB□-6		6	110.1				11.9			34
VSP-HC10-40LB□-2		1.8	126.7		60.6	55	8.4	40	1.0 to 3.0	35
VSP-HC10-40LB□-4		4	130.8				11.2			36
VSP-HC10-40LB□-6		6	132.1				11.9			37
VSP-HC10-50LB□-2		1.8	148.2		70.6	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50LB□-4		4	152.3				11.2			40
VSP-HC10-50LB□-6		6	153.6				11.9			41
VSP-HC15LB□-2	15	1.8	58.4	17.5	27.2	20	8.4	9	0.9 to 2.7	20
VSP-HC15LB□-4		4	62.4				11.2			21
VSP-HC15LB□-6		6	63.7				11.9			22
VSP-HC15-10LB□-2		1.8	65.2		32.6	21.5	8.4	10	1.0 to 2.4	24
VSP-HC15-10LB□-4		4	69.3				11.2			25
VSP-HC15-10LB□-6		6	70.6				11.9			26
VSP-HC15-15LB□-2		1.8	75.2		37.6	26.5	8.4	15	1.0 to 2.7	26
VSP-HC15-15LB□-4		4	79.3				11.2			27
VSP-HC15-15LB□-6		6	80.6				11.9			28
VSP-HC15-20LB□-2		1.8	85.2		42.6	31.5	8.4	20	1.0 to 3.0	28
VSP-HC15-20LB□-4		4	89.3				11.2			29
VSP-HC15-20LB□-6		6	90.6				11.9			30
VSP-HC15-25LB□-2		1.8	95.7		47.6	37	8.4	25	1.0 to 3.0	30
VSP-HC15-25LB□-4		4	99.8				11.2			31
VSP-HC15-25LB□-6		6	101.1				11.9			32
VSP-HC15-30LB□-2		1.8	106.7		52.6	43	8.4	30	1.0 to 3.0	32
VSP-HC15-30LB□-4		4	110.8				11.2			33
VSP-HC15-30LB□-6		6	112.1				11.9			34
VSP-HC15-40LB□-2		1.8	128.7		62.6	55	8.4	40	1.0 to 3.0	35
VSP-HC15-40LB□-4		4	132.8				11.2			36
VSP-HC15-40LB□-6		6	134.1				11.9			37
VSP-HC15-50LB□-2		1.8	150.2		72.6	66.5	8.4	50	1.0 to 3.1	39
VSP-HC15-50LB□-4		4	154.3				11.2			40
VSP-HC15-50LB□-6		6	155.6				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20LB□-2/4/6



●VSP-HC20-□LB□-2/4/6

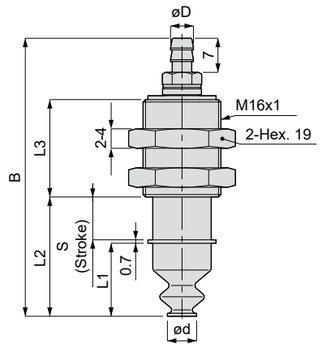


Unit: mm

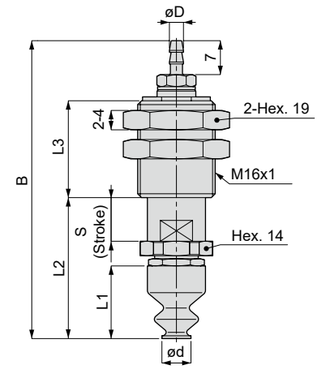
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20LB□-2	20	1.8	60.9	20	29.7	20	8.4	9	0.9 to 2.7	21
VSP-HC20LB□-4		4	64.9				11.2			22
VSP-HC20LB□-6		6	66.2				11.9			23
VSP-HC20-10LB□-2		1.8	69.2		35	21.5	8.4	10	1.0 to 2.4	27
VSP-HC20-10LB□-4		4	73.3				11.2			28
VSP-HC20-10LB□-6		6	74.6				11.9			29
VSP-HC20-15LB□-2		1.8	79.2		40	26.5	8.4	15	1.0 to 2.7	29
VSP-HC20-15LB□-4		4	83.3				11.2			30
VSP-HC20-15LB□-6		6	84.6				11.9			31
VSP-HC20-20LB□-2		1.8	89.2		45	31.5	8.4	20	1.0 to 3.0	31
VSP-HC20-20LB□-4		4	93.3				11.2			32
VSP-HC20-20LB□-6		6	94.6				11.9			33
VSP-HC20-25LB□-2		1.8	99.7		50	37	8.4	25	1.0 to 3.0	33
VSP-HC20-25LB□-4		4	103.8				11.2			34
VSP-HC20-25LB□-6		6	105.1				11.9			35
VSP-HC20-30LB□-2		1.8	110.7		55	43	8.4	30	1.0 to 3.0	35
VSP-HC20-30LB□-4		4	114.8				11.2			36
VSP-HC20-30LB□-6		6	116.1				11.9			37
VSP-HC20-40LB□-2		1.8	132.7		65	55	8.4	40	1.0 to 3.0	39
VSP-HC20-40LB□-4		4	136.8				11.2			40
VSP-HC20-40LB□-6		6	138.1				11.9			41
VSP-HC20-50LB□-2		1.8	154.2		75	66.5	8.4	50	1.0 to 3.1	43
VSP-HC20-50LB□-4		4	158.3				11.2			44
VSP-HC20-50LB□-6		6	159.6				11.9			45

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC6, 8LB□-4T/6T



●VSP-HC6, 8-□LB□-4T/6T

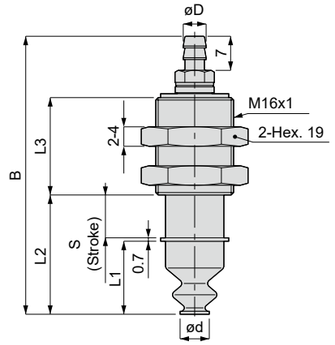


Unit: mm

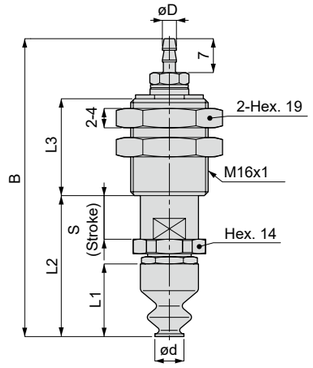
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC6LB□-4T	6	2.5	57.1	15	24.7	20	9	0.9 to 2.7	20
VSP-HC6LB□-6T		4							
VSP-HC6-10LB□-4T		2.5	63.9		30.1	21.5	10	1.0 to 2.4	24
VSP-HC6-10LB□-6T		4							
VSP-HC6-15LB□-4T		2.5	73.9		35.1	26.5	15	1.0 to 2.7	26
VSP-HC6-15LB□-6T		4							
VSP-HC6-20LB□-4T		2.5	83.9		40.1	31.5	20	1.0 to 3.0	28
VSP-HC6-20LB□-6T		4							
VSP-HC6-25LB□-4T		2.5	94.4		45.1	37	25	1.0 to 3.0	31
VSP-HC6-25LB□-6T		4							
VSP-HC6-30LB□-4T		2.5	105.4		50.1	43	30	1.0 to 3.0	33
VSP-HC6-30LB□-6T		4							
VSP-HC6-40LB□-4T		2.5	127.4		60.1	55	40	1.0 to 3.0	37
VSP-HC6-40LB□-6T		4							
VSP-HC6-50LB□-4T		2.5	148.9		70.1	66.5	50	1.0 to 3.1	41
VSP-HC6-50LB□-6T		4							
VSP-HC8LB□-4T	8	2.5	57.1	15	24.7	20	9	0.9 to 2.7	20
VSP-HC8LB□-6T		4							
VSP-HC8-10LB□-4T		2.5	63.9		30.1	21.5	10	1.0 to 2.4	24
VSP-HC8-10LB□-6T		4							
VSP-HC8-15LB□-4T		2.5	73.9		35.1	26.5	15	1.0 to 2.7	26
VSP-HC8-15LB□-6T		4							
VSP-HC8-20LB□-4T		2.5	83.9		40.1	31.5	20	1.0 to 3.0	28
VSP-HC8-20LB□-6T		4							
VSP-HC8-25LB□-4T		2.5	94.4		45.1	37	25	1.0 to 3.0	31
VSP-HC8-25LB□-6T		4							
VSP-HC8-30LB□-4T		2.5	105.4		50.1	43	30	1.0 to 3.0	33
VSP-HC8-30LB□-6T		4							
VSP-HC8-40LB□-4T		2.5	127.4		60.1	55	40	1.0 to 3.0	37
VSP-HC8-40LB□-6T		4							
VSP-HC8-50LB□-4T		2.5	148.9		70.1	66.5	50	1.0 to 3.1	41
VSP-HC8-50LB□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10, 15LB□-4T/6T



●VSP-HC10, 15-□LB□-4T/6T

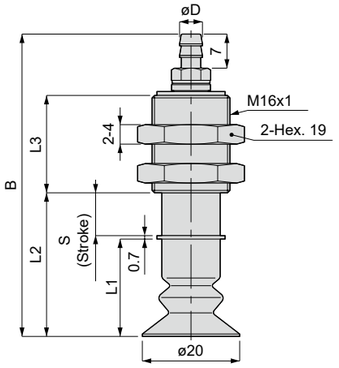


Unit: mm

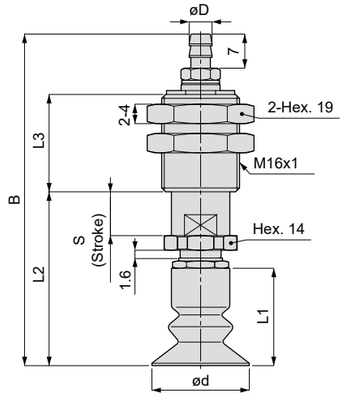
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10LB□-4T	10	2.5	57.6	15.5	25.2	20	9	0.9 to 2.7	20
VSP-HC10LB□-6T		4							
VSP-HC10-10LB□-4T		2.5	64.4		30.6	21.5	10	1.0 to 2.4	24
VSP-HC10-10LB□-6T		4							
VSP-HC10-15LB□-4T		2.5	74.4		35.6	26.5	15	1.0 to 2.7	26
VSP-HC10-15LB□-6T		4							
VSP-HC10-20LB□-4T		2.5	84.4		40.6	31.5	20	1.0 to 3.0	28
VSP-HC10-20LB□-6T		4							
VSP-HC10-25LB□-4T		2.5	94.9		45.6	37	25	1.0 to 3.0	31
VSP-HC10-25LB□-6T		4							
VSP-HC10-30LB□-4T		2.5	105.9		50.6	43	30	1.0 to 3.0	33
VSP-HC10-30LB□-6T		4							
VSP-HC10-40LB□-4T		2.5	127.9		60.6	55	40	1.0 to 3.0	37
VSP-HC10-40LB□-6T		4							
VSP-HC10-50LB□-4T		2.5	149.4		70.6	66.5	50	1.0 to 3.1	41
VSP-HC10-50LB□-6T		4							
VSP-HC15LB□-4T	15	2.5	59.6	17.5	27.2	20	9	0.9 to 2.7	20
VSP-HC15LB□-6T		4							
VSP-HC15-10LB□-4T		2.5	66.4		32.6	21.5	10	1.0 to 2.4	24
VSP-HC15-10LB□-6T		4							
VSP-HC15-15LB□-4T		2.5	76.4		37.6	26.5	15	1.0 to 2.7	26
VSP-HC15-15LB□-6T		4							
VSP-HC15-20LB□-4T		2.5	86.4		42.6	31.5	20	1.0 to 3.0	28
VSP-HC15-20LB□-6T		4							
VSP-HC15-25LB□-4T		2.5	96.9		47.6	37	25	1.0 to 3.0	31
VSP-HC15-25LB□-6T		4							
VSP-HC15-30LB□-4T		2.5	107.9		52.6	43	30	1.0 to 3.0	33
VSP-HC15-30LB□-6T		4							
VSP-HC15-40LB□-4T		2.5	129.9		62.6	55	40	1.0 to 3.0	37
VSP-HC15-40LB□-6T		4							
VSP-HC15-50LB□-4T		2.5	151.4		72.6	66.5	50	1.0 to 3.1	41
VSP-HC15-50LB□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20LB□-4T/6T



●VSP-HC20-□LB□-4T/6T

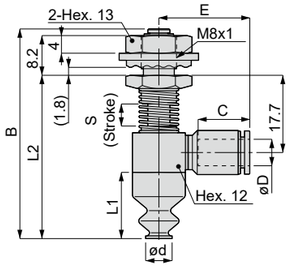


Unit: mm

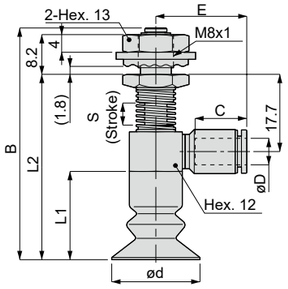
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20LB□-4T	20	2.5	57.1	20	29.7	20	9	0.9 to 2.7	21
VSP-HC20LB□-6T		4							
VSP-HC20-10LB□-4T		2.5	70.4		35	21.5	10	1.0 to 2.4	26
VSP-HC20-10LB□-6T		4							
VSP-HC20-15LB□-4T		2.5	80.4		40	26.5	15	1.0 to 2.7	28
VSP-HC20-15LB□-6T		4							
VSP-HC20-20LB□-4T		2.5	90.4		45	31.5	20	1.0 to 3.0	30
VSP-HC20-20LB□-6T		4							
VSP-HC20-25LB□-4T		2.5	100.9		50	37	25	1.0 to 3.0	32
VSP-HC20-25LB□-6T		4							
VSP-HC20-30LB□-4T		2.5	111.9		55	43	30	1.0 to 3.0	35
VSP-HC20-30LB□-6T		4							
VSP-HC20-40LB□-4T		2.5	133.9		65	55	40	1.0 to 3.0	39
VSP-HC20-40LB□-6T		4							
VSP-HC20-50LB□-4T		2.5	155.4		75	66.5	50	1.0 to 3.1	43
VSP-HC20-50LB□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD6 to 15LB□-2/4/6



●VSP-HD20LB□-2/4/6

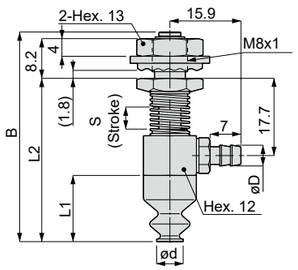


Unit: mm

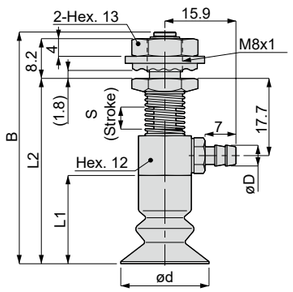
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6LB□-2	6	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD6LB□-4		4				11.2	18.8			30
VSP-HD6LB□-6		6				11.9	20.6			31
VSP-HD8LB□-2	8	1.8	47.5	15	37.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD8LB□-4		4				11.2	18.8			30
VSP-HD8LB□-6		6				11.9	20.6			31
VSP-HD10LB□-2	10	1.8	48	15.5	37.7	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD10LB□-4		4				11.2	18.8			30
VSP-HD10LB□-6		6				11.9	20.6			31
VSP-HD15LB□-2	15	1.8	50	17.5	39.7	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HD15LB□-4		4				11.2	18.8			31
VSP-HD15LB□-6		6				11.9	20.6			32
VSP-HD20LB□-2	20	1.8	52.5	20	42.2	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HD20LB□-4		4				11.2	18.8			32
VSP-HD20LB□-6		6				11.9	20.6			33

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD6 to 15LB□-4T/6T



●VSP-HD20LB□-4T/6T

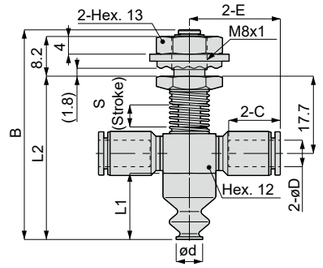


Unit: mm

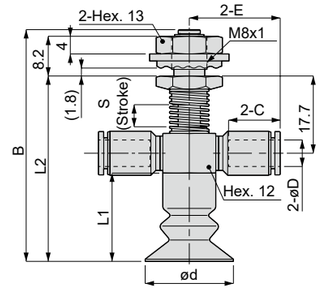
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD6LB□-4T	6	2.5	47.5	15	37.2	5.2	1.6 to 2.9	30
VSP-HD6LB□-6T		4						
VSP-HD8LB□-4T	8	2.5	47.5	15	37.2	5.2	1.6 to 2.9	30
VSP-HD8LB□-6T		4						
VSP-HD10LB□-4T	10	2.5	48	15.5	37.7	5.2	1.6 to 2.9	30
VSP-HD10LB□-6T		4						
VSP-HD15LB□-4T	15	2.5	50	17.5	39.7	5.2	1.6 to 2.9	30
VSP-HD15LB□-6T		4						
VSP-HD20LB□-4T	20	2.5	52.5	20	52.5	5.2	1.6 to 2.9	32
VSP-HD20LB□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Push-in fitting)

●VSP-HDW6 to 15LB□-2/4/6



●VSP-HDW20LB□-2/4/6

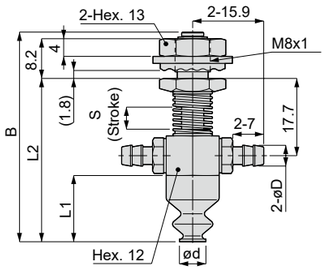


Unit: mm

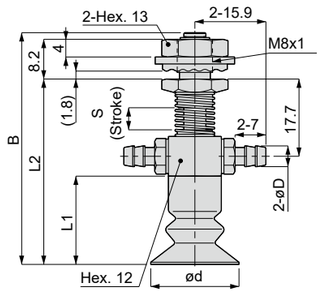
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6LB□-2	6	1.8	47.5	12.2	37.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW6LB□-4		4				11.2	18.8			30
VSP-HDW6LB□-6		6				11.9	20.6			31
VSP-HDW8LB□-2	8	1.8	47.5	12.2	37.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW8LB□-4		4				11.2	18.8			30
VSP-HDW8LB□-6		6				11.9	20.6			31
VSP-HDW10LB□-2	10	1.8	48	14	37.7	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HDW10LB□-4		4				11.2	18.8			30
VSP-HDW10LB□-6		6				11.9	20.6			31
VSP-HDW15LB□-2	15	1.8	50	14	39.7	8.4	14.7	5.2	1.6 to 2.9	30
VSP-HDW15LB□-4		4				11.2	18.8			31
VSP-HDW15LB□-6		6				11.9	20.6			32
VSP-HDW20LB□-2	20	1.8	52.5	15	42.2	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HDW20LB□-4		4				11.2	18.8			32
VSP-HDW20LB□-6		6				11.9	20.6			33

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides, VSP-HDW, Barb Fitting)

●VSP-HDW6 to 15LB□-4T/6T



●VSP-HDW20LB□-4T/6T

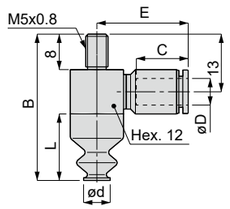


Unit: mm

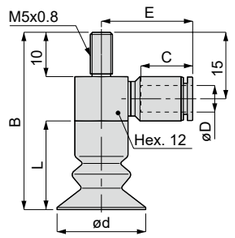
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW6LB□-4T	6	2.5	47.5	15	37.2	5.2	1.6 to 2.9	30
VSP-HDW6LB□-6T		4						
VSP-HDW8LB□-4T	8	2.5	47.5	15	37.2	5.2	1.6 to 2.9	30
VSP-HDW8LB□-6T		4						
VSP-HDW10LB□-4T	10	2.5	48	15.5	37.7	5.2	1.6 to 2.9	30
VSP-HDW10LB□-6T		4						
VSP-HDW15LB□-4T	15	2.5	50	17.5	39.7	5.2	1.6 to 2.9	30
VSP-HDW15LB□-6T		4						
VSP-HDW20LB□-4T	20	2.5	52.5	20	52.5	5.2	1.6 to 2.9	32
VSP-HDW20LB□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE6 to 15LB□-2/4/6



●VSP-HE20LB□-2/4/6

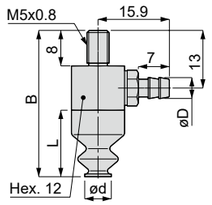


Unit: mm

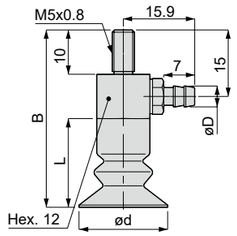
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE6LB□-2	6	1.8	33	15	8.4	14.7	15
VSP-HE6LB□-4		4			11.2	18.8	16
VSP-HE6LB□-6		6			11.9	20.6	17
VSP-HE8LB□-2	8	1.8	33	15	8.4	14.7	15
VSP-HE8LB□-4		4			11.2	18.8	16
VSP-HE8LB□-6		6			11.9	20.6	17
VSP-HE10LB□-2	10	1.8	33.5	15.5	8.4	14.7	15
VSP-HE10LB□-4		4			11.2	18.8	16
VSP-HE10LB□-6		6			11.9	20.6	17
VSP-HE15LB□-2	15	1.8	35.5	17.5	8.4	14.7	15
VSP-HE15LB□-4		4			11.2	18.8	16
VSP-HE15LB□-6		6			11.9	20.6	17
VSP-HE20LB□-2	20	1.8	40	20	8.4	14.7	17
VSP-HE20LB□-4		4			11.2	18.8	18
VSP-HE20LB□-6		6			11.9	20.6	19

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE6 to 15LB□-4T/6T



●VSP-HE20LB□-4T/6T

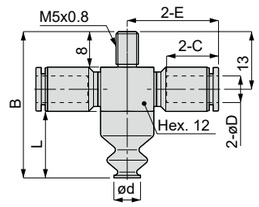


Unit: mm

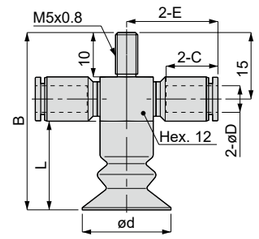
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE6LB□-4T	6	2.5	33	15	15
VSP-HE6LB□-6T		4			
VSP-HE8LB□-4T	8	2.5	33	15	15
VSP-HE8LB□-6T		4			
VSP-HE10LB□-4T	10	2.5	33.5	15.5	15
VSP-HE10LB□-6T		4			
VSP-HE15LB□-4T	15	2.5	35.5	17.5	16
VSP-HE15LB□-6T		4			
VSP-HE20LB□-4T	20	2.5	40	20	18
VSP-HE20LB□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW6 to 15LB□-2/4/6



●VSP-HEW20LB□-2/4/6

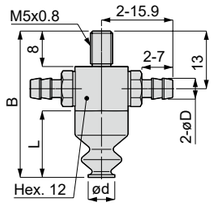


Unit: mm

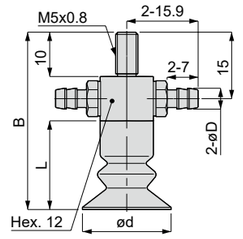
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW6LB□-2	6	1.8	33	15	8.4	14.7	15
VSP-HEW6LB□-4		4			11.2	18.8	16
VSP-HEW6LB□-6		6			11.9	20.6	17
VSP-HEW8LB□-2	8	1.8	33	15	8.4	14.7	15
VSP-HEW8LB□-4		4			11.2	18.8	16
VSP-HEW8LB□-6		6			11.9	20.6	17
VSP-HEW10LB□-2	10	1.8	33.5	15.5	8.4	14.7	15
VSP-HEW10LB□-4		4			11.2	18.8	16
VSP-HEW10LB□-6		6			11.9	20.6	17
VSP-HEW15LB□-2	15	1.8	35.5	17.5	8.4	14.7	15
VSP-HEW15LB□-4		4			11.2	18.8	16
VSP-HEW15LB□-6		6			11.9	20.6	17
VSP-HEW20LB□-2	20	1.8	40	20	8.4	14.7	17
VSP-HEW20LB□-4		4			11.2	18.8	18
VSP-HEW20LB□-6		6			11.9	20.6	19

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW6 to 15LB□-4T/6T



●VSP-HEW20LB□-4T/6T

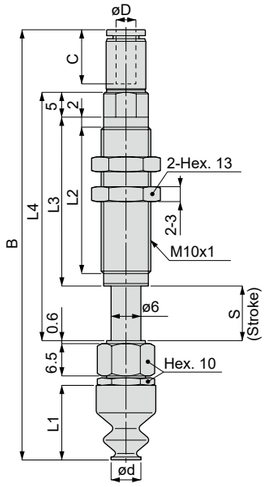


Unit: mm

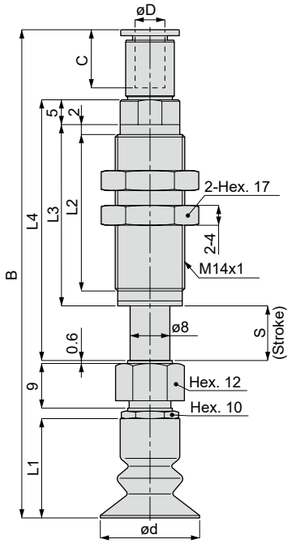
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW6LB□-4T	6	2.5	33	15	15
VSP-HEW6LB□-6T		4			
VSP-HEW8LB□-4T	8	2.5	33	15	15
VSP-HEW8LB□-6T		4			
VSP-HEW10LB□-4T	10	2.5	33.5	15.5	15
VSP-HEW10LB□-6T		4			
VSP-HEW15LB□-4T	15	2.5	35.5	17.5	16
VSP-HEW15LB□-6T		4			
VSP-HEW20LB□-4T	20	2.5	40	20	18
VSP-HEW20LB□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC6 to 15-□LB□-4



●VSP-LFC20-□LB□-4



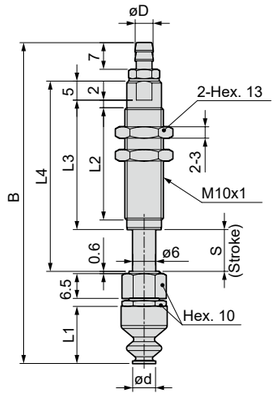
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2LB□-4	6	4	71.2	15	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC6-5LB□-4			77.2		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC6-10LB□-4			87.2		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC6-15LB□-4			97.2		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC6-20LB□-4			107.2		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC8-2LB□-4	8	4	71.2	15	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC8-5LB□-4			77.2		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC8-10LB□-4			87.2		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC8-15LB□-4			97.2		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC8-20LB□-4			107.2		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC10-2LB□-4	10	4	71.7	15.5	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC10-5LB□-4			77.7		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC10-10LB□-4			87.7		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC10-15LB□-4			97.7		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC10-20LB□-4			107.7		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC15-2LB□-4	15	4	73.7	17.5	21.5	26	34	11.2	2	1.3 to 1.8	30
VSP-LFC15-5LB□-4			79.7		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	32
VSP-LFC15-10LB□-4			89.7		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	34
VSP-LFC15-15LB□-4			99.7		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	36
VSP-LFC15-20LB□-4			109.7		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	38
VSP-LFC20-5LB□-4	20	4	87.1	20	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57
VSP-LFC20-5LB□-6		6	88.4					11.9			58
VSP-LFC20-10LB□-4		4	97.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59
VSP-LFC20-10LB□-6		6	98.4					11.9			60
VSP-LFC20-15LB□-4		4	107.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62
VSP-LFC20-15LB□-6		6	108.4					11.9			63
VSP-LFC20-20LB□-4		4	117.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65
VSP-LFC20-20LB□-6		6	118.4					11.9			66

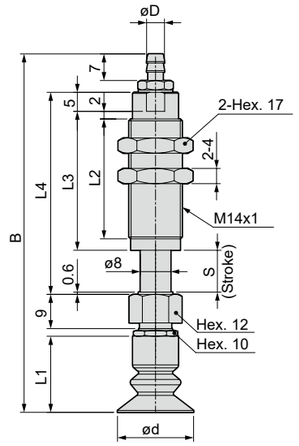
* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC6 to 15-□LB□-4T/6T



●VSP-LFC20-□LB□-4T/6T



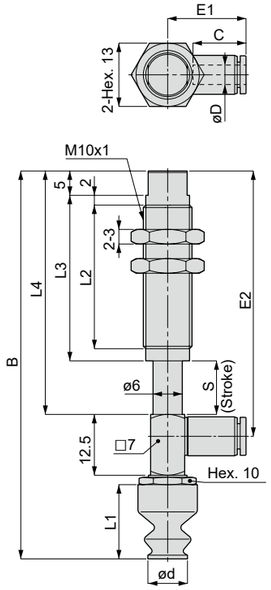
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC6-2LB□-4T	6	2.5	68.3	15	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC6-2LB□-6T		4								
VSP-LFC6-5LB□-4T		2.5	74.3		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC6-5LB□-6T		4								
VSP-LFC6-10LB□-4T		2.5	84.3		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC6-10LB□-6T		4								
VSP-LFC6-15LB□-4T		2.5	94.3		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC6-15LB□-6T		4								
VSP-LFC6-20LB□-4T		2.5	104.3		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC6-20LB□-6T		4								
VSP-LFC8-2LB□-4T	8	2.5	68.3	15	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC8-2LB□-6T		4								
VSP-LFC8-5LB□-4T		2.5	74.3		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC8-5LB□-6T		4								
VSP-LFC8-10LB□-4T		2.5	84.3		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC8-10LB□-6T		4								
VSP-LFC8-15LB□-4T		2.5	94.3		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC8-15LB□-6T		4								
VSP-LFC8-20LB□-4T		2.5	104.3		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC8-20LB□-6T		4								
VSP-LFC10-2LB□-4T	10	2.5	68.8	15.5	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC10-2LB□-6T		4								
VSP-LFC10-5LB□-4T		2.5	74.8		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-5LB□-6T		4								
VSP-LFC10-10LB□-4T		2.5	84.8		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-10LB□-6T		4								
VSP-LFC10-15LB□-4T		2.5	94.8		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-15LB□-6T		4								
VSP-LFC10-20LB□-4T		2.5	104.8		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC10-20LB□-6T		4								
VSP-LFC15-2LB□-4T	15	2.5	70.8	17.5	21.5	26	34	2	1.3 to 1.8	28
VSP-LFC15-2LB□-6T		4								
VSP-LFC15-5LB□-4T		2.5	76.8		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC15-5LB□-6T		4								
VSP-LFC15-10LB□-4T		2.5	86.8		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC15-10LB□-6T		4								
VSP-LFC15-15LB□-4T		2.5	96.8		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC15-15LB□-6T		4								
VSP-LFC15-20LB□-4T		2.5	106.8		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC15-20LB□-6T		4								
VSP-LFC20-5LB□-4T	20	2.5	84.2	20	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	52
VSP-LFC20-5LB□-6T		4								
VSP-LFC20-10LB□-4T		2.5	94.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	54
VSP-LFC20-10LB□-6T		4								
VSP-LFC20-15LB□-4T		2.5	104.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	57
VSP-LFC20-15LB□-6T		4								
VSP-LFC20-20LB□-4T		2.5	114.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	60
VSP-LFC20-20LB□-6T		4								

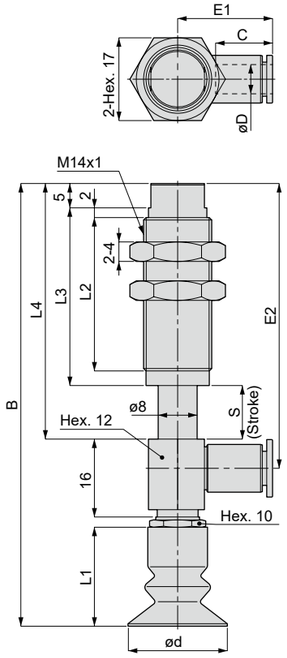
* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD6 to 15-□LB□-4



●VSP-LFD20-□LB□-4/6

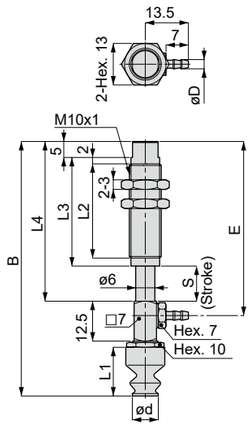


Unit: mm

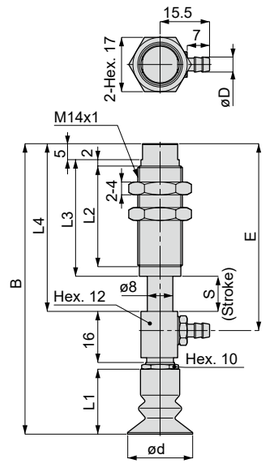
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5LB□-4	6	4	69.6	15	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	28
VSP-LFD6-10LB□-4			79.6		29.5	34	50			54.5	10	1.3 to 3.3	30
VSP-LFD6-15LB□-4			89.6		34.5	39	60			64.5	15	1.3 to 4.2	32
VSP-LFD6-20LB□-4			99.6		39.5	44	70			74.5	20	1.3 to 5.1	34
VSP-LFD8-5LB□-4	8	4	69.6	15	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	28
VSP-LFD8-10LB□-4			79.6		29.5	34	50			54.5	10	1.3 to 3.3	30
VSP-LFD8-15LB□-4			89.6		34.5	39	60			64.5	15	1.3 to 4.2	32
VSP-LFD8-20LB□-4			99.6		39.5	44	70			74.5	20	1.3 to 5.1	34
VSP-LFD10-5LB□-4	10	4	70.1	15.5	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	28
VSP-LFD10-10LB□-4			80.1		29.5	34	50			54.5	10	1.3 to 3.3	30
VSP-LFD10-15LB□-4			90.1		34.5	39	60			64.5	15	1.3 to 4.2	32
VSP-LFD10-20LB□-4			100.1		39.5	44	70			74.5	20	1.3 to 5.1	34
VSP-LFD15-5LB□-4	15	4	72.1	17.5	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	28
VSP-LFD15-10LB□-4			82.1		29.5	34	50			54.5	10	1.3 to 3.3	30
VSP-LFD15-15LB□-4			92.1		34.5	39	60			64.5	15	1.3 to 4.2	32
VSP-LFD15-20LB□-4			102.1		39.5	44	70			74.5	20	1.3 to 5.1	34
VSP-LFD20-5LB□-4	20	4	80.5	20	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58
VSP-LFD20-5LB□-6		6						11.9	19.7				59
VSP-LFD20-10LB□-4		4	90.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62
VSP-LFD20-10LB□-6		6						11.9	19.7				63
VSP-LFD20-15LB□-4		4	100.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66
VSP-LFD20-15LB□-6		6						11.9	19.7				67
VSP-LFD20-20LB□-4		4	110.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70
VSP-LFD20-20LB□-6		6						11.9	19.7				71

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD6 to 15-□LB□-4T/6T



●VSP-LFD20-□LB□-4T/6T

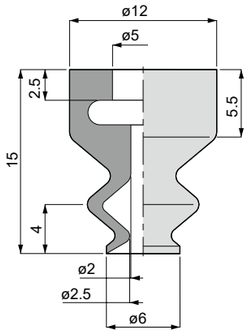


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD6-5LB□-4T	6	2.5	69.6	15	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD6-5LB□-6T		4									
VSP-LFD6-10LB□-4T		2.5	79.6		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD6-10LB□-6T		4									
VSP-LFD6-15LB□-4T		2.5	89.6		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD6-15LB□-6T		4									
VSP-LFD6-20LB□-4T		2.5	99.6		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD6-20LB□-6T		4									
VSP-LFD8-5LB□-4T	8	2.5	69.6	15	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD8-5LB□-6T		4									
VSP-LFD8-10LB□-4T		2.5	79.6		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD8-10LB□-6T		4									
VSP-LFD8-15LB□-4T		2.5	89.6		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD8-15LB□-6T		4									
VSP-LFD8-20LB□-4T		2.5	99.6		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD8-20LB□-6T		4									
VSP-LFD10-5LB□-4T	10	2.5	70.1	15.5	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD10-5LB□-6T		4									
VSP-LFD10-10LB□-4T		2.5	80.1		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD10-10LB□-6T		4									
VSP-LFD10-15LB□-4T		2.5	90.1		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD10-15LB□-6T		4									
VSP-LFD10-20LB□-4T		2.5	100.1		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD10-20LB□-6T		4									
VSP-LFD15-5LB□-4T	15	2.5	72.1	17.5	24.5	29	40	44.5	5	1.3 to 2.4	27
VSP-LFD15-5LB□-6T		4									
VSP-LFD15-10LB□-4T		2.5	82.1		29.5	34	50	54.5	10	1.3 to 3.3	29
VSP-LFD15-10LB□-6T		4									
VSP-LFD15-15LB□-4T		2.5	92.1		34.5	39	60	64.5	15	1.3 to 4.2	31
VSP-LFD15-15LB□-6T		4									
VSP-LFD15-20LB□-4T		2.5	102.1		39.5	44	70	74.5	20	1.3 to 5.1	33
VSP-LFD15-20LB□-6T		4									
VSP-LFD20-5LB□-4T	20	2.5	80.5	20	26.5	31.5	42.5	48.5	5	4.5 to 6.5	54
VSP-LFD20-5LB□-6T		4									
VSP-LFD20-10LB□-4T		2.5	90.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57
VSP-LFD20-10LB□-6T		4									
VSP-LFD20-15LB□-4T		2.5	100.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61
VSP-LFD20-15LB□-6T		4									
VSP-LFD20-20LB□-4T		2.5	110.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65
VSP-LFD20-20LB□-6T		4									

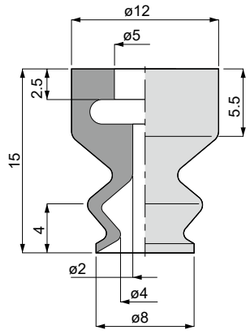
Pad Rubber Only External Dimension Diagram

●VSPG-6LB□



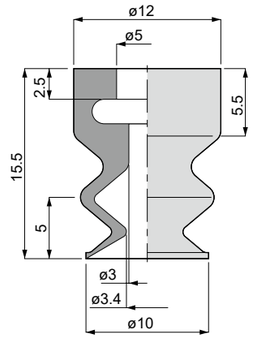
Weight: 1 g

●VSPG-8LB□



Weight: 1 g

●VSPG-10LB□



Weight: 1.1 g

●VSPG-15LB□

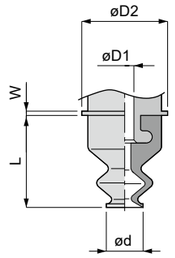
Weight: 1.2 g

●VSPG-20LB□

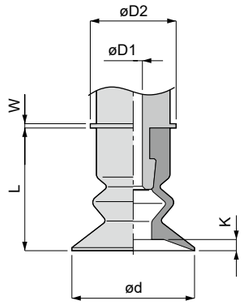
Weight: 2 g

Detailed Diagram of Pad and Holder Connection Part

●VSPG-6 to 15LB□A



●VSPG-20LB□A



Unit: mm

Model No.	Pad Diameter ød	L	øD1	øD2	W
VSPG-6LB□A	6	15	3	14	0.7
VSPG-8LB□A	8	15	3	14	0.7
VSPG-10LB□A	10	15.5	3	14	0.7
VSPG-15LB□A	15	17.5	3	14	0.7
VSPG-20LB□A	20	20	3	14	0.7

* The øD2 and W dimensions in the dimension table apply only to the VPHC type.

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Soft Bellows Type, VSP-□LB□Series

Design / Selection

Warning

■Since soft bellows type pads may adhere together due to working Status and material characteristics, confirm performance with an actual device. Also, tackiness may increase depending on the operating environment or pad wear. Review the pad shape, material, quantity, etc., as necessary.

Caution

■The VPHC type holder has no conductivity. When using vacuum pads made of conductive material, take measures to discharge electricity directly from the pad rubber.

■Use the soft bellows so that they do not overcrush. Excessive crushing may accelerate wear of the bellows part, cause cracks in the lip part, or lead to deformation due to strain, potentially causing suction failure.

■When replacing a soft bellows type pad adaptor, be sure to check the Suction Pads configuration diagram in the catalog, use appropriate tools according to the recommended tightening torque below and tighten without looseness using the hexagonal part of the holder outer diameter.

●Recommended Tightening Torque

Pad Thread Size (mm)	Tightening Torque
M4x0.7	0.7 to 0.8 N·m
M6x1	1.5 to 2.0 N·m

MEMO

Suction Pad Non-slip Type

VSP-□K□ Series

Suction pad with a non-slip structure on the pad's suction surface to grip the workpiece

RoHS

Ideal for transporting workpieces with adhering oil, such as press parts

Abundant holder variations

Shape 16 types

- Standard...5 types
- Compact...Class 4
- Low dust generation .....2 types
- Lightweight...3 types
- Low back : 2 types

Piping Connection 5 types

- Push-in fitting (ø1.8 to ø6) ..... 3 types
- Barbed fitting (ø4, ø6) .....2 types

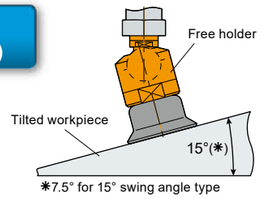
Stroke 11 types

2 mm to 50 mm
(Depends on pad diameter, holder type)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

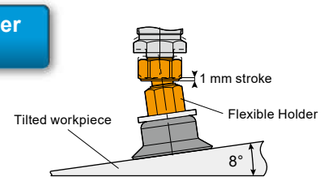
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

Free holder (F1:30°, F2:15°)



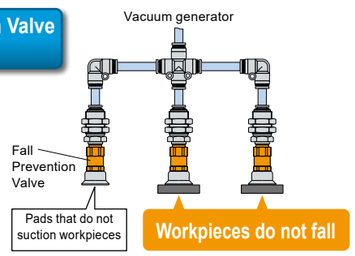
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

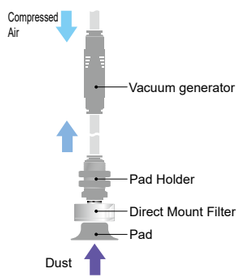
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

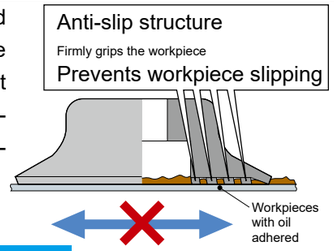
Filtration Area
T1: 1.7 cm², T2: 7 cm²



Pad Shape

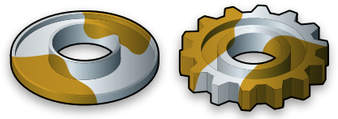
Oil Resistance

Fluororubber and oil-resistant nitrile rubber with excellent durability in oily environments are available.



Recommended Workpiece

Press parts with adhering oil, etc.



Pad Diameter

5 types | 10 | 20 | 30 | 40 | 50

Pad Material

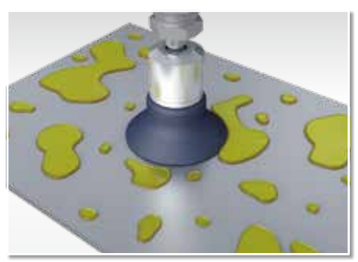
5 types | Oil Resistant NBR | Silicone | Urethane | Fluorine | Conductive NBR (Low Resistance-type)

*Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Slippery parts with adhering oil

Workpieces with adhering oil such as press parts, automobile parts. Pad material can be selected according to the properties of the target workpiece.



Transport of heavy steel plates

Press working, laser processing, etc.

Model No. Notation

Anti-slip Type

Suction Pad

VSP – C – 30 – -20 – K – NH – 6 – [ ] – F1 – V – T1

VSP	C	30	-20	K	NH	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Connection Size/Shape	❼ Buffer Load	❽ Pad Swing	❾ Drop Prevention Valve	❿ Direct Mount Filter

Pad Rubber Only

VSPG – 30 – K – NH

VSPG	30	K	NH
Model No.	❷	❹	❺

Pad Rubber + Set with Fixing Screw

VSPG – 30 – K – NH – A

VSPG	30	K	NH	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
		Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
10	ø10
20	ø20
30	ø30
40	ø40
50	ø50

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code
Specified Stroke, or No Buffer	●	●				Blank *1, *2
Stroke 2 mm				●		–2 *3
Stroke 5 mm				●	●	–5
Stroke 10 mm	●	●	●	●	●	–10
Stroke 15 mm	●	●	●	●	●	–15
Stroke 20 mm	●	●	●	●	●	–20
Stroke 25 mm			●			–25
Stroke 30 mm	●	●	●			–30
Stroke 40 mm	●	●	●			–40
Stroke 50 mm	●	●	●			–50

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 10, -2 can be selected for ❸.

❹ Pad Shape

Code	Content	
K	Anti-slip Type	

❺ Pad Material

Code	Content
NH	Oil Resistant NBR
S	Silicone Rubber
U	Urethane rubber
F	Fluororubber
NE	Conductive NBR (Low Resistance-type)

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP – ..... – P4□

*Please inquire for details.

❻ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8, Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●												4C	
ø6, Push-in fitting, without spring cover			●	●												6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●												4TC	
ø6, Barb fitting, without spring cover			●	●												6TC	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❻. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❻.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

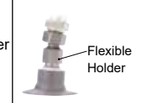
❼ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1 *2

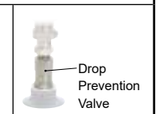
*1: For ❶ Holder Shape other than LFC, ❼ is 'Blank'.
*2: For ❸ stroke option -2, ❼ is blank.

❽ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
CF	With Flexible Holder (Angle 8°)	 Flexible Holder

*1: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❾ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	 Drop Prevention Valve

*1: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

❿ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1 *1: ❿ T2 can be selected when ❷ Pad Diameter is 20 to 50.
*2: For dimensions with the direct mount filter, please refer to P. 1064.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

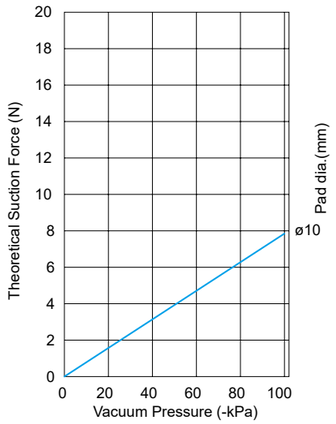
Holder Shape	Pad Diameter	Push-in fitting ø4 4	ø4 4C	ø6 6	ø6 6C	Barb fitting ø4 4T	ø4 4TC	ø6 6T	ø6 6TC
A	ø10			●				●	
	ø20 to ø50	●		●		●		●	
B	All sizes	●		●		●		●	
C	All sizes	●	●	●	●	●	●	●	●
D	All sizes	●	●	●	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M14	Blank
F	All sizes		●

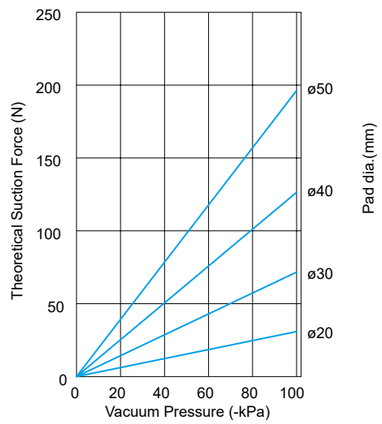
Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø10		●		●	
	ø20 to ø50		●		●	●
MB	All sizes	●	●	●	●	●
MC	All sizes	●	●		●	●
MD	All sizes	●	●	●	●	●
LFC	ø10		●		●	●
	ø20 to ø50		●	●	●	●
LFD	ø10		●		●	●
	ø20 to ø50		●	●	●	●
HC	All sizes	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

Theoretical Suction Force

●Pad diameter: ø10 mm



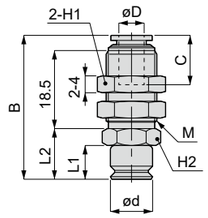
●Pad diameter: ø20 mm to ø50 mm



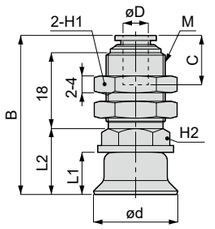
* The theoretical suction force is a value under static conditions. When actually using, apply a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A10K□-6



●VSP-A20 to 50K□-4/6

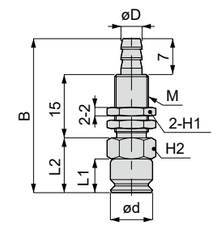


Unit: mm

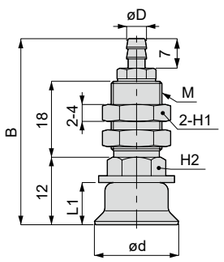
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10K□-6	10	6	M12x1	34.3	8	12	11.9	14	12	22
VSP-A20K□-4	20	4	M12x1	46.9	10	16	11.2	14	12	30
VSP-A20K□-6		6	M14x1	37.9			11.9	17	14	36
VSP-A30K□-4	30	4	M12x1	48.9	12	18	11.2	14	12	34
VSP-A30K□-6		6	M14x1	39.9			11.9	17	14	40
VSP-A40K□-4	40	4	M12x1	52.9	16	22	11.2	14	12	43
VSP-A40K□-6		6	M14x1	43.9			11.9	17	14	49
VSP-A50K□-4	50	4	M12x1	53.9	17	23	11.2	14	12	49
VSP-A50K□-6		6	M14x1	44.9			11.9	17	14	55

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A10K□-6T



●VSP-A20 to 50K□-4T/6T

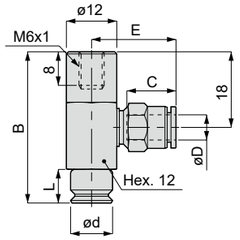


Unit: mm

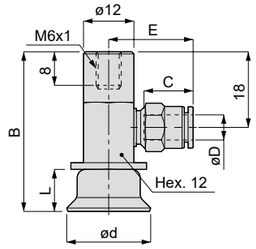
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10K□-6T	10	4	M8x0.75	35	8	12	10	10	12
VSP-A20K□-4T	20	2.5	M12x1	44	10	16	14	12	30
VSP-A20K□-6T		4							
VSP-A30K□-4T	30	2.5	M12x1	46	12	18	14	12	34
VSP-A30K□-6T		4							
VSP-A40K□-4T	40	2.5	M12x1	50	16	22	14	12	43
VSP-A40K□-6T		4							
VSP-A50K□-4T	50	2.5	M12x1	51	17	23	14	12	49
VSP-A50K□-6T		4							

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B10K□4/6



●VSP-B20 to 50K□-4/6

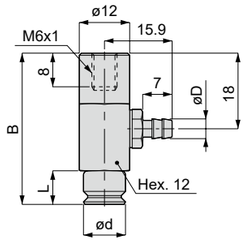


Unit: mm

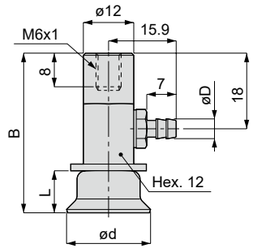
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B10K□-4	10	4	36	8	11.2	18.8	30
VSP-B10K□-6		6			11.9	20.1	31
VSP-B20K□-4	20	4	38	10	11.2	18.8	33
VSP-B20K□-6		6			11.9	20.1	34
VSP-B30K□-4	30	4	40	12	11.2	18.8	37
VSP-B30K□-6		6			11.9	20.1	38
VSP-B40K□-4	40	4	44	16	11.2	18.8	46
VSP-B40K□-6		6			11.9	20.1	47
VSP-B50K□-4	50	4	45	17	11.2	18.8	52
VSP-B50K□-6		6			11.9	20.1	53

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B10K□-4T/6T



●VSP-B20 to 50K□-4T/6T

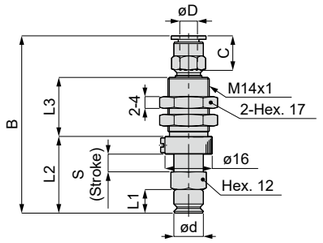


Unit: mm

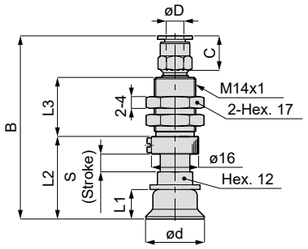
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B10K□-4T	10	2.5	36	8	29
VSP-B10K□-6T		4			
VSP-B20K□-4T	20	2.5	38	10	32
VSP-B20K□-6T		4			
VSP-B30K□-4T	30	2.5	40	12	36
VSP-B30K□-6T		4			
VSP-B40K□-4T	40	2.5	44	16	45
VSP-B40K□-6T		4			
VSP-B50K□-4T	50	2.5	45	17	51
VSP-B50K□-6T		4			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10K□4/6
●VSP-C10-□K□-4/6



●VSP-C20 to 50K□-4/6
●VSP-C20 to 50-□K□-4/6

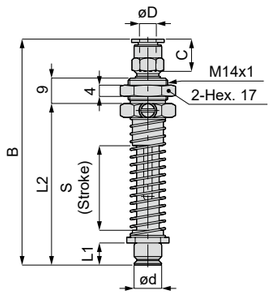


Unit: mm

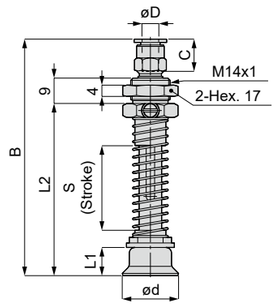
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10K□-4	10	4	59	8	26	20	11.2	6	4.0 to 7.1	35
VSP-C10K□-6		6	60.3				11.9			36
VSP-C10-10K□-4		4	63.5		30.5		11.2	10	2.0 to 5.2	36
VSP-C10-10K□-6		6	64.8				11.9			37
VSP-C10-15K□-4		4	73.5		35.5	25	11.2	15	2.0 to 5.9	42
VSP-C10-15K□-6		6	74.8				11.9			43
VSP-C10-20K□-4		4	89.5		34	34	11.2	20	1.1 to 4.8	49
VSP-C10-20K□-6		6	90.8				11.9			50
VSP-C20K□-4	20	4	61	10	28	20	11.2	6	7.0 to 12.6	39
VSP-C20K□-6		6	62.3				11.9			40
VSP-C20-10K□-4		4	67		34		11.2	10	3.3 to 10.0	41
VSP-C20-10K□-6		6	68.3				11.9			42
VSP-C20-15K□-4		4	77		39	25	11.2	15	3.3 to 10.4	46
VSP-C20-15K□-6		6	78.3				11.9			47
VSP-C20-20K□-4		4	93		46	34	11.2	20	2.0 to 8.7	53
VSP-C20-20K□-6		6	94.3				11.9			54
VSP-C30K□-4	30	4	63	12	30	20	11.2	6	7.0 to 12.6	43
VSP-C30K□-6		6	64.3				11.9			44
VSP-C30-10K□-4		4	69		36		11.2	10	3.3 to 10.0	45
VSP-C30-10K□-6		6	70.3				11.9			46
VSP-C30-15K□-4		4	79		41	25	11.2	15	3.3 to 10.4	50
VSP-C30-15K□-6		6	80.3				11.9			51
VSP-C30-20K□-4		4	95		48	34	11.2	20	2.0 to 8.7	57
VSP-C30-20K□-6		6	96.3				11.9			58
VSP-C40K□-4	40	4	67	16	34	20	11.2	6	7.0 to 12.6	51
VSP-C40K□-6		6	68.3				11.9			52
VSP-C40-10K□-4		4	73		40		11.2	10	3.3 to 10.0	54
VSP-C40-10K□-6		6	74.3				11.9			55
VSP-C40-15K□-4		4	83		45	25	11.2	15	3.3 to 10.4	59
VSP-C40-15K□-6		6	84.3				11.9			60
VSP-C40-20K□-4		4	99		52	34	11.2	20	2.0 to 8.7	65
VSP-C40-20K□-6		6	100.3				11.9			66
VSP-C50K□-4	50	4	68	17	35	20	11.2	6	7.0 to 12.6	58
VSP-C50K□-6		6	69.3				11.9			59
VSP-C50-10K□-4		4	74		41		11.2	10	3.3 to 10.0	60
VSP-C50-10K□-6		6	75.3				11.9			61
VSP-C50-15K□-4		4	84		46	25	11.2	15	3.3 to 10.4	65
VSP-C50-15K□-6		6	85.3				11.9			66
VSP-C50-20K□-4		4	100		53	34	11.2	20	2.0 to 8.7	72
VSP-C50-20K□-6		6	101.3				11.9			73

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C10-□K□-4C/6C



●VSP-C20 to 50-□K□-4C/6C

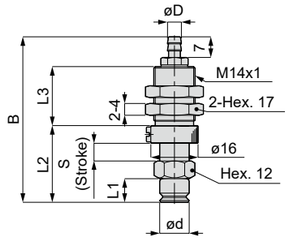


Unit: mm

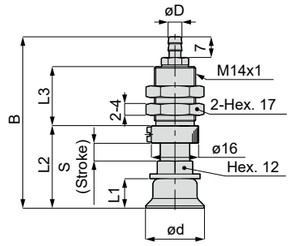
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20K□-4C	10	4	66.5	8	44.5	11.2	20	1.5 to 4.9	44
VSP-C10-20K□-6C		6	67.8			11.9			45
VSP-C10-30K□-4C		4	79.5		57.5	11.2	30	1.1 to 4.8	49
VSP-C10-30K□-6C		6	80.8			11.9			50
VSP-C10-40K□-4C		4	92.5		70.5	11.2	40	1.0 to 4.5	54
VSP-C10-40K□-6C		6	93.8			11.9			55
VSP-C10-50K□-4C		4	105.5		83.5	11.2	50	0.9 to 4.5	59
VSP-C10-50K□-6C		6	106.8			11.9			60
VSP-C20-20K□-4C	20	4	70	10	48	11.2	20	1.5 to 4.9	49
VSP-C20-20K□-6C		6	71.3			11.9			50
VSP-C20-30K□-4C		4	83		61	11.2	30	1.1 to 4.8	54
VSP-C20-30K□-6C		6	84.3			11.9			55
VSP-C20-40K□-4C		4	96		74	11.2	40	1.0 to 4.5	59
VSP-C20-40K□-6C		6	97.3			11.9			60
VSP-C20-50K□-4C		4	109		87	11.2	50	0.9 to 4.5	64
VSP-C20-50K□-6C		6	110.3			11.9			65
VSP-C30-20K□-4C	30	4	72	12	50	11.2	20	1.5 to 4.9	53
VSP-C30-20K□-6C		6	73.3			11.9			54
VSP-C30-30K□-4C		4	85		63	11.2	30	1.1 to 4.8	58
VSP-C30-30K□-6C		6	86.3			11.9			59
VSP-C30-40K□-4C		4	98		76	11.2	40	1.0 to 4.5	63
VSP-C30-40K□-6C		6	99.3			11.9			64
VSP-C30-50K□-4C		4	111		89	11.2	50	0.9 to 4.5	68
VSP-C30-50K□-6C		6	112.3			11.9			69
VSP-C40-20K□-4C	40	4	76	16	54	11.2	20	1.5 to 4.9	61
VSP-C40-20K□-6C		6	77.3			11.9			62
VSP-C40-30K□-4C		4	89		67	11.2	30	1.1 to 4.8	66
VSP-C40-30K□-6C		6	90.3			11.9			67
VSP-C40-40K□-4C		4	102		80	11.2	40	1.0 to 4.5	71
VSP-C40-40K□-6C		6	103.3			11.9			72
VSP-C40-50K□-4C		4	115		93	11.2	50	0.9 to 4.5	77
VSP-C40-50K□-6C		6	116.3			11.9			78
VSP-C50-20K□-4C	50	4	77	17	55	11.2	20	1.5 to 4.9	68
VSP-C50-20K□-6C		6	78.3			11.9			69
VSP-C50-30K□-4C		4	90		68	11.2	30	1.1 to 4.8	73
VSP-C50-30K□-6C		6	91.3			11.9			74
VSP-C50-40K□-4C		4	103		81	11.2	40	1.0 to 4.5	78
VSP-C50-40K□-6C		6	104.3			11.9			79
VSP-C50-50K□-4C		4	116		94	11.2	50	0.9 to 4.5	83
VSP-C50-50K□-6C		6	117.3			11.9			84

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C10K□-4T/6T
●VSP-C10-□K□-4T/6T



●VSP-C20 to 50K□-4T/6T
●VSP-C20 to 50/K□-4T/6T

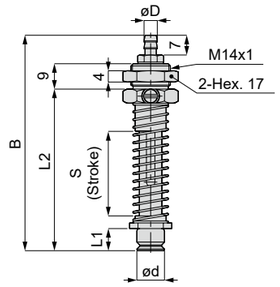


Unit: mm

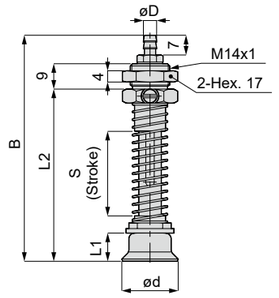
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C10K□-4T	10	4	56.1	8	26	20	6	4.0 to 7.1	34
VSP-C10K□-6T		6							
VSP-C10-10K□-4T		4	60.6		30.5		10	2.0 to 5.2	35
VSP-C10-10K□-6T		6							
VSP-C10-15K□-4T		4	70.6		35.5	25	15	2.0 to 5.9	41
VSP-C10-15K□-6T		6							
VSP-C10-20K□-4T		4	86.6		42.5	34	20	1.1 to 4.8	48
VSP-C10-20K□-6T		6							
VSP-C20K□-4T	20	4	58.1	10	28	20	6	7.0 to 12.6	38
VSP-C20K□-6T		6							
VSP-C20-10K□-4T		4	64.1		34		10	3.3 to 10.0	40
VSP-C20-10K□-6T		6							
VSP-C20-15K□-4T		4	74.1		39	25	15	3.3 to 10.4	45
VSP-C20-15K□-6T		6							
VSP-C20-20K□-4T		4	90.1		46	34	20	2.0 to 8.7	52
VSP-C20-20K□-6T		6							
VSP-C30K□-4T	30	4	60.1	12	30	20	6	7.0 to 12.6	42
VSP-C30K□-6T		6							
VSP-C30-10K□-4T		4	66.1		36		10	3.3 to 10.0	44
VSP-C30-10K□-6T		6							
VSP-C30-15K□-4T		4	76.1		41	25	15	3.3 to 10.4	49
VSP-C30-15K□-6T		6							
VSP-C30-20K□-4T		4	92.1		48	34	20	2.0 to 8.7	56
VSP-C30-20K□-6T		6							
VSP-C40K□-4T	40	4	64.1	16	34	20	6	7.0 to 12.6	50
VSP-C40K□-6T		6							
VSP-C40-10K□-4T		4	70.1		40		10	3.3 to 10.0	53
VSP-C40-10K□-6T		6							
VSP-C40-15K□-4T		4	80.1		45	25	15	3.3 to 10.4	58
VSP-C40-15K□-6T		6							
VSP-C40-20K□-4T		4	96.1		52	34	20	2.0 to 8.7	64
VSP-C40-20K□-6T		6							
VSP-C50K□-4T	50	4	65.1	17	35	20	6	7.0 to 12.6	57
VSP-C50K□-6T		6							
VSP-C50-10K□-4T		4	71.1		41		10	3.3 to 10.0	59
VSP-C50-10K□-6T		6							
VSP-C50-15K□-4T		4	81.1		46	25	15	3.3 to 10.4	64
VSP-C50-15K□-6T		6							
VSP-C50-20K□-4T		4	97.1		53	34	20	2.0 to 8.7	71
VSP-C50-20K□-6T		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C10-□K□-4TC/6TC



●VSP-C20 to 50-□K□-4TC/6TC

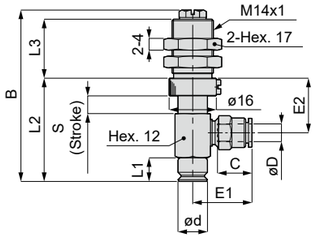


Unit: mm

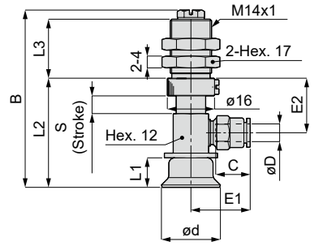
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20K□-4TC	10	4	63.6	8	44.5	20	1.5 to 4.9	43
VSP-C10-20K□-6TC		6						
VSP-C10-30K□-4TC		4	76.6		57.5	30	1.1 to 4.8	48
VSP-C10-30K□-6TC		6						
VSP-C10-40K□-4TC		4	89.6		70.5	40	1.0 to 4.5	53
VSP-C10-40K□-6TC		6						
VSP-C10-50K□-4TC		4	102.6		83.5	50	0.9 to 4.5	58
VSP-C10-50K□-6TC		6						
VSP-C20-20K□-4TC	20	4	67.1	10	48	20	1.5 to 4.9	48
VSP-C20-20K□-6TC		6						
VSP-C20-30K□-4TC		4	80.1		61	30	1.1 to 4.8	53
VSP-C20-30K□-6TC		6						
VSP-C20-40K□-4TC		4	93.1		74	40	1.0 to 4.5	58
VSP-C20-40K□-6TC		6						
VSP-C20-50K□-4TC		4	106.1		87	50	0.9 to 4.5	63
VSP-C20-50K□-6TC		6						
VSP-C30-20K□-4TC	30	4	69.1	12	50	20	1.5 to 4.9	52
VSP-C30-20K□-6TC		6						
VSP-C30-30K□-4TC		4	82.1		63	30	1.1 to 4.8	57
VSP-C30-30K□-6TC		6						
VSP-C30-40K□-4TC		4	95.1		76	40	1.0 to 4.5	62
VSP-C30-40K□-6TC		6						
VSP-C30-50K□-4TC		4	108.1		89	50	0.9 to 4.5	67
VSP-C30-50K□-6TC		6						
VSP-C40-20K□-4TC	40	4	73.1	16	54	20	1.5 to 4.9	60
VSP-C40-20K□-6TC		6						
VSP-C40-30K□-4TC		4	86.1		67	30	1.1 to 4.8	65
VSP-C40-30K□-6TC		6						
VSP-C40-40K□-4TC		4	99.1		80	40	1.0 to 4.5	70
VSP-C40-40K□-6TC		6						
VSP-C40-50K□-4TC		4	112.1		93	50	0.9 to 4.5	76
VSP-C40-50K□-6TC		6						
VSP-C50-20K□-4TC	50	4	74.1	17	55	20	1.5 to 4.9	67
VSP-C50-20K□-6TC		6						
VSP-C50-30K□-4TC		4	87.1		68	30	1.1 to 4.8	72
VSP-C50-30K□-6TC		6						
VSP-C50-40K□-4TC		4	100.1		81	40	1.0 to 4.5	77
VSP-C50-40K□-6TC		6						
VSP-C50-50K□-4TC		4	113.1		94	50	0.9 to 4.5	82
VSP-C50-50K□-6TC		6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10K□4/6
●VSP-D10-□K□-4/6



●VSP-D20 to 50K□-4/6
●VSP-D20 to 50-□K□-4/6

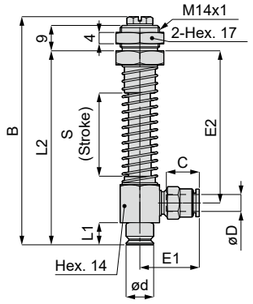


Unit: mm

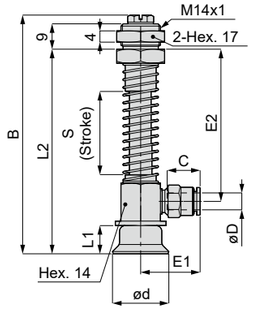
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10K□-4	10	4	58.1	8	35	20	11.2	18.8	18.5	6	4.0 to 7.1	47
VSP-D10K□-6		6					11.9	20.1				48
VSP-D10-10K□-4		4	63.1		40		11.2	18.8	25	10	2.0 to 5.2	51
VSP-D10-10K□-6		6					11.9	20.1				52
VSP-D10-15K□-4		4	73.1		45	25	11.2	18.8	30	15	2.0 to 5.9	56
VSP-D10-15K□-6		6					11.9	20.1				57
VSP-D10-20K□-4		4	89.1		52	34	11.2	18.8	37	20	1.1 to 4.8	66
VSP-D10-20K□-6		6					11.9	20.1				67
VSP-D20K□-4	20	4	60.1	10	37	20	11.2	18.8	18.5	6	7.0 to 12.6	50
VSP-D20K□-6		6					11.9	20.1				51
VSP-D20-10K□-4		4	66.1		43		11.2	18.8	24.5	10	3.3 to 10.0	54
VSP-D20-10K□-6		6					11.9	20.1				55
VSP-D20-15K□-4		4	76.1		48	25	11.2	18.8	29.5	15	3.3 to 10.4	61
VSP-D20-15K□-6		6					11.9	20.1				62
VSP-D20-20K□-4		4	92.1		55	34	11.2	18.8	36.5	20	2.0 to 8.7	71
VSP-D20-20K□-6		6					11.9	20.1				72
VSP-D30K□-4	30	4	62.1	12	39	20	11.2	18.8	18.5	6	7.0 to 12.6	54
VSP-D30K□-6		6					11.9	20.1				55
VSP-D30-10K□-4		4	68.1		45		11.2	18.8	24.5	10	3.3 to 10.0	58
VSP-D30-10K□-6		6					11.9	20.1				59
VSP-D30-15K□-4		4	78.1		50	25	11.2	18.8	29.5	15	3.3 to 10.4	65
VSP-D30-15K□-6		6					11.9	20.1				66
VSP-D30-20K□-4		4	94.1		57	34	11.2	18.8	36.5	20	2.0 to 8.7	75
VSP-D30-20K□-6		6					11.9	20.1				76
VSP-D40K□-4	40	4	66.1	16	43	20	11.2	18.8	18.5	6	7.0 to 12.6	63
VSP-D40K□-6		6					11.9	20.1				64
VSP-D40-10K□-4		4	72.1		49		11.2	18.8	24.5	10	3.3 to 10.0	67
VSP-D40-10K□-6		6					11.9	20.1				68
VSP-D40-15K□-4		4	82.1		54	25	11.2	18.8	29.5	15	3.3 to 10.4	73
VSP-D40-15K□-6		6					11.9	20.1				74
VSP-D40-20K□-4		4	98.1		61	34	11.2	18.8	36.5	20	2.0 to 8.7	83
VSP-D40-20K□-6		6					11.9	20.1				84
VSP-D50K□-4	50	4	67.1	17	44	20	11.2	18.8	18.5	6	7.0 to 12.6	69
VSP-D50K□-6		6					11.9	20.1				70
VSP-D50-10K□-4		4	73.1		50		11.2	18.8	24.5	10	3.3 to 10.0	73
VSP-D50-10K□-6		6					11.9	20.1				74
VSP-D50-15K□-4		4	83.1		55	25	11.2	18.8	29.5	15	3.3 to 10.4	80
VSP-D50-15K□-6		6					11.9	20.1				81
VSP-D50-20K□-4		4	99.1		62	34	11.2	18.8	36.5	20	2.0 to 8.7	90
VSP-D50-20K□-6		6					11.9	20.1				91

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D10-□K□-4C/6C



●VSP-D20 to 50-□K□-4C/6C

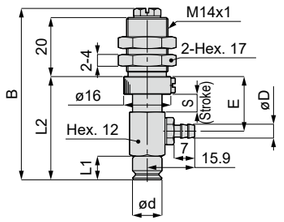


Unit: mm

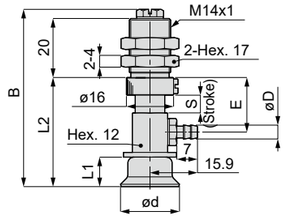
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20K□-4C	10	4	68.1	8	56	11.2	19.8	40.5	20	1.5 to 4.9	68
VSP-D10-20K□-6C		6				11.9	21.1				69
VSP-D10-30K□-4C		4	81.1		69	11.2	19.8	53.5	30	1.1 to 4.8	74
VSP-D10-30K□-6C		6				11.9	21.1				75
VSP-D10-40K□-4C		4	94.1		82	11.2	19.8	66.5	40	1.0 to 4.5	81
VSP-D10-40K□-6C		6				11.9	21.1				82
VSP-D10-50K□-4C		4	107.1		95	11.2	19.8	79.5	50	0.9 to 4.5	88
VSP-D10-50K□-6C		6				11.9	21.1				89
VSP-D20-20K□-4C	20	4	71.6	10	59.5	11.2	19.8	41	20	1.5 to 4.9	69
VSP-D20-20K□-6C		6				11.9	21.1				70
VSP-D20-30K□-4C		4	84.6		72.5	11.2	19.8	54	30	1.1 to 4.8	76
VSP-D20-30K□-6C		6				11.9	21.1				77
VSP-D20-40K□-4C		4	97.6		85.5	11.2	19.8	67	40	1.0 to 4.5	82
VSP-D20-40K□-6C		6				11.9	21.1				83
VSP-D20-50K□-4C		4	110.6		98.5	11.2	19.8	80	50	0.9 to 4.5	89
VSP-D20-50K□-6C		6				11.9	21.1				90
VSP-D30-20K□-4C	30	4	73.6	12	61.5	11.2	19.8	41	20	1.5 to 4.9	73
VSP-D30-20K□-6C		6				11.9	21.1				74
VSP-D30-30K□-4C		4	86.6		74.5	11.2	19.8	54	30	1.1 to 4.8	80
VSP-D30-30K□-6C		6				11.9	21.1				81
VSP-D30-40K□-4C		4	99.6		87.5	11.2	19.8	67	40	1.0 to 4.5	86
VSP-D30-40K□-6C		6				11.9	21.1				87
VSP-D30-50K□-4C		4	112.6		100.5	11.2	19.8	80	50	0.9 to 4.5	93
VSP-D30-50K□-6C		6				11.9	21.1				94
VSP-D40-20K□-4C	40	4	77.6	16	65.5	11.2	19.8	41	20	1.5 to 4.9	81
VSP-D40-20K□-6C		6				11.9	21.1				82
VSP-D40-30K□-4C		4	90.6		78.5	11.2	19.8	54	30	1.1 to 4.8	88
VSP-D40-30K□-6C		6				11.9	21.1				89
VSP-D40-40K□-4C		4	103.6		91.5	11.2	19.8	67	40	1.0 to 4.5	95
VSP-D40-40K□-6C		6				11.9	21.1				96
VSP-D40-50K□-4C		4	116.6		104.5	11.2	19.8	80	50	0.9 to 4.5	102
VSP-D40-50K□-6C		6				11.9	21.1				103
VSP-D50-20K□-4C	50	4	78.6	17	66.5	11.2	19.8	41	20	1.5 to 4.9	88
VSP-D50-20K□-6C		6				11.9	21.1				89
VSP-D50-30K□-4C		4	91.6		79.5	11.2	19.8	54	30	1.1 to 4.8	95
VSP-D50-30K□-6C		6				11.9	21.1				96
VSP-D50-40K□-4C		4	104.6		92.5	11.2	19.8	67	40	1.0 to 4.5	101
VSP-D50-40K□-6C		6				11.9	21.1				102
VSP-D50-50K□-4C		4	117.6		105.5	11.2	19.8	80	50	0.9 to 4.5	108
VSP-D50-50K□-6C		6				11.9	21.1				109

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10K□-4T/6T
●VSP-D10-□K□-4T/6T



●VSP-D20 to 50K□-4T/6T
●VSP-D20 to 50-□K□-4T/6T

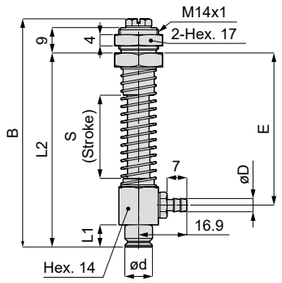


Unit: mm

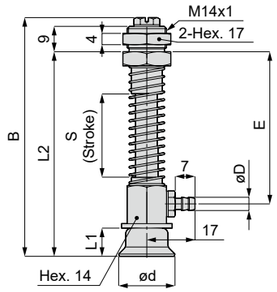
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10K□-4T	10	2.5	58.1	8	35	20	18.5	6	4.0 to 7.1	46
VSP-D10K□-6T		4								
VSP-D10-10K□-4T		2.5	63.1		40		25	10	2.0 to 5.2	50
VSP-D10-10K□-6T		4								
VSP-D10-15K□-4T		2.5	73.1		45	25	30	15	2.0 to 5.9	55
VSP-D10-15K□-6T		4								
VSP-D10-20K□-4T		2.5	89.1		52	34	37	20	1.1 to 4.8	65
VSP-D10-20K□-6T		4								
VSP-D20K□-4T	20	2.5	60.1	10	37	20	18.5	6	7.0 to 12.6	49
VSP-D20K□-6T		4								
VSP-D20-10K□-4T		2.5	66.1		43		24.5	10	3.3 to 10.0	53
VSP-D20-10K□-6T		4								
VSP-D20-15K□-4T		2.5	76.1		48	25	29.5	15	3.3 to 10.4	60
VSP-D20-15K□-6T		4								
VSP-D20-20K□-4T		2.5	92.1		55	34	36.5	20	2.0 to 8.7	70
VSP-D20-20K□-6T		4								
VSP-D30K□-4T	30	2.5	62.1	12	39	20	18.5	6	7.0 to 12.6	53
VSP-D30K□-6T		4								
VSP-D30-10K□-4T		2.5	68.1		45		24.5	10	3.3 to 10.0	57
VSP-D30-10K□-6T		4								
VSP-D30-15K□-4T		2.5	78.1		50	25	29.5	15	3.3 to 10.4	64
VSP-D30-15K□-6T		4								
VSP-D30-20K□-4T		2.5	94.1		57	34	36.5	20	2.0 to 8.7	74
VSP-D30-20K□-6T		4								
VSP-D40K□-4T	40	2.5	66.1	16	43	20	18.5	6	7.0 to 12.6	62
VSP-D40K□-6T		4								
VSP-D40-10K□-4T		2.5	72.1		49		24.5	10	3.3 to 10.0	66
VSP-D40-10K□-6T		4								
VSP-D40-15K□-4T		2.5	82.1		54	25	29.5	15	3.3 to 10.4	72
VSP-D40-15K□-6T		4								
VSP-D40-20K□-4T		2.5	98.1		61	34	36.5	20	2.0 to 8.7	82
VSP-D40-20K□-6T		4								
VSP-D50K□-4T	50	2.5	67.1	17	44	20	18.5	6	7.0 to 12.6	68
VSP-D50K□-6T		4								
VSP-D50-10K□-4T		2.5	73.1		50		24.5	10	3.3 to 10.0	72
VSP-D50-10K□-6T		4								
VSP-D50-15K□-4T		2.5	83.1		55	25	29.5	15	3.3 to 10.4	79
VSP-D50-15K□-6T		4								
VSP-D50-20K□-4T		2.5	99.1		62	34	36.5	20	2.0 to 8.7	89
VSP-D50-20K□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D10-□K□-4TC/6TC



●VSP-D20 to 50-□K□-4TC/6TC

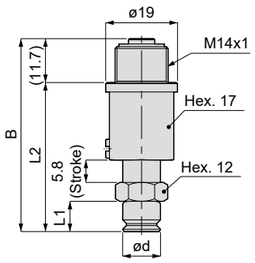


Unit: mm

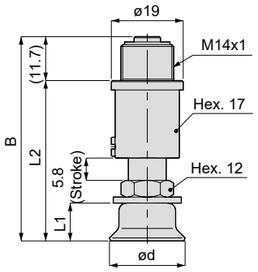
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20K□-4TC	10	2.5	68.1	8	56	40.5	20	1.5 to 4.9	67
VSP-D10-20K□-6TC		4							
VSP-D10-30K□-4TC		2.5	81.1		69	53.5	30	1.1 to 4.8	74
VSP-D10-30K□-6TC		4							
VSP-D10-40K□-4TC		2.5	94.1		82	66.5	40	1.0 to 4.5	80
VSP-D10-40K□-6TC		4							
VSP-D10-50K□-4TC		2.5	107.1		95	79.5	50	0.9 to 4.5	87
VSP-D10-50K□-6TC		4							
VSP-D20-20K□-4TC	20	4	71.6	10	59.5	41	20	1.5 to 4.9	68
VSP-D20-20K□-6TC		6							
VSP-D20-30K□-4TC		4	84.6		72.5	54	30	1.1 to 4.8	75
VSP-D20-30K□-6TC		6							
VSP-D20-40K□-4TC		4	97.6		85.5	67	40	1.0 to 4.5	81
VSP-D20-40K□-6TC		6							
VSP-D20-50K□-4TC		4	110.6		98.5	80	50	0.9 to 4.5	88
VSP-D20-50K□-6TC		6							
VSP-D30-20K□-4TC	30	4	73.6	12	61.5	41	20	1.5 to 4.9	72
VSP-D30-20K□-6TC		6							
VSP-D30-30K□-4TC		4	86.6		74.5	54	30	1.1 to 4.8	79
VSP-D30-30K□-6TC		6							
VSP-D30-40K□-4TC		4	99.6		87.5	67	40	1.0 to 4.5	85
VSP-D30-40K□-6TC		6							
VSP-D30-50K□-4TC		4	112.6		100.5	80	50	0.9 to 4.5	92
VSP-D30-50K□-6TC		6							
VSP-D40-20K□-4TC	40	4	77.6	16	65.5	41	20	1.5 to 4.9	80
VSP-D40-20K□-6TC		6							
VSP-D40-30K□-4TC		4	90.6		78.5	54	30	1.1 to 4.8	87
VSP-D40-30K□-6TC		6							
VSP-D40-40K□-4TC		4	103.6		91.5	67	40	1.0 to 4.5	94
VSP-D40-40K□-6TC		6							
VSP-D40-50K□-4TC		4	116.6		104.5	80	50	0.9 to 4.5	101
VSP-D40-50K□-6TC		6							
VSP-D50-20K□-4TC	50	4	78.6	17	66.5	41	20	1.5 to 4.9	87
VSP-D50-20K□-6TC		6							
VSP-D50-30K□-4TC		4	91.6		79.5	54	30	1.1 to 4.8	94
VSP-D50-30K□-6TC		6							
VSP-D50-40K□-4TC		4	104.6		92.5	67	40	1.0 to 4.5	100
VSP-D50-40K□-6TC		6							
VSP-D50-50K□-4TC		4	117.6		105.5	80	50	0.9 to 4.5	107
VSP-D50-50K□-6TC		6							

External Dimension Diagram (Direct Mount, Buffer Type, VSP-F, Male Thread Type)

●VSP-F10K□



●VSP-F20 to 50K□

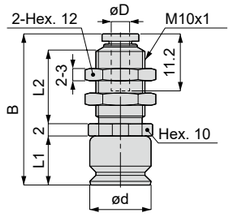


Unit: mm

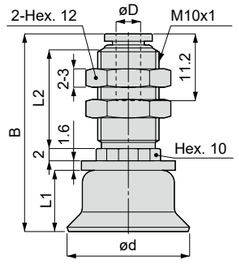
Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F10K□	10	51	8	39.3	7.9 to 15	56
VSP-F20K□	20	54	10	42.3	7.9 to 15	59
VSP-F30K□	30	56	12	44.3	7.9 to 15	63
VSP-F40K□	40	60	16	48.3	7.9 to 15	71
VSP-F50K□	50	61	17	49.3	7.9 to 15	78

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA10K□-4



●VSP-MA20 to 50K□-4

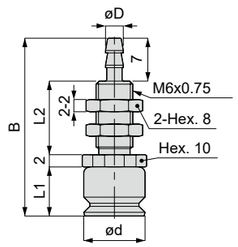


Unit: mm

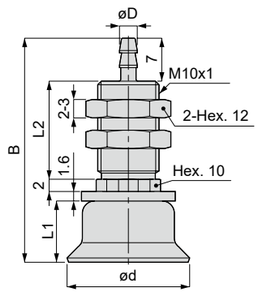
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Weight (g)
VSP-MA10K□-4	10	4	29	8	16.4	6.4
VSP-MA20K□-4	20	4	32.6	10	16.4	12
VSP-MA30K□-4	30	4	34.6	12	16.4	16
VSP-MA40K□-4	40	4	38.6	16	16.4	25
VSP-MA50K□-4	50	4	39.6	17	16.4	36

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA10K□-4T



●VSP-MA20 to 50K□-4T/6T

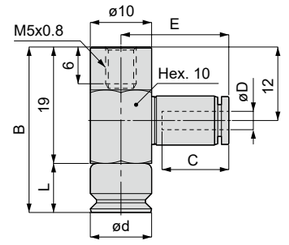


Unit: mm

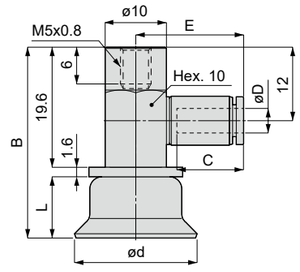
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Weight (g)
VSP-MA10K□-4T	10	2.5	29	8	12	3.6
VSP-MA20K□-4T	20	2.5	36.6	10	16	12
VSP-MA20K□-6T		4				
VSP-MA30K□-4T	30	2.5	38.6	12	16	16
VSP-MA30K□-6T		4				
VSP-MA40K□-4T	40	2.5	42.6	16	16	25
VSP-MA40K□-6T		4				
VSP-MA50K□-4T	50	2.5	43.6	17	16	36
VSP-MA50K□-6T		4				

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB10K□-2/4/6



●VSP-MB20 to 50K□-2/4/6

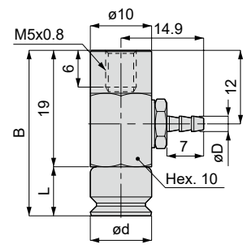


Unit: mm

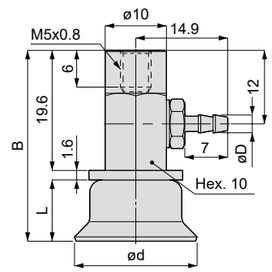
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB10K□-2	10	1.8	27	8	8.4	13.7	7.1
VSP-MB10K□-4		4			11.2	17.8	8.1
VSP-MB10K□-6		6			11.9	19.6	9.1
VSP-MB20K□-2	20	1.8	31.2	10	8.4	13.7	12
VSP-MB20K□-4		4			11.2	17.8	13
VSP-MB20K□-6		6			11.9	19.6	14
VSP-MB30K□-2	30	1.8	33.2	12	8.4	13.7	16
VSP-MB30K□-4		4			11.2	17.8	17
VSP-MB30K□-6		6			11.9	19.6	18
VSP-MB40K□-2	40	1.8	37.2	16	8.4	13.7	25
VSP-MB40K□-4		4			11.2	17.8	26
VSP-MB40K□-6		6			11.9	19.6	27
VSP-MB50K□-2	50	1.8	38.2	17	8.4	13.7	36
VSP-MB50K□-4		4			11.2	17.8	37
VSP-MB50K□-6		6			11.9	19.6	38

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB10K□-4T/6T



●VSP-MB20 to 50K□-4T/6T

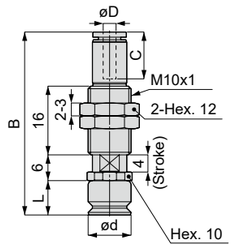


Unit: mm

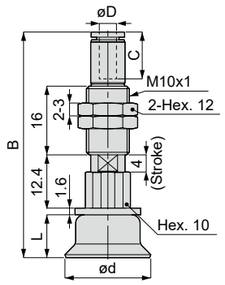
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MB10K□-4T	10	2.5	27	8	6.7
VSP-MB10K□-6T		4			
VSP-MB20K□-4T	20	2.5	31.2	10	12
VSP-MB20K□-6T		4			
VSP-MB30K□-4T	30	2.5	33.2	12	16
VSP-MB30K□-6T		4			
VSP-MB40K□-4T	40	2.5	37.2	16	25
VSP-MB40K□-6T		4			
VSP-MB50K□-4T	50	2.5	38.2	17	36
VSP-MB50K□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC10K□-2/4



●VSP-MC20 to 50K□-2/4

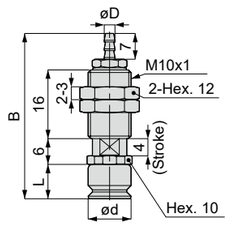


Unit: mm

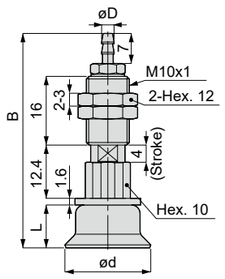
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC10K□-2	10	1.8	38.9	8	8.4	1 to 1.3	15
VSP-MC10K□-4		4	43		11.2		16
VSP-MC20K□-2	20	1.8	48.9	10	8.4	1 to 1.3	23
VSP-MC20K□-4		4	53		11.2		24
VSP-MC30K□-2	30	1.8	50.9	12	8.4	1 to 1.3	27
VSP-MC30K□-4		4	55		11.2		28
VSP-MC40K□-2	40	1.8	54.9	16	8.4	1 to 1.3	36
VSP-MC40K□-4		4	59		11.2		37
VSP-MC50K□-2	50	1.8	55.9	17	8.4	1 to 1.3	47
VSP-MC50K□-4		4	60		11.2		48

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC10K□-4T/6T



●VSP-MC20 to 50K□-4T/6T

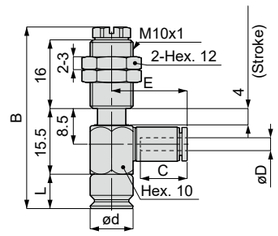


Unit: mm

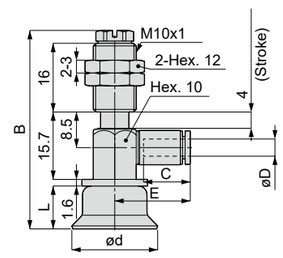
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC10K□-4T	10	2.5	40.1	8	0.5 to 0.6	15
VSP-MC10K□-6T		4				
VSP-MC20K□-4T	20	2.5	50.1	10	1 to 1.3	23
VSP-MC20K□-6T		4				
VSP-MC30K□-4T	30	2.5	52.1	12	1 to 1.3	27
VSP-MC30K□-6T		4				
VSP-MC40K□-4T	40	2.5	56.1	16	1 to 1.3	36
VSP-MC40K□-6T		4				
VSP-MC50K□-4T	50	2.5	57.1	17	1 to 1.3	47
VSP-MC50K□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD10K□-2/4/6



●VSP-MD20 to 50K□-2/4/6

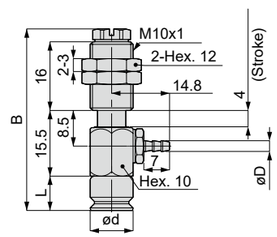


Unit: mm

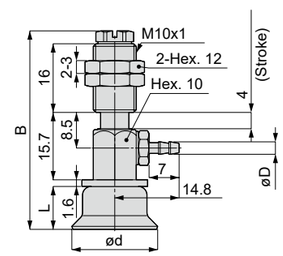
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD10K□-2	10	1.8	42.5	8	8.4	13.6	1 to 1.3	22
VSP-MD10K□-4		4			11.2	17.7		23
VSP-MD10K□-6		6			11.9	19.5		24
VSP-MD20K□-2	20	1.8	46.3	10	8.4	13.6	1 to 1.3	26
VSP-MD20K□-4		4			11.2	17.7		27
VSP-MD20K□-6		6			11.9	19.5		28
VSP-MD30K□-2	30	1.8	48.3	12	8.4	13.6	1 to 1.3	30
VSP-MD30K□-4		4			11.2	17.7		31
VSP-MD30K□-6		6			11.9	19.5		32
VSP-MD40K□-2	40	1.8	52.3	16	8.4	13.6	1 to 1.3	39
VSP-MD40K□-4		4			11.2	17.7		40
VSP-MD40K□-6		6			11.9	19.5		41
VSP-MD50K□-2	50	1.8	53.3	17	8.4	13.6	1 to 1.3	48
VSP-MD50K□-4		4			11.2	17.7		49
VSP-MD50K□-6		6			11.9	19.5		50

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD10K□-4T/6T



●VSP-MD20 to 50K□-4T/6T

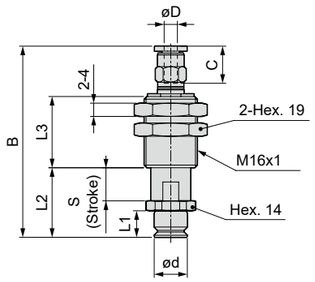


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD10K□-4T	10	2.5	42.5	8	1 to 1.3	22
VSP-MD10K□-6T		4				
VSP-MD20K□-4T	20	2.5	46.3	10	1 to 1.3	26
VSP-MD20K□-6T		4				
VSP-MD30K□-4T	30	2.5	48.3	12	1 to 1.3	30
VSP-MD30K□-6T		4				
VSP-MD40K□-4T	40	2.5	52.3	16	1 to 1.3	39
VSP-MD40K□-6T		4				
VSP-MD50K□-4T	50	2.5	53.3	17	1 to 1.3	50
VSP-MD50K□-6T		4				

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10-□K□-2/4/6

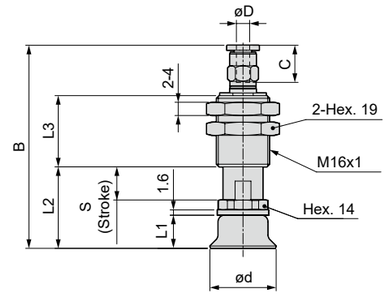


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10K□-2	10	1.8	53.6	8	21	21.5	8.4	10	1.0 to 2.4	22
VSP-HC10-10K□-4		4	57.7				11.2			23
VSP-HC10-10K□-6		6	59				11.9			24
VSP-HC10-15K□-2		1.8	63.6		26	26.5	8.4	15	1.0 to 2.7	24
VSP-HC10-15K□-4		4	67.7				11.2			25
VSP-HC10-15K□-6		6	69				11.9			26
VSP-HC10-20K□-2		1.8	73.6		31	31.5	8.4	20	1.0 to 3.0	26
VSP-HC10-20K□-4		4	77.7				11.2			27
VSP-HC10-20K□-6		6	79				11.9			28
VSP-HC10-25K□-2		1.8	84.1		36	37	8.4	25	1.0 to 3.0	28
VSP-HC10-25K□-4		4	88.2				11.2			29
VSP-HC10-25K□-6		6	89.5				11.9			30
VSP-HC10-30K□-2		1.8	95.1		41	43	8.4	30	1.0 to 3.0	30
VSP-HC10-30K□-4		4	99.2				11.2			31
VSP-HC10-30K□-6		6	100.5				11.9			32
VSP-HC10-40K□-2		1.8	117.1		51	55	8.4	40	1.0 to 3.0	34
VSP-HC10-40K□-4		4	121.2				11.2			35
VSP-HC10-40K□-6		6	122.5				11.9			36
VSP-HC10-50K□-2		1.8	138.6		61	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50K□-4		4	142.7				11.2			40
VSP-HC10-50K□-6		6	144				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 30-□K□-2/4/6

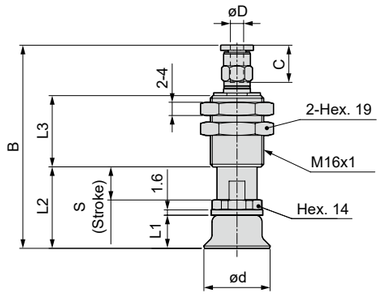


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10K□-2	20	1.8	57.2	10	24.6	21.5	8.4	10	1.0 to 2.4	27
VSP-HC20-10K□-4		4	61.3				11.2			28
VSP-HC20-10K□-6		6	62.6				11.9			29
VSP-HC20-15K□-2		1.8	67.2		29.6	26.5	8.4	15	1.0 to 2.7	29
VSP-HC20-15K□-4		4	71.3				11.2			30
VSP-HC20-15K□-6		6	72.6				11.9			31
VSP-HC20-20K□-2		1.8	77.2		34.6	31.5	8.4	20	1.0 to 3.0	31
VSP-HC20-20K□-4		4	81.3				11.2			32
VSP-HC20-20K□-6		6	82.6				11.9			33
VSP-HC20-25K□-2		1.8	87.7		39.6	37	8.4	25	1.0 to 3.0	33
VSP-HC20-25K□-4		4	91.8				11.2			34
VSP-HC20-25K□-6		6	93.1				11.9			35
VSP-HC20-30K□-2		1.8	98.7		44.6	43	8.4	30	1.0 to 3.0	35
VSP-HC20-30K□-4		4	102.8				11.2			36
VSP-HC20-30K□-6		6	104.1				11.9			37
VSP-HC20-40K□-2		1.8	120.7		54.6	55	8.4	40	1.0 to 3.0	39
VSP-HC20-40K□-4		4	124.8				11.2			40
VSP-HC20-40K□-6		6	126.1				11.9			41
VSP-HC20-50K□-2		1.8	142.2		64.6	66.5	8.4	50	1.0 to 3.1	43
VSP-HC20-50K□-4		4	146.3				11.2			44
VSP-HC20-50K□-6		6	147.6				11.9			45
VSP-HC30-10K□-2	30	1.8	59.2	12	26.6	21.5	8.4	10	1.0 to 2.4	30
VSP-HC30-10K□-4		4	63.3				11.2			31
VSP-HC30-10K□-6		6	64.6				11.9			32
VSP-HC30-15K□-2		1.8	69.2		31.6	26.5	8.4	15	1.0 to 2.7	32
VSP-HC30-15K□-4		4	73.3				11.2			33
VSP-HC30-15K□-6		6	74.6				11.9			34
VSP-HC30-20K□-2		1.8	79.2		36.6	31.5	8.4	20	1.0 to 3.0	34
VSP-HC30-20K□-4		4	83.3				11.2			35
VSP-HC30-20K□-6		6	84.6				11.9			36
VSP-HC30-25K□-2		1.8	89.7		41.6	37	8.4	25	1.0 to 3.0	36
VSP-HC30-25K□-4		4	93.8				11.2			37
VSP-HC30-25K□-6		6	95.1				11.9			38
VSP-HC30-30K□-2		1.8	100.7		46.6	43	8.4	30	1.0 to 3.0	38
VSP-HC30-30K□-4		4	104.8				11.2			39
VSP-HC30-30K□-6		6	106.1				11.9			40
VSP-HC30-40K□-2		1.8	122.7		56.5	55	8.4	40	1.0 to 3.0	42
VSP-HC30-40K□-4		4	126.8				11.2			43
VSP-HC30-40K□-6		6	128.1				11.9			44
VSP-HC30-50K□-2		1.8	144.2		66.6	66.5	8.4	50	1.0 to 3.1	46
VSP-HC30-50K□-4		4	148.3				11.2			47
VSP-HC30-50K□-6		6	149.6				11.9			48

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC40, 50-□K□-2/4/6

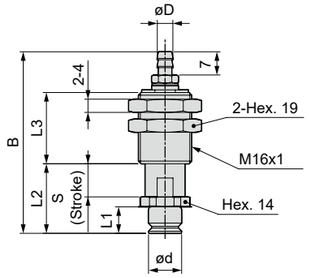


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC40-10K□-2	40	1.8	63.2	16	30.6	21.5	8.4	10	1.0 to 2.4	37
VSP-HC40-10K□-4		4	67.3				11.2			38
VSP-HC40-10K□-6		6	68.6				11.9			39
VSP-HC40-15K□-2		1.8	73.2		35.6	26.5	8.4	15	1.0 to 2.7	39
VSP-HC40-15K□-4		4	77.3				11.2			40
VSP-HC40-15K□-6		6	78.6				11.9			41
VSP-HC40-20K□-2		1.8	83.2		40.6	31.5	8.4	20	1.0 to 3.0	41
VSP-HC40-20K□-4		4	87.3				11.2			42
VSP-HC40-20K□-6		6	88.6				11.9			43
VSP-HC40-25K□-2		1.8	93.7		45.6	37	8.4	25	1.0 to 3.0	43
VSP-HC40-25K□-4		4	97.8				11.2			44
VSP-HC40-25K□-6		6	99.1				11.9			45
VSP-HC40-30K□-2		1.8	104.7		50.6	43	8.4	30	1.0 to 3.0	46
VSP-HC40-30K□-4		4	108.8				11.2			46
VSP-HC40-30K□-6		6	110.1				11.9			47
VSP-HC40-40K□-2		1.8	126.7		60.6	55	8.4	40	1.0 to 3.0	49
VSP-HC40-40K□-4		4	130.8				11.2			50
VSP-HC40-40K□-6		6	132.1				11.9			51
VSP-HC40-50K□-2		1.8	148.2		70.6	66.5	8.4	50	1.0 to 3.1	53
VSP-HC40-50K□-4		4	152.3				11.2			54
VSP-HC40-50K□-6		6	153.6				11.9			55
VSP-HC50-10K□-2	50	1.8	64.2	17	31.6	21.5	8.4	10	1.0 to 2.4	43
VSP-HC50-10K□-4		4	68.3				11.2			44
VSP-HC50-10K□-6		6	69.6				11.9			45
VSP-HC50-15K□-2		1.8	74.2		36.6	26.5	8.4	15	1.0 to 2.7	45
VSP-HC50-15K□-4		4	78.3				11.2			46
VSP-HC50-15K□-6		6	79.6				11.9			47
VSP-HC50-20K□-2		1.8	84.2		41.6	31.5	8.4	20	1.0 to 3.0	47
VSP-HC50-20K□-4		4	88.3				11.2			48
VSP-HC50-20K□-6		6	89.6				11.9			49
VSP-HC50-25K□-2		1.8	94.7		46.6	37	8.4	25	1.0 to 3.0	49
VSP-HC50-25K□-4		4	98.8				11.2			50
VSP-HC50-25K□-6		6	100.1				11.9			51
VSP-HC50-30K□-2		1.8	105.7		51.6	43	8.4	30	1.0 to 3.0	51
VSP-HC50-30K□-4		4	109.8				11.2			52
VSP-HC50-30K□-6		6	111.1				11.9			53
VSP-HC50-40K□-2		1.8	127.7		61.6	55	8.4	40	1.0 to 3.0	55
VSP-HC50-40K□-4		4	131.8				11.2			56
VSP-HC50-40K□-6		6	133.1				11.9			57
VSP-HC50-50K□-2		1.8	149.2		71.6	66.5	8.4	50	1.0 to 3.1	59
VSP-HC50-50K□-4		4	153.3				11.2			60
VSP-HC50-50K□-6		6	154.6				11.9			61

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10-□K□-4T/6T

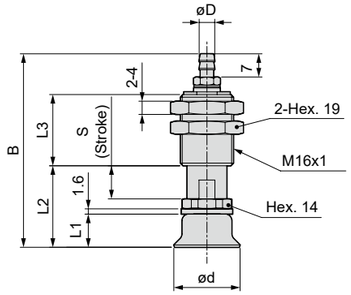


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10K□-4T	10	2.5	54.8	8	21	21.5	10	1.0 to 2.4	21
VSP-HC10-10K□-6T		4							
VSP-HC10-15K□-4T		2.5	64.8		26	26.5	15	1.0 to 2.7	23
VSP-HC10-15K□-6T		4							
VSP-HC10-20K□-4T		2.5	74.8		31	31.5	20	1.0 to 3.0	25
VSP-HC10-20K□-6T		4							
VSP-HC10-25K□-4T		2.5	85.3		36	37	25	1.0 to 3.0	28
VSP-HC10-25K□-6T		4							
VSP-HC10-30K□-4T		2.5	96.3		41	43	30	1.0 to 3.0	30
VSP-HC10-30K□-6T		4							
VSP-HC10-40K□-4T		2.5	118.3		51	55	40	1.0 to 3.0	34
VSP-HC10-40K□-6T		4							
VSP-HC10-50K□-4T		2.5	139.8		61	66.5	50	1.0 to 3.1	38
VSP-HC10-50K□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20, 30-□K□-4T/6T

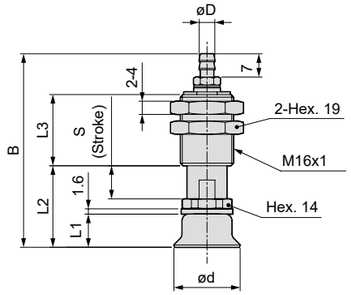


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10K□-4T	20	2.5	58.4	10	24.6	21.5	10	1.0 to 2.4	25
VSP-HC20-10K□-6T		4							
VSP-HC20-15K□-4T		2.5	68.4		29.6	26.5	15	1.0 to 2.7	27
VSP-HC20-15K□-6T		4							
VSP-HC20-20K□-4T		2.5	78.4		34.6	31.5	20	1.0 to 3.0	29
VSP-HC20-20K□-6T		4							
VSP-HC20-25K□-4T		2.5	88.9		39.6	37	25	1.0 to 3.0	31
VSP-HC20-25K□-6T		4							
VSP-HC20-30K□-4T		2.5	99.9		44.6	43	30	1.0 to 3.0	33
VSP-HC20-30K□-6T		4							
VSP-HC20-40K□-4T		2.5	121.9		54.6	55	40	1.0 to 3.0	38
VSP-HC20-40K□-6T		4							
VSP-HC20-50K□-4T		2.5	143.4		64.6	66.5	50	1.0 to 3.1	42
VSP-HC20-50K□-6T		4							
VSP-HC30-10K□-4T	30	2.5	60.4	12	26.6	21.5	10	1.0 to 2.4	28
VSP-HC30-10K□-6T		4							
VSP-HC30-15K□-4T		2.5	70.4		31.6	26.5	15	1.0 to 2.7	30
VSP-HC30-15K□-6T		4							
VSP-HC30-20K□-4T		2.5	80.4		36.6	31.5	20	1.0 to 3.0	32
VSP-HC30-20K□-6T		4							
VSP-HC30-25K□-4T		2.5	90.9		41.6	37	25	1.0 to 3.0	34
VSP-HC30-25K□-6T		4							
VSP-HC30-30K□-4T		2.5	101.9		46.6	43	30	1.0 to 3.0	36
VSP-HC30-30K□-6T		4							
VSP-HC30-40K□-4T		2.5	124		56.6	55	40	1.0 to 3.0	41
VSP-HC30-40K□-6T		4							
VSP-HC30-50K□-4T		2.5	145.4		66.6	66.5	50	1.0 to 3.1	45
VSP-HC30-50K□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC40, 50-□K□-4T/6T

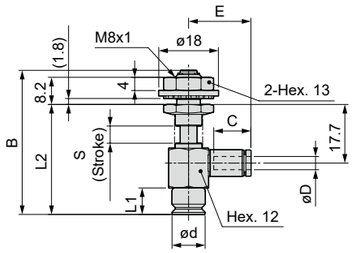


Unit: mm

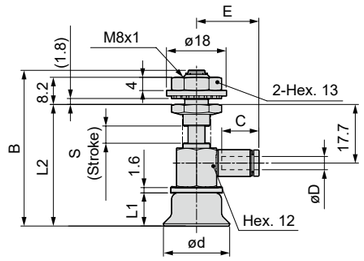
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC40-10K□-4T	40	2.5	64.4	16	30.6	21.5	10	1.0 to 2.4	35
VSP-HC40-10K□-6T		4							
VSP-HC40-15K□-4T		2.5	74.4		35.6	26.5	15	1.0 to 2.7	37
VSP-HC40-15K□-6T		4							
VSP-HC40-20K□-4T		2.5	84.4		40.6	31.5	20	1.0 to 3.0	39
VSP-HC40-20K□-6T		4							
VSP-HC40-25K□-4T		2.5	94.9		45.6	37	25	1.0 to 3.0	41
VSP-HC40-25K□-6T		4							
VSP-HC40-30K□-4T		2.5	105.9		50.6	43	30	1.0 to 3.0	43
VSP-HC40-30K□-6T		4							
VSP-HC40-40K□-4T		2.5	127.9		60.6	55	40	1.0 to 3.0	48
VSP-HC40-40K□-6T		4							
VSP-HC40-50K□-4T		2.5	149.4		70.6	66.5	50	1.0 to 3.1	52
VSP-HC40-50K□-6T		4							
VSP-HC50-10K□-4T	50	2.5	65.4	17	31.6	21.5	10	1.0 to 2.4	41
VSP-HC50-10K□-6T		4							
VSP-HC50-15K□-4T		2.5	75.4		36.6	26.5	15	1.0 to 2.7	43
VSP-HC50-15K□-6T		4							
VSP-HC50-20K□-4T		2.5	85.4		41.6	31.5	20	1.0 to 3.0	45
VSP-HC50-20K□-6T		4							
VSP-HC50-25K□-4T		2.5	95.9		46.6	37	25	1.0 to 3.0	47
VSP-HC50-25K□-6T		4							
VSP-HC50-30K□-4T		2.5	106.9		51.6	43	30	1.0 to 3.0	49
VSP-HC50-30K□-6T		4							
VSP-HC50-40K□-4T		2.5	128.9		61.6	55	40	1.0 to 3.0	54
VSP-HC50-40K□-6T		4							
VSP-HC50-50K□-4T		2.5	150.4		71.6	66.5	50	1.0 to 3.1	58
VSP-HC50-50K□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Push-in fitting)

●VSP-HD10K□-2/4/6



●VSP-HD20 to 50K□-2/4/6

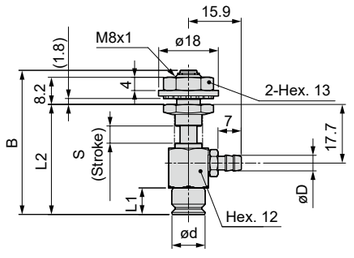


Unit: mm

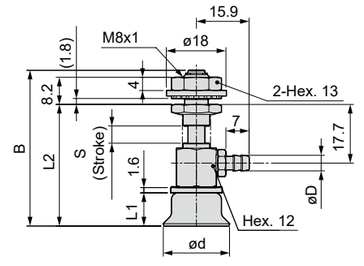
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10K□-2	10	1.8	43.5	8	33.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HD10K□-4		4				11.2	18.8			34
VSP-HD10K□-6		6				11.9	20.6			35
VSP-HD20K□-2	20	1.8	47	10	36.7	8.4	14.7	5.2	1.6 to 2.9	36
VSP-HD20K□-4		4				11.2	18.8			37
VSP-HD20K□-6		6				11.9	20.6			38
VSP-HD30K□-2	30	1.8	49	12	38.7	8.4	14.7	5.2	1.6 to 2.9	39
VSP-HD30K□-4		4				11.2	18.8			40
VSP-HD30K□-6		6				11.9	20.6			41
VSP-HD40K□-2	40	1.8	53	16	42.7	8.4	14.7	5.2	1.6 to 2.9	46
VSP-HD40K□-4		4				11.2	18.8			47
VSP-HD40K□-6		6				11.9	20.6			48
VSP-HD50K□-2	50	1.8	54	17	43.7	8.4	14.7	5.2	1.6 to 2.9	52
VSP-HD50K□-4		4				11.2	18.8			53
VSP-HD50K□-6		6				11.9	20.6			54

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Barb Fitting)

●VSP-HD10K□-4T/6T



●VSP-HD20 to 50K□-4T/6T

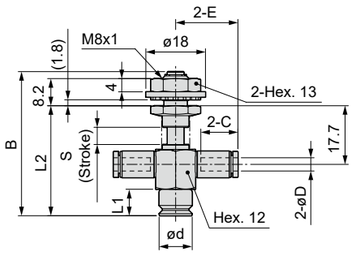


Unit: mm

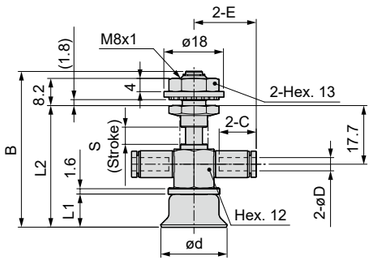
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10K□-4T	10	2.5	43.5	8	33.2	5.2	1.6 to 2.9	29
VSP-HD10K□-6T		4						
VSP-HD20K□-4T	20	2.5	47	10	36.7	5.2	1.6 to 2.9	36
VSP-HD20K□-6T		4						
VSP-HD30K□-4T	30	2.5	49	12	38.7	5.2	1.6 to 2.9	39
VSP-HD30K□-6T		4						
VSP-HD40K□-4T	40	2.5	53	16	42.7	5.2	1.6 to 2.9	46
VSP-HD40K□-6T		4						
VSP-HD50K□-4T	50	2.5	54	17	43.7	5.2	1.6 to 2.9	52
VSP-HD50K□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Push-in fitting)

●VSP-HDW10K□-2/4/6



●VSP-HDW20 to 50K□-2/4/6

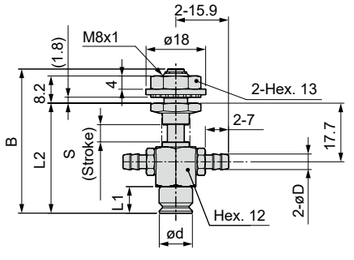


Unit: mm

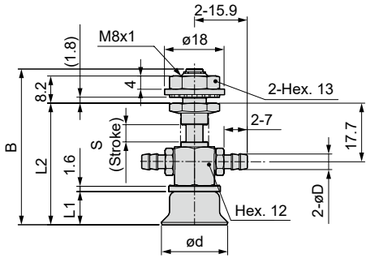
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10K□-2	10	1.8	43.5	8	33.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW10K□-4		4				11.2	18.8			35
VSP-HDW10K□-6		6				11.9	20.6			37
VSP-HDW20K□-2	20	1.8	47	10	36.7	8.4	14.7	5.2	1.6 to 2.9	38
VSP-HDW20K□-4		4				11.2	18.8			40
VSP-HDW20K□-6		6				11.9	20.6			42
VSP-HDW30K□-2	30	1.8	49	12	38.7	8.4	14.7	5.2	1.6 to 2.9	41
VSP-HDW30K□-4		4				11.2	18.8			43
VSP-HDW30K□-6		6				11.9	20.6			45
VSP-HDW40K□-2	40	1.8	53	16	42.7	8.4	14.7	5.2	1.6 to 2.9	48
VSP-HDW40K□-4		4				11.2	18.8			50
VSP-HDW40K□-6		6				11.9	20.6			52
VSP-HDW50K□-2	50	1.8	54	17	43.7	8.4	14.7	5.2	1.6 to 2.9	54
VSP-HDW50K□-4		4				11.2	18.8			56
VSP-HDW50K□-6		6				11.9	20.6			58

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Barb Fitting)

●VSP-HDW10K□-4T/6T



●VSP-HDW20 to 50K□-4T/6T

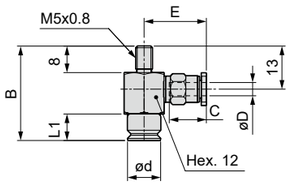


Unit: mm

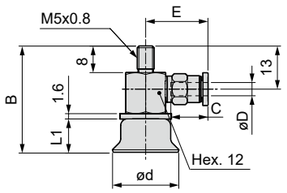
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10K□-4T	10	2.5	43.5	8	33.2	5.2	1.6 to 2.9	32
VSP-HDW10K□-6T		4						
VSP-HDW20K□-4T	20	2.5	47	10	36.7	5.2	1.6 to 2.9	37
VSP-HDW20K□-6T		4						
VSP-HDW30K□-4T	30	2.5	49	12	38.7	5.2	1.6 to 2.9	40
VSP-HDW30K□-6T		4						
VSP-HDW40K□-4T	40	2.5	53	16	42.7	5.2	1.6 to 2.9	47
VSP-HDW40K□-6T		4						
VSP-HDW50K□-4T	50	2.5	54	17	43.7	5.2	1.6 to 2.9	53
VSP-HDW50K□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Push-in fitting)

●VSP-HE10K□-2/4/6



●VSP-HE20 to 50K□-2/4/6

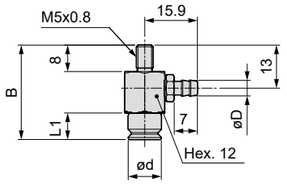


Unit: mm

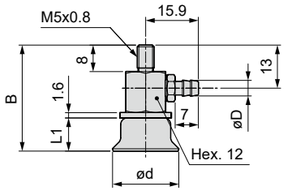
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE10K□-2	10	1.8	28.5	8	8.4	14.7	17
VSP-HE10K□-4		4			11.2	18.8	18
VSP-HE10K□-6		6			11.9	20.6	19
VSP-HE20K□-2	20	1.8	32	10	8.4	14.7	22
VSP-HE20K□-4		4			11.2	18.8	23
VSP-HE20K□-6		6			11.9	20.6	24
VSP-HE30K□-2	30	1.8	34	12	8.4	14.7	25
VSP-HE30K□-4		4			11.2	18.8	26
VSP-HE30K□-6		6			11.9	20.6	27
VSP-HE40K□-2	40	1.8	38	16	8.4	14.7	32
VSP-HE40K□-4		4			11.2	18.8	33
VSP-HE40K□-6		6			11.9	20.6	34
VSP-HE50K□-2	50	1.8	39	17	8.4	14.7	38
VSP-HE50K□-4		4			11.2	18.8	39
VSP-HE50K□-6		6			11.9	20.6	40

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Barb Fitting)

●VSP-HE10K□-4T/6T



●VSP-HE20 to 50K□-4T/6T

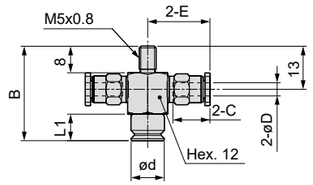


Unit: mm

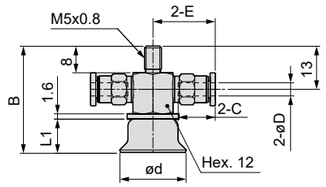
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE10K□-4T	10	2.5	28.5	8	17
VSP-HE10K□-6T		4			
VSP-HE20K□-4T	20	2.5	32	10	21
VSP-HE20K□-6T		4			
VSP-HE30K□-4T	30	2.5	34	12	24
VSP-HE30K□-6T		4			
VSP-HE40K□-4T	40	2.5	38	16	31
VSP-HE40K□-6T		4			
VSP-HE50K□-4T	50	2.5	39	17	37
VSP-HE50K□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW10K□-2/4/6



●VSP-HEW20 to 50K□-2/4/6

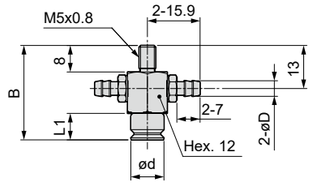


Unit: mm

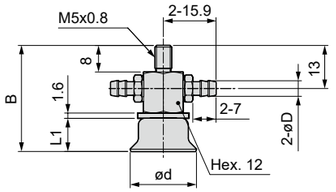
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW10K□-2	10	1.8	28.5	8	8.4	14.7	19
VSP-HEW10K□-4		4			11.2	18.8	21
VSP-HEW10K□-6		6			11.9	20.6	23
VSP-HEW20K□-2	20	1.8	32	10	8.4	14.7	23
VSP-HEW20K□-4		4			11.2	18.8	25
VSP-HEW20K□-6		6			11.9	20.6	27
VSP-HEW30K□-2	30	1.8	34	12	8.4	14.7	26
VSP-HEW30K□-4		4			11.2	18.8	28
VSP-HEW30K□-6		6			11.9	20.6	30
VSP-HEW40K□-2	40	1.8	38	16	8.4	14.7	33
VSP-HEW40K□-4		4			11.2	18.8	35
VSP-HEW40K□-6		6			11.9	20.6	37
VSP-HEW50K□-2	50	1.8	39	17	8.4	14.7	39
VSP-HEW50K□-4		4			11.2	18.8	41
VSP-HEW50K□-6		6			11.9	20.6	43

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW10K□-4T/6T



●VSP-HEW20 to 50K□-4T/6T

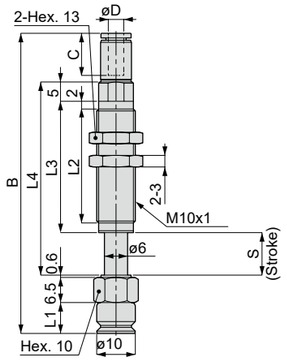


Unit: mm

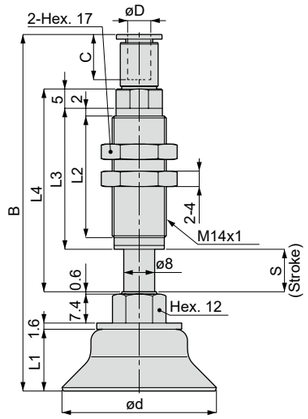
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW10K□-4T	10	2.5	28.5	8	18
VSP-HEW10K□-6T		4			
VSP-HEW20K□-4T	20	2.5	32	10	22
VSP-HEW20K□-6T		4			
VSP-HEW30K□-4T	30	2.5	34	12	25
VSP-HEW30K□-6T		4			
VSP-HEW40K□-4T	40	2.5	38	16	32
VSP-HEW40K□-6T		4			
VSP-HEW50K□-4T	50	2.5	39	17	38
VSP-HEW50K□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC10-□K□-4



●VSP-LFC20 to 50-□K□-4/6



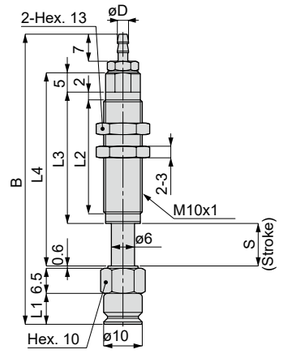
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2K□-4	10	4	62.1	8	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC10-5K□-4			68.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-10K□-4			78.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-15K□-4			88.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-20K□-4			98.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC20-5K□-4	20	4	75.1	10	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57
VSP-LFC20-5K□-6		6	76.4					11.9			58
VSP-LFC20-10K□-4		4	85.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59
VSP-LFC20-10K□-6		6	86.4					11.9			60
VSP-LFC20-15K□-4		4	95.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62
VSP-LFC20-15K□-6		6	96.4					11.9			63
VSP-LFC20-20K□-4		4	105.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65
VSP-LFC20-20K□-6		6	106.4					11.9			66
VSP-LFC30-5K□-4	30	4	77.1	12	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	60
VSP-LFC30-5K□-6		6	78.4					11.9			61
VSP-LFC30-10K□-4		4	87.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	62
VSP-LFC30-10K□-6		6	88.4					11.9			63
VSP-LFC30-15K□-4		4	97.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	65
VSP-LFC30-15K□-6		6	98.4					11.9			66
VSP-LFC30-20K□-4		4	107.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	68
VSP-LFC30-20K□-6		6	108.4					11.9			69
VSP-LFC40-5K□-4	40	4	81.1	16	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	69
VSP-LFC40-5K□-6		6	82.4					11.9			70
VSP-LFC40-10K□-4		4	91.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	71
VSP-LFC40-10K□-6		6	92.4					11.9			72
VSP-LFC40-15K□-4		4	101.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	74
VSP-LFC40-15K□-6		6	102.4					11.9			75
VSP-LFC40-20K□-4		4	111.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	77
VSP-LFC40-20K□-6		6	112.4					11.9			78
VSP-LFC50-5K□-4	50	4	82.1	17	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	76
VSP-LFC50-5K□-6		6	83.4					11.9			77
VSP-LFC50-10K□-4		4	92.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	78
VSP-LFC50-10K□-6		6	93.4					11.9			79
VSP-LFC50-15K□-4		4	102.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	81
VSP-LFC50-15K□-6		6	103.4					11.9			82
VSP-LFC50-20K□-4		4	112.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	84
VSP-LFC50-20K□-6		6	113.4					11.9			85

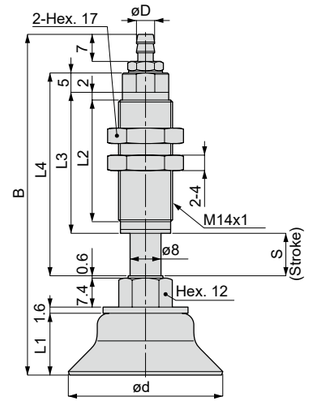
*Values inSide ,brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC10-□K□-4T/6T



●VSP-LFC20 to 50-□K□-4T/6T



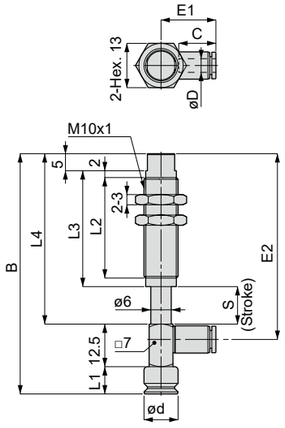
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2K□-4T	10	2.5	59.2	8	21.5	26	34	2	1.3 to 1.8	26
VSP-LFC10-2K□-6T		4								
VSP-LFC10-5K□-4T		2.5	65.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	28
VSP-LFC10-5K□-6T		4								
VSP-LFC10-10K□-4T		2.5	75.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	30
VSP-LFC10-10K□-6T		4								
VSP-LFC10-15K□-4T		2.5	85.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	32
VSP-LFC10-15K□-6T		4								
VSP-LFC10-20K□-4T		2.5	95.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	34
VSP-LFC10-20K□-6T		4								
VSP-LFC20-5K□-4T	20	2.5	72.2	10	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	52
VSP-LFC20-5K□-6T		4								
VSP-LFC20-10K□-4T		2.5	82.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	54
VSP-LFC20-10K□-6T		4								
VSP-LFC20-15K□-4T		2.5	92.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	57
VSP-LFC20-15K□-6T		4								
VSP-LFC20-20K□-4T		2.5	102.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	60
VSP-LFC20-20K□-6T		4								
VSP-LFC30-5K□-4T	30	2.5	74.2	12	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	55
VSP-LFC30-5K□-6T		4								
VSP-LFC30-10K□-4T		2.5	84.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	57
VSP-LFC30-10K□-6T		4								
VSP-LFC30-15K□-4T		2.5	94.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	60
VSP-LFC30-15K□-6T		4								
VSP-LFC30-20K□-4T		2.5	104.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	63
VSP-LFC30-20K□-6T		4								
VSP-LFC40-5K□-4T	40	2.5	78.2	16	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	64
VSP-LFC40-5K□-6T		4								
VSP-LFC40-10K□-4T		2.5	88.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	66
VSP-LFC40-10K□-6T		4								
VSP-LFC40-15K□-4T		2.5	98.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	69
VSP-LFC40-15K□-6T		4								
VSP-LFC40-20K□-4T		2.5	108.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	72
VSP-LFC40-20K□-6T		4								
VSP-LFC50-5K□-4T	50	2.5	79.2	17	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	71
VSP-LFC50-5K□-6T		4								
VSP-LFC50-10K□-4T		2.5	89.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	73
VSP-LFC50-10K□-6T		4								
VSP-LFC50-15K□-4T		2.5	99.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	76
VSP-LFC50-15K□-6T		4								
VSP-LFC50-20K□-4T		2.5	109.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	78
VSP-LFC50-20K□-6T		4								

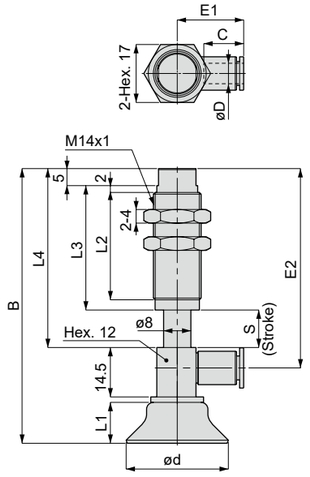
*Values inSide ,brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Push-in fitting)

●VSP-LFD10-□K□-4



●VSP-LFD20 to 50-□K□-4/6

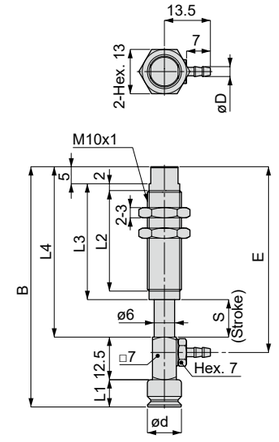


Unit: mm

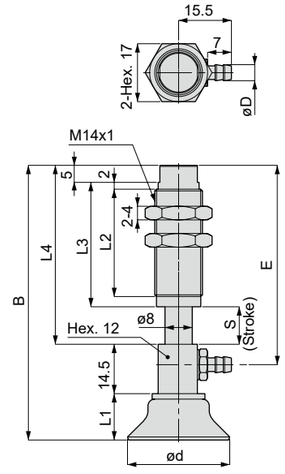
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5K□-4	10	4	60.5	8	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	26
VSP-LFD10-10K□-4			70.5		29.5	34	50			54.5	10	1.3 to 3.3	28
VSP-LFD10-15K□-4			80.5		34.5	39	60			64.5	15	1.3 to 4.2	30
VSP-LFD10-20K□-4			90.5		39.5	44	70			74.5	20	1.3 to 5.1	32
VSP-LFD20-5K□-4	20	4	68.5	10	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58
VSP-LFD20-5K□-6		6						11.9	19.7				59
VSP-LFD20-10K□-4		4	78.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62
VSP-LFD20-10K□-6		6						11.9	19.7				63
VSP-LFD20-15K□-4		4	88.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66
VSP-LFD20-15K□-6		6						11.9	19.7				67
VSP-LFD20-20K□-4		4	98.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70
VSP-LFD20-20K□-6		6						11.9	19.7				71
VSP-LFD30-5K□-4	30	4	70.5	12	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	61
VSP-LFD30-5K□-6		6						11.9	19.7				62
VSP-LFD30-10K□-4		4	80.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	65
VSP-LFD30-10K□-6		6						11.9	19.7				66
VSP-LFD30-15K□-4		4	90.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	69
VSP-LFD30-15K□-6		6						11.9	19.7				70
VSP-LFD30-20K□-4		4	100.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	73
VSP-LFD30-20K□-6		6						11.9	19.7				74
VSP-LFD40-5K□-4	40	4	74.5	16	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	70
VSP-LFD40-5K□-6		6						11.9	19.7				71
VSP-LFD40-10K□-4		4	84.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	74
VSP-LFD40-10K□-6		6						11.9	19.7				75
VSP-LFD40-15K□-4		4	94.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	78
VSP-LFD40-15K□-6		6						11.9	19.7				79
VSP-LFD40-20K□-4		4	104.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	82
VSP-LFD40-20K□-6		6						11.9	19.7				83
VSP-LFD50-5K□-4	50	4	75.5	17	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	77
VSP-LFD50-5K□-6		6						11.9	19.7				78
VSP-LFD50-10K□-4		4	85.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	81
VSP-LFD50-10K□-6		6						11.9	19.7				82
VSP-LFD50-15K□-4		4	95.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	85
VSP-LFD50-15K□-6		6						11.9	19.7				86
VSP-LFD50-20K□-4		4	105.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	89
VSP-LFD50-20K□-6		6						11.9	19.7				90

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Barb Fitting)

●VSP-LFD10-□K□-4T/6T



●VSP-LFD20 to 50-□K□-4T/6T

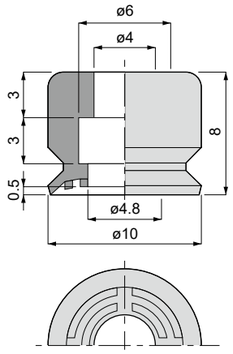


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5K□-4T	10	2.5	60.5	8	24.5	29	40	44.5	5	1.3 to 2.4	25
VSP-LFD10-5K□-6T		4									
VSP-LFD10-10K□-4T		2.5	70.5		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD10-10K□-6T		4									
VSP-LFD10-15K□-4T		2.5	80.5		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD10-15K□-6T		4									
VSP-LFD10-20K□-4T		2.5	90.5		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD10-20K□-6T		4									
VSP-LFD20-5K□-4T	20	2.5	68.5	10	26.5	31.5	42.5	48.5	5	4.5 to 6.5	54
VSP-LFD20-5K□-6T		4									
VSP-LFD20-10K□-4T		2.5	78.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57
VSP-LFD20-10K□-6T		4									
VSP-LFD20-15K□-4T		2.5	88.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61
VSP-LFD20-15K□-6T		4									
VSP-LFD20-20K□-4T		2.5	98.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65
VSP-LFD20-20K□-6T		4									
VSP-LFD30-5K□-4T	30	2.5	70.5	12	26.5	31.5	42.5	48.5	5	4.5 to 6.5	57
VSP-LFD30-5K□-6T		4									
VSP-LFD30-10K□-4T		2.5	80.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	60
VSP-LFD30-10K□-6T		4									
VSP-LFD30-15K□-4T		2.5	90.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	64
VSP-LFD30-15K□-6T		4									
VSP-LFD30-20K□-4T		2.5	100.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	68
VSP-LFD30-20K□-6T		4									
VSP-LFD40-5K□-4T	40	2.5	74.5	16	26.5	31.5	42.5	48.5	5	4.5 to 6.5	66
VSP-LFD40-5K□-6T		4									
VSP-LFD40-10K□-4T		2.5	84.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	69
VSP-LFD40-10K□-6T		4									
VSP-LFD40-15K□-4T		2.5	94.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	73
VSP-LFD40-15K□-6T		4									
VSP-LFD40-20K□-4T		2.5	104.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	77
VSP-LFD40-20K□-6T		4									
VSP-LFD50-5K□-4T	50	2.5	75.5	17	26.5	31.5	42.5	48.5	5	4.5 to 6.5	73
VSP-LFD50-5K□-6T		4									
VSP-LFD50-10K□-4T		2.5	85.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	76
VSP-LFD50-10K□-6T		4									
VSP-LFD50-15K□-4T		2.5	95.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	80
VSP-LFD50-15K□-6T		4									
VSP-LFD50-20K□-4T		2.5	105.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	84
VSP-LFD50-20K□-6T		4									

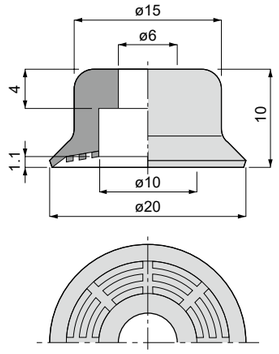
Pad Rubber Only External Dimension Diagram

●VSPG-10K□



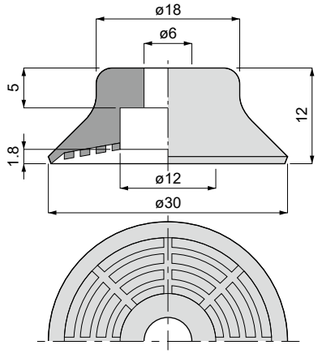
Weight: 0.6 g [0.9 g]

●VSPG-20K□



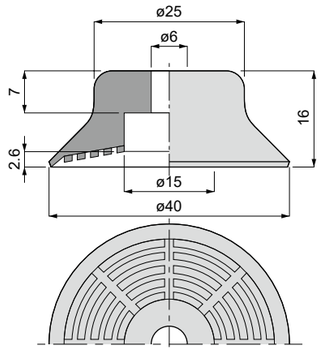
Weight: 1.7 g [2.6 g]

●VSPG-30K□



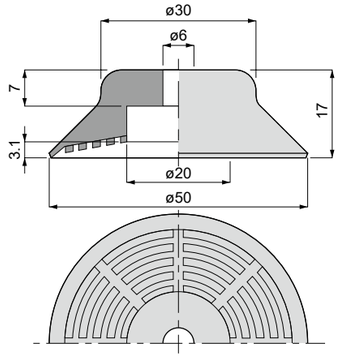
Weight: 4.1 g [6.5 g]

●VSPG-40K□



Weight: 10 g [16 g]

●VSPG-50K□

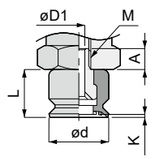


Weight: 16 g [23 g]

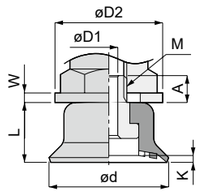
Weight: Values in [ ] are for fluororubber only.

Detailed Diagram of Pad and Holder Connection Part

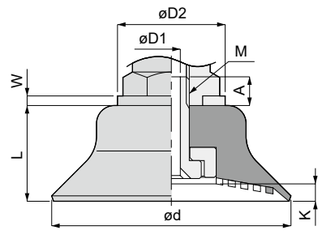
●VSPG-10K□A



●VSPG-20, 30K□A



●VSPG-40, 50K□A



Unit: mm

Model No.	Pad Diameter ød	L	Lip Inner Height K	Fixing Screw M	A	øD1	øD2	W
VSPG-10K□A	10	8	0.5	M4x0.7	3.5	2	-	-
VSPG-20K□A	20	10	1.1	M6x1	4.5	3	18	1.6
VSPG-30K□A	30	12	1.8	M6x1	5.5	3	18	1.6
VSPG-40K□A	40	16	2.6	M6x1	5.3	3	22	1.6
VSPG-50K□A	50	17	3.1	M6x1	5.3	3	22	1.6

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad Thin Workpiece-type

VSP-□P□ Series

Suction pad with a thin lip and no ribs, emphasizing adhesion to the workpiece

RoHS

Ideal for thin workpieces such as copy paper and vinyl. Soft pad lip reduces workpiece wrinkling and mitigates double-picking (picking two sheets)

Abundant holder variations

Shape 17 types

- Standard..6 types
- Compact Class 5
- Low dust generation .....2 types
- Lightweight...2 types
- Low back.....2 types

Piping Connection 6 types

- Push-in fitting (ø1.8 to ø6)3 types
- Barbed fitting (ø4, ø6) .....2 types
- Screw-in (M5).....1 type

Stroke 10 types

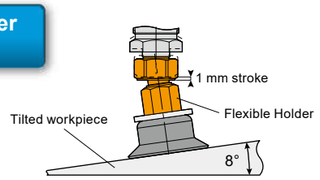
2 mm to 50 mm
(Depending on pad size, holder)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

Supports assembly options for swiveling (flexible holder) that follows inclined workpiece surfaces

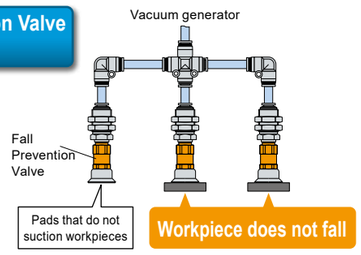
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

Drop Prevention Valve (V)



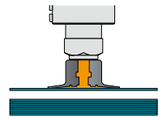
Pad surface treatment (option) with special processing to reduce adsorption marks is available

	-DL	-ER	-FG
Surface Treatment	Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
Compatible Material	Silicone Fluorine Conductive Silicone	Nitrile Nitrile Conductive NBR	Silicone Conductive Silicone Ultra Soft Silicone
Features	Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

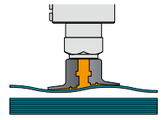
Double-picking mitigation

No ribs on the lip surface; pad adheres closely to the workpiece during suction. At this time, the effective suction area becomes smaller, making it difficult to lift the second sheet.



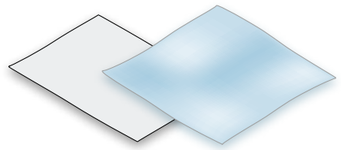
Ideal for thin workpieces

No ribs allow close adhesion to the workpiece, preventing deformation. Additionally, the thin lip follows workpiece waviness well.



Recommended Workpiece

Thin workpieces such as sheets and vinyl



Pad Diameter

4 types 8 10 15 20

Pad Material

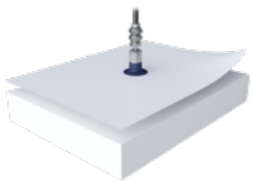
6 types Nitrile Silicone Urethane Fluorine Conductive NBR (Low Resistance-type) Fluorosilicone

*Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Thin Workpieces

Reduces double-picking of thin workpieces like films and permeable workpieces like paper/drawing paper.



Permeable workpieces such as paper/drawing paper

Thin workpieces such as films

Model No. Notation

●For Thin Objects Type

Suction Pad

VSP – ME – 20 – [ ] – P – N – -ER – M5 – [ ] – CF – V

VSP	ME	20	[ ]	P	N	-ER	M5	[ ]	CF	V
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Port Shape	❽ Buffer Load	❾ Pad Swing	❿ Drop Prevention Valve

Pad Rubber Only

VSPG — 20 — P — N — -ER

VSPG	20	P	N	-ER
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side ,Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
	Standard	Direct Mount Type	E	
	Compact		ME	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Standard	Side ,Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
		Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
8	ø8
10	ø10
15	ø15
20	ø20

❸ Stroke Option

Content	Holder Shape C	Holder Shape D	Holder Shape LFC	Holder Shape LFD	Code
Specified Stroke, or No Buffer	●	●			Blank
Stroke 2 mm			●		–2
Stroke 5 mm			●	●	–5
Stroke 10 mm	●	●	●	●	–10
Stroke 15 mm	●	●	●	●	–15
Stroke 20 mm	●	●	●	●	–20
Stroke 30 mm	●	●			–30
Stroke 40 mm	●	●			–40
Stroke 50 mm	●	●			–50

*1, *2

*1: For ❶ Holder Shape other than C, D, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.

❹ Pad Shape

Code	Content	
P	For Thin Objects Type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
U	Urethane rubber
F	Fluororubber
FS	Fluorosilicone Rubber
NE	Conductive NBR (Low Resistance-type)

❻ Surface Treatment

Content	Compatible Pad Material N	S	F	NE	Compatible Pad Diameter For Thin Workpieces(P)	Code
No surface treatment	All pad materials, all pad diameters					Blank
Anti-Adhesion Special Coating		●	●		All sizes	–DL
Suction Mark Reduction Surface Modification	●			●	All sizes	–ER
Fluorine Coating		●			All sizes	–FG

Model No. Notation

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP – ..... – P4*

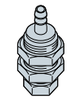
Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP – ..... – FP*

*Please inquire for details.

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	ME	LFC	LFD	HD	HDW	HE	HEW	Code	
(❶: For E and F)																Blank	
ø1.8, Push-in fitting		●	●	●	●	●	●	●				●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●		●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●												4C	
ø6, Push-in fitting, without spring cover			●	●												6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●		●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●												4TC	
ø6, Barb fitting, without spring cover			●	●												6TC	
M5 x 0.8									●							M5	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❼. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: For ❶ C with ❸ 'Blank', only 2, 4, 4T, and 6T can be selected for ❼.

❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1
*2

*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

❾ Pad Swing

Code	Content		
Blank	None		
CF	With Flexible Holder (Angle 8°)		Flexible Holder

*1

*1: ❾CF can be selected for ❶ Holder Shape E and ME.
*2: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❿ Drop Prevention Valve

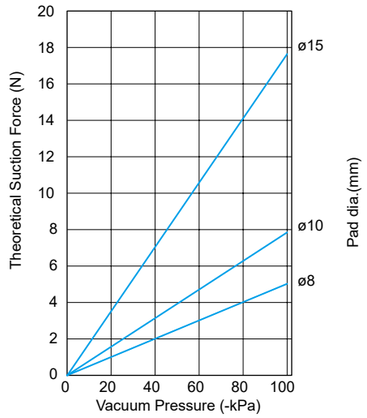
Code	Content		
Blank	None		
V	With Drop Prevention Valve		Drop Prevention Valve

*1

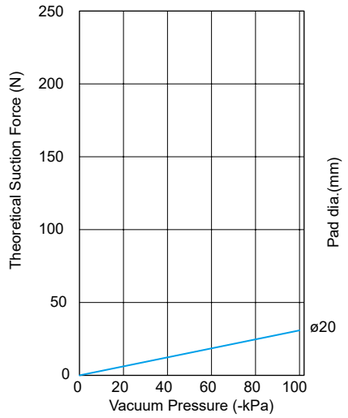
*1: ❿V can be selected for ❶ Holder Shape E and ME.
*2: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

Theoretical Suction Force

●Pad diameter: ø8 mm to 15 mm



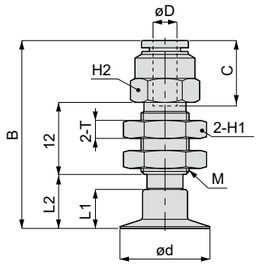
●Pad diameter: ø20 mm



Regarding the suction force of the thin workpiece-type, due to pad characteristics, it may not be possible to secure the calculated suction force (theoretical suction force x safety factor) due to factors such as vacuum level, pad material, and adsorbed object. Refer to "Suction Pads selection method" (P. 412) Use the suction force obtained with this formula as a guide, and make sure that there is no problem with the suction capacity on the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A8 to 20P□-4/6

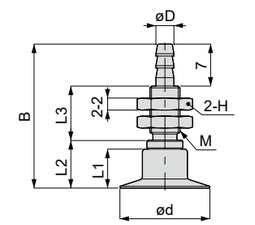


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A8P□-4	8	4	M8x0.75	30.6	5.5	8	11.2	10	8	2	10.2
VSP-A8P□-6		6	M10x1	31.3			11.9	12	10	3	13.8
VSP-A10P□-4	10	4	M8x0.75	30.9	5.8	8.3	11.2	10	8	2	10.3
VSP-A10P□-6		6	M10x1	31.6			11.9	12	10	3	13.9
VSP-A15P□-4	15	4	M8x0.75	31.6	6.5	9	11.2	10	8	2	10.4
VSP-A15P□-6		6	M10x1	32.3			11.9	12	10	3	14
VSP-A20P□-4	20	4	M8x0.75	32.4	7.3	9.8	11.2	10	8	2	10.5
VSP-A20P□-6		6	M10x1	33.1			11.9	12	10	3	14.1

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A8 to 20P□-4T/6T

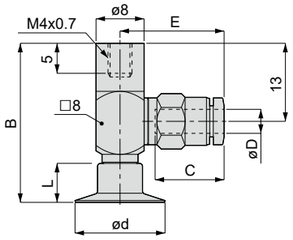


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	Width Across Flats H	Weight (g)
VSP-A8P□-4T	8	2.5	M5x0.5	23	5.5	7	9	8	3.2
VSP-A8P□-6T		4	M8x0.75	24.5			10.5	10	14
VSP-A10P□-4T	10	2.5	M5x0.5	23.3	5.8	7.3	9	8	3.2
VSP-A10P□-6T		4	M8x0.75	24.8			10.5	10	14
VSP-A15P□-4T	15	2.5	M5x0.5	24	6.5	8	9	8	3.3
VSP-A15P□-6T		4	M8x0.75	25.5			10.5	10	14
VSP-A20P□-4T	20	2.5	M5x0.5	24.8	7.3	8.8	9	8	3.4
VSP-A20P□-6T		4	M8x0.75	26.3			10.5	10	14

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B8 to 20P□-2/4/6

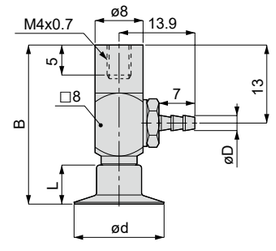


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B8P□-2	8	1.8	25.5	5.5	8.4	12.7	12
VSP-B8P□-4		4			11.2	16.8	13
VSP-B8P□-6		6			11.9	18.6	14
VSP-B10P□-2	10	1.8	25.8	5.8	8.4	12.7	12
VSP-B10P□-4		4			11.2	16.8	13
VSP-B10P□-6		6			11.9	18.6	14
VSP-B15P□-2	15	1.8	26.5	6.5	8.4	12.7	12
VSP-B15P□-4		4			11.2	16.8	13
VSP-B15P□-6		6			11.9	18.6	14
VSP-B20P□-2	20	1.8	27.3	7.3	8.4	12.7	12
VSP-B20P□-4		4			11.2	16.8	13
VSP-B20P□-6		6			11.9	18.6	14

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B8 to 20P□-4T/6T

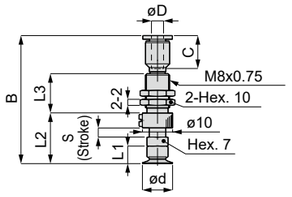


Unit: mm

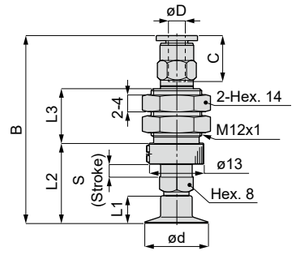
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B8P□-4T	8	2.5	25.5	5.5	10
VSP-B8P□-6T		4			
VSP-B10P□-4T	10	2.5	25.8	5.8	10
VSP-B10P□-6T		4			
VSP-B15P□-4T	15	2.5	26.5	6.5	10
VSP-B15P□-6T		4			
VSP-B20P□-4T	20	2.5	27.3	7.3	10
VSP-B20P□-6T		4			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C8 to 20P□-2/4/6



●VSP-C8 to 20-□P□-2/4/6

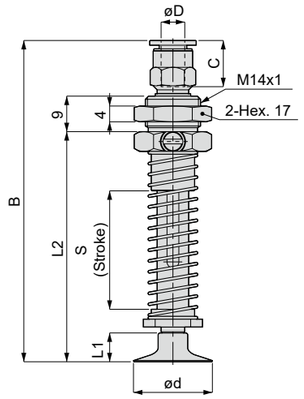


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C8P□-2	8	1.8	39.2	5.5	16.5	13	8.4	3	0.9 to 1.9	8
VSP-C8P□-4		4	42.5				11.2			9
VSP-C8-10P□-2		1.8	51.4		25	17.5	8.4	10	0.8 to 2.7	21
VSP-C8-10P□-4		4	55.5				11.2			22
VSP-C8-10P□-6		6	57.3				11.9			23
VSP-C8-15P□-2		1.8	62.4		30	23.5	8.4	15	0.7 to 3.0	25
VSP-C8-15P□-4		4	66.5				11.2			26
VSP-C8-15P□-6		6	68.3				11.9			27
VSP-C8-20P□-2		1.8	72.4		35	28.5	8.4	20	0.9 to 3.4	27
VSP-C8-20P□-4		4	76.5				11.2			28
VSP-C8-20P□-6		6	78.3				11.9			29
VSP-C10P□-2	10	1.8	39.5	5.8	16.8	13	8.4	3	0.9 to 1.9	8
VSP-C10P□-4		4	42.8				11.2			9
VSP-C10-10P□-2		1.8	51.7		25.3	17.5	8.4	10	0.8 to 2.7	21
VSP-C10-10P□-4		4	55.8				11.2			22
VSP-C10-10P□-6		6	57.6				11.9			23
VSP-C10-15P□-2		1.8	62.7		30.3	23.5	8.4	15	0.7 to 3.0	25
VSP-C10-15P□-4		4	66.8				11.2			26
VSP-C10-15P□-6		6	68.6				11.9			27
VSP-C10-20P□-2		1.8	72.7		35.3	28.5	8.4	20	0.9 to 3.4	27
VSP-C10-20P□-4		4	76.8				11.2			28
VSP-C10-20P□-6		6	78.6				11.9			29
VSP-C15P□-2	15	1.8	40.2	6.5	17.5	13	8.4	3	0.9 to 1.9	8
VSP-C15P□-4		4	43.5				11.2			9
VSP-C15-10P□-2		1.8	52.4		26	17.5	8.4	10	0.8 to 2.7	21
VSP-C15-10P□-4		4	56.5				11.2			22
VSP-C15-10P□-6		6	58.3				11.9			23
VSP-C15-15P□-2		1.8	63.4		31	23.5	8.4	15	0.7 to 3.0	25
VSP-C15-15P□-4		4	67.5				11.2			26
VSP-C15-15P□-6		6	69.3				11.9			27
VSP-C15-20P□-2		1.8	73.4		36	28.5	8.4	20	0.9 to 3.4	27
VSP-C15-20P□-4		4	77.5				11.2			28
VSP-C15-20P□-6		6	79.3				11.9			29
VSP-C20P□-2	20	1.8	41	7.3	18.3	13	8.4	3	0.9 to 1.9	8
VSP-C20P□-4		4	44.3				11.2			9
VSP-C20-10P□-2		1.8	53.2		26.8	17.5	8.4	10	0.8 to 2.7	21
VSP-C20-10P□-4		4	57.3				11.2			22
VSP-C20-10P□-6		6	59.1				11.9			23
VSP-C20-15P□-2		1.8	64.2		31.8	23.5	8.4	15	0.7 to 3.0	25
VSP-C20-15P□-4		4	68.3				11.2			26
VSP-C20-15P□-6		6	70.1				11.9			27
VSP-C20-20P□-2		1.8	74.2		36.8	28.5	8.4	20	0.9 to 3.4	27
VSP-C20-20P□-4		4	78.3				11.2			28
VSP-C20-20P□-6		6	80.1				11.9			29

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C8 to 20-□P□-4C/6C

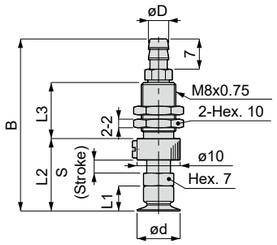


Unit: mm

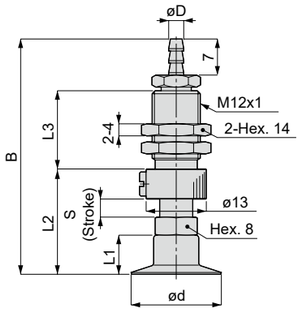
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C8-20P□-4C	8	4	65.5	5.5	43.5	11.2	20	1.5 to 4.9	43
VSP-C8-20P□-6C		6	66.8			11.9			44
VSP-C8-30P□-4C		4	78.5		56.5	11.2	30	1.1 to 4.8	48
VSP-C8-30P□-6C		6	79.8			11.9			49
VSP-C8-40P□-4C		4	91.5		69.5	11.2	40	1.0 to 4.5	54
VSP-C8-40P□-6C		6	92.8			11.9			55
VSP-C8-50P□-4C		4	104.5		82.5	11.2	50	0.9 to 4.5	59
VSP-C8-50P□-6C		6	105.8			11.9			60
VSP-C10-20P□-4C	10	4	65.8	5.8	43.8	11.2	20	1.5 to 4.9	43
VSP-C10-20P□-6C		6	67.1			11.9			44
VSP-C10-30P□-4C		4	78.8		56.8	11.2	30	1.1 to 4.8	48
VSP-C10-30P□-6C		6	80.1			11.9			49
VSP-C10-40P□-4C		4	91.8		69.8	11.2	40	1.0 to 4.5	54
VSP-C10-40P□-6C		6	93.1			11.9			55
VSP-C10-50P□-4C		4	104.8		82.8	11.2	50	0.9 to 4.5	59
VSP-C10-50P□-6C		6	106.1			11.9			60
VSP-C15-20P□-4C	15	4	66.5	6.5	44.5	11.2	20	1.5 to 4.9	43
VSP-C15-20P□-6C		6	67.8			11.9			44
VSP-C15-30P□-4C		4	79.5		57.5	11.2	30	1.1 to 4.8	48
VSP-C15-30P□-6C		6	80.8			11.9			49
VSP-C15-40P□-4C		4	92.5		70.5	11.2	40	1.0 to 4.5	54
VSP-C15-40P□-6C		6	93.8			11.9			55
VSP-C15-50P□-4C		4	105.5		83.5	11.2	50	0.9 to 4.5	59
VSP-C15-50P□-6C		6	106.8			11.9			60
VSP-C20-20P□-4C	20	4	67.3	7.3	45.3	11.2	20	1.5 to 4.9	43
VSP-C20-20P□-6C		6	68.6			11.9			44
VSP-C20-30P□-4C		4	80.3		58.3	11.2	30	1.1 to 4.8	48
VSP-C20-30P□-6C		6	81.6			11.9			49
VSP-C20-40P□-4C		4	93.3		71.3	11.2	40	1.0 to 4.5	54
VSP-C20-40P□-6C		6	94.6			11.9			55
VSP-C20-50P□-4C		4	106.3		84.3	11.2	50	0.9 to 4.5	59
VSP-C20-50P□-6C		6	107.6			11.9			60

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C8 to 20P□-4T/6T



●VSP-C8 to 20-□P□-4T/6T

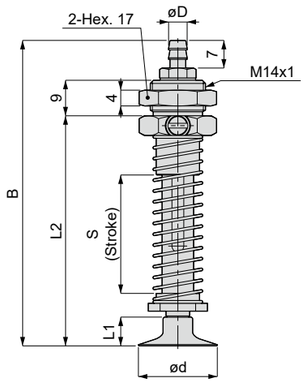


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C8P□-4T	8	2.5	39.1	5.5	16.5	13	3	0.9 to 1.9	8
VSP-C8P□-6T		4							
VSP-C8-10P□-4T		2.5	52.6		25	17.5	10	0.8 to 2.7	21
VSP-C8-10P□-6T		4							
VSP-C8-15P□-4T		2.5	63.6		30	23.5	15	0.7 to 3.0	25
VSP-C8-15P□-6T		4							
VSP-C8-20P□-4T		2.5	73.6		35	28.5	20	0.9 to 3.4	27
VSP-C8-20P□-6T		4							
VSP-C10P□-4T	10	2.5	39.4	5.8	16.8	13	3	0.9 to 1.9	8
VSP-C10P□-6T		4							
VSP-C10-10P□-4T		2.5	52.9		25.3	17.5	10	0.8 to 2.7	21
VSP-C10-10P□-6T		4							
VSP-C10-15P□-4T		2.5	63.9		30.3	23.5	15	0.7 to 3.0	25
VSP-C10-15P□-6T		4							
VSP-C10-20P□-4T		2.5	73.9		35.3	28.5	20	0.9 to 3.4	27
VSP-C10-20P□-6T		4							
VSP-C15P□-4T	15	2.5	40.1	6.5	17.5	13	3	0.9 to 1.9	8
VSP-C15P□-6T		4							
VSP-C15-10P□-4T		2.5	53.6		26	17.5	10	0.8 to 2.7	21
VSP-C15-10P□-6T		4							
VSP-C15-15P□-4T		2.5	64.6		31	23.5	15	0.7 to 3.0	25
VSP-C15-15P□-6T		4							
VSP-C15-20P□-4T		2.5	74.6		36	28.5	20	0.9 to 3.4	27
VSP-C15-20P□-6T		4							
VSP-C20P□-4T	20	2.5	40.9	7.3	18.3	13	3	0.9 to 1.9	8
VSP-C20P□-6T		4							
VSP-C20-10P□-4T		2.5	54.4		26.8	17.5	10	0.8 to 2.7	21
VSP-C20-10P□-6T		4							
VSP-C20-15P□-4T		2.5	65.4		31.8	23.5	15	0.7 to 3.0	25
VSP-C20-15P□-6T		4							
VSP-C20-20P□-4T		2.5	75.4		36.8	28.5	20	0.9 to 3.4	27
VSP-C20-20P□-6T		4							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C8 to 20-□P□-4TC/6TC

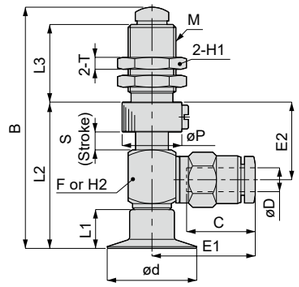


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C8-20P□-4TC	8	2.5	62.6	5.5	43.5	20	1.5 to 4.9	42
VSP-C8-20P□-6TC		4						
VSP-C8-30P□-4TC		2.5	75.6		56.5	30	1.1 to 4.8	47
VSP-C8-30P□-6TC		4						
VSP-C8-40P□-4TC		2.5	88.6		69.5	40	1.0 to 4.5	52
VSP-C8-40P□-6TC		4						
VSP-C8-50P□-4TC		2.5	101.6		82.5	50	0.9 to 4.5	58
VSP-C8-50P□-6TC		4						
VSP-C10-20P□-4TC	10	2.5	62.9	5.8	43.8	20	1.5 to 4.9	42
VSP-C10-20P□-6TC		4						
VSP-C10-30P□-4TC		2.5	75.9		56.8	30	1.1 to 4.8	47
VSP-C10-30P□-6TC		4						
VSP-C10-40P□-4TC		2.5	88.9		69.8	40	1.0 to 4.5	52
VSP-C10-40P□-6TC		4						
VSP-C10-50P□-4TC		2.5	101.9		82.8	50	0.9 to 4.5	58
VSP-C10-50P□-6TC		4						
VSP-C15-20P□-4TC	15	2.5	63.6	6.5	44.5	20	1.5 to 4.9	42
VSP-C15-20P□-6TC		4						
VSP-C15-30P□-4TC		2.5	76.6		57.5	30	1.1 to 4.8	47
VSP-C15-30P□-6TC		4						
VSP-C15-40P□-4TC		2.5	89.6		70.5	40	1.0 to 4.5	52
VSP-C15-40P□-6TC		4						
VSP-C15-50P□-4TC		2.5	102.6		83.5	50	0.9 to 4.5	58
VSP-C15-50P□-6TC		4						
VSP-C20-20P□-4TC	20	2.5	64.4	7.3	45.3	20	1.5 to 4.9	42
VSP-C20-20P□-6TC		4						
VSP-C20-30P□-4TC		2.5	77.4		58.3	30	1.1 to 4.8	47
VSP-C20-30P□-6TC		4						
VSP-C20-40P□-4TC		2.5	90.4		71.3	40	1.0 to 4.5	52
VSP-C20-40P□-6TC		4						
VSP-C20-50P□-4TC		2.5	103.4		84.3	50	0.9 to 4.5	58
VSP-C20-50P□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D8 to 20P□-2/4/6
●VSP-D8 to 20-□P□-2/4/6

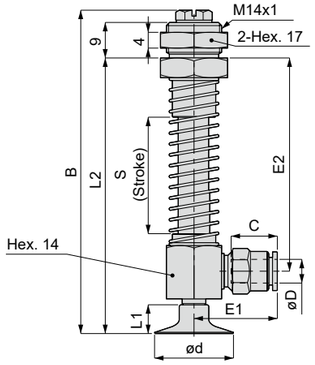


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	øP	Tube End C	E1	E2	Width Across Flats H1	Width Across Flats H2	F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D8P□-2	8	1.8	M8x0.75	39.5	5.5	23.5	13	10	8.4	12.7	13	10	-	□8	2	3	0.9 to 1.9	13
VSP-D8P□-4		4							11.2	16.8								14
VSP-D8P□-6		6							11.9	18.6								15
VSP-D8-10P□-2		1.8	M12x1	54.6		34	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D8-10P□-4		4							11.2	18.8								34
VSP-D8-10P□-6		6							11.9	20.1								35
VSP-D8-15P□-2		1.8		65.6		39	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D8-15P□-4		4							11.2	18.8								38
VSP-D8-15P□-6		6							11.9	20.1								39
VSP-D8-20P□-2		1.8		75.6		44	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D8-20P□-4		4							11.2	18.8								41
VSP-D8-20P□-6		6							11.9	20.1								42
VSP-D10P□-2	10	1.8	M8x0.75	39.8	5.8	23.8	13	10	8.4	12.7	13	10	-	□8	2	3	0.9 to 1.9	13
VSP-D10P□-4		4							11.2	16.8								14
VSP-D10P□-6		6							11.9	18.6								15
VSP-D10-10P□-2		1.8	M12x1	54.9		34.3	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D10-10P□-4		4							11.2	18.8								34
VSP-D10-10P□-6		6							11.9	20.1								35
VSP-D10-15P□-2		1.8		65.9		39.3	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D10-15P□-4		4							11.2	18.8								38
VSP-D10-15P□-6		6							11.9	20.1								39
VSP-D10-20P□-2		1.8		75.9		44.3	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D10-20P□-4		4							11.2	18.8								41
VSP-D10-20P□-6		6							11.9	20.1								42
VSP-D15P□-2	15	1.8	M8x0.75	40.5	6.5	24.5	13	10	8.4	12.7	13	10	-	□8	2	3	0.9 to 1.9	13
VSP-D15P□-4		4							11.2	16.8								14
VSP-D15P□-6		6							11.9	18.6								15
VSP-D15-10P□-2		1.8	M12x1	55.6		35	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D15-10P□-4		4							11.2	18.8								34
VSP-D15-10P□-6		6							11.9	20.1								35
VSP-D15-15P□-2		1.8		66.6		40	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D15-15P□-4		4							11.2	18.8								38
VSP-D15-15P□-6		6							11.9	20.1								39
VSP-D15-20P□-2		1.8		76.6		45	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D15-20P□-4		4							11.2	18.8								41
VSP-D15-20P□-6		6							11.9	20.1								42
VSP-D20P□-2	20	1.8	M8x0.75	41.3	7.3	25.3	13	10	8.4	12.7	13	10	-	□8	2	3	0.9 to 1.9	13
VSP-D20P□-4		4							11.2	16.8								14
VSP-D20P□-6		6							11.9	18.6								15
VSP-D20-10P□-2		1.8	M12x1	56.4		35.8	17.5	13	8.4	14.7	21	14	12	-	4	10	0.6 to 1.7	33
VSP-D20-10P□-4		4							11.2	18.8								34
VSP-D20-10P□-6		6							11.9	20.1								35
VSP-D20-15P□-2		1.8		67.4		40.8	23.5		8.4	14.7	26					15	0.4 to 1.7	37
VSP-D20-15P□-4		4							11.2	18.8								38
VSP-D20-15P□-6		6							11.9	20.1								39
VSP-D20-20P□-2		1.8		77.4		45.8	28.5		8.4	14.7	31					20	0.3 to 1.8	40
VSP-D20-20P□-4		4							11.2	18.8								41
VSP-D20-20P□-6		6							11.9	20.1								42

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D8 to 20-□P□-4C/6C

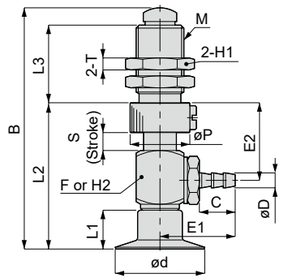


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D8-20P□-4C	8	4	65.6	5.5	53.5	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D8-20P□-6C		6				11.9	21.1				63
VSP-D8-30P□-4C		4	78.6		66.5	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D8-30P□-6C		6				11.9	21.1				69
VSP-D8-40P□-4C		4	91.6		79.5	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D8-40P□-6C		6				11.9	21.1				76
VSP-D8-50P□-4C		4	104.6		92.5	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D8-50P□-6C		6				11.9	21.1				83
VSP-D10-20P□-4C	10	4	65.9	5.8	53.8	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D10-20P□-6C		6				11.9	21.1				63
VSP-D10-30P□-4C		4	78.9		66.8	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D10-30P□-6C		6				11.9	21.1				69
VSP-D10-40P□-4C		4	91.9		79.8	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D10-40P□-6C		6				11.9	21.1				76
VSP-D10-50P□-4C		4	104.9		92.8	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D10-50P□-6C		6				11.9	21.1				83
VSP-D15-20P□-4C	15	4	66.6	6.5	54.5	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D15-20P□-6C		6				11.9	21.1				63
VSP-D15-30P□-4C		4	79.6		67.5	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D15-30P□-6C		6				11.9	21.1				69
VSP-D15-40P□-4C		4	92.6		80.5	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D15-40P□-6C		6				11.9	21.1				76
VSP-D15-50P□-4C		4	105.6		93.5	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D15-50P□-6C		6				11.9	21.1				83
VSP-D20-20P□-4C	20	4	67.4	7.3	55.3	11.2	19.8	40.5	20	1.5 to 4.9	62
VSP-D20-20P□-6C		6				11.9	21.1				63
VSP-D20-30P□-4C		4	80.4		68.3	11.2	19.8	53.5	30	1.1 to 4.8	68
VSP-D20-30P□-6C		6				11.9	21.1				69
VSP-D20-40P□-4C		4	93.4		81.3	11.2	19.8	66.5	40	1.0 to 4.5	75
VSP-D20-40P□-6C		6				11.9	21.1				76
VSP-D20-50P□-4C		4	106.4		94.3	11.2	19.8	79.5	50	0.9 to 4.5	82
VSP-D20-50P□-6C		6				11.9	21.1				83

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D8 to 20P□-4T/6T
●VSP-D8 to 20-□P□-4T/6T

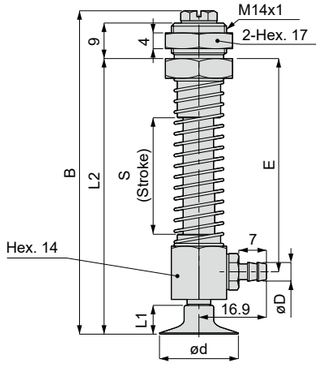


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	E1	E2	Width Across Flats H1	Width Across Flats H2	F	T	Stroke S	Spring Force (N)	Weight (g)
VSP-D8P□-4T	8	2.5	M8x0.75	39.5	5.5	23.5	13	10	13.9	13	10	-	□8	2	3	0.9 to 1.9	14
VSP-D8P□-6T		4															
VSP-D8-10P□-4T		2.5	M12x1	54.6		34	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	34
VSP-D8-10P□-6T		4															
VSP-D8-15P□-4T		2.5		65.6		39	23.5			26					15	0.4 to 1.7	38
VSP-D8-15P□-6T		4															
VSP-D8-20P□-4T		2.5		75.6		44	28.5			31					20	0.3 to 1.8	41
VSP-D8-20P□-6T		4															
VSP-D10P□-4T	10	2.5	M8x0.75	39.8	5.8	23.8	13	10	13.9	13	10	-	□8	2	3	0.9 to 1.9	14
VSP-D10P□-6T		4															
VSP-D10-10P□-4T		2.5	M12x1	54.9		34.3	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	34
VSP-D10-10P□-6T		4															
VSP-D10-15P□-4T		2.5		65.9		39.3	23.5			26					15	0.4 to 1.7	38
VSP-D10-15P□-6T		4															
VSP-D10-20P□-4T		2.5		75.9		44.3	28.5			31					20	0.3 to 1.8	41
VSP-D10-20P□-6T		4															
VSP-D15P□-4T	15	2.5	M8x0.75	40.5	6.5	24.5	13	10	13.9	13	10	-	□8	2	3	0.9 to 1.9	14
VSP-D15P□-6T		4															
VSP-D15-10P□-4T		2.5	M12x1	55.6		35	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	34
VSP-D15-10P□-6T		4															
VSP-D15-15P□-4T		2.5		66.6		40	23.5			26					15	0.4 to 1.7	38
VSP-D15-15P□-6T		4															
VSP-D15-20P□-4T		2.5		76.6		45	28.5			31					20	0.3 to 1.8	41
VSP-D15-20P□-6T		4															
VSP-D20P□-4T	20	2.5	M8x0.75	41.3	7.3	25.3	13	10	13.9	13	10	-	□8	2	3	0.9 to 1.9	14
VSP-D20P□-6T		4															
VSP-D20-10P□-4T		2.5	M12x1	56.4		35.8	17.5	13	15.9	21	14	12	-	4	10	0.6 to 1.7	34
VSP-D20-10P□-6T		4															
VSP-D20-15P□-4T		2.5		67.5		40.8	23.5			26					15	0.4 to 1.7	38
VSP-D20-15P□-6T		4															
VSP-D20-20P□-4T		2.5		77.4		45.8	28.5			31					20	0.3 to 1.8	41
VSP-D20-20P□-6T		4															

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D8 to 20-□P□-4TC/6TC

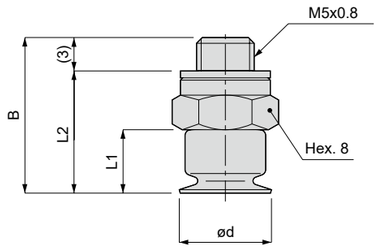


Unit: mm

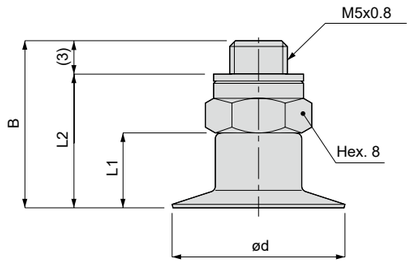
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D8-20P□-4TC	8	2.5	65.6	5.5	53.5	40.5	20	1.5 to 4.9	60
VSP-D8-20P□-6TC		4							
VSP-D8-30P□-4TC		2.5	78.6		66.5	53.5	30	1.1 to 4.8	67
VSP-D8-30P□-6TC		4							
VSP-D8-40P□-4TC		2.5	91.6		79.5	66.5	40	1.0 to 4.5	74
VSP-D8-40P□-6TC		4							
VSP-D8-50P□-4TC		2.5	104.6		92.5	79.5	50	0.9 to 4.5	80
VSP-D8-50P□-6TC		4							
VSP-D10-20P□-4TC	10	2.5	65.9	5.8	53.8	40.5	20	1.5 to 4.9	60
VSP-D10-20P□-6TC		4							
VSP-D10-30P□-4TC		2.5	78.9		66.8	53.5	30	1.1 to 4.8	67
VSP-D10-30P□-6TC		4							
VSP-D10-40P□-4TC		2.5	91.9		79.8	66.5	40	1.0 to 4.5	74
VSP-D10-40P□-6TC		4							
VSP-D10-50P□-4TC		2.5	104.9		92.8	79.5	50	0.9 to 4.5	80
VSP-D10-50P□-6TC		4							
VSP-D15-20P□-4TC	15	2.5	66.6	6.5	54.5	40.5	20	1.5 to 4.9	60
VSP-D15-20P□-6TC		4							
VSP-D15-30P□-4TC		2.5	79.6		67.5	53.5	30	1.1 to 4.8	67
VSP-D15-30P□-6TC		4							
VSP-D15-40P□-4TC		2.5	92.6		80.5	66.5	40	1.0 to 4.5	74
VSP-D15-40P□-6TC		4							
VSP-D15-50P□-4TC		2.5	105.6		93.5	79.5	50	0.9 to 4.5	80
VSP-D15-50P□-6TC		4							
VSP-D20-20P□-4TC	20	2.5	67.4	7.3	55.3	40.5	20	1.5 to 4.9	60
VSP-D20-20P□-6TC		4							
VSP-D20-30P□-4TC		2.5	80.4		68.3	53.5	30	1.1 to 4.8	67
VSP-D20-30P□-6TC		4							
VSP-D20-40P□-4TC		2.5	93.4		81.3	66.5	40	1.0 to 4.5	74
VSP-D20-40P□-6TC		4							
VSP-D20-50P□-4TC		2.5	106.4		94.3	79.5	50	0.9 to 4.5	80
VSP-D20-50P□-6TC		4							

External Dimension Diagram (Direct Mount, Fixed Type, VSP-E, Male Thread)

●VSP-E8, 10P□



●VSP-E15, 20P□

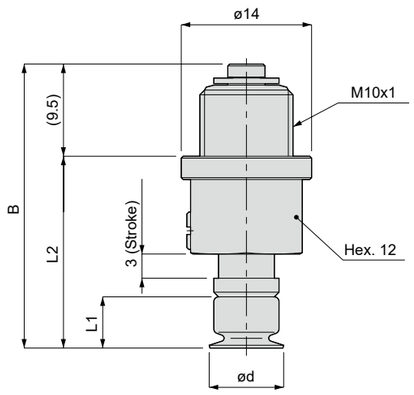


Unit: mm

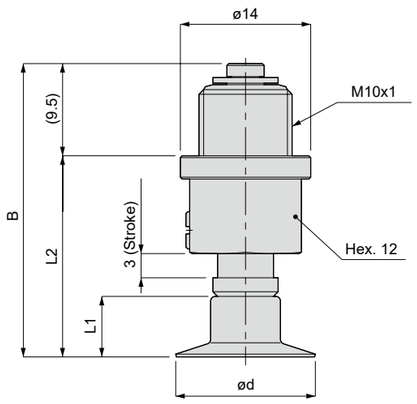
Model No.	Pad Diameter ød	B	L1	L2	Weight (g)
VSP-E8P□	8	13.5	5.5	10.5	2.7
VSP-E10P□	10	13.8	5.8	10.8	2.8
VSP-E15P□	15	14.5	6.5	11.5	2.9
VSP-E20P□	20	15.3	7.3	12.3	3

External Dimension Diagram (Direct Mount Type, Buffer Type, VSP-F, Male Thread)

●VSP-F8, 10P□



●VSP-F15, 20P□

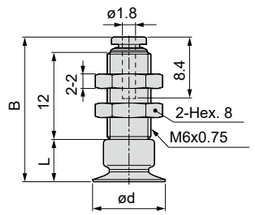


Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F8P□	8	30.5	5.5	21	2.3 to 3.9	14.2
VSP-F10P□	10	30.8	5.8	21.3	2.3 to 3.9	14.3
VSP-F15P□	15	31.5	6.5	22	2.3 to 3.9	14.4
VSP-F20P□	20	32.3	7.3	22.8	2.3 to 3.9	14.5

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA8 to 20P□-2

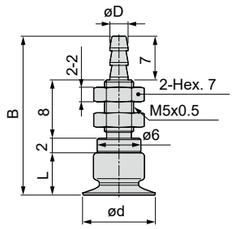


Unit: mm

Model No.	Pad Diameter ød	B	L	Weight (g)
VSP-MA8P□-2	8	19.6	5.5	2.1
VSP-MA10P□-2	10	19.9	5.8	2.1
VSP-MA15P□-2	15	20.6	6.5	2.2
VSP-MA20P□-2	20	21.4	7.3	2.2

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA8 to 20P□-4T

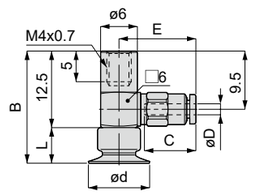


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MA8P□-4T	8	2.5	22.5	5.5	1.6
VSP-MA10P□-4T	10	2.5	22.8	5.8	1.6
VSP-MA15P□-4T	15	2.5	23.5	6.5	1.7
VSP-MA20P□-4T	20	2.5	24.3	7.3	1.7

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB8 to 20P□-2/4

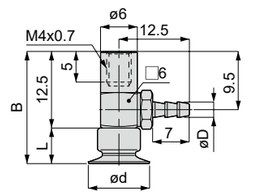


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB8P□-2	8	1.8	18	5.5	8.4	12.5	2.1
VSP-MB8P□-4		4			11.2	15.8	3
VSP-MB10P□-2	10	1.8	18.3	5.8	8.4	12.5	2.1
VSP-MB10P□-4		4			11.2	15.8	3
VSP-MB15P□-2	15	1.8	19	6.5	8.4	12.5	2.2
VSP-MB15P□-4		4			11.2	15.8	3
VSP-MB20P□-2	20	1.8	19.8	7.3	8.4	12.5	2.2
VSP-MB20P□-4		4			11.2	15.8	3

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB8 to 20P□-4T/6T

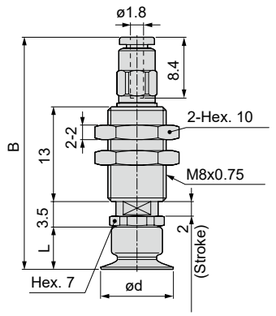


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MB8P□-4T	8	2.5	18	5.5	2
VSP-MB8P□-6T		4			
VSP-MB10P□-4T	10	2.5	18.3	5.8	2
VSP-MB10P□-6T		4			
VSP-MB15P□-4T	15	2.5	19	6.5	2
VSP-MB15P□-6T		4			
VSP-MB20P□-4T	20	2.5	19.8	7.3	2
VSP-MB20P□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC8 to 20P□-2

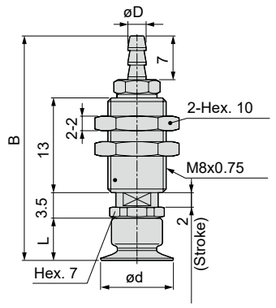


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC8P□-2	8	1.8	31.7	5.5	0.5 to 0.6	1.8
VSP-MC10P□-2	10	1.8	32	5.8	0.5 to 0.6	1.8
VSP-MC15P□-2	15	1.8	32.7	6.5	0.5 to 0.6	1.8
VSP-MC20P□-2	20	1.8	33.5	7.3	0.5 to 0.6	1.8

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC8 to 20P□-4T/6T

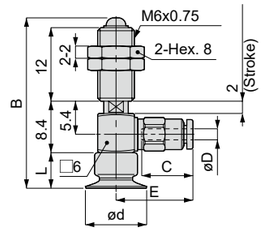


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC8P□-4T	8	2.5	31.6	5.5	0.5 to 0.6	1.6
VSP-MC8P□-6T		4				
VSP-MC10P□-4T	10	2.5	31.9	5.8	0.5 to 0.6	1.6
VSP-MC10P□-6T		4				
VSP-MC15P□-4T	15	2.5	32.6	6.5	0.5 to 0.6	1.6
VSP-MC15P□-6T		4				
VSP-MC20P□-4T	20	2.5	33.4	7.3	0.5 to 0.6	1.6
VSP-MC20P□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD8 to 20P□-2/4

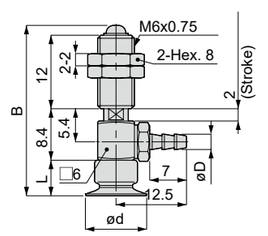


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD8P□-2	8	1.8	27.5	5.5	8.4	12.6	0.5 to 0.6	6.1
VSP-MD8P□-4		4			11.2	15.9		7
VSP-MD10P□-2	10	1.8	27.8	5.8	8.4	12.6	0.5 to 0.6	6.2
VSP-MD10P□-4		4			11.2	15.9		7
VSP-MD15P□-2	15	1.8	28.5	6.5	8.4	12.6	0.5 to 0.6	6.2
VSP-MD15P□-4		4			11.2	15.9		7
VSP-MD20P□-2	20	1.8	29.3	7.3	8.4	12.6	0.5 to 0.6	6.3
VSP-MD20P□-4		4			11.2	15.9		7

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD8 to 20P□-4T/6T

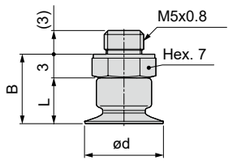


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD8P□-4T	8	2.5	27.5	5.5	0.5 to 0.6	6
VSP-MD8P□-6T		4				
VSP-MD10P□-4T	10	2.5	27.8	5.8	0.5 to 0.6	6
VSP-MD10P□-6T		4				
VSP-MD15P□-4T	15	2.5	28.5	6.5	0.5 to 0.6	6.1
VSP-MD15P□-6T		4				
VSP-MD20P□-4T	20	2.5	29.3	7.3	0.5 to 0.6	6.1
VSP-MD20P□-6T		4				

External Dimension Diagram (Compact, Direct Mount, Fixed Type, VSP-ME, Male Thread)

●VSP-ME8 to 20P□-M5

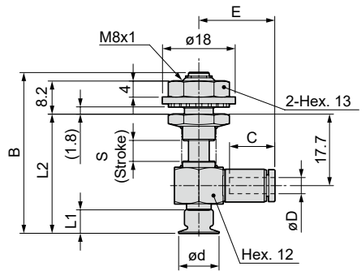


Unit: mm

Model No.	Pad Diameter ød	B	L	Weight (g)
VSP-ME8P□-M5	8	8.5	5.5	8
VSP-ME10P□-M5	10	8.8	5.8	10
VSP-ME15P□-M5	15	9.5	6.5	15
VSP-ME20P□-M5	20	10.3	7.3	20

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Push-in fitting)

●VSP-HD8 to 20P□-2/4/6

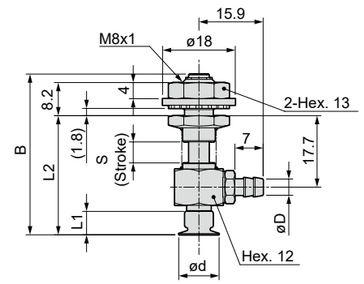


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD8P□-2	8	1.8	39.5	5.5	29.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD8P□-4		4				11.2	18.8			30
VSP-HD8P□-6		6				11.9	20.6			31
VSP-HD10P□-2	10	1.8	39.8	5.8	29.5	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD10P□-4		4				11.2	18.8			30
VSP-HD10P□-6		6				11.9	20.6			31
VSP-HD15P□-2	15	1.8	40.5	6.5	30.2	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD15P□-4		4				11.2	18.8			30
VSP-HD15P□-6		6				11.9	20.6			31
VSP-HD20P□-2	20	1.8	41.3	7.3	31	8.4	14.7	5.2	1.6 to 2.9	29
VSP-HD20P□-4		4				11.2	18.8			30
VSP-HD20P□-6		6				11.9	20.6			31

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Barb Fitting)

●VSP-HD8 to 20P□-4T/6T

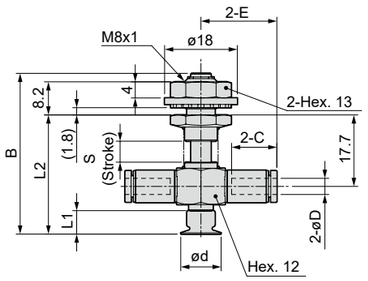


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD8P□-4T	8	2.5	39.5	5.5	29.2	5.2	1.6 to 2.9	28
VSP-HD8P□-6T		4						
VSP-HD10P□-4T	10	2.5	39.8	5.8	29.5	5.2	1.6 to 2.9	28
VSP-HD10P□-6T		4						
VSP-HD15P□-4T	15	2.5	40.5	6.5	30.2	5.2	1.6 to 2.9	28
VSP-HD15P□-6T		4						
VSP-HD20P□-4T	20	2.5	41.3	7.3	31	5.2	1.6 to 2.9	28
VSP-HD20P□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Push-in fitting)

●VSP-HDW8 to 20P□-2/4/6

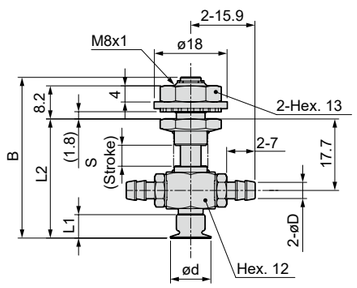


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW8P□-2	8	1.8	39.5	5.5	29.2	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HDW8P□-4		4				11.2	18.8			33
VSP-HDW8P□-6		6				11.9	20.6			35
VSP-HDW10P□-2	10	1.8	39.8	5.8	29.5	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HDW10P□-4		4				11.2	18.8			33
VSP-HDW10P□-6		6				11.9	20.6			35
VSP-HDW15P□-2	15	1.8	40.5	6.5	30.2	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HDW15P□-4		4				11.2	18.8			33
VSP-HDW15P□-6		6				11.9	20.6			35
VSP-HDW20P□-2	20	1.8	41.3	7.3	31	8.4	14.7	5.2	1.6 to 2.9	31
VSP-HDW20P□-4		4				11.2	18.8			33
VSP-HDW20P□-6		6				11.9	20.6			35

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Barb Fitting)

●VSP-HDW8 to 20P□-4T/6T

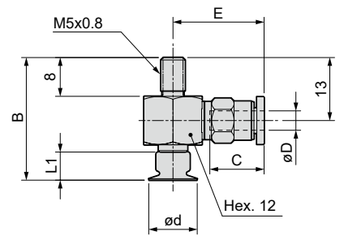


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW8P□-4T	8	2.5	39.5	5.5	29.2	5.2	1.6 to 2.9	29
VSP-HDW8P□-6T		4						
VSP-HDW10P□-4T	10	2.5	39.8	5.8	29.5	5.2	1.6 to 2.9	29
VSP-HDW10P□-6T		4						
VSP-HDW15P□-4T	15	2.5	40.5	6.5	30.2	5.2	1.6 to 2.9	29
VSP-HDW15P□-6T		4						
VSP-HDW20P□-4T	20	2.5	41.3	7.3	31	5.2	1.6 to 2.9	29
VSP-HDW20P□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Push-in fitting)

●VSP-HE8 to 20P□-2/4/6

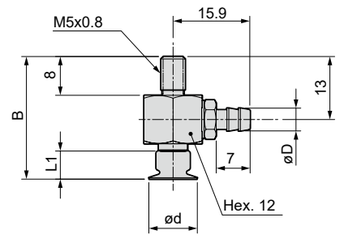


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE8P□-2	8	1.8	25	5.5	8.4	14.7	15
VSP-HE8P□-4		4			11.2	18.8	16
VSP-HE8P□-6		6			11.9	20.6	17
VSP-HE10P□-2	10	1.8	25.3	5.8	8.4	14.7	15
VSP-HE10P□-4		4			11.2	18.8	16
VSP-HE10P□-6		6			11.9	20.6	17
VSP-HE15P□-2	15	1.8	26	6.5	8.4	14.7	15
VSP-HE15P□-4		4			11.2	18.8	16
VSP-HE15P□-6		6			11.9	20.6	17
VSP-HE20P□-2	20	1.8	26.8	7.3	8.4	14.7	15
VSP-HE20P□-4		4			11.2	18.8	16
VSP-HE20P□-6		6			11.9	20.6	17

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Barb Fitting)

●VSP-HE8 to 20P□-4T/6T

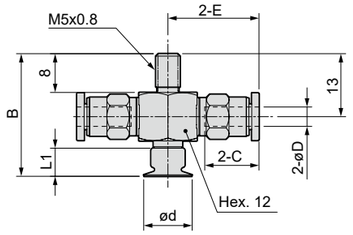


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE8P□-4T	8	2.5	25	5.5	14
VSP-HE8P□-6T		4			
VSP-HE10P□-4T	10	2.5	25.3	5.8	14
VSP-HE10P□-6T		4			
VSP-HE15P□-4T	15	2.5	26	6.5	14
VSP-HE15P□-6T		4			
VSP-HE20P□-4T	20	2.5	26.8	7.3	14
VSP-HE20P□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW8 to 20P□-2/4/6

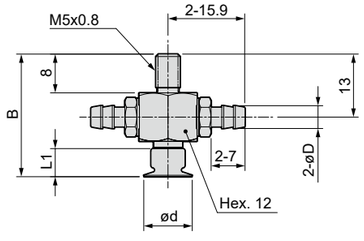


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW8P□-2	8	1.8	25	5.5	8.4	14.7	16
VSP-HEW8P□-4		4			11.2	18.8	18
VSP-HEW8P□-6		6			11.9	20.6	20
VSP-HEW10P□-2	10	1.8	25.3	5.8	8.4	14.7	16
VSP-HEW10P□-4		4			11.2	18.8	18
VSP-HEW10P□-6		6			11.9	20.6	20
VSP-HEW15P□-2	15	1.8	26	6.5	8.4	14.7	16
VSP-HEW15P□-4		4			11.2	18.8	18
VSP-HEW15P□-6		6			11.9	20.6	20
VSP-HEW20P□-2	20	1.8	26.8	7.3	8.4	14.7	16
VSP-HEW20P□-4		4			11.2	18.8	18
VSP-HEW20P□-6		6			11.9	20.6	20

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW8 to 20P□-4T/6T

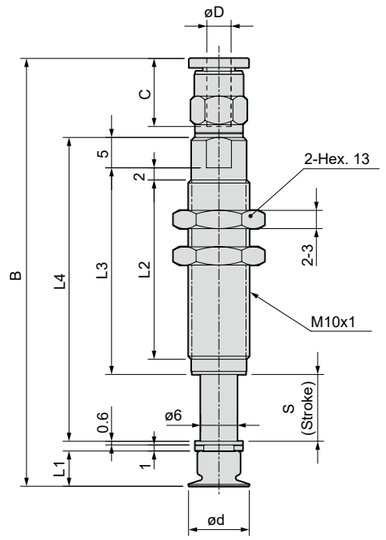


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW8P□-4T	8	2.5	25	5.5	15
VSP-HEW8P□-6T		4			
VSP-HEW10P□-4T	10	2.5	25.3	5.8	15
VSP-HEW10P□-6T		4			
VSP-HEW15P□-4T	15	2.5	26	6.5	15
VSP-HEW15P□-6T		4			
VSP-HEW20P□-4T	20	2.5	26.8	7.3	15
VSP-HEW20P□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC8 to 20-□P□-4



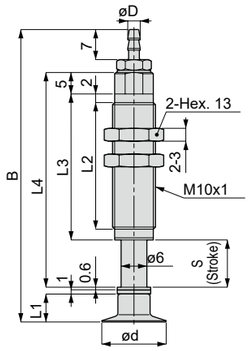
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC8-2P□-4	8	4	54.1	5.5	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC8-5P□-4			60.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC8-10P□-4			70.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC8-15P□-4			80.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC8-20P□-4			90.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC10-2P□-4	10	4	54.4	5.8	21.5	26	34	11.2	2	1.3 to 1.8	25
VSP-LFC10-5P□-4			60.4		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC10-10P□-4			70.4		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC10-15P□-4			80.4		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC10-20P□-4			90.4		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	33
VSP-LFC15-2P□-4	15	4	55.1	6.5	21.5	26	34	11.2	2	1.3 to 1.8	26
VSP-LFC15-5P□-4			61.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	28
VSP-LFC15-10P□-4			71.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	30
VSP-LFC15-15P□-4			81.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	32
VSP-LFC15-20P□-4			91.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	34
VSP-LFC20-2P□-4	20	4	55.9	7.3	21.5	26	34	11.2	2	1.3 to 1.8	26
VSP-LFC20-5P□-4			61.9		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	28
VSP-LFC20-10P□-4			71.9		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	30
VSP-LFC20-15P□-4			81.9		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	32
VSP-LFC20-20P□-4			91.9		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	34

* Values inSide ,brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC8 to 20-□P□-4T/6T



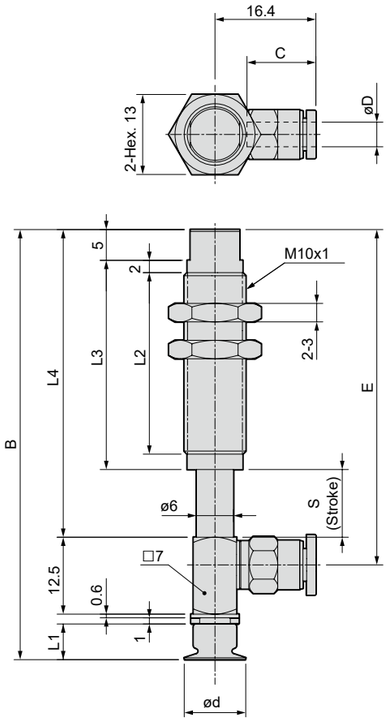
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC8-2P□-4T	8	2.5	51.2	5.5	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC8-2P□-6T		4								
VSP-LFC8-5P□-4T		2.5	57.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC8-5P□-6T		4								
VSP-LFC8-10P□-4T		2.5	67.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC8-10P□-6T		4								
VSP-LFC8-15P□-4T		2.5	77.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC8-15P□-6T		4								
VSP-LFC8-20P□-4T		2.5	87.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC8-20P□-6T		4								
VSP-LFC10-2P□-4T	10	2.5	51.5	5.8	21.5	26	34	2	1.3 to 1.8	24
VSP-LFC10-2P□-6T		4								
VSP-LFC10-5P□-4T		2.5	57.5		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	26
VSP-LFC10-5P□-6T		4								
VSP-LFC10-10P□-4T		2.5	67.5		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	28
VSP-LFC10-10P□-6T		4								
VSP-LFC10-15P□-4T		2.5	77.5		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	30
VSP-LFC10-15P□-6T		4								
VSP-LFC10-20P□-4T		2.5	87.5		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	31
VSP-LFC10-20P□-6T		4								
VSP-LFC15-2P□-4T	15	2.5	52.2	6.5	21.5	26	34	2	1.3 to 1.8	25
VSP-LFC15-2P□-6T		4								
VSP-LFC15-5P□-4T		2.5	58.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC15-5P□-6T		4								
VSP-LFC15-10P□-4T		2.5	68.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC15-10P□-6T		4								
VSP-LFC15-15P□-4T		2.5	78.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC15-15P□-6T		4								
VSP-LFC15-20P□-4T		2.5	88.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	32
VSP-LFC15-20P□-6T		4								
VSP-LFC20-2P□-4T	20	2.5	53	7.3	21.5	26	34	2	1.3 to 1.8	25
VSP-LFC20-2P□-6T		4								
VSP-LFC20-5P□-4T		2.5	59		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	27
VSP-LFC20-5P□-6T		4								
VSP-LFC20-10P□-4T		2.5	69		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	29
VSP-LFC20-10P□-6T		4								
VSP-LFC20-15P□-4T		2.5	79		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	31
VSP-LFC20-15P□-6T		4								
VSP-LFC20-20P□-4T		2.5	89		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	32
VSP-LFC20-20P□-6T		4								

* Values inSide ,brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Push-in fitting)

●VSP-LFD8 to 20-□P□-4

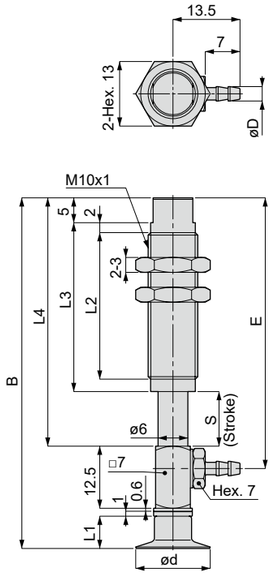


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD8-5P□-4	8	4	59.6	5.5	24.5	29	40	11.2	44.5	5	1.3 to 2.4	30
VSP-LFD8-10P□-4			69.6		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD8-15P□-4			79.6		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD8-20P□-4			89.6		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD10-5P□-4	10	4	59.9	5.8	24.5	29	40	11.2	44.5	5	1.3 to 2.4	30
VSP-LFD10-10P□-4			69.9		29.5	34	50		54.5	10	1.3 to 3.3	33
VSP-LFD10-15P□-4			79.9		34.5	39	60		64.5	15	1.3 to 4.2	35
VSP-LFD10-20P□-4			89.9		39.5	44	70		74.5	20	1.3 to 5.1	37
VSP-LFD15-5P□-4	15	4	60.6	6.5	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD15-10P□-4			70.6		29.5	34	50		54.5	10	1.3 to 3.3	34
VSP-LFD15-15P□-4			80.6		34.5	39	60		64.5	15	1.3 to 4.2	36
VSP-LFD15-20P□-4			90.6		39.5	44	70		74.5	20	1.3 to 5.1	38
VSP-LFD20-5P□-4	20	4	61.4	7.3	24.5	29	40	11.2	44.5	5	1.3 to 2.4	31
VSP-LFD20-10P□-4			71.4		29.5	34	50		54.5	10	1.3 to 3.3	34
VSP-LFD20-15P□-4			81.4		34.5	39	60		64.5	15	1.3 to 4.2	36
VSP-LFD20-20P□-4			91.4		39.5	44	70		74.5	20	1.3 to 5.1	38

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Barb Fitting)

●VSP-LFD8 to 20-□P□-4T/6T

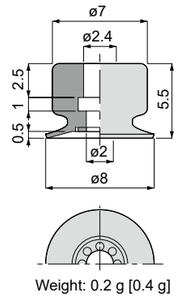


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD8-5P□-4T	8	2.5	59.6	5.5	24.5	29	40	44.5	5	1.3 to 2.4	29
VSP-LFD8-5P□-6T		4									
VSP-LFD8-10P□-4T		2.5	69.6		29.5	34	50	54.5	10	1.3 to 3.3	31
VSP-LFD8-10P□-6T		4									
VSP-LFD8-15P□-4T		2.5	79.6		34.5	39	60	64.5	15	1.3 to 4.2	33
VSP-LFD8-15P□-6T		4									
VSP-LFD8-20P□-4T		2.5	89.6		39.5	44	70	74.5	20	1.3 to 5.1	35
VSP-LFD8-20P□-6T		4									
VSP-LFD10-5P□-4T	10	2.5	59.9	5.8	24.5	29	40	44.5	5	1.3 to 2.4	29
VSP-LFD10-5P□-6T		4									
VSP-LFD10-10P□-4T		2.5	69.9		29.5	34	50	54.5	10	1.3 to 3.3	31
VSP-LFD10-10P□-6T		4									
VSP-LFD10-15P□-4T		2.5	79.9		34.5	39	60	64.5	15	1.3 to 4.2	33
VSP-LFD10-15P□-6T		4									
VSP-LFD10-20P□-4T		2.5	89.9		39.5	44	70	74.5	20	1.3 to 5.1	35
VSP-LFD10-20P□-6T		4									
VSP-LFD15-5P□-4T	15	2.5	60.6	6.5	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD15-5P□-6T		4									
VSP-LFD15-10P□-4T		2.5	70.6		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD15-10P□-6T		4									
VSP-LFD15-15P□-4T		2.5	80.6		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD15-15P□-6T		4									
VSP-LFD15-20P□-4T		2.5	90.6		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD15-20P□-6T		4									
VSP-LFD20-5P□-4T	20	2.5	61.4	7.3	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD20-5P□-6T		4									
VSP-LFD20-10P□-4T		2.5	71.4		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD20-10P□-6T		4									
VSP-LFD20-15P□-4T		2.5	81.4		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD20-15P□-6T		4									
VSP-LFD20-20P□-4T		2.5	91.4		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD20-20P□-6T		4									

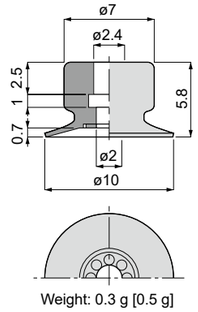
Pad Rubber Only External Dimension Diagram

●VSPG-8P□



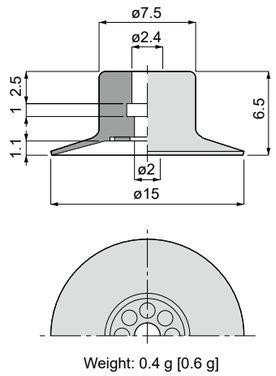
Weight: 0.2 g [0.4 g]

●VSPG-10P□



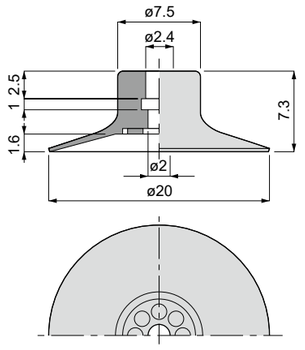
Weight: 0.3 g [0.5 g]

●VSPG-15P□



Weight: 0.4 g [0.6 g]

●VSPG-20P□

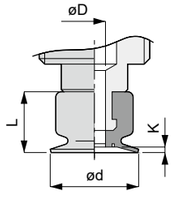


Weight: 0.5 g [0.8 g]

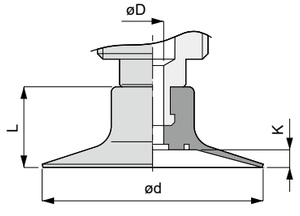
Weight: Values in [ ] are for fluororubber only.

Detailed Diagram of Pad and Holder Connection Part

●VSPG-8, 10P□A



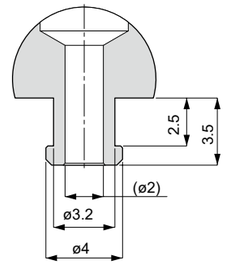
●VSPG-15, 20P□A



Unit: mm

Model No.	Pad Diameter ød	L	Lip Internal Height K	øD
VSPG-8P□A	8	5.5	0.5	2
VSPG-10P□A	10	5.8	0.7	2
VSPG-15P□A	15	6.5	1.1	2
VSPG-20P□A	20	7.3	1.6	2

Pad Fitting Part Dimensions



Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad, Thin Object Type, VSP-□P□Series

Design / Selection

Warning

For thin object type pads, depending on usage conditions and material properties, the pad may stick to the workpiece. Please confirm with the actual machine.

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechan-ical Break Function
Ending

Suction Pad, Flat Type / Flat Increased Suction Flow RatE-type

VSP-□F□, □FH□ Series

Suction pad with a flat suction surface that prevents thin workpieces from deforming or wrinkling.

RoHS

By forming grooves on the flat suction surface, changes in the workpiece during suction are suppressed, reducing wrinkling.

Abundant holder variations

Shape 16 types

- Standard... 5 types
- Compact... Class 4
- Low dust generation
- .....2 types
- Lightweight.. 3 types
- Low back2 types

Piping Connection 5 types

- Push-in fitting (ø1.8 to ø6)3 types
- Barbed fitting (ø4, ø6) ..... 2 types

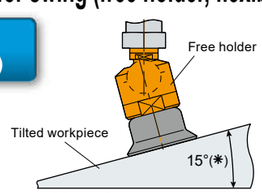
Stroke 11 types

2 mm to 50 mm
(Depends on pad diameter, holder)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

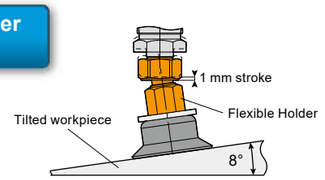
Free holder (F1:30°, F2:15°)



*7.5° for 15° swing angle type

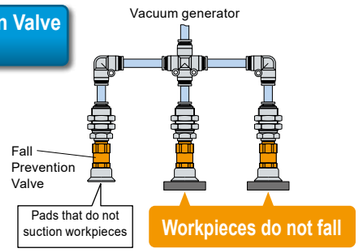
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

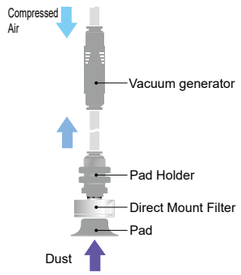
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



Pad surface treatment (option) with special processing to reduce adsorption marks is available

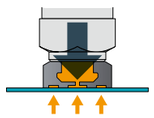
	-DL	-ER	-FG
Surface Treatment	Sticking Prevention	Adsorption Mark Reduction	Fluorine Coating
Compatible Material	Silicone Fluorine Conductive Silicone	Nitrile Nitrile Conductive NBR	Silicone Conductive Silicone
Features	Special coating with good slippage. Effective for preventing sticking of lightweight workpieces and thin workpieces.	Surface modification with environmentally friendly chemicals reduces adsorption marks.	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

Flat Shape

Standard Type (F)

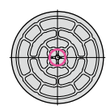
The flat-shaped suction surface holds down the workpiece, suppressing workpiece deformation. On the other hand, since the suction area is limited to the groove parts, the suction force is not very large.



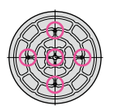
Increased Suction Flow RatE-type (FH)

Increased flow path holes significantly improve suction flow rate and suction force.

Standard



Intake flow rate increase type

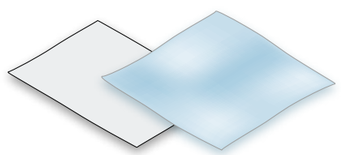


Suction Flow Rate Max. 2.5x
Suction force Max. 6x

Flow Path
4-hole addition

Recommended Workpiece

Thin workpieces such as sheets and vinyl



Pad Diameter

5 types 10 15 20 25 30

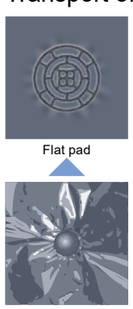
Pad Material

6 types Nitrile Silicone Urethane Fluorine Conductive Silicone Conductive NBR (Low Resistance-type)

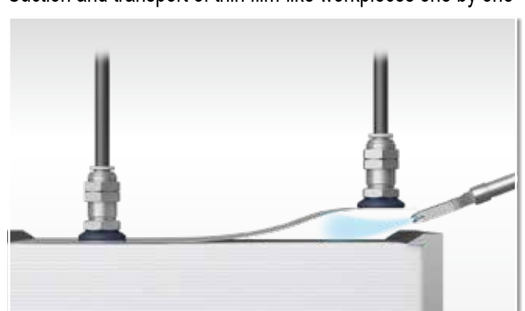
*No urethane option for Increased Suction Flow RatE-type (FH). Silicone (S) conforms to the Food Sanitation Act. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Transport of thin and easily deformable workpieces



Suction and transport of thin film-like workpieces one by one



Model No. Notation

●Flat type/intake flow rate increase-type

Suction Pad

VSP – C – 30 – -20 – F – N – -ER – 6 – [ ] – F1 – V – T1

VSP	C	30	-20	F	N	-ER	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	❼ Connection Port Shape	❽ Buffer Load	❾ Pad Swing	❿ Drop Prevention Valve	⓫ Direct Mount Filter

Pad Rubber Only

VSPG – 30 F N -ER

VSPG	30	F	N	-ER
Model No.	❷	❹	❺	❻

Pad Rubber + Set with Fixing Screw

VSPG – 30 F N -ER A

VSPG	30	F	N	-ER	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Surface Treatment	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
		Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
10	ø10
15	ø15
20	ø20
25	ø25
30	ø30

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●				Blank	*1, *2
Stroke 2 mm				●		–2	*3
Stroke 5 mm				●	●	–5	
Stroke 10 mm	●	●	●	●	●	–10	
Stroke 15 mm	●	●	●	●	●	–15	
Stroke 20 mm	●	●	●	●	●	–20	
Stroke 25 mm			●			–25	
Stroke 30 mm	●	●	●			–30	
Stroke 40 mm	●	●	●			–40	
Stroke 50 mm	●	●	●			–50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 10 or 15, -2 can be selected for ❸.

❹ Pad Shape

Code	Content	
F	Flat Type	
FH	Flat Increased Suction Flow Type	

❺ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
U	Urethane rubber
F	Fluororubber
SE	Conductive Silicone Rubber
NE	Conductive NBR (Low Resistance-type)

*1: When ❹ Pad Shape is FH, ❺ U cannot be selected.

❻ Surface Treatment

Content	Compatible Pad Material N	S	F	SE	NE	Compatible Pad Diameter Flat(F/FH)	Code
No surface treatment	All pad materials, all pad diameters						Blank
Anti-Adhesion Special Coating		●	●	●		All sizes	–DL
Suction Mark Reduction Surface Modification	●				●	All sizes	–ER
Fluorine Coating		●		●		All sizes	–FG

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Structure usable in rechargeable battery manufacturing processes

VSP –..... – P4*

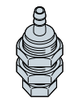
*Please inquire for details.

Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

●Uses food-grade lubricant and Food Sanitation Act compliant resin/rubber materials suitable for food manufacturing processes.

VSP –..... – FP*

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8 Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4 Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6 Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø4 Push-in fitting, without spring cover			●	●												4C	
ø6 Push-in fitting, without spring cover			●	●												6C	
ø4 Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6 Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4 Barb fitting, without spring cover			●	●												4TC	
ø6 Barb fitting, without spring cover			●	●												6TC	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for (7). Additionally, for (3) Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❽ Buffer Load

Code	Content
Blank	Standard Load or No Buffer
L	Low Load (1/4 of Standard Load)

*1 *2

*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

❾ Pad Swing

Code	Content	
Blank	None	
F1	With free holder (angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
CF	With Flexible Holder (Angle 8°)	Flexible Holder

*1: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❿ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*1: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

⓫ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1 *1: ⓫T2 can be selected when ❷ Pad Diameter is 20 to 30.
*2: For dimensions with the direct mount filter, please refer to P. 1064.

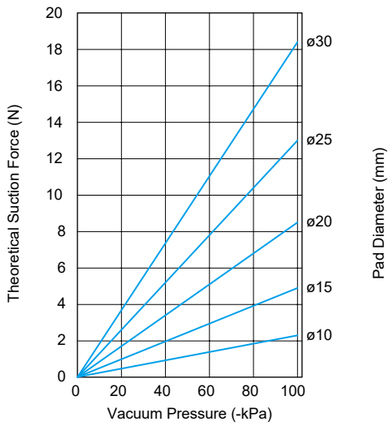
Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

Holder Shape	Pad Diameter	Push-in fitting ø4 4	ø4 4C	ø6 6	ø6 6C	Barb fitting ø4 4T	ø4 4TC	ø6 6T	ø6 6TC
A	ø10, ø15			●				●	
	ø20 to ø30	●		●		●		●	
B	All sizes	●		●		●		●	
C	All sizes	●	●	●	●	●	●	●	●
D	All sizes	●	●	●	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M14	Thread Blank
F	All sizes		●

Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø10, ø15		●		●	
	ø20 to ø30		●		●	●
MB	All sizes	●	●	●	●	●
MC	All sizes	●	●		●	●
MD	All sizes	●	●	●	●	●
LFC	ø10, ø15		●		●	●
	ø20 to ø30		●	●	●	●
LFD	ø10, ø15		●		●	●
	ø20 to ø30		●	●	●	●
HC	All sizes	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

Theoretical Suction Force

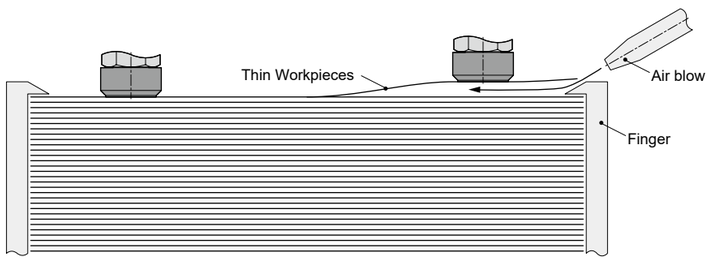


*Theoretical suction force is a value under static conditions. For actual use, apply a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting.

Reference Material for Use

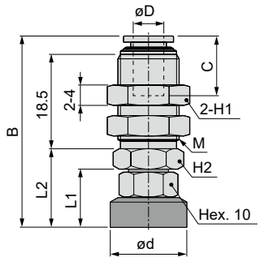
■When Sucking Multiple Stacked Thin Workpieces

Multiple workpieces may be sucked at once. Therefore, it is necessary to use a small diameter pad and further lower the vacuum pressure. Also, one method to prevent suction of multiple workpieces is to use air blow or Fingers as shown in the diagram below.

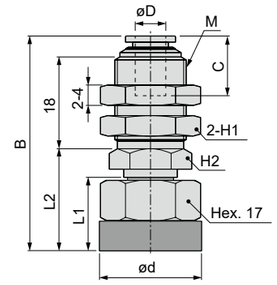


Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A10, 15F (FH)□-6



●VSP-A20 to 30F (FH)□-4/6



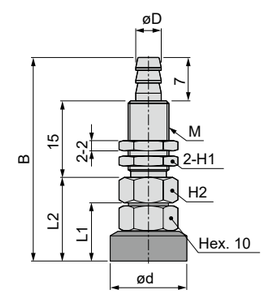
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10F (FH)□-6	10	6	M12x1	37.7 (35.9)	11.4 (9.6)	15.4 (13.6)	11.9	14	12	25 (24)
VSP-A15F (FH)□-6	15	6	M12x1	37.7 (35.9)	11.4 (9.6)	15.4 (13.6)	11.9	14	12	25 (24)
VSP-A20F (FH)□-4	20	4	M12x1	51.2 (46.4)	14.3 (9.5)	20.3 (15.5)	11.2	14	12	48 (38)
VSP-A20F (FH)□-6		6	M14x1	42.2 (37.4)		19.9 (15.1)	11.9	17	14	54 (44)
VSP-A25F (FH)□-4	25	4	M12x1	51.2 (46.4)	14.3 (9.5)	20.3 (15.5)	11.2	14	12	49 (39)
VSP-A25F (FH)□-6		6	M14x1	42.2 (37.4)		19.9 (15.1)	11.9	17	14	55 (45)
VSP-A30F (FH)□-4	30	4	M12x1	51.2 (46.4)	14.3 (9.5)	20.3 (15.5)	11.2	14	12	49 (39)
VSP-A30F (FH)□-6		6	M14x1	42.2 (37.4)		19.9 (15.1)	11.9	17	14	55 (45)

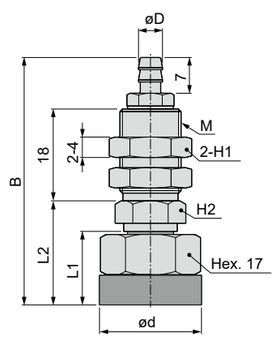
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A10, 15F (FH)□-6T



●VSP-A20 to 30F (FH)□-4T/6T



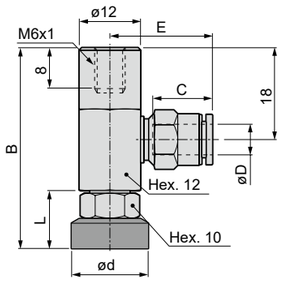
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10F (FH)□-6T	10	6	M8x0.75	38.4 (36.6)	11.4 (9.6)	16.4 (14.6)	10	10	15 (14)
VSP-A15F (FH)□-6T	15	6	M8x0.75	38.4 (36.6)	11.4 (9.6)	16.4 (14.6)	10	10	16 (15)
VSP-A20F (FH)□-4T	20	4	M12x1	48.3 (43.5)	14.3 (9.5)	20.3 (15.5)	14	12	47 (37)
VSP-A20F (FH)□-6T		6							
VSP-A25F (FH)□-4T	25	4	M12x1	48.3 (43.5)	14.3 (9.5)	20.3 (15.5)	14	12	48 (38)
VSP-A25F (FH)□-6T		6							
VSP-A30F (FH)□-4T	30	4	M12x1	48.3 (43.5)	14.3 (9.5)	20.3 (15.5)	14	12	49 (39)
VSP-A30F (FH)□-6T		6							

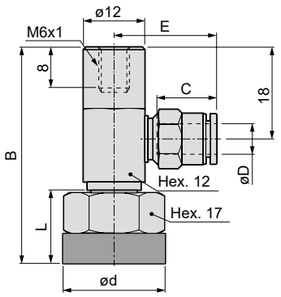
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B10, 15F (FH)□-4/6



●VSP-B20 to 30F (FH)□-4/6



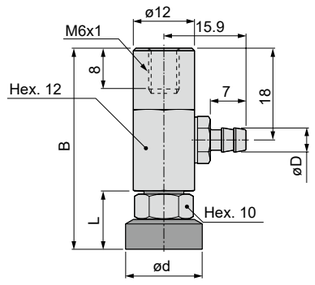
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B10F (FH)□-4	10	4	39.4 (37.6)	11.4 (9.6)	11.2	18.8	33 (32)
VSP-B10F (FH)□-6		6			11.9	20.1	34 (33)
VSP-B15F (FH)□-4	15	4	39.4 (37.6)	11.4 (9.6)	11.2	18.8	33 (32)
VSP-B15F (FH)□-6		6			11.9	20.1	34 (33)
VSP-B20F (FH)□-4	20	4	42.3 (37.5)	14.3 (9.5)	11.2	18.8	50 (40)
VSP-B20F (FH)□-6		6			11.9	20.1	51 (41)
VSP-B25F (FH)□-4	25	4	42.3 (37.5)	14.3 (9.5)	11.2	18.8	51 (41)
VSP-B25F (FH)□-6		6			11.9	20.1	52 (42)
VSP-B30F (FH)□-4	30	4	42.3 (37.5)	14.3 (9.5)	11.2	18.8	52 (42)
VSP-B30F (FH)□-6		6			11.9	20.1	53 (43)

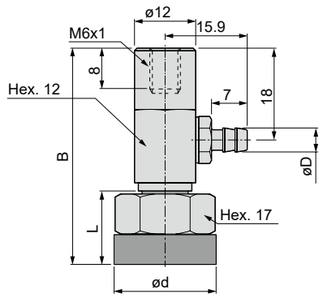
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B10, 15F (FH)□-4T/6T



●VSP-B20 to 30F (FH)□-4T/6T



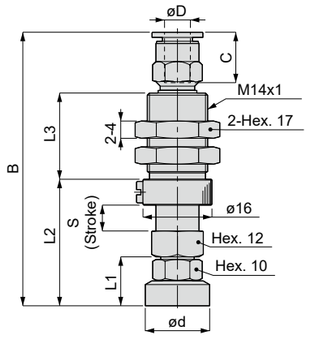
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B10F (FH)□-4T	10	2.5	39.4 (37.6)	11.4 (9.6)	32 (31)
VSP-B10F (FH)□-6T		4			
VSP-B15F (FH)□-4T	15	2.5	39.4 (37.6)	11.4 (9.6)	33 (32)
VSP-B15F (FH)□-6T		4			
VSP-B20F (FH)□-4T	20	2.5	42.3 (37.5)	14.3 (9.5)	49 (39)
VSP-B20F (FH)□-6T		4			
VSP-B25F (FH)□-4T	25	2.5	42.3 (37.5)	14.3 (9.5)	50 (40)
VSP-B25F (FH)□-6T		4			
VSP-B30F (FH)□-4T	30	2.5	42.3 (37.5)	14.3 (9.5)	51 (41)
VSP-B30F (FH)□-6T		4			

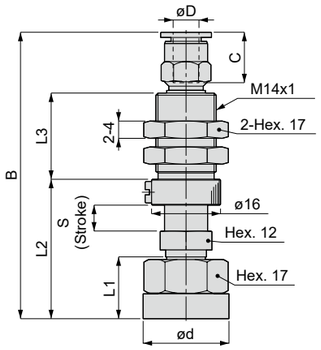
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10, 15F (FH)□-4/6
●VSP-C10, 15-□F (F)□-4/6



●VSP-C20 to 30F (FH)□-4/6
●VSP-C20 to 30-□F (FH)□-4/6



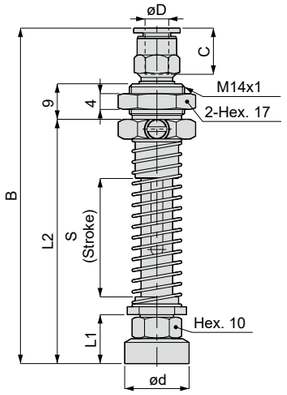
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10F (FH)□-4	10	4	62.4 (60.6)	11.4 (9.6)	29.4 (27.6)	20	11.2	6	4.0 to 7.1	38 (37)
VSP-C10F (FH)□-6		6	63.7 (61.9)				11.9			39 (38)
VSP-C10-10F (FH)□-4		4	66.9 (65.1)		33.9 (32.1)		11.2	10	2.0 to 5.2	40 (39)
VSP-C10-10F (FH)□-6		6	68.2 (66.4)				11.9			41 (40)
VSP-C10-15F (FH)□-4		4	76.9 (75.1)		38.9 (37.1)	25	11.2	15	2.0 to 5.9	45 (44)
VSP-C10-15F (FH)□-6		6	78.2 (76.4)				11.9			46 (45)
VSP-C10-20F (FH)□-4		4	92.9 (91.1)		45.9 (44.1)	34	11.2	20	1.1 to 4.8	52 (51)
VSP-C10-20F (FH)□-6		6	94.2 (92.4)				11.9			53 (52)
VSP-C15F (FH)□-4	15	4	62.4 (60.6)	11.4 (9.6)	29.4 (27.6)	20	11.2	6	4.0 to 7.1	39 (38)
VSP-C15F (FH)□-6		6	63.7 (61.9)				11.9			40 (39)
VSP-C15-10F (FH)□-4		4	66.9 (65.1)		33.9 (32.1)		11.2	10	2.0 to 5.2	40 (39)
VSP-C15-10F (FH)□-6		6	68.2 (66.4)				11.9			41 (40)
VSP-C15-15F (FH)□-4		4	76.9 (75.1)		38.9 (37.1)	25	11.2	15	2.0 to 5.9	45 (44)
VSP-C15-15F (FH)□-6		6	78.2 (76.4)				11.9			46 (45)
VSP-C15-20F (FH)□-4		4	92.9 (91.1)		45.9 (44.1)	34	11.2	20	1.1 to 4.8	52 (51)
VSP-C15-20F (FH)□-6		6	94.2 (92.4)				11.9			53 (52)
VSP-C20F (FH)□-4	20	4	65.3 (60.5)	14.3 (9.5)	32.3 (27.5)	20	11.2	6	7.0 to 12.6	56 (46)
VSP-C20F (FH)□-6		6	66.6 (61.8)				11.9			57 (47)
VSP-C20-10F (FH)□-4		4	71.3 (66.5)		38.3 (33.5)		11.2	10	3.3 to 10.0	59 (49)
VSP-C20-10F (FH)□-6		6	72.6 (67.8)				11.9			60 (50)
VSP-C20-15F (FH)□-4		4	81.3 (76.5)		43.3 (38.5)	25	11.2	15	3.3 to 10.4	64 (54)
VSP-C20-15F (FH)□-6		6	82.6 (77.8)				11.9			65 (55)
VSP-C20-20F (FH)□-4		4	97.3 (92.5)		50.3 (45.5)	34	11.2	20	2.0 to 8.7	70 (60)
VSP-C20-20F (FH)□-6		6	98.6 (93.8)				11.9			71 (61)
VSP-C25F (FH)□-4	25	4	65.3 (60.5)	14.3 (9.5)	32.3 (27.5)	20	11.2	6	7.0 to 12.6	57 (47)
VSP-C25F (FH)□-6		6	66.6 (61.8)				11.9			58 (48)
VSP-C25-10F (FH)□-4		4	71.3 (66.5)		38.3 (33.5)		11.2	10	3.3 to 10.0	60 (50)
VSP-C25-10F (FH)□-6		6	72.6 (67.8)				11.9			61 (51)
VSP-C25-15F (FH)□-4		4	81.3 (76.5)		43.3 (38.5)	25	11.2	15	3.3 to 10.4	65 (55)
VSP-C25-15F (FH)□-6		6	82.6 (77.8)				11.9			66 (56)
VSP-C25-20F (FH)□-4		4	97.3 (92.5)		50.3 (45.5)	34	11.2	20	2.0 to 8.7	71 (61)
VSP-C25-20F (FH)□-6		6	98.6 (93.8)				11.9			72 (62)
VSP-C30F (FH)□-4	30	4	65.3 (60.5)	14.3 (9.5)	32.3 (27.5)	20	11.2	6	7.0 to 12.6	58 (48)
VSP-C30F (FH)□-6		6	66.6 (61.8)				11.9			59 (49)
VSP-C30-10F (FH)□-4		4	71.3 (66.5)		38.3 (33.5)		11.2	10	3.3 to 10.0	60 (50)
VSP-C30-10F (FH)□-6		6	72.6 (67.8)				11.9			61 (51)
VSP-C30-15F (FH)□-4		4	81.3 (76.5)		43.3 (38.5)	25	11.2	15	3.3 to 10.4	65 (55)
VSP-C30-15F (FH)□-6		6	82.6 (77.8)				11.9			66 (56)
VSP-C30-20F (FH)□-4		4	97.3 (92.5)		50.3 (45.5)	34	11.2	20	2.0 to 8.7	71 (61)
VSP-C30-20F (FH)□-6		6	98.6 (93.8)				11.9			72 (62)

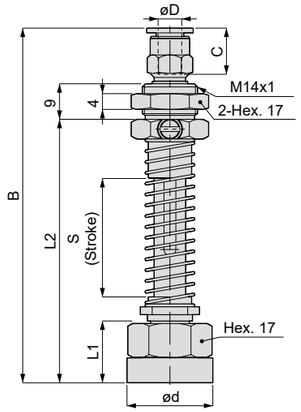
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C10, 15-□F (FH)□-4C/6C



●VSP-C20 to 30-□F (FH)□-4C/6C



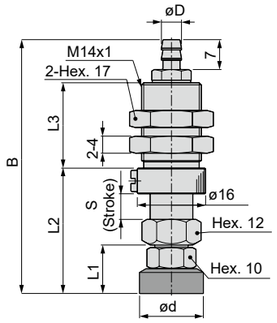
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20F (FH)□-4C	10	4	69.9 (68.1)	11.4 (9.6)	47.9 (46.1)	11.2	20	1.5 to 4.9	47 (46)
VSP-C10-20F (FH)□-6C		6	71.2 (69.4)			11.9			48 (47)
VSP-C10-30F (FH)□-4C		4	82.9 (81.1)		60.9 (59.1)	11.2	30	1.1 to 4.8	53 (52)
VSP-C10-30F (FH)□-6C		6	84.2 (82.4)			11.9			54 (53)
VSP-C10-40F (FH)□-4C		4	95.9 (94.1)		73.9 (72.1)	11.2	40	1.0 to 4.5	58 (57)
VSP-C10-40F (FH)□-6C		6	97.2 (95.4)			11.9			59 (58)
VSP-C10-50F (FH)□-4C		4	108.9 (107.1)		86.9 (85.1)	11.2	50	0.9 to 4.5	63 (62)
VSP-C10-50F (FH)□-6C		6	110.2 (108.4)			11.9			64 (63)
VSP-C15-20F (FH)□-4C	15	4	69.9 (68.1)	11.4 (9.6)	47.9 (46.1)	11.2	20	1.5 to 4.9	49 (48)
VSP-C15-20F (FH)□-6C		6	71.2 (69.4)			11.9			50 (49)
VSP-C15-30F (FH)□-4C		4	82.9 (81.1)		60.9 (59.1)	11.2	30	1.1 to 4.8	55 (54)
VSP-C15-30F (FH)□-6C		6	84.2 (82.4)			11.9			56 (55)
VSP-C15-40F (FH)□-4C		4	95.9 (94.1)		73.9 (72.1)	11.2	40	1.0 to 4.5	60 (59)
VSP-C15-40F (FH)□-6C		6	97.2 (95.4)			11.9			61 (60)
VSP-C15-50F (FH)□-4C		4	108.9 (107.1)		86.9 (85.1)	11.2	50	0.9 to 4.5	65 (64)
VSP-C15-50F (FH)□-6C		6	110.2 (108.4)			11.9			66 (65)
VSP-C20-20F (FH)□-4C	20	4	74.3 (69.5)	14.3 (9.5)	52.3 (47.5)	11.2	20	1.5 to 4.9	66 (56)
VSP-C20-20F (FH)□-6C		6	75.6 (70.8)			11.9			67 (57)
VSP-C20-30F (FH)□-4C		4	87.3 (82.5)		65.3 (60.5)	11.2	30	1.1 to 4.8	71 (61)
VSP-C20-30F (FH)□-6C		6	88.6 (83.8)			11.9			72 (62)
VSP-C20-40F (FH)□-4C		4	100.3 (95.5)		78.3 (73.5)	11.2	40	1.0 to 4.5	77 (67)
VSP-C20-40F (FH)□-6C		6	101.6 (96.8)			11.9			78 (77)
VSP-C20-50F (FH)□-4C		4	113.3 (108.5)		91.3 (86.5)	11.2	50	0.9 to 4.5	82 (72)
VSP-C20-50F (FH)□-6C		6	114.6 (109.8)			11.9			83 (73)
VSP-C25-20F (FH)□-4C	25	4	74.3 (69.5)	14.3 (9.5)	52.3 (47.5)	11.2	20	1.5 to 4.9	67 (57)
VSP-C25-20F (FH)□-6C		6	75.6 (70.8)			11.9			68 (58)
VSP-C25-30F (FH)□-4C		4	87.3 (82.5)		65.3 (60.5)	11.2	30	1.1 to 4.8	72 (62)
VSP-C25-30F (FH)□-6C		6	88.6 (83.8)			11.9			73 (63)
VSP-C25-40F (FH)□-4C		4	100.3 (95.5)		78.3 (73.5)	11.2	40	1.0 to 4.5	78 (68)
VSP-C25-40F (FH)□-6C		6	101.6 (96.8)			11.9			79 (69)
VSP-C25-50F (FH)□-4C		4	113.3 (108.5)		91.3 (86.5)	11.2	50	0.9 to 4.5	83 (73)
VSP-C25-50F (FH)□-6C		6	114.6 (109.8)			11.9			84 (74)
VSP-C30-20F (FH)□-4C	30	4	74.3 (69.5)	14.3 (9.5)	52.3 (47.5)	11.2	20	1.5 to 4.9	67 (57)
VSP-C30-20F (FH)□-6C		6	75.6 (70.8)			11.9			68 (58)
VSP-C30-30F (FH)□-4C		4	87.3 (82.5)		65.3 (60.5)	11.2	30	1.1 to 4.8	72 (62)
VSP-C30-30F (FH)□-6C		6	88.6 (83.8)			11.9			73 (63)
VSP-C30-40F (FH)□-4C		4	100.3 (95.5)		78.3 (73.5)	11.2	40	1.0 to 4.5	78 (68)
VSP-C30-40F (FH)□-6C		6	101.6 (96.8)			11.9			79 (69)
VSP-C30-50F (FH)□-4C		4	113.3 (108.5)		91.3 (86.5)	11.2	50	0.9 to 4.5	83 (73)
VSP-C30-50F (FH)□-6C		6	114.6 (109.8)			11.9			84 (74)

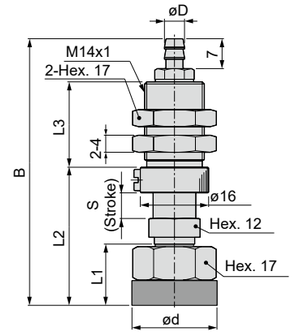
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C10, 15F (FH)□-4T/6T
●VSP-C10, 15-□F (FH)□-4T/6T



●VSP-C20 to 30F (FH)□-4T/6T
●VSP-C20 to 30-□F (FH)□-4T/6T



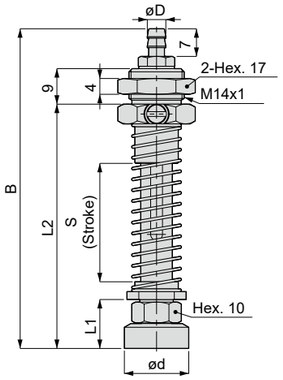
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C10F (FH)□-4T	10	4	59.5 (57.7)	11.4 (9.6)	29.4 (27.6)	20	6	4.0 to 7.1	34 (33)
VSP-C10F (FH)□-6T		6							
VSP-C10-10F (FH)□-4T		4	64 (62.2)		33.9 (32.1)		10	2.0 to 5.2	35 (34)
VSP-C10-10F (FH)□-6T		6							
VSP-C10-15F (FH)□-4T		4	74 (72.2)		38.9 (37.1)	25	15	2.0 to 5.9	41 (40)
VSP-C10-15F (FH)□-6T		6							
VSP-C10-20F (FH)□-4T		4	90 (88.2)		45.9 (44.1)	34	20	1.1 to 4.8	48 (47)
VSP-C10-20F (FH)□-6T		6							
VSP-C15F (FH)□-4T	15	4	59.5 (57.7)	11.4 (9.6)	29.4 (27.6)	20	6	7.0 to 12.6	38 (37)
VSP-C15F (FH)□-6T		6							
VSP-C15-10F (FH)□-4T		4	64 (62.2)		33.9 (32.1)		10	3.3 to 10.0	40 (39)
VSP-C15-10F (FH)□-6T		6							
VSP-C15-15F (FH)□-4T		4	74 (72.2)		38.9 (37.1)	25	15	3.3 to 10.4	45 (44)
VSP-C15-15F (FH)□-6T		6							
VSP-C15-20F (FH)□-4T		4	90 (88.2)		45.9 (44.1)	34	20	2.0 to 8.7	52 (51)
VSP-C15-20F (FH)□-6T		6							
VSP-C20F (FH)□-4T	20	4	62.4 (57.6)	14.3 (9.5)	32.3 (27.5)	20	6	7.0 to 12.6	42 (32)
VSP-C20F (FH)□-6T		6							
VSP-C20-10F (FH)□-4T		4	68.4 (63.6)		38.3 (33.5)		10	3.3 to 10.0	44 (34)
VSP-C20-10F (FH)□-6T		6							
VSP-C20-15F (FH)□-4T		4	78.4 (73.6)		43.3 (38.5)	25	15	3.3 to 10.4	49 (39)
VSP-C20-15F (FH)□-6T		6							
VSP-C20-20F (FH)□-4T		4	94.4 (89.6)		50.3 (45.5)	34	20	2.0 to 8.7	56 (46)
VSP-C20-20F (FH)□-6T		6							
VSP-C25F (FH)□-4T	25	4	62.4 (57.6)	14.3 (9.5)	32.3 (27.5)	20	6	7.0 to 12.6	50 (40)
VSP-C25F (FH)□-6T		6							
VSP-C25-10F (FH)□-4T		4	68.4 (63.6)		38.3 (33.5)		10	3.3 to 10.0	53 (43)
VSP-C25-10F (FH)□-6T		6							
VSP-C25-15F (FH)□-4T		4	78.4 (73.6)		43.3 (38.5)	25	15	3.3 to 10.4	58 (48)
VSP-C25-15F (FH)□-6T		6							
VSP-C25-20F (FH)□-4T		4	94.4 (89.6)		50.3 (45.5)	34	20	2.0 to 8.7	64 (54)
VSP-C25-20F (FH)□-6T		6							
VSP-C30F (FH)□-4T	30	4	62.4 (57.6)	14.3 (9.5)	32.3 (27.5)	20	6	7.0 to 12.6	57 (47)
VSP-C30F (FH)□-6T		6							
VSP-C30-10F (FH)□-4T		4	68.4 (63.6)		38.3 (33.5)		10	3.3 to 10.0	59 (49)
VSP-C30-10F (FH)□-6T		6							
VSP-C30-15F (FH)□-4T		4	78.4 (73.6)		43.3 (38.5)	25	15	3.3 to 10.4	64 (54)
VSP-C30-15F (FH)□-6T		6							
VSP-C30-20F (FH)□-4T		4	94.4 (89.6)		50.3 (45.5)	34	20	2.0 to 8.7	71 (61)
VSP-C30-20F (FH)□-6T		6							

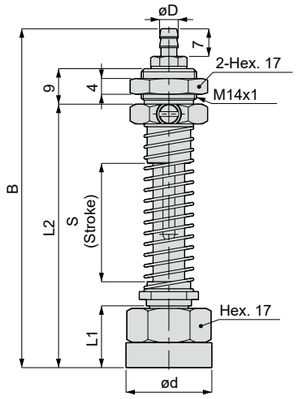
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C10, 15-□F (FH)□-4TC/6TC



●VSP-C20 to 30-□F (FH)□-4TC/6TC



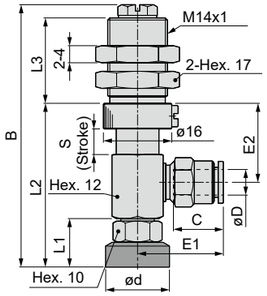
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20F (FH)□-4TC	10	4	67 (65.2)	11.4 (9.6)	47.9 (46.1)	20	1.5 to 4.9	45 (44)
VSP-C10-20F (FH)□-6TC		6						
VSP-C10-30F (FH)□-4TC		4	80 (78.2)		60.9 (59.1)	30	1.1 to 4.8	51 (50)
VSP-C10-30F (FH)□-6TC		6						
VSP-C10-40F (FH)□-4TC		4	93 (91.2)		73.9 (72.1)	40	1.0 to 4.5	56 (55)
VSP-C10-40F (FH)□-6TC		6						
VSP-C10-50F (FH)□-4TC		4	106 (104.2)		86.9 (85.1)	50	0.9 to 4.5	61 (60)
VSP-C10-50F (FH)□-6TC		6						
VSP-C15-20F (FH)□-4TC	15	4	67 (65.2)	11.4 (9.6)	47.9 (46.1)	20	1.5 to 4.9	47 (46)
VSP-C15-20F (FH)□-6TC		6						
VSP-C15-30F (FH)□-4TC		4	80 (78.2)		60.9 (59.1)	30	1.1 to 4.8	53 (52)
VSP-C15-30F (FH)□-6TC		6						
VSP-C15-40F (FH)□-4TC		4	93 (91.2)		73.9 (72.1)	40	1.0 to 4.5	58 (57)
VSP-C15-40F (FH)□-6TC		6						
VSP-C15-50F (FH)□-4TC		4	106 (104.2)		86.9 (85.1)	50	0.9 to 4.5	63 (62)
VSP-C15-50F (FH)□-6TC		6						
VSP-C20-20F (FH)□-4TC	20	4	71.4 (66.6)	14.3 (9.5)	52.3 (48.5)	20	1.5 to 4.9	65 (55)
VSP-C20-20F (FH)□-6TC		6						
VSP-C20-30F (FH)□-4TC		4	84.4 (79.6)		65.3 (61.5)	30	1.1 to 4.8	70 (60)
VSP-C20-30F (FH)□-6TC		6						
VSP-C20-40F (FH)□-4TC		4	97.4 (92.6)		78.3 (74.5)	40	1.0 to 4.5	75 (65)
VSP-C20-40F (FH)□-6TC		6						
VSP-C20-50F (FH)□-4TC		4	110.4 (105.6)		91.3 (87.5)	50	0.9 to 4.5	81 (71)
VSP-C20-50F (FH)□-6TC		6						
VSP-C25-20F (FH)□-4TC	25	4	71.4 (66.6)	14.3 (9.5)	52.3 (48.5)	20	1.5 to 4.9	66 (56)
VSP-C25-20F (FH)□-6TC		6						
VSP-C25-30F (FH)□-4TC		4	84.4 (79.6)		65.3 (61.5)	30	1.1 to 4.8	71 (61)
VSP-C25-30F (FH)□-6TC		6						
VSP-C25-40F (FH)□-4TC		4	97.4 (92.6)		78.3 (74.5)	40	1.0 to 4.5	76 (66)
VSP-C25-40F (FH)□-6TC		6						
VSP-C25-50F (FH)□-4TC		4	110.4 (105.6)		91.3 (87.5)	50	0.9 to 4.5	82 (72)
VSP-C25-50F (FH)□-6TC		6						
VSP-C30-20F (FH)□-4TC	30	4	71.4 (66.6)	14.3 (9.5)	52.3 (48.5)	20	1.5 to 4.9	66 (56)
VSP-C30-20F (FH)□-6TC		6						
VSP-C30-30F (FH)□-4TC		4	84.4 (79.6)		65.3 (61.5)	30	1.1 to 4.8	71 (61)
VSP-C30-30F (FH)□-6TC		6						
VSP-C30-40F (FH)□-4TC		4	97.4 (92.6)		78.3 (74.5)	40	1.0 to 4.5	76 (66)
VSP-C30-40F (FH)□-6TC		6						
VSP-C30-50F (FH)□-4TC		4	110.4 (105.6)		91.3 (87.5)	50	0.9 to 4.5	82 (72)
VSP-C30-50F (FH)□-6TC		6						

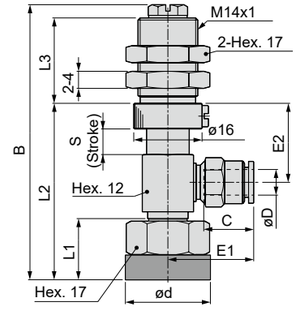
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10, 15F (FH)□-4/6
●VSP-D10, 15-□F (FH)□-4/6



●VSP-D20 to 30F (FH)□-4/6
●VSP-D20 to 30-□F (FH)□-4/6



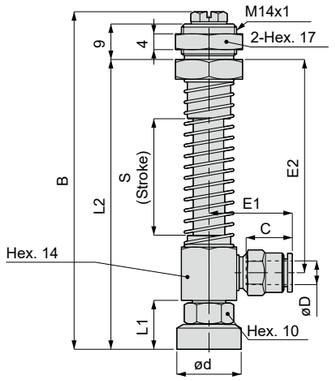
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10F (FH)□-4	10	4	61.5 (59.7)	11.4 (9.6)	38.4 (36.6)	20	11.2	18.8	18.5	6	4.0 to 7.1	50 (49)
VSP-D10F (FH)□-6		6					11.9	20.1				51 (50)
VSP-D10-10F (FH)□-4		4	66.5 (64.7)		43.4 (41.6)		11.2	18.8	25	10	2.0 to 5.2	53 (52)
VSP-D10-10F (FH)□-6		6					11.9	20.1				54 (53)
VSP-D10-15F (FH)□-4		4	76.5 (74.7)		48.4 (46.6)	25	11.2	18.8	30	15	2.0 to 5.9	59 (58)
VSP-D10-15F (FH)□-6		6					11.9	20.1				60 (59)
VSP-D10-20F (FH)□-4		4	92.5 (90.7)		55.4 (53.6)	34	11.2	18.8	37	20	1.1 to 4.8	69 (68)
VSP-D10-20F (FH)□-6		6					11.9	20.1				70 (69)
VSP-D15F (FH)□-4	15	4	61.5 (59.7)	11.4 (9.6)	38.4 (36.6)	20	11.2	18.8	18.5	6	4.0 to 7.1	51 (50)
VSP-D15F (FH)□-6		6					11.9	20.1				52 (51)
VSP-D15-10F (FH)□-4		4	66.5 (64.7)		43.4 (41.6)		11.2	18.8	25	10	2.0 to 5.2	54 (53)
VSP-D15-10F (FH)□-6		6					11.9	20.1				55 (54)
VSP-D15-15F (FH)□-4		4	76.5 (74.7)		48.4 (46.6)	25	11.2	18.8	30	15	2.0 to 5.9	60 (59)
VSP-D15-15F (FH)□-6		6					11.9	20.1				61 (60)
VSP-D15-20F (FH)□-4		4	92.5 (90.7)		55.4 (53.6)	34	11.2	18.8	37	20	1.1 to 4.8	70 (69)
VSP-D15-20F (FH)□-6		6					11.9	20.1				71 (70)
VSP-D20F (FH)□-4	20	4	64.4 (59.6)	14.3 (9.5)	41.3 (36.5)	20	11.2	18.8	18.5	6	7.0 to 12.6	68 (58)
VSP-D20F (FH)□-6		6					11.9	20.1				69 (59)
VSP-D20-10F (FH)□-4		4	70.4 (65.6)		47.3 (42.5)		11.2	18.8	24.5	10	3.3 to 10.0	71 (61)
VSP-D20-10F (FH)□-6		6					11.9	20.1				72 (62)
VSP-D20-15F (FH)□-4		4	80.4 (75.6)		52.3 (47.5)	25	11.2	18.8	29.5	15	3.3 to 10.4	78 (68)
VSP-D20-15F (FH)□-6		6					11.9	20.1				79 (69)
VSP-D20-20F (FH)□-4		4	96.4 (91.6)		59.3 (54.5)	34	11.2	18.8	36.5	20	2.0 to 8.7	88 (78)
VSP-D20-20F (FH)□-6		6					11.9	20.1				89 (79)
VSP-D25F (FH)□-4	25	4	64.4 (59.6)	14.3 (9.5)	41.3 (36.5)	20	11.2	18.8	18.5	6	7.0 to 12.6	69 (59)
VSP-D25F (FH)□-6		6					11.9	20.1				70 (60)
VSP-D25-10F (FH)□-4		4	70.4 (65.6)		47.3 (42.5)		11.2	18.8	24.5	10	3.3 to 10.0	72 (62)
VSP-D25-10F (FH)□-6		6					11.9	20.1				73 (63)
VSP-D25-15F (FH)□-4		4	80.4 (75.6)		52.3 (47.5)	25	11.2	18.8	29.5	15	3.3 to 10.4	79 (69)
VSP-D25-15F (FH)□-6		6					11.9	20.1				80 (70)
VSP-D25-20F (FH)□-4		4	96.4 (91.6)		59.3 (54.5)	34	11.2	18.8	36.5	20	2.0 to 8.7	89 (79)
VSP-D25-20F (FH)□-6		6					11.9	20.1				90 (80)
VSP-D30F (FH)□-4	30	4	64.4 (59.6)	14.3 (9.5)	41.3 (36.5)	20	11.2	18.8	18.5	6	7.0 to 12.6	69 (59)
VSP-D30F (FH)□-6		6					11.9	20.1				70 (60)
VSP-D30-10F (FH)□-4		4	70.4 (65.6)		47.3 (42.5)		11.2	18.8	24.5	10	3.3 to 10.0	72 (82)
VSP-D30-10F (FH)□-6		6					11.9	20.1				73 (63)
VSP-D30-15F (FH)□-4		4	80.4 (75.6)		52.3 (47.5)	25	11.2	18.8	29.5	15	3.3 to 10.4	79 (69)
VSP-D30-15F (FH)□-6		6					11.9	20.1				80 (70)
VSP-D30-20F (FH)□-4		4	96.4 (91.6)		59.3 (54.5)	34	11.2	18.8	36.5	20	2.0 to 8.7	89 (79)
VSP-D30-20F (FH)□-6		6					11.9	20.1				90 (80)

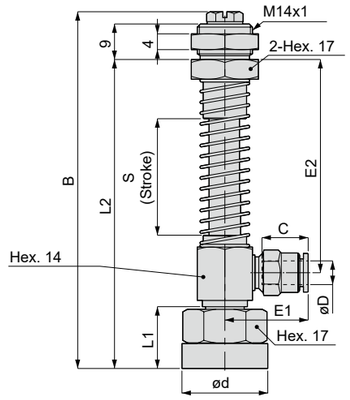
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D10, 15-□F (FH)□-4C/6C



●VSP-D20 to 30-□F (FH)□-4C/6C



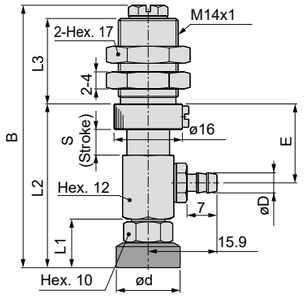
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20F (FH)□-4C	10	4	71.5 (69.7)	11.4 (9.6)	59.4 (57.6)	11.2	19.8	40.5	20	1.5 to 4.9	71 (70)
VSP-D10-20F (FH)□-6C		6				11.9	21.1				72 (71)
VSP-D10-30F (FH)□-4C		4	84.5 (82.7)		72.4 (70.6)	11.2	19.8	53.5	30	1.1 to 4.8	78 (77)
VSP-D10-30F (FH)□-6C		6				11.9	21.1				79 (78)
VSP-D10-40F (FH)□-4C		4	97.5 (95.7)		85.4 (83.6)	11.2	19.8	66.5	40	1.0 to 4.5	84 (83)
VSP-D10-40F (FH)□-6C		6				11.9	21.1				85 (84)
VSP-D10-50F (FH)□-4C		4	110.5 (108.7)		98.4 (96.6)	11.2	19.8	79.5	50	0.9 to 4.5	91 (90)
VSP-D10-50F (FH)□-6C		6				11.9	21.1				92 (91)
VSP-D15-20F (FH)□-4C	15	4	71.5 (69.7)		59.4 (57.6)	11.2	19.8	40.5	20	1.5 to 4.9	72 (71)
VSP-D15-20F (FH)□-6C		6				11.9	21.1				73 (72)
VSP-D15-30F (FH)□-4C		4	84.5 (82.7)		72.4 (70.6)	11.2	19.8	53.5	30	1.1 to 4.8	79 (78)
VSP-D15-30F (FH)□-6C		6				11.9	21.1				80 (79)
VSP-D15-40F (FH)□-4C		4	97.5 (95.7)		85.4 (83.6)	11.2	19.8	66.5	40	1.0 to 4.5	85 (84)
VSP-D15-40F (FH)□-6C		6				11.9	21.1				86 (85)
VSP-D15-50F (FH)□-4C		4	110.5 (108.7)		98.4 (96.6)	11.2	19.8	79.5	50	0.9 to 4.5	92 (91)
VSP-D15-50F (FH)□-6C		6				11.9	21.1				93 (92)
VSP-D20-20F (FH)□-4C	20	4	75.9 (71.1)	14.3 (9.5)	63.8 (59)	11.2	19.8	41	20	1.5 to 4.9	76 (66)
VSP-D20-20F (FH)□-6C		6				11.9	21.1				77 (67)
VSP-D20-30F (FH)□-4C		4	88.9 (84.1)		76.8 (72)	11.2	19.8	54	30	1.1 to 4.8	83 (73)
VSP-D20-30F (FH)□-6C		6				11.9	21.1				84 (74)
VSP-D20-40F (FH)□-4C		4	101.9 (97.1)		89.8 (85)	11.2	19.8	67	40	1.0 to 4.5	100 (90)
VSP-D20-40F (FH)□-6C		6				11.9	21.1				101 (91)
VSP-D20-50F (FH)□-4C		4	114.9 (110.1)		102.8 (98)	11.2	19.8	80	50	0.9 to 4.5	107 (97)
VSP-D20-50F (FH)□-6C		6				11.9	21.1				108 (98)
VSP-D25-20F (FH)□-4C	25	4	75.9 (71.1)	14.3 (9.5)	63.8 (59)	11.2	19.8	41	20	1.5 to 4.9	77 (67)
VSP-D25-20F (FH)□-6C		6				11.9	21.1				78 (68)
VSP-D25-30F (FH)□-4C		4	88.9 (84.1)		76.8 (72)	11.2	19.8	54	30	1.1 to 4.8	84 (74)
VSP-D25-30F (FH)□-6C		6				11.9	21.1				85 (75)
VSP-D25-40F (FH)□-4C		4	101.9 (97.1)		89.8 (85)	11.2	19.8	67	40	1.0 to 4.5	101 (91)
VSP-D25-40F (FH)□-6C		6				11.9	21.1				102 (92)
VSP-D25-50F (FH)□-4C		4	114.9 (110.1)		102.8 (98)	11.2	19.8	80	50	0.9 to 4.5	108 (98)
VSP-D25-50F (FH)□-6C		6				11.9	21.1				109 (99)
VSP-D30-20F (FH)□-4C	30	4	75.9 (71.1)	14.3 (9.5)	63.8 (59)	11.2	19.8	41	20	1.5 to 4.9	77 (67)
VSP-D30-20F (FH)□-6C		6				11.9	21.1				78 (68)
VSP-D30-30F (FH)□-4C		4	88.9 (84.1)		76.8 (72)	11.2	19.8	54	30	1.1 to 4.8	84 (74)
VSP-D30-30F (FH)□-6C		6				11.9	21.1				85 (75)
VSP-D30-40F (FH)□-4C		4	101.9 (97.1)		89.8 (85)	11.2	19.8	67	40	1.0 to 4.5	101 (91)
VSP-D30-40F (FH)□-6C		6				11.9	21.1				102 (92)
VSP-D30-50F (FH)□-4C		4	114.9 (110.1)		102.8 (98)	11.2	19.8	80	50	0.9 to 4.5	108 (98)
VSP-D30-50F (FH)□-6C		6				11.9	21.1				109 (99)

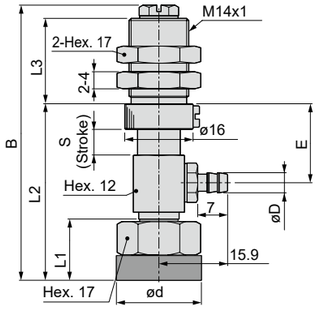
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10, 15F (FH)□-4T/6T
●VSP-D10, 15-□F (FH)□-4T/6T



●VSP-D20 to 30F (FH)□-4T/6T
●VSP-D20 to 30-□F (FH)□-4T/6T



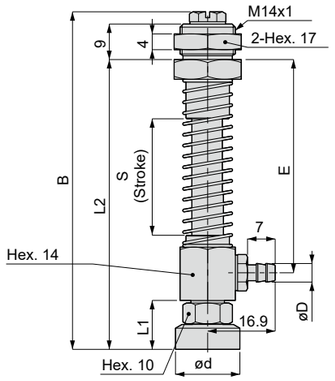
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10F (FH)□-4T	10	2.5	61.5 (59.7)	11.4 (9.6)	38.4 (36.6)	20	18.5	6	4.0 to 7.1	49 (48)
VSP-D10F (FH)□-6T		4								
VSP-D10-10F (FH)□-4T		2.5	66.5 (64.7)		43.4 (41.6)		25	10	2.0 to 5.2	53 (52)
VSP-D10-10F (FH)□-6T		4								
VSP-D10-15F (FH)□-4T		2.5	76.5 (74.7)		48.4 (46.6)	25	30	15	2.0 to 5.9	58 (57)
VSP-D10-15F (FH)□-6T		4								
VSP-D10-20F (FH)□-4T		2.5	92.5 (90.7)		55.4 (53.6)	34	37	20	1.1 to 4.8	69 (68)
VSP-D10-20F (FH)□-6T		4								
VSP-D15F (FH)□-4T	15	2.5	61.5 (59.7)		38.4 (36.6)	20	18.5	6	4.0 to 7.1	50 (49)
VSP-D15F (FH)□-6T		4								
VSP-D15-10F (FH)□-4T		2.5	66.5 (64.7)		43.4 (41.6)		25	10	2.0 to 5.2	53 (52)
VSP-D15-10F (FH)□-6T		4								
VSP-D15-15F (FH)□-4T		2.5	76.5 (74.7)		48.4 (46.6)	25	30	15	2.0 to 5.9	58 (57)
VSP-D15-15F (FH)□-6T		4								
VSP-D15-20F (FH)□-4T		2.5	92.5 (90.7)		55.4 (53.6)	34	37	20	1.1 to 4.8	69 (68)
VSP-D15-20F (FH)□-6T		4								
VSP-D20F (FH)□-4T	20	2.5	64.4 (59.6)	14.3 (9.5)	41.3 (36.5)	20	18.5	6	7.0 to 12.6	66 (56)
VSP-D20F (FH)□-6T		4								
VSP-D20-10F (FH)□-4T		2.5	70.4 (65.6)		47.3 (42.5)		24.5	10	3.3 to 10.0	71 (61)
VSP-D20-10F (FH)□-6T		4								
VSP-D20-15F (FH)□-4T		2.5	80.4 (75.6)		52.3 (47.5)	25	29.5	15	3.3 to 10.4	77 (67)
VSP-D20-15F (FH)□-6T		4								
VSP-D20-20F (FH)□-4T		2.5	96.4 (91.6)		59.3 (54.5)	34	36.5	20	2.0 to 8.7	87 (77)
VSP-D20-20F (FH)□-6T		4								
VSP-D25F (FH)□-4T	25	2.5	64.4 (59.6)		41.3 (36.5)	20	18.5	6	7.0 to 12.6	67 (57)
VSP-D25F (FH)□-6T		4								
VSP-D25-10F (FH)□-4T		2.5	70.4 (65.6)		47.3 (42.5)		24.5	10	3.3 to 10.0	72 (62)
VSP-D25-10F (FH)□-6T		4								
VSP-D25-15F (FH)□-4T		2.5	80.4 (75.6)		52.3 (47.5)	25	29.5	15	3.3 to 10.4	78 (68)
VSP-D25-15F (FH)□-6T		4								
VSP-D25-20F (FH)□-4T		2.5	96.4 (91.6)		59.3 (54.5)	34	36.5	20	2.0 to 8.7	88 (78)
VSP-D25-20F (FH)□-6T		4								
VSP-D30F (FH)□-4T	30	2.5	64.4 (59.6)		41.3 (36.5)	20	18.5	6	7.0 to 12.6	68 (58)
VSP-D30F (FH)□-6T		4								
VSP-D30-10F (FH)□-4T		2.5	70.4 (65.6)		47.3 (42.5)		24.5	10	3.3 to 10.0	72 (62)
VSP-D30-10F (FH)□-6T		4								
VSP-D30-15F (FH)□-4T		2.5	80.4 (75.6)		52.3 (47.5)	25	29.5	15	3.3 to 10.4	78 (68)
VSP-D30-15F (FH)□-6T		4								
VSP-D30-20F (FH)□-4T		2.5	96.4 (91.6)		59.3 (54.5)	34	36.5	20	2.0 to 8.7	88 (78)
VSP-D30-20F (FH)□-6T		4								

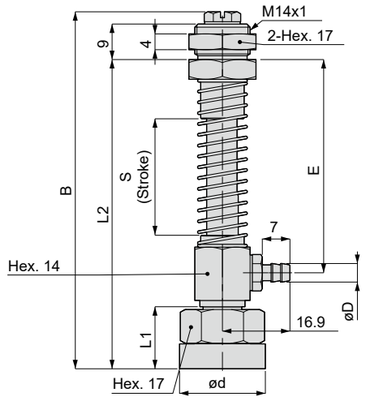
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D10, 15-□F (FH)□-4TC/6TC



●VSP-D20 to 30-□F (FH)□-4TC/6TC



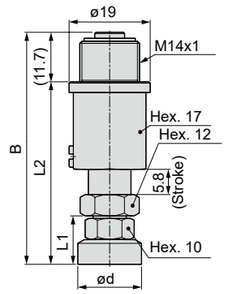
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20F (FH)□-4TC	10	2.5	71.5 (69.7)	11.4 (9.6)	59.4 (57.6)	40.5	20	1.5 to 4.9	68 (67)
VSP-D10-20F (FH)□-6TC		4							
VSP-D10-30F (FH)□-4TC		2.5	84.5 (82.7)		72.4 (70.6)	53.5	30	1.1 to 4.8	75 (74)
VSP-D10-30F (FH)□-6TC		4							
VSP-D10-40F (FH)□-4TC		2.5	97.5 (95.7)		85.4 (83.6)	66.5	40	1.0 to 4.5	81 (80)
VSP-D10-40F (FH)□-6TC		4							
VSP-D10-50F (FH)□-4TC		2.5	110.5 (108.7)		98.4 (96.6)	79.5	50	0.9 to 4.5	88 (87)
VSP-D10-50F (FH)□-6TC		4							
VSP-D15-20F (FH)□-4TC	15	4	71.5 (69.7	11.4 (9.6)	59.4 (57.6)	41	20	1.5 to 4.9	69 (68)
VSP-D15-20F (FH)□-6TC		6							
VSP-D15-30F (FH)□-4TC		4	84.5 (82.7)		72.4 (70.6)	54	30	1.1 to 4.8	76 (75)
VSP-D15-30F (FH)□-6TC		6							
VSP-D15-40F (FH)□-4TC		4	97.5 (95.7)		85.4 (83.6)	67	40	1.0 to 4.5	82 (81)
VSP-D15-40F (FH)□-6TC		6							
VSP-D15-50F (FH)□-4TC		4	110.5 (108.7)		98.4 (96.6)	80	50	0.9 to 4.5	89 (88)
VSP-D15-50F (FH)□-6TC		6							
VSP-D20-20F (FH)□-4TC	20	4	75.9 (71.1)	14.3 (9.5)	63.8 (59)	41	20	1.5 to 4.9	85 (75)
VSP-D20-20F (FH)□-6TC		6							
VSP-D20-30F (FH)□-4TC		4	88.9 (84.1)		76.8 (72)	54	30	1.1 to 4.8	92 (82)
VSP-D20-30F (FH)□-6TC		6							
VSP-D20-40F (FH)□-4TC		4	101.9 (97.1)		89.8 (85)	67	40	1.0 to 4.5	99 (89)
VSP-D20-40F (FH)□-6TC		6							
VSP-D20-50F (FH)□-4TC		4	114.9 (110.1)		102.8 (98)	80	50	0.9 to 4.5	106 (96)
VSP-D20-50F (FH)□-6TC		6							
VSP-D25-20F (FH)□-4TC	25	4	75.9 (71.1)	14.3 (9.5)	63.8 (59)	41	20	1.5 to 4.9	86 (76)
VSP-D25-20F (FH)□-6TC		6							
VSP-D25-30F (FH)□-4TC		4	88.9 (84.1)		76.8 (72)	54	30	1.1 to 4.8	93 (83)
VSP-D25-30F (FH)□-6TC		6							
VSP-D25-40F (FH)□-4TC		4	101.9 (97.1)		89.8 (85)	67	40	1.0 to 4.5	100 (90)
VSP-D25-40F (FH)□-6TC		6							
VSP-D25-50F (FH)□-4TC		4	114.9 (110.1)		102.8 (98)	80	50	0.9 to 4.5	107 (97)
VSP-D25-50F (FH)□-6TC		6							
VSP-D30-20F (FH)□-4TC	30	4	75.9 (71.1)	14.3 (9.5)	63.8 (59)	41	20	1.5 to 4.9	86 (76)
VSP-D30-20F (FH)□-6TC		6							
VSP-D30-30F (FH)□-4TC		4	88.9 (84.1)		76.8 (72)	54	30	1.1 to 4.8	93 (92)
VSP-D30-30F (FH)□-6TC		6							
VSP-D30-40F (FH)□-4TC		4	101.9 (97.1)		89.8 (85)	67	40	1.0 to 4.5	100 (90)
VSP-D30-40F (FH)□-6TC		6							
VSP-D30-50F (FH)□-4TC		4	114.9 (110.1)		102.8 (98)	80	50	0.9 to 4.5	107 (97)
VSP-D30-50F (FH)□-6TC		6							

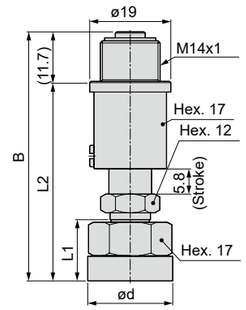
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Buffer Type, Direct Mount Type, VSP-F, Male Thread)

●VSP-F10, 15F (FH)□



●VSP-F20 to 30F (FH)□



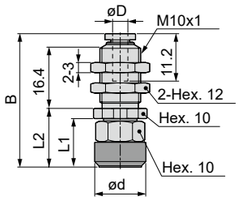
Unit: mm

Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F10F (FH)□	10	54.4 (52.6)	11.4 (9.6)	42.7 (40.9)	7.9 to 15	59 (58)
VSP-F15F (FH)□	15	54.4 (52.6)	11.4 (9.6)	42.7 (40.9)	7.9 to 15	60 (59)
VSP-F20F (FH)□	20	58.4 (53.6)	14.3 (9.5)	46.7 (41.9)	7.9 to 15	76 (60)
VSP-F25F (FH)□	25	58.4 (53.6)	14.3 (9.5)	46.7 (41.9)	7.9 to 15	77 (67)
VSP-F30F (FH)□	30	58.4 (53.6)	14.3 (9.5)	46.7 (41.9)	7.9 to 15	77 (67)

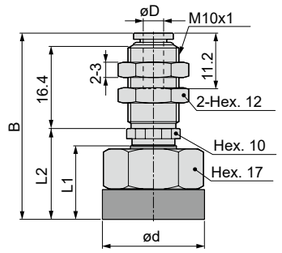
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA10, 15F (FH)□-4



●VSP-MA20 to 30F (FH)□-4



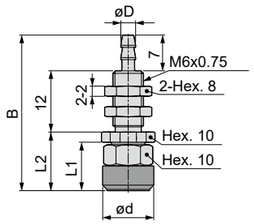
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Weight (g)
VSP-MA10F (FH)□-4	10	4	32.4 (30.6)	11.4 (9.6)	13.4 (11.6)	10 (9)
VSP-MA15F (FH)□-4	15	4	32.4 (30.6)	11.4 (9.6)	13.4 (11.6)	10 (9)
VSP-MA20F (FH)□-4	20	4	36.9 (32.1)	14.3 (9.5)	17.9 (13.1)	29 (19)
VSP-MA25F (FH)□-4	25	4	36.9 (32.1)	14.3 (9.5)	17.9 (13.1)	31 (21)
VSP-MA30F (FH)□-4	30	4	36.9 (32.1)	14.3 (9.5)	17.9 (13.1)	31 (21)

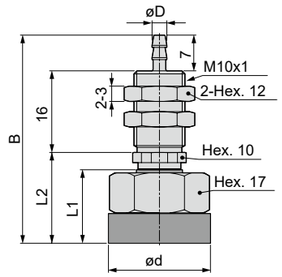
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA10, 15F (FH)□-4T



●VSP-MA20 to 30F (FH)□-4T/6T



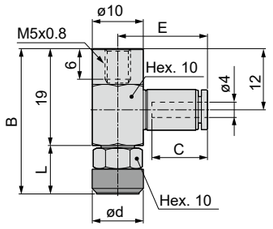
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Weight (g)
VSP-MA10F (FH)□-4T	10	2.5	32.4 (30.6)	11.4 (9.6)	13.4 (11.6)	7 (6)
VSP-MA15F (FH)□-4T	15	2.5	32.4 (30.6)	11.4 (9.6)	13.4 (11.6)	8 (7)
VSP-MA20F (FH)□-4T	20	2.5	40.9 (36.1)	14.3 (9.5)	17.9 (13.1)	29 (19)
VSP-MA20F (FH)□-6T		4				
VSP-MA25F (FH)□-4T	25	2.5	40.9 (36.1)	14.3 (9.5)	17.9 (13.1)	31 (21)
VSP-MA25F (FH)□-6T		4				
VSP-MA30F (FH)□-4T	30	2.5	40.9 (36.1)	14.3 (9.5)	17.9 (13.1)	31 (21)
VSP-MA30F (FH)□-6T		4				

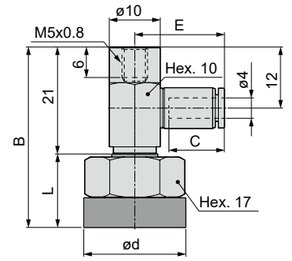
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB10, 15F (FH)□-2/4/6



●VSP-MB20 to 30F (FH)□-2/4/6



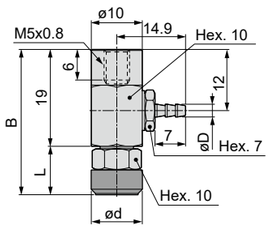
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB10F (FH)□-2	10	1.8	30.4 (28.6)	11.4 (9.6)	8.4	13.7	11 (10)
VSP-MB10F (FH)□-4		4			11.2	17.8	12 (11)
VSP-MB10F (FH)□-6		6			11.9	19.6	13 (12)
VSP-MB15F (FH)□-2	15	1.8	30.4 (28.6)	11.4 (9.6)	8.4	13.7	11 (10)
VSP-MB15F (FH)□-4		4			11.2	17.8	12 (11)
VSP-MB15F (FH)□-6		6			11.9	19.6	13 (12)
VSP-MB20F (FH)□-2	20	1.8	35.5 (30.7)	14.3 (9.5)	8.4	13.7	29 (19)
VSP-MB20F (FH)□-4		4			11.2	17.8	30 (20)
VSP-MB20F (FH)□-6		6			11.9	19.6	31 (21)
VSP-MB25F (FH)□-2	25	1.8	35.5 (30.7)	14.3 (9.5)	8.4	13.7	31 (21)
VSP-MB25F (FH)□-4		4			11.2	17.8	32 (22)
VSP-MB25F (FH)□-6		6			11.9	19.6	33 (23)
VSP-MB30F (FH)□-2	30	1.8	35.5 (30.7)	14.3 (9.5)	8.4	13.7	32 (22)
VSP-MB30F (FH)□-4		4			11.2	17.8	33 (23)
VSP-MB30F (FH)□-6		6			11.9	19.6	34 (24)

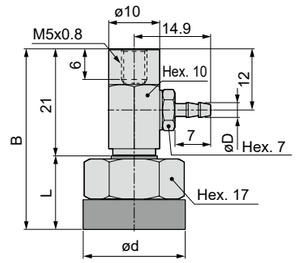
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB10, 15F (FH)□-4T/6T



●VSP-MB20 to 30F (FH)□-4T/6T



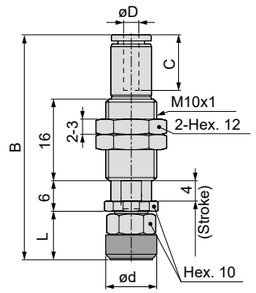
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MB10F (FH)□-4T	10	2.5	30.4 (28.6)	11.4 (9.6)	10 (9)
VSP-MB10F (FH)□-6T		4			
VSP-MB15F (FH)□-4T	15	2.5	30.4 (28.6)	11.4 (9.6)	11 (10)
VSP-MB15F (FH)□-6T		4			
VSP-MB20F (FH)□-4T	20	2.5	35.5 (30.7)	14.3 (9.5)	29 (19)
VSP-MB20F (FH)□-6T		4			
VSP-MB25F (FH)□-4T	25	2.5	35.5 (30.7)	14.3 (9.5)	31 (30)
VSP-MB25F (FH)□-6T		4			
VSP-MB30F (FH)□-4T	30	2.5	35.5 (30.7)	14.3 (9.5)	31 (30)
VSP-MB30F (FH)□-6T		4			

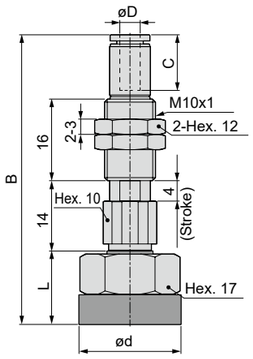
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC10, 15F(FH) □-2/4



●VSP-MC20 to 30F(FH)□-2/4



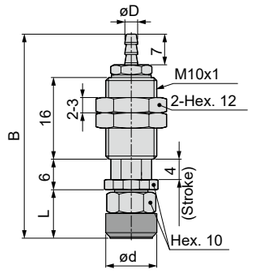
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC10F(FH)□-2	10	1.8	42.3 (40.5)	11.4 (9.6)	8.4	1 to 1.3	19 (18)
VSP-MC10F(FH)□-4		4	46.4 (44.6)		11.2		20 (19)
VSP-MC15F(FH)□-2	15	1.8	42.3 (40.5)	11.4 (9.6)	8.4	1 to 1.3	19 (18)
VSP-MC15F(FH)□-4		4	46.4 (44.6)		11.2		20 (19)
VSP-MC20F(FH)□-2	20	1.8	53.2 (49.4)	14.3 (9.5)	8.4	1 to 1.3	40 (30)
VSP-MC20F(FH)□-4		4	57.3 (52.5)		11.2		41 (31)
VSP-MC25F(FH)□-2	25	1.8	53.2 (49.4)	14.3 (9.5)	8.4	1 to 1.3	42 (32)
VSP-MC25F(FH)□-4		4	57.3 (52.5)		11.2		43 (33)
VSP-MC30F(FH)□-2	30	1.8	53.2 (49.4)	14.3 (9.5)	8.4	1 to 1.3	42 (32)
VSP-MC30F(FH)□-4		4	57.3 (52.5)		11.2		43 (33)

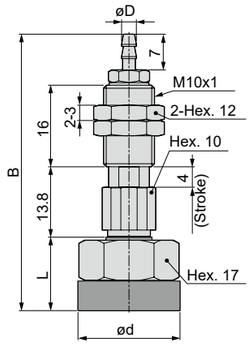
*Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC10, 15F(FH)□-4T/6T



●VSP-MC20 to 30F(FH)□-4T/6T



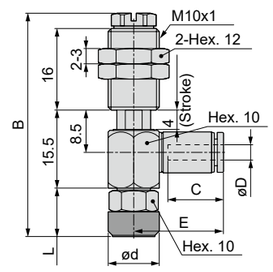
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC10F(FH)□-4T	10	2.5	43.5 (41.7)	11.4 (9.6)	0.5 to 0.6	18 (17)
VSP-MC10F(FH)□-6T		4				
VSP-MC15F(FH)□-4T	15	2.5	43.5 (41.7)	11.4 (9.6)	0.5 to 0.6	19 (18)
VSP-MC15F(FH)□-6T		4				
VSP-MC20F(FH)□-4T	20	2.5	54.4 (49.6)	14.3 (9.5)	1 to 1.3	40 (30)
VSP-MC20F(FH)□-6T		4				
VSP-MC25F(FH)□-4T	25	2.5	54.4 (49.6)	14.3 (9.5)	1 to 1.3	42 (32)
VSP-MC25F(FH)□-6T		4				
VSP-MC30F(FH)□-4T	30	2.5	54.4 (49.6)	14.3 (9.5)	1 to 1.3	42 (32)
VSP-MC30F(FH)□-6T		4				

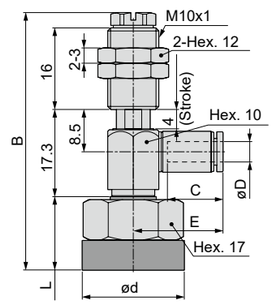
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD10, 15F(FH)□-2/4/6



●VSP-MD20 to 30F(FH)□-2/4/6



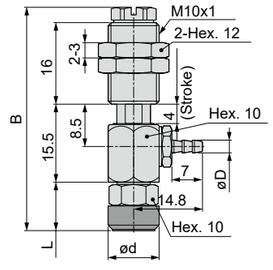
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD10F(FH)□-2	10	1.8	45.9 (44.1)	11.4 (9.6)	8.4	13.6	1 to 1.3	26 (25)
VSP-MD10F(FH)□-4		4			11.2	17.7		27 (26)
VSP-MD10F(FH)□-6		6			11.9	19.5		28 (27)
VSP-MD15F(FH)□-2	15	1.8	45.9 (44.1)	11.4 (9.6)	8.4	13.6	1 to 1.3	27 (26)
VSP-MD15F(FH)□-4		4			11.2	17.7		28 (27)
VSP-MD15F(FH)□-6		6			11.9	19.5		29 (28)
VSP-MD20F(FH)□-2	20	1.8	50.6 (45.8)	14.3 (9.5)	8.4	13.6	1 to 1.3	44 (34)
VSP-MD20F(FH)□-4		4			11.2	17.7		45 (35)
VSP-MD20F(FH)□-6		6			11.9	19.5		46 (36)
VSP-MD25F(FH)□-2	25	1.8	50.6 (45.8)	14.3 (9.5)	8.4	13.6	1 to 1.3	45 (35)
VSP-MD25F(FH)□-4		4			11.2	17.7		46 (36)
VSP-MD25F(FH)□-6		6			11.9	19.5		47 (37)
VSP-MD30F(FH)□-2	30	1.8	50.6 (45.8)	14.3 (9.5)	8.4	13.6	1 to 1.3	45 (35)
VSP-MD30F(FH)□-4		4			11.2	17.7		46 (36)
VSP-MD30F(FH)□-6		6			11.9	19.5		47 (37)

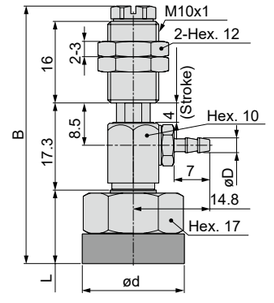
*Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD10, 15F(FH)□-4T/6T



●VSP-MD20 to 30F(FH)□-4T/6T



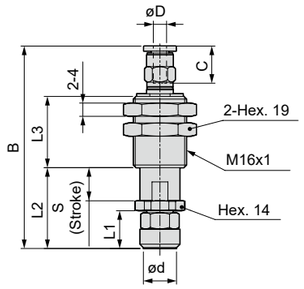
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD10F(FH)□-4T	10	2.5	45.9 (44.1)	11.4 (9.6)	1 to 1.3	26 (25)
VSP-MD10F(FH)□-6T		4				
VSP-MD15F(FH)□-4T	15	2.5	45.9 (44.1)	11.4 (9.6)	1 to 1.3	26 (25)
VSP-MD15F(FH)□-6T		4				
VSP-MD20F(FH)□-4T	20	2.5	50.6 (45.8)	14.3 (9.5)	1 to 1.3	43 (33)
VSP-MD20F(FH)□-6T		4				
VSP-MD25F(FH)□-4T	25	2.5	50.6 (45.8)	14.3 (9.5)	1 to 1.3	45 (35)
VSP-MD25F(FH)□-6T		4				
VSP-MD30F(FH)□-4T	30	2.5	50.6 (45.8)	14.3 (9.5)	1 to 1.3	45 (35)
VSP-MD30F(FH)□-6T		4				

* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10, 15-□F(FH)□-2/4/6



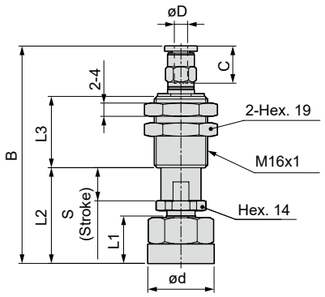
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10F(FH)□-2	10	1.8	57 (55.2)	11.4 (9.6)	24.4 (22.6)	21.5	8.4	10	1.0 to 2.4	26 (25)
VSP-HC10-10F(FH)□-4		4	61.1 (59.3)				11.2			27 (26)
VSP-HC10-10F(FH)□-6		6	62.4 (60.6)				11.9			28 (27)
VSP-HC10-15F(FH)□-2		1.8	67 (65.2)		29.4 (27.6)	26.5	8.4	15	1.0 to 2.7	28 (27)
VSP-HC10-15F(FH)□-4		4	71.1 (96.3)				11.2			29 (28)
VSP-HC10-15F(FH)□-6		6	72.4 (70.6)				11.9			30 (29)
VSP-HC10-20F(FH)□-2		1.8	77 (75.2)		34.4 (32.6)	31.5	8.4	20	1.0 to 3.0	30 (29)
VSP-HC10-20F(FH)□-4		4	81.1 (79.3)				11.2			31 (30)
VSP-HC10-20F(FH)□-6		6	82.4 (80.6)				11.9			32 (31)
VSP-HC10-25F(FH)□-2		1.8	87.5 (85.7)		39.4 (37.6)	37	8.4	25	1.0 to 3.0	32 (31)
VSP-HC10-25F(FH)□-4		4	91.6 (89.8)				11.2			33 (32)
VSP-HC10-25F(FH)□-6		6	92.9 (91.1)				11.9			34 (33)
VSP-HC10-30F(FH)□-2		1.8	98.5 (96.7)		44.4 (42.6)	43	8.4	30	1.0 to 3.0	34 (33)
VSP-HC10-30F(FH)□-4		4	102.6 (100.8)				11.2			35 (34)
VSP-HC10-30F(FH)□-6		6	103.9 (102.1)				11.9			36 (35)
VSP-HC10-40F(FH)□-2		1.8	120.5 (118.7)		54.4 (52.6)	55	8.4	40	1.0 to 3.0	38 (37)
VSP-HC10-40F(FH)□-4		4	124.6 (122.8)				11.2			39 (38)
VSP-HC10-40F(FH)□-6		6	125.9 (124.1)				11.9			40 (39)
VSP-HC10-50F(FH)□-2		1.8	142 (140.2)		64.4 (62.6)	66.5	8.4	50	1.0 to 3.1	43 (42)
VSP-HC10-50F(FH)□-4		4	146.1 (144.3)				11.2			44 (43)
VSP-HC10-50F(FH)□-6		6	147.4 (145.6)				11.9			45 (44)
VSP-HC15-10F(FH)□-2	15	1.8	57 (55.2)	11.4 (9.6)	24.4 (22.6)	21.5	8.4	10	1.0 to 2.4	27 (26)
VSP-HC15-10F(FH)□-4		4	61.1 (59.3)				11.2			28 (27)
VSP-HC15-10F(FH)□-6		6	62.4 (60.6)				11.9			29 (28)
VSP-HC15-15F(FH)□-2		1.8	67 (65.2)		29.4 (27.6)	26.5	8.4	15	1.0 to 2.7	29 (28)
VSP-HC15-15F(FH)□-4		4	71.1 (96.3)				11.2			30 (29)
VSP-HC15-15F(FH)□-6		6	72.4 (70.6)				11.9			31 (30)
VSP-HC15-20F(FH)□-2		1.8	77 (75.2)		34.4 (32.6)	31.5	8.4	20	1.0 to 3.0	31 (30)
VSP-HC15-20F(FH)□-4		4	81.1 (79.3)				11.2			32 (31)
VSP-HC15-20F(FH)□-6		6	82.4 (80.6)				11.9			33 (32)
VSP-HC15-25F(FH)□-2		1.8	87.5 (85.7)		39.4 (37.6)	37	8.4	25	1.0 to 3.0	33 (32)
VSP-HC15-25F(FH)□-4		4	91.6 (89.8)				11.2			34 (33)
VSP-HC15-25F(FH)□-6		6	92.9 (91.1)				11.9			35 (34)
VSP-HC15-30F(FH)□-2		1.8	98.5 (96.7)		44.4 (42.6)	43	8.4	30	1.0 to 3.0	35 (34)
VSP-HC15-30F(FH)□-4		4	102.6 (100.8)				11.2			36 (35)
VSP-HC15-30F(FH)□-6		6	103.9 (102.1)				11.9			37 (36)
VSP-HC15-40F(FH)□-2		1.8	120.5 (118.7)		54.4 (52.6)	55	8.4	40	1.0 to 3.0	39 (38)
VSP-HC15-40F(FH)□-4		4	124.6 (122.8)				11.2			40 (39)
VSP-HC15-40F(FH)□-6		6	125.9 (124.1)				11.9			41 (40)
VSP-HC15-50F(FH)□-2		1.8	142 (140.2)		64.4 (62.6)	66.5	8.4	50	1.0 to 3.1	44 (43)
VSP-HC15-50F(FH)□-4		4	146.1 (144.3)				11.2			45 (44)
VSP-HC15-50F(FH)□-6		6	147.4 (145.6)				11.9			46 (45)

* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 25-□F(FH)□-2/4/6



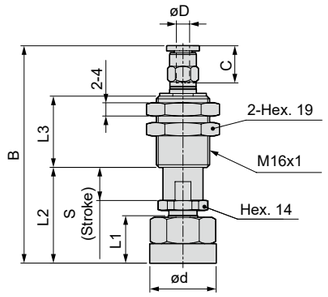
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10F(FH)□-2	20	1.8	61.5 (56.7)	14.3 (9.5)	28.9 (24.1)	21.5	8.4	10	1.0 to 2.4	44 (34)
VSP-HC20-10F(FH)□-4		4	65.6 (60.8)				11.2			45 (35)
VSP-HC20-10F(FH)□-6		6	66.9 (62.1)				11.9			46 (36)
VSP-HC20-15F(FH)□-2		1.8	71.5 (66.7)		33.9 (29.1)	26.5	8.4	15	1.0 to 2.7	46 (36)
VSP-HC20-15F(FH)□-4		4	75.6 (70.8)				11.2			47 (37)
VSP-HC20-15F(FH)□-6		6	76.9 (72.1)				11.9			48 (38)
VSP-HC20-20F(FH)□-2		1.8	81.5 (76.7)		38.9 (34.1)	31.5	8.4	20	1.0 to 3.0	48 (38)
VSP-HC20-20F(FH)□-4		4	85.6 (80.8)				11.2			49 (39)
VSP-HC20-20F(FH)□-6		6	86.9 (82.1)				11.9			50 (40)
VSP-HC20-25F(FH)□-2		1.8	92 (87.2)		43.9 (39.1)	37	8.4	25	1.0 to 3.0	50 (40)
VSP-HC20-25F(FH)□-4		4	96.1 (91.3)				11.2			51 (41)
VSP-HC20-25F(FH)□-6		6	97.4 (92.6)				11.9			52 (42)
VSP-HC20-30F(FH)□-2		1.8	103 (98.2)		48.9 (44.1)	43	8.4	30	1.0 to 3.0	52 (42)
VSP-HC20-30F(FH)□-4		4	107.1 (102.3)				11.2			53 (43)
VSP-HC20-30F(FH)□-6		6	108.4 (103.6)				11.9			54 (44)
VSP-HC20-40F(FH)□-2		1.8	125 (120.2)		58.9 (54.1)	55	8.4	40	1.0 to 3.0	56 (46)
VSP-HC20-40F(FH)□-4		4	129.1 (124.3)				11.2			57 (47)
VSP-HC20-40F(FH)□-6		6	130.4 (125.6)				11.9			58 (48)
VSP-HC20-50F(FH)□-2		1.8	146.5 (141.7)		68.9 (64.1)	66.5	8.4	50	1.0 to 3.1	60 (50)
VSP-HC20-50F(FH)□-4		4	150.6 (145.8)				11.2			61 (51)
VSP-HC20-50F(FH)□-6		6	151.9 (147.1)				11.9			62 (52)
VSP-HC25-10F(FH)□-2	25	1.8	61.5 (56.7)	14.3 (9.5)	28.9 (24.1)	21.5	8.4	10	1.0 to 2.4	45 (35)
VSP-HC25-10F(FH)□-4		4	65.6 (60.8)				11.2			46 (36)
VSP-HC25-10F(FH)□-6		6	66.9 (62.1)				11.9			47 (37)
VSP-HC25-15F(FH)□-2		1.8	71.5 (66.7)		33.9 (29.1)	26.5	8.4	15	1.0 to 2.7	47 (37)
VSP-HC25-15F(FH)□-4		4	75.6 (70.8)				11.2			48 (38)
VSP-HC25-15F(FH)□-6		6	76.9 (72.1)				11.9			49 (39)
VSP-HC25-20F(FH)□-2		1.8	81.5 (76.7)		38.9 (34.1)	31.5	8.4	20	1.0 to 3.0	49 (39)
VSP-HC25-20F(FH)□-4		4	85.6 (80.8)				11.2			50 (40)
VSP-HC25-20F(FH)□-6		6	86.9 (82.1)				11.9			51 (41)
VSP-HC25-25F(FH)□-2		1.8	92 (87.2)		43.9 (39.1)	37	8.4	25	1.0 to 3.0	51 (41)
VSP-HC25-25F(FH)□-4		4	96.1 (91.3)				11.2			52 (42)
VSP-HC25-25F(FH)□-6		6	97.4 (92.6)				11.9			53 (43)
VSP-HC25-30F(FH)□-2		1.8	103 (98.2)		48.9 (44.1)	43	8.4	30	1.0 to 3.0	53 (43)
VSP-HC25-30F(FH)□-4		4	107.1 (102.3)				11.2			54 (44)
VSP-HC25-30F(FH)□-6		6	108.4 (103.6)				11.9			55 (45)
VSP-HC25-40F(FH)□-2		1.8	125 (120.2)		58.9 (54.1)	55	8.4	40	1.0 to 3.0	57 (47)
VSP-HC25-40F(FH)□-4		4	129.1 (124.3)				11.2			58 (48)
VSP-HC25-40F(FH)□-6		6	130.4 (125.6)				11.9			59 (49)
VSP-HC25-50F(FH)□-2		1.8	146.5 (141.7)		68.9 (64.1)	66.5	8.4	50	1.0 to 3.1	61 (51)
VSP-HC25-50F(FH)□-4		4	150.6 (145.8)				11.2			62 (52)
VSP-HC25-50F(FH)□-6		6	151.9 (147.1)				11.9			63 (53)

* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC30-□F(FH)□-2/4/6



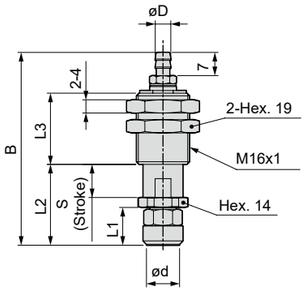
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC30-10F(FH)□-2	30	1.8	61.5 (56.7)	14.3 (9.5)	28.9 (24.1)	21.5	8.4	10	1.0 to 2.4	46 (36)
VSP-HC30-10F(FH)□-4		4	65.6 (60.8)				11.2			47 (37)
VSP-HC30-10F(FH)□-6		6	66.9 (62.1)				11.9			48 (38)
VSP-HC30-15F(FH)□-2		1.8	71.5 (66.7)		33.9 (29.1)	26.5	8.4	15	1.0 to 2.7	48 (38)
VSP-HC30-15F(FH)□-4		4	75.6 (70.8)				11.2			49 (39)
VSP-HC30-15F(FH)□-6		6	76.9 (72.1)				11.9			50 (40)
VSP-HC30-20F(FH)□-2		1.8	81.5 (76.7)		38.9 (34.1)	31.5	8.4	20	1.0 to 3.0	50 (40)
VSP-HC30-20F(FH)□-4		4	85.6 (80.8)				11.2			51 (41)
VSP-HC30-20F(FH)□-6		6	86.9 (82.1)				11.9			52 (42)
VSP-HC30-25F(FH)□-2		1.8	92 (87.2)		43.9 (39.1)	37	8.4	25	1.0 to 3.0	52 (42)
VSP-HC30-25F(FH)□-4		4	96.1 (91.3)				11.2			53 (43)
VSP-HC30-25F(FH)□-6		6	97.4 (92.6)				11.9			54 (44)
VSP-HC30-30F(FH)□-2		1.8	103 (98.2)		48.9 (44.1)	43	8.4	30	1.0 to 3.0	54 (44)
VSP-HC30-30F(FH)□-4		4	107.1 (102.3)				11.2			55 (45)
VSP-HC30-30F(FH)□-6		6	108.4 (103.6)				11.9			56 (46)
VSP-HC30-40F(FH)□-2		1.8	125 (120.2)		58.9 (54.1)	55	8.4	40	1.0 to 3.0	58 (48)
VSP-HC30-40F(FH)□-4		4	129.1 (124.3)				11.2			59 (49)
VSP-HC30-40F(FH)□-6		6	130.4 (125.6)				11.9			60 (50)
VSP-HC30-50F(FH)□-2		1.8	146.5 (141.7)		68.9 (64.1)	66.5	8.4	50	1.0 to 3.1	62 (52)
VSP-HC30-50F(FH)□-4		4	150.6 (145.8)				11.2			63 (53)
VSP-HC30-50F(FH)□-6		6	151.9 (147.1)				11.9			64 (54)

* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10, 15-□F(FH)□-4T/6T



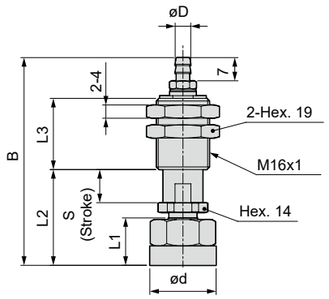
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10F(FH)□-4T	10	2.5	58.2 (56.4)	11.4 (9.6)	24.4 (22.6)	21.5	10	1.0 to 2.4	25 (24)
VSP-HC10-10F(FH)□-6T		4							
VSP-HC10-15F(FH)□-4T		2.5	68.2 (66.4)		29.4 (27.6)	26.5	15	1.0 to 2.7	27 (26)
VSP-HC10-15F(FH)□-6T		4							
VSP-HC10-20F(FH)□-4T		2.5	78.2 (76.4)		34.4 (32.6)	31.5	20	1.0 to 3.0	29 (28)
VSP-HC10-20F(FH)□-6T		4							
VSP-HC10-25F(FH)□-4T		2.5	88.7 (86.9)		39.4 (37.6)	37	25	1.0 to 3.0	32 (31)
VSP-HC10-25F(FH)□-6T		4							
VSP-HC10-30F(FH)□-4T		2.5	99.7 (97.9)		44.4 (42.6)	43	30	1.0 to 3.0	34 (33)
VSP-HC10-30F(FH)□-6T		4							
VSP-HC10-40F(FH)□-4T		2.5	121.7 (119.9)		54.4 (52.6)	55	40	1.0 to 3.0	38 (37)
VSP-HC10-40F(FH)□-6T		4							
VSP-HC10-50F(FH)□-4T		2.5	143.2 (141.4)		64.4 (62.6)	66.5	50	1.0 to 3.1	42 (41)
VSP-HC10-50F(FH)□-6T		4							
VSP-HC15-10F(FH)□-4T	15	2.5	58.2 (56.4)	11.4 (9.6)	24.4 (22.6)	21.5	10	1.0 to 2.4	26 (25)
VSP-HC15-10F(FH)□-6T		4							
VSP-HC15-15F(FH)□-4T		2.5	68.2 (66.4)		29.4 (27.6)	26.5	15	1.0 to 2.7	28 (27)
VSP-HC15-15F(FH)□-6T		4							
VSP-HC15-20F(FH)□-4T		2.5	78.2 (76.4)		34.4 (32.6)	31.5	20	1.0 to 3.0	30 (29)
VSP-HC15-20F(FH)□-6T		4							
VSP-HC15-25F(FH)□-4T		2.5	88.7 (86.9)		39.4 (37.6)	37	25	1.0 to 3.0	33 (32)
VSP-HC15-25F(FH)□-6T		4							
VSP-HC15-30F(FH)□-4T		2.5	99.7 (97.9)		44.4 (42.6)	43	30	1.0 to 3.0	35 (34)
VSP-HC15-30F(FH)□-6T		4							
VSP-HC15-40F(FH)□-4T		2.5	121.7 (119.9)		54.4 (52.6)	55	40	1.0 to 3.0	39 (38)
VSP-HC15-40F(FH)□-6T		4							
VSP-HC15-50F(FH)□-4T		2.5	143.2 (141.4)		64.4 (62.6)	66.5	50	1.0 to 3.1	43 (42)
VSP-HC15-50F(FH)□-6T		4							

* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC20 to 30-□F(FH)□-4T/6T



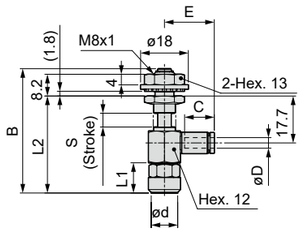
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10F(FH)□-4T	20	2.5	62.7 (57.9)	14.3 (9.5)	28.9 (24.1)	21.5	10	1.0 to 2.4	43 (33)
VSP-HC20-10F(FH)□-6T		4							
VSP-HC20-15F(FH)□-4T		2.5	72.7 (67.9)		33.9 (29.1)	26.5	15	1.0 to 2.7	44 (35)
VSP-HC20-15F(FH)□-6T		4							
VSP-HC20-20F(FH)□-4T		2.5	82.7 (77.9)		38.9 (34.1)	31.5	20	1.0 to 3.0	47 (37)
VSP-HC20-20F(FH)□-6T		4							
VSP-HC20-25F(FH)□-4T		2.5	93.2 (89.4)		43.9 (39.1)	37	25	1.0 to 3.0	49 (39)
VSP-HC20-25F(FH)□-6T		4							
VSP-HC20-30F(FH)□-4T		2.5	104.2 (99.4)		48.9 (44.1)	43	30	1.0 to 3.0	52 (42)
VSP-HC20-30F(FH)□-6T		4							
VSP-HC20-40F(FH)□-4T		2.5	126.2 (121.4)		58.9 (54.1)	55	40	1.0 to 3.0	56 (46)
VSP-HC20-40F(FH)□-6T		4							
VSP-HC20-50F(FH)□-4T		2.5	147.7 (142.9)		68.9 (64.1)	66.5	50	1.0 to 3.1	60 (50)
VSP-HC20-50F(FH)□-6T		4							
VSP-HC25-10F(FH)□-4T	25	2.5	62.7 (57.9)	14.3 (9.5)	28.9 (24.1)	21.5	10	1.0 to 2.4	44 (34)
VSP-HC25-10F(FH)□-6T		4							
VSP-HC25-15F(FH)□-4T		2.5	72.7 (67.9)		33.9 (29.1)	26.5	15	1.0 to 2.7	46 (36)
VSP-HC25-15F(FH)□-6T		4							
VSP-HC25-20F(FH)□-4T		2.5	82.7 (77.9)		38.9 (34.1)	31.5	20	1.0 to 3.0	48 (38)
VSP-HC25-20F(FH)□-6T		4							
VSP-HC25-25F(FH)□-4T		2.5	93.2 (89.4)		43.9 (39.1)	37	25	1.0 to 3.0	50 (40)
VSP-HC25-25F(FH)□-6T		4							
VSP-HC25-30F(FH)□-4T		2.5	104.2 (99.4)		48.9 (44.1)	43	30	1.0 to 3.0	53 (43)
VSP-HC25-30F(FH)□-6T		4							
VSP-HC25-40F(FH)□-4T		2.5	126.2 (121.4)		58.9 (54.1)	55	40	1.0 to 3.0	57 (47)
VSP-HC25-40F(FH)□-6T		4							
VSP-HC25-50F(FH)□-4T		2.5	147.7 (142.9)		68.9 (64.1)	66.5	50	1.0 to 3.1	61 (51)
VSP-HC25-50F(FH)□-6T		4							
VSP-HC30-10F(FH)□-4T	30	2.5	62.7 (57.9)	14.3 (9.5)	28.9 (24.1)	21.5	10	1.0 to 2.4	45 (35)
VSP-HC30-10F(FH)□-6T		4							
VSP-HC30-15F(FH)□-4T		2.5	72.7 (67.9)		33.9 (29.1)	26.5	15	1.0 to 2.7	47 (37)
VSP-HC30-15F(FH)□-6T		4							
VSP-HC30-20F(FH)□-4T		2.5	82.7 (77.9)		38.9 (34.1)	31.5	20	1.0 to 3.0	49 (39)
VSP-HC30-20F(FH)□-6T		4							
VSP-HC30-25F(FH)□-4T		2.5	93.2 (89.4)		43.9 (39.1)	37	25	1.0 to 3.0	51 (41)
VSP-HC30-25F(FH)□-6T		4							
VSP-HC30-30F(FH)□-4T		2.5	104.2 (99.4)		48.9 (44.1)	43	30	1.0 to 3.0	54 (44)
VSP-HC30-30F(FH)□-6T		4							
VSP-HC30-40F(FH)□-4T		2.5	126.2 (121.4)		58.9 (54.1)	55	40	1.0 to 3.0	58 (48)
VSP-HC30-40F(FH)□-6T		4							
VSP-HC30-50F(FH)□-4T		2.5	147.7 (142.9)		68.9 (64.1)	66.5	50	1.0 to 3.1	62 (52)
VSP-HC30-50F(FH)□-6T		4							

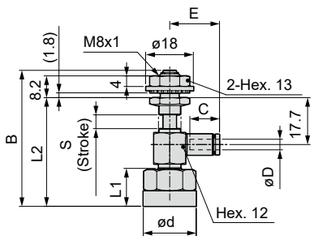
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Push-in fitting)

●VSP-HD10, 15F(FH)□-2/4/6



●VSP-HD20 to 30F(FH)□-2/4/6



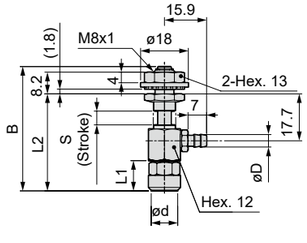
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10F(FH)□-2	10	1.8	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	8.4	14.7	5.2	1.6 to 2.9	36 (35)
VSP-HD10F(FH)□-4		4				11.2	18.8			37 (36)
VSP-HD10F(FH)□-6		6				11.9	20.6			38 (37)
VSP-HD15F(FH)□-2	15	1.8				8.4	14.7			37 (36)
VSP-HD15F(FH)□-4		4				11.2	18.8			38 (37)
VSP-HD15F(FH)□-6		6				11.9	20.6			39 (38)
VSP-HD20F(FH)□-2	20	1.8	51.3 (46.5)	14.3 (9.5)	41 (36.2)	8.4	14.7			49 (39)
VSP-HD20F(FH)□-4		4				11.2	18.8			50 (40)
VSP-HD20F(FH)□-6		6				11.9	20.6			51 (41)
VSP-HD25F(FH)□-2	25	1.8				8.4	14.7			50 (40)
VSP-HD25F(FH)□-4		4				11.2	18.8			51 (41)
VSP-HD25F(FH)□-6		6				11.9	20.6			52 (42)
VSP-HD30F(FH)□-2	30	1.8	51.3 (46.5)	14.3 (9.5)	41 (36.2)	8.4	14.7			51 (41)
VSP-HD30F(FH)□-4		4				11.2	18.8			52 (42)
VSP-HD30F(FH)□-6		6				11.9	20.6			53 (43)

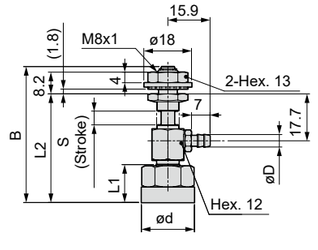
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Barb Fitting)

●VSP-HD10, 15F(FH)□-4T/6T



●VSP-HD20 to 30F(FH)□-4T/6T



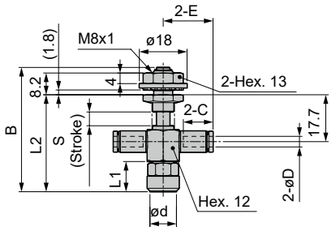
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10F(FH)□-4T	10	2.5	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	5.2	1.6 to 2.9	35 (34)
VSP-HD10F(FH)□-6T		4						
VSP-HD15F(FH)□-4T	15	2.5	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	5.2	1.6 to 2.9	36 (35)
VSP-HD15F(FH)□-6T		4						
VSP-HD20F(FH)□-4T	20	2.5	51.3 (46.5)	14.3 (9.5)	41 (36.2)	5.2	1.6 to 2.9	53 (52)
VSP-HD20F(FH)□-6T		4						
VSP-HD25F(FH)□-4T	25	2.5	51.3 (46.5)	14.3 (9.5)	41 (36.2)	5.2	1.6 to 2.9	54 (53)
VSP-HD25F(FH)□-6T		4						
VSP-HD30F(FH)□-4T	30	2.5	51.3 (46.5)	14.3 (9.5)	41 (36.2)	5.2	1.6 to 2.9	55 (54)
VSP-HD30F(FH)□-6T		4						

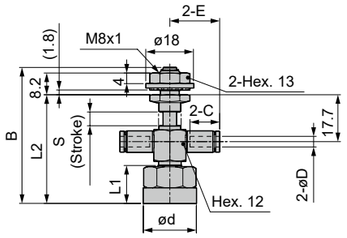
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Push-in fitting)

●VSP-HDW10, 15F(FH)□-2/4/6



●VSP-HDW20 to 30F(FH)□-2/4/6



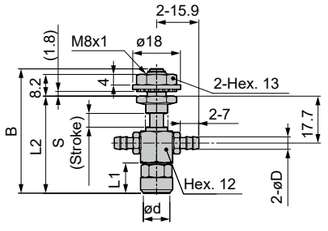
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10F(FH)□-2	10	1.8	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	8.4	14.7	5.2	1.6 to 2.9	37 (36)
VSP-HDW10F(FH)□-4		4				11.2	18.8			39 (38)
VSP-HDW10F(FH)□-6		6				11.9	20.6			41 (40)
VSP-HDW15F(FH)□-2	15	1.8	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	8.4	14.7	5.2	1.6 to 2.9	38 (37)
VSP-HDW15F(FH)□-4		4				11.2	18.8			40 (39)
VSP-HDW15F(FH)□-6		6				11.9	20.6			42 (41)
VSP-HDW20F(FH)□-2	20	1.8	51.3 (46.5)	14.3 (9.5)	41 (36.2)	8.4	14.7	5.2	1.6 to 2.9	55 (45)
VSP-HDW20F(FH)□-4		4				11.2	18.8			57 (47)
VSP-HDW20F(FH)□-6		6				11.9	20.6			59 (49)
VSP-HDW25F(FH)□-2	25	1.8	51.3 (46.5)	14.3 (9.5)	41 (36.2)	8.4	14.7	5.2	1.6 to 2.9	56 (46)
VSP-HDW25F(FH)□-4		4				11.2	18.8			58 (48)
VSP-HDW25F(FH)□-6		6				11.9	20.6			60 (50)
VSP-HDW30F(FH)□-2	30	1.8	51.3 (46.5)	14.3 (9.5)	41 (36.2)	8.4	14.7	5.2	1.6 to 2.9	57 (47)
VSP-HDW30F(FH)□-4		4				11.2	18.8			59 (49)
VSP-HDW30F(FH)□-6		6				11.9	20.6			61 (51)

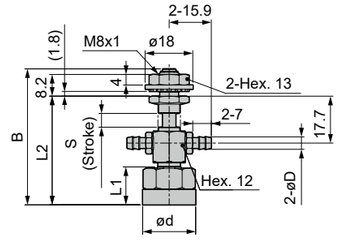
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Barb Fitting)

●VSP-HDW10, 15F(FH)□-4T/6T



●VSP-HDW20 to 30F(FH)□-4T/6T



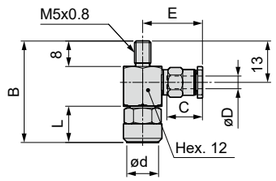
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10F(FH)□-4T	10	2.5	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	5.2	1.6 to 2.9	36 (35)
VSP-HDW10F(FH)□-6T		4						
VSP-HDW15F(FH)□-4T	15	2.5	46.9 (45.1)	11.4 (9.6)	36.6 (34.8)	5.2	1.6 to 2.9	37 (36)
VSP-HDW15F(FH)□-6T		4						
VSP-HDW20F(FH)□-4T	20	2.5	51.3 (46.5)	14.3 (9.5)	41 (36.2)	5.2	1.6 to 2.9	54 (44)
VSP-HDW20F(FH)□-6T		4						
VSP-HDW25F(FH)□-4T	25	2.5	51.3 (46.5)	14.3 (9.5)	41 (36.2)	5.2	1.6 to 2.9	55 (45)
VSP-HDW25F(FH)□-6T		4						
VSP-HDW30F(FH)□-4T	30	2.5	51.3 (46.5)	14.3 (9.5)	41 (36.2)	5.2	1.6 to 2.9	56 (46)
VSP-HDW30F(FH)□-6T		4						

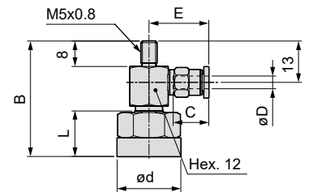
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Push-in fitting)

●VSP-HE10, 15F(FH)□-2/4/6



●VSP-HE20 to 30F(FH)□-2/4/6



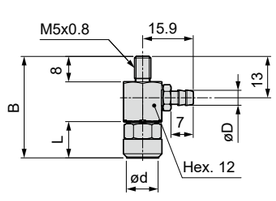
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE10F(FH)□-2	10	1.8	31.9 (30.1)	11.4 (9.6)	8.4	14.7	22 (21)
VSP-HE10F(FH)□-4		4			11.2	18.8	23 (22)
VSP-HE10F(FH)□-6		6			11.9	20.6	24 (23)
VSP-HE15F(FH)□-2	15	1.8	31.9 (30.1)	11.4 (9.6)	8.4	14.7	23 (22)
VSP-HE15F(FH)□-4		4			11.2	18.8	24 (23)
VSP-HE15F(FH)□-6		6			11.9	20.6	25 (24)
VSP-HE20F(FH)□-2	20	1.8	36.3 (31.5)	14.3 (9.5)	8.4	14.7	38 (28)
VSP-HE20F(FH)□-4		4			11.2	18.8	39 (29)
VSP-HE20F(FH)□-6		6			11.9	20.6	40 (30)
VSP-HE25F(FH)□-2	25	1.8	36.3 (31.5)	14.3 (9.5)	8.4	14.7	39 (29)
VSP-HE25F(FH)□-4		4			11.2	18.8	40 (30)
VSP-HE25F(FH)□-6		6			11.9	20.6	41 (31)
VSP-HE30F(FH)□-2	30	1.8	36.3 (31.5)	14.3 (9.5)	8.4	14.7	40 (30)
VSP-HE30F(FH)□-4		4			11.2	18.8	41 (31)
VSP-HE30F(FH)□-6		6			11.9	20.6	42 (32)

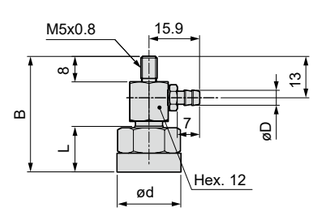
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Barb Fitting)

●VSP-HE10, 15F(FH)□-4T/6T



●VSP-HE20 to 30F(FH)□-4T/6T



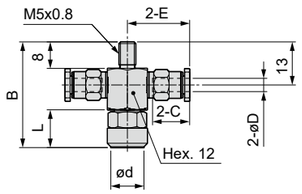
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE10F(FH)□-4T	10	2.5	31.9 (30.1)	11.4 (9.6)	21 (20)
VSP-HE10F(FH)□-6T		4			
VSP-HE15F(FH)□-4T	15	2.5	31.9 (30.1)	11.4 (9.6)	22 (21)
VSP-HE15F(FH)□-6T		4			
VSP-HE20F(FH)□-4T	20	2.5	36.3 (31.5)	14.3 (9.5)	38 (28)
VSP-HE20F(FH)□-6T		4			
VSP-HE25F(FH)□-4T	25	2.5	36.3 (31.5)	14.3 (9.5)	39 (29)
VSP-HE25F(FH)□-6T		4			
VSP-HE30F(FH)□-4T	30	2.5	36.3 (31.5)	14.3 (9.5)	40 (30)
VSP-HE30F(FH)□-6T		4			

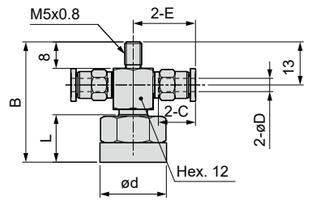
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW10, 15F(FH)□-2/4/6



●VSP-HEW20 to 30F(FH)□-2/4/6



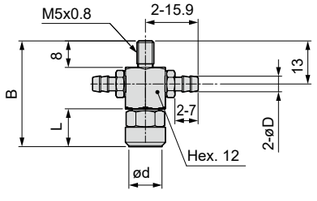
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW10F(FH)□-2	10	1.8	31.9 (30.1)	11.4 (9.6)	8.4	14.7	23 (22)
VSP-HEW10F(FH)□-4		4			11.2	18.8	25 (24)
VSP-HEW10F(FH)□-6		6			11.9	20.6	27 (26)
VSP-HEW15F(FH)□-2	15	1.8	31.9 (30.1)	11.4 (9.6)	8.4	14.7	24 (23)
VSP-HEW15F(FH)□-4		4			11.2	18.8	26 (25)
VSP-HEW15F(FH)□-6		6			11.9	20.6	28 (27)
VSP-HEW20F(FH)□-2	20	1.8	36.3 (31.5)	14.3 (9.5)	8.4	14.7	40 (30)
VSP-HEW20F(FH)□-4		4			11.2	18.8	42 (32)
VSP-HEW20F(FH)□-6		6			11.9	20.6	44 (34)
VSP-HEW25F(FH)□-2	25	1.8	36.3 (31.5)	14.3 (9.5)	8.4	14.7	41 (31)
VSP-HEW25F(FH)□-4		4			11.2	18.8	43 (33)
VSP-HEW25F(FH)□-6		6			11.9	20.6	45 (35)
VSP-HEW30F(FH)□-2	30	1.8	36.3 (31.5)	14.3 (9.5)	8.4	14.7	42 (32)
VSP-HEW30F(FH)□-4		4			11.2	18.8	44 (34)
VSP-HEW30F(FH)□-6		6			11.9	20.6	46 (36)

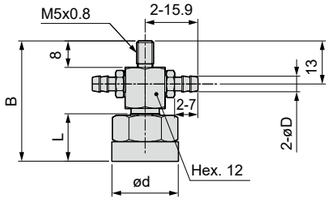
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW10, 15F(FH)□-4T/6T



●VSP-HEW20 to 30F(FH)□-4T/6T



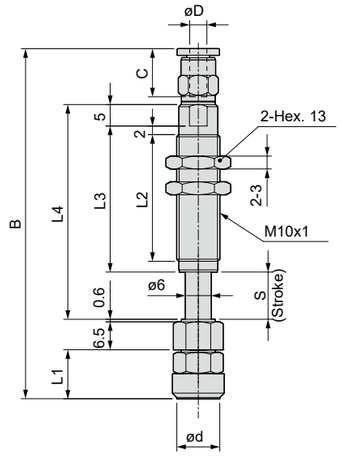
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW10F(FH)□-4T	10	2.5	31.9 (30.1)	11.4 (9.6)	22 (21)
VSP-HEW10F(FH)□-6T		4			
VSP-HEW15F(FH)□-4T	15	2.5	31.9 (30.1)	11.4 (9.6)	23 (22)
VSP-HEW15F(FH)□-6T		4			
VSP-HEW20F(FH)□-4T	20	2.5	36.3 (32.5)	14.3 (10.5)	39 (29)
VSP-HEW20F(FH)□-6T		4			
VSP-HEW25F(FH)□-4T	25	2.5	36.3 (32.5)	14.3 (10.5)	40 (30)
VSP-HEW25F(FH)□-6T		4			
VSP-HEW30F(FH)□-4T	30	2.5	36.3 (32.5)	14.3 (10.5)	41 (31)
VSP-HEW30F(FH)□-6T		4			

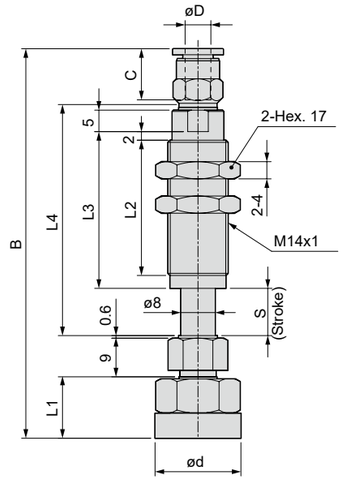
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC10, 15-□F(FH)□-4



●VSP-LFC20 to 30-□F(FH)□-4/6



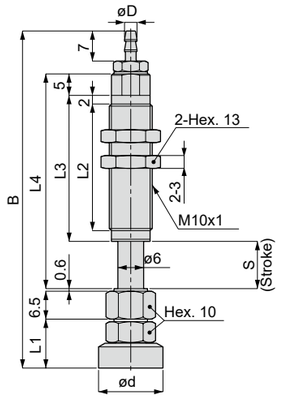
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2F(FH)□-4	10	4	65.5 (63.7)	11.4 (9.6)	21.5	26	34	11.2	2	1.3 to 1.8	32 (31)
VSP-LFC10-5F(FH)□-4			71.5 (69.7)		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	34 (33)
VSP-LFC10-10F(FH)□-4			81.5 (79.7)		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	36 (35)
VSP-LFC10-15F(FH)□-4			91.5 (89.7)		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	38 (37)
VSP-LFC10-20F(FH)□-4			101.5 (99.7)		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	40 (39)
VSP-LFC15-2F(FH)□-4	15	4	65.5 (63.7)	11.4 (9.6)	21.5	26	34	11.2	2	1.3 to 1.8	33 (32)
VSP-LFC15-5F(FH)□-4			71.5 (69.7)		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	35 (34)
VSP-LFC15-10F(FH)□-4			81.5 (79.7)		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	37 (36)
VSP-LFC15-15F(FH)□-4			91.5 (89.7)		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	39 (38)
VSP-LFC15-20F(FH)□-4			101.5 (99.7)		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	41 (40)
VSP-LFC20-5F(FH)□-4	20	4	79.4 (74.6)	14.3 (9.5)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	75 (65)
VSP-LFC20-5F(FH)□-6		6	80.7 (75.9)					11.9			76 (66)
VSP-LFC20-10F(FH)□-4		4	89.4 (84.6)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	77 (67)
VSP-LFC20-10F(FH)□-6		6	90.7 (85.9)					11.9			78 (68)
VSP-LFC20-15F(FH)□-4		4	99.4 (94.6)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	80 (70)
VSP-LFC20-15F(FH)□-6		6	100.7 (95.9)					11.9			81 (71)
VSP-LFC20-20F(FH)□-4		4	109.4 (104.6)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	83 (73)
VSP-LFC20-20F(FH)□-6		6	110.7 (105.9)					11.9			84 (74)
VSP-LFC25-5F(FH)□-4	25	4	79.4 (74.6)	14.3 (9.5)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	76 (66)
VSP-LFC25-5F(FH)□-6		6	80.7 (75.9)					11.9			77 (67)
VSP-LFC25-10F(FH)□-4		4	89.4 (84.6)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	78 (68)
VSP-LFC25-10F(FH)□-6		6	90.7 (85.9)					11.9			79 (69)
VSP-LFC25-15F(FH)□-4		4	99.4 (94.6)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	81 (71)
VSP-LFC25-15F(FH)□-6		6	100.7 (95.9)					11.9			82 (72)
VSP-LFC25-20F(FH)□-4		4	109.4 (104.6)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	84 (74)
VSP-LFC25-20F(FH)□-6		6	110.7 (105.9)					11.9			85 (75)
VSP-LFC30-5F(FH)□-4	30	4	79.4 (74.6)	14.3 (9.5)	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	78 (67)
VSP-LFC30-5F(FH)□-6		6	80.7 (75.9)					11.9			79 (68)
VSP-LFC30-10F(FH)□-4		4	89.4 (84.6)		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	80 (69)
VSP-LFC30-10F(FH)□-6		6	90.7 (85.9)					11.9			81 (70)
VSP-LFC30-15F(FH)□-4		4	99.4 (94.6)		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	83 (72)
VSP-LFC30-15F(FH)□-6		6	100.7 (95.9)					11.9			84 (73)
VSP-LFC30-20F(FH)□-4		4	109.4 (104.6)		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	86 (75)
VSP-LFC30-20F(FH)□-6		6	110.7 (105.9)					11.9			87 (76)

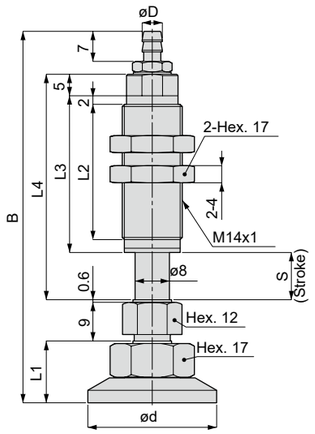
*1: Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.
*2: Figures in [ ] indicate load for the Low Load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC10, 15-□F(FH)□-4T/6T



●VSP-LFC20 to 30-□F(FH)□-4T/6T



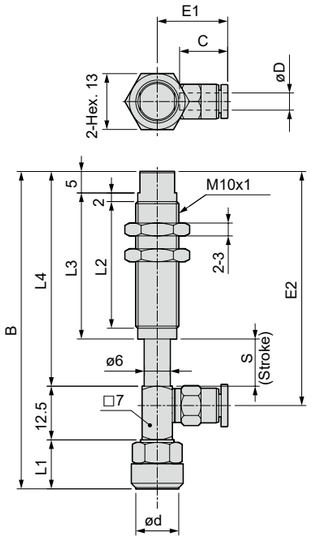
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2F(FH)□-4T	10	2.5	62.6 (60.8)	11.4 (9.6)	21.5	26	34	2	1.3 to 1.8	30 (29)
VSP-LFC10-2F(FH)□-6T		4								
VSP-LFC10-5F(FH)□-4T		2.5	68.6 (66.8)		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	32 (31)
VSP-LFC10-5F(FH)□-6T		4								
VSP-LFC10-10F(FH)□-4T		2.5	78.6 (76.8)		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	34 (33)
VSP-LFC10-10F(FH)□-6T		4								
VSP-LFC10-15F(FH)□-4T		2.5	88.6 (86.8)		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	36 (35)
VSP-LFC10-15F(FH)□-6T		4								
VSP-LFC10-20F(FH)□-4T		2.5	98.6 (96.8)		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	38 (37)
VSP-LFC10-20F(FH)□-6T		4								
VSP-LFC15-2F(FH)□-4T	15	2.5	62.6 (60.8)		21.5	26	34	2	1.3 to 1.8	31 (30)
VSP-LFC15-2F(FH)□-6T		4								
VSP-LFC15-5F(FH)□-4T		2.5	68.6 (66.8)		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	33 (32)
VSP-LFC15-5F(FH)□-6T		4								
VSP-LFC15-10F(FH)□-4T		2.5	78.6 (76.8)		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	35 (34)
VSP-LFC15-10F(FH)□-6T		4								
VSP-LFC15-15F(FH)□-4T		2.5	88.6 (86.8)		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	37 (36)
VSP-LFC15-15F(FH)□-6T		4								
VSP-LFC15-20F(FH)□-4T		2.5	98.6 (96.8)		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	39 (38)
VSP-LFC15-20F(FH)□-6T		4								
VSP-LFC20-5F(FH)□-4T	20	2.5	76.5 (71.7)	14.3 (9.5)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	70 (60)
VSP-LFC20-5F(FH)□-6T		4								
VSP-LFC20-10F(FH)□-4T		2.5	86.5 (81.7)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	72 (62)
VSP-LFC20-10F(FH)□-6T		4								
VSP-LFC20-15F(FH)□-4T		2.5	96.5 (91.7)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	75 (65)
VSP-LFC20-15F(FH)□-6T		4								
VSP-LFC20-20F(FH)□-4T		2.5	106.5 (101.7)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	78 (68)
VSP-LFC20-20F(FH)□-6T		4								
VSP-LFC25-5F(FH)□-4T	25	2.5	76.5 (71.7)	14.3 (9.5)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	71 (61)
VSP-LFC25-5F(FH)□-6T		4								
VSP-LFC25-10F(FH)□-4T		2.5	86.5 (81.7)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	73 (63)
VSP-LFC25-10F(FH)□-6T		4								
VSP-LFC25-15F(FH)□-4T		2.5	96.5 (91.7)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	76 (76)
VSP-LFC25-15F(FH)□-6T		4								
VSP-LFC25-20F(FH)□-4T		2.5	106.5 (101.7)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	79 (69)
VSP-LFC25-20F(FH)□-6T		4								
VSP-LFC30-5F(FH)□-4T	30	2.5	76.5 (71.7)	14.3 (9.5)	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	73 (62)
VSP-LFC30-5F(FH)□-6T		4								
VSP-LFC30-10F(FH)□-4T		2.5	86.5 (81.7)		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	75 (64)
VSP-LFC30-10F(FH)□-6T		4								
VSP-LFC30-15F(FH)□-4T		2.5	96.5 (91.7)		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	78 (67)
VSP-LFC30-15F(FH)□-6T		4								
VSP-LFC30-20F(FH)□-4T		2.5	106.5 (101.7)		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	81 (70)
VSP-LFC30-20F(FH)□-6T		4								

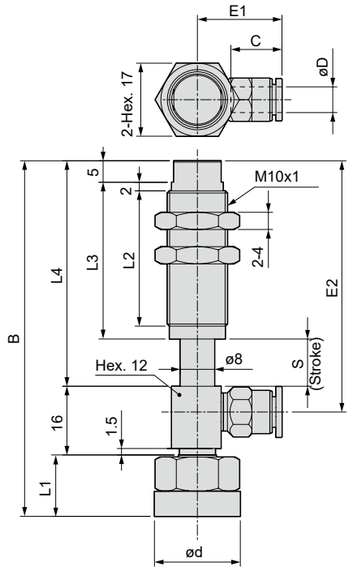
*1: Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.
*2: Figures in [ ] indicate load for the Low Load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Push-in fitting)

●VSP-LFD10, 15-□F(FH)□-4



●VSP-LFD20 to 30-□F(FH)□-4/6



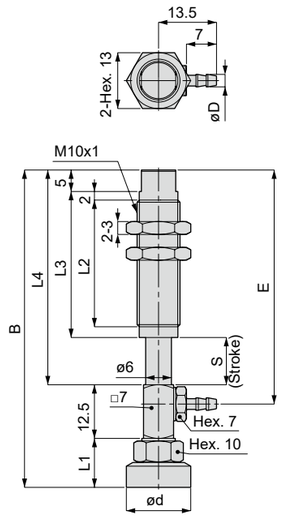
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5F(FH)□-4	10	4	63.9 (62.1)	11.4 (9.6)	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	30 (29)
VSP-LFD10-10F(FH)□-4			73.9 (72.1)		29.5	34	50			54.5	10	1.3 to 3.3	32 (31)
VSP-LFD10-15F(FH)□-4			83.9 (82.1)		34.5	39	60			64.5	15	1.3 to 4.2	34 (33)
VSP-LFD10-20F(FH)□-4			93.9 (92.1)		39.5	44	70			74.5	20	1.3 to 5.1	36 (35)
VSP-LFD15-5F(FH)□-4	15	4	63.9 (62.1)	11.4 (9.6)	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	31 (30)
VSP-LFD15-10F(FH)□-4			73.9 (72.1)		29.5	34	50			54.5	10	1.3 to 3.3	33 (32)
VSP-LFD15-15F(FH)□-4			83.9 (82.1)		34.5	39	60			64.5	15	1.3 to 4.2	35 (34)
VSP-LFD15-20F(FH)□-4			93.9 (92.1)		39.5	44	70			74.5	20	1.3 to 5.1	37 (36)
VSP-LFD20-5F(FH)□-4	20	4	72.8 (68)	14.3 (9.5)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	76 (66)
VSP-LFD20-5F(FH)□-6								11.9	19.7				77 (67)
VSP-LFD20-10F(FH)□-4			82.8 (78)		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	80 (70)
VSP-LFD20-10F(FH)□-6								11.9	19.7				81 (71)
VSP-LFD20-15F(FH)□-4			92.8 (88)		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	84 (74)
VSP-LFD20-15F(FH)□-6								11.9	19.7				85 (75)
VSP-LFD20-20F(FH)□-4			102.8 (98)		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	88 (78)
VSP-LFD20-20F(FH)□-6								11.9	19.7				89 (79)
VSP-LFD25-5F(FH)□-4	25	4	72.8 (68)	14.3 (9.5)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	77 (67)
VSP-LFD25-5F(FH)□-6								11.9	19.7				78 (68)
VSP-LFD25-10F(FH)□-4			82.8 (78)		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	81 (71)
VSP-LFD25-10F(FH)□-6								11.9	19.7				82 (72)
VSP-LFD25-15F(FH)□-4			92.8 (88)		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	85 (75)
VSP-LFD25-15F(FH)□-6								11.9	19.7				86 (76)
VSP-LFD25-20F(FH)□-4			102.8 (98)		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	89 (79)
VSP-LFD25-20F(FH)□-6								11.9	19.7				90 (80)
VSP-LFD30-5F(FH)□-4	30	4	72.8 (68)	14.3 (9.5)	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	79 (68)
VSP-LFD30-5F(FH)□-6								11.9	19.7				80 (69)
VSP-LFD30-10F(FH)□-4			82.8 (78)		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	83 (72)
VSP-LFD30-10F(FH)□-6								11.9	19.7				84 (73)
VSP-LFD30-15F(FH)□-4			92.8 (88)		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	87 (76)
VSP-LFD30-15F(FH)□-6								11.9	19.7				88 (77)
VSP-LFD30-20F(FH)□-4			102.8 (98)		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	91 (80)
VSP-LFD30-20F(FH)□-6								11.9	19.7				92 (81)

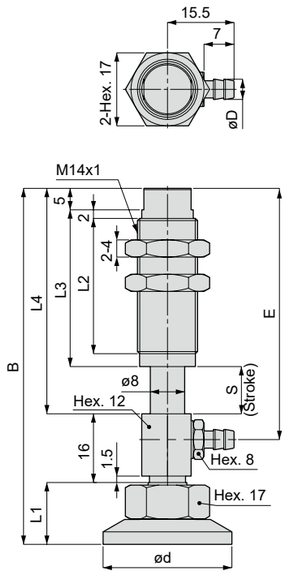
* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Barb Fitting)

●VSP-LFD10, 15-□F(FH)□-4T/6T



●VSP-LFD20 to 30-□F(FH)□-4T/6T



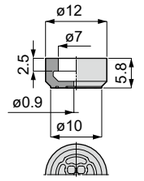
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5F(FH)□-4T	10	2.5	63.9 (62.1)	11.4 (9.6)	24.5	29	40	44.5	5	1.3 to 2.4	29 (28)
VSP-LFD10-5F(FH)□-6T		4									
VSP-LFD10-10F(FH)□-4T		2.5	73.9 (72.1)		29.5	34	50	54.5	10	1.3 to 3.3	31 (30)
VSP-LFD10-10F(FH)□-6T		4									
VSP-LFD10-15F(FH)□-4T		2.5	83.9 (82.1)		34.5	39	60	64.5	15	1.3 to 4.2	33 (32)
VSP-LFD10-15F(FH)□-6T		4									
VSP-LFD10-20F(FH)□-4T		2.5	93.9 (92.1)		39.5	44	70	74.5	20	1.3 to 5.1	35 (34)
VSP-LFD10-20F(FH)□-6T		4									
VSP-LFD15-5F(FH)□-4T	15	2.5	63.9 (62.1)	11.4 (9.6)	24.5	29	40	44.5	5	1.3 to 2.4	30 (29)
VSP-LFD15-5F(FH)□-6T		4									
VSP-LFD15-10F(FH)□-4T		2.5	73.9 (72.1)		29.5	34	50	54.5	10	1.3 to 3.3	32 (31)
VSP-LFD15-10F(FH)□-6T		4									
VSP-LFD15-15F(FH)□-4T		2.5	83.9 (82.1)		34.5	39	60	64.5	15	1.3 to 4.2	34 (33)
VSP-LFD15-15F(FH)□-6T		4									
VSP-LFD15-20F(FH)□-4T		2.5	93.9 (92.1)		39.5	44	70	74.5	20	1.3 to 5.1	36 (35)
VSP-LFD15-20F(FH)□-6T		4									
VSP-LFD20-5F(FH)□-4T	20	2.5	72.8 (68)	14.3 (9.5)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	72 (62)
VSP-LFD20-5F(FH)□-6T		4									
VSP-LFD20-10F(FH)□-4T		2.5	82.8 (78)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	75 (65)
VSP-LFD20-10F(FH)□-6T		4									
VSP-LFD20-15F(FH)□-4T		2.5	92.8 (88)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	79 (69)
VSP-LFD20-15F(FH)□-6T		4									
VSP-LFD20-20F(FH)□-4T		2.5	102.8 (98)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	83 (73)
VSP-LFD20-20F(FH)□-6T		4									
VSP-LFD25-5F(FH)□-4T	25	2.5	72.8 (68)	14.3 (9.5)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	73 (63)
VSP-LFD25-5F(FH)□-6T		4									
VSP-LFD25-10F(FH)□-4T		2.5	82.8 (78)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	76 (66)
VSP-LFD25-10F(FH)□-6T		4									
VSP-LFD25-15F(FH)□-4T		2.5	92.8 (88)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	80 (70)
VSP-LFD25-15F(FH)□-6T		4									
VSP-LFD25-20F(FH)□-4T		2.5	102.8 (98)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	84 (74)
VSP-LFD25-20F(FH)□-6T		4									
VSP-LFD30-5F(FH)□-4T	30	2.5	72.8 (68)	14.3 (9.5)	26.5	31.5	42.5	48.5	5	4.5 to 6.5	75 (64)
VSP-LFD30-5F(FH)□-6T		4									
VSP-LFD30-10F(FH)□-4T		2.5	82.8 (78)		31.5	36.5	52.5	58.5	10	4.5 to 8.2	78 (67)
VSP-LFD30-10F(FH)□-6T		4									
VSP-LFD30-15F(FH)□-4T		2.5	92.8 (88)		36.5	41.5	62.5	68.5	15	4.5 to 9.9	82 (71)
VSP-LFD30-15F(FH)□-6T		4									
VSP-LFD30-20F(FH)□-4T		2.5	102.8 (98)		41.5	46.5	72.5	78.5	20	4.5 to 14.9	86 (75)
VSP-LFD30-20F(FH)□-6T		4									

* Figures in ( ) indicate dimensions for the Flat Increased Suction Flow Rate-type.

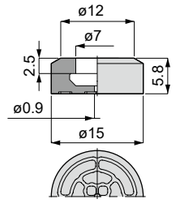
Pad Rubber Only External Dimension Diagram (Flat)

●VSPG-10F□



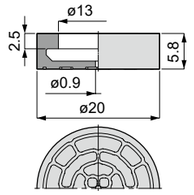
Weight: 0.6 g [0.9 g]

●VSPG-15F□



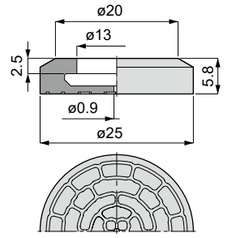
Weight: 1.1 g [1.7 g]

●VSPG-20F□



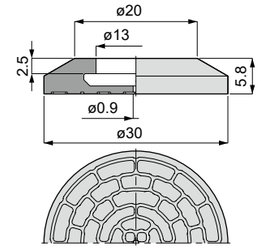
Weight: 1.4 g [2.3 g]

●VSPG-25F□



Weight: 2.6 g [4.1 g]

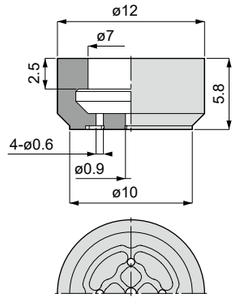
●VSPG-30F□



Weight: 3.5 g [5.1 g]

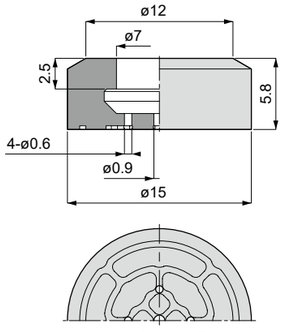
Pad Rubber Only External Dimension Diagram (Flat Increased Suction Flow RatE-type)

●VSPG-10FH□



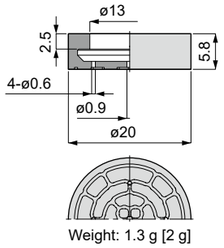
Weight: 0.5 g [0.8 g]

●VSPG-15FH□



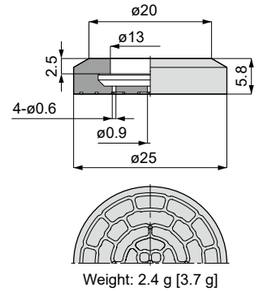
Weight: 1 g [1.5 g]

●VSPG-20FH□



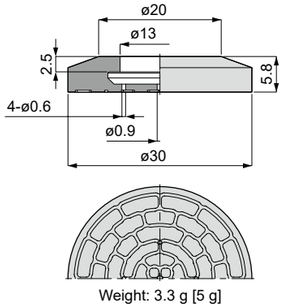
Weight: 1.3 g [2 g]

●VSPG-25FH□



Weight: 2.4 g [3.7 g]

●VSPG-30FH□

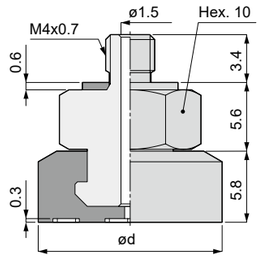


Weight: 3.3 g [5 g]

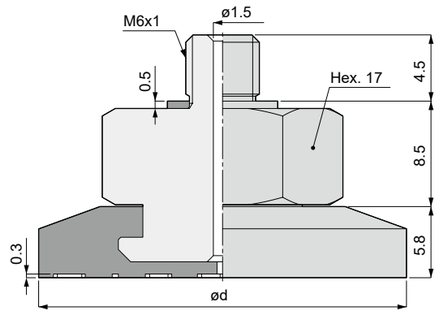
Weight: Values in [ ] are for fluororubber only.

Pad Rubber + Set with Fixing Screw External Dimension Diagram (Flat)

●VSPG-10, 15F□A



●VSPG-20 to 30F□A

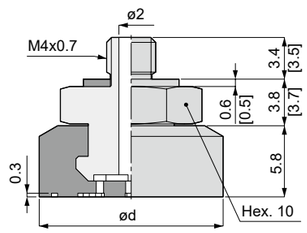


Unit: mm

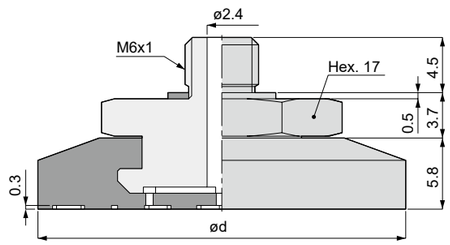
Model No.	Pad Diameter ød	Weight (g)
VSPG-10F□A	10	5.6 [5.9]
VSPG-15F□A	15	6.1 [6.7]
VSPG-20F□A	20	23.4 [24.3]
VSPG-25F□A	25	24.6 [26.1]
VSPG-30F□A	30	25.5 [27.1]

Pad Rubber + Set with Fixing Screw External Dimension Diagram (Flat Increased Suction Flow RatE-type)

●VSPG-10, 15FH□A



●VSPG-20 to 30FH□A



Unit: mm

Model No.	Pad Diameter ød	Weight (g)
VSPG-10FH□A	10	4.3 [4.6]
VSPG-15FH□A	15	4.8 [5.3]
VSPG-20FH□A	20	13.3 [14]
VSPG-25FH□A	25	14.4 [15.7]
VSPG-30FH□A	30	15.3 [17]

Weight: Values in [ ] are for fluororubber only.

MEMO

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad, Flat Type / Flat Increased Suction Flow Rate-type, VSP-□F□, □FH□ Series

Design / Selection

Caution

Flat types may have difficulty adsorbing breathable workpieces or workpieces that deform easily under their own weight during suction. When using, please select after conducting actual suction tests.

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad, Suction Mark Prevention Type

VSP-□Q□ Series

Suction pad using resin material for the pad, resistant to suction marks.

RoHS

Ideal for transporting liquid crystal glass, in painting processes, and for semiconductor manufacturing equipment.

Abundant holder variations

Shape	16 types

- Standard.... 5 types
- Compact... Class 4
- Low dust generation ..... 2 types
- Lightweight ... 3 types
- Low back 2 types

Piping Connection	5 types

- Push-in fitting (ø1.8 to ø6) ..... 3 types
- Barbed fitting (M3, M5).... 2 types

Stroke	11 types

2 mm to 50 mm
(Depends on pad diameter, holder)

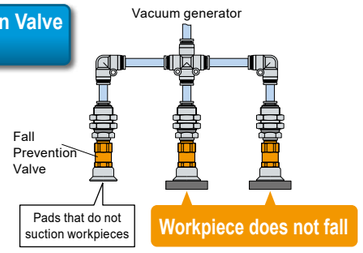
Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

Flexible holder and resin pad allow suction of inclined workpieces.

Workpiece release properties during vacuum breaking are also good.

Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

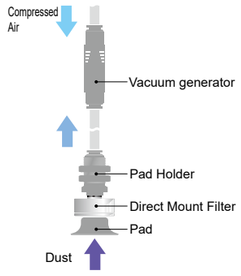
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²



Adopts resin pads, preventing rubber material transfer that causes suction marks.

3 types of resin materials available for the pad part. Easily replaceable without removing the main body using a spanner and hexagon wrench.

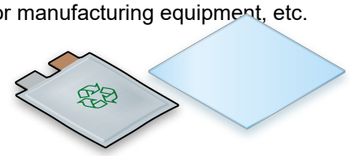
	K	M	KE
Material	PEEK	POM	Conductive PEEK
Features	Excellent chemical resistance and heat resistance, also high mechanical strength. Ideal for liquid crystal/semiconductor manufacturing equipment.	Good wear resistance, self-lubricating properties, and excellent cost balance. Applicable to various manufacturing lines such as food-related and packaging machinery.	In addition to PEEK's material properties, it has conductivity and dissipates static electricity. Also applicable to electronic component manufacturing equipment.

Pad Shape

Standardly equipped with a flexible holder, allowing suction of inclined workpieces.

Recommended Workpiece

Ideal for liquid crystal glass, painting processes, semiconductor manufacturing equipment, etc.



Pad Diameter

3 types	10	20	30

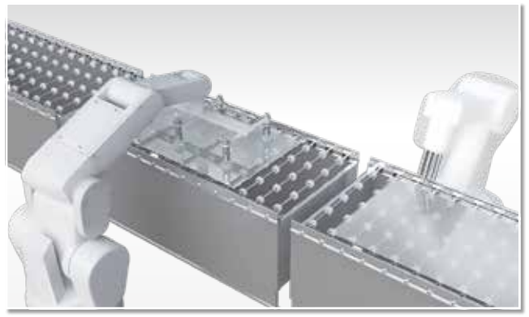
Pad Material

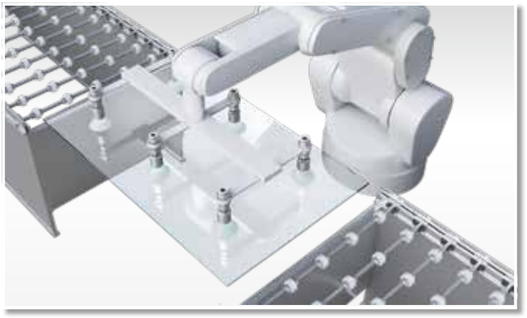
3 types	PEEK	POM	Conductive PEEK

Solution Examples

Workpieces sensitive to suction marks

Hard pads using resin instead of rubber allow handling of glass substrates, solar cells, etc., without leaving suction marks.





Model No. Notation

●Suction Mark Prevention Type

Suction Pad

VSP	C	10	-20	Q	K	4		V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❼ Connection Port Shape	❽ Buffer Load	❾ Drop Prevention Valve	❿ Direct Mount Filter

Resin Pad Only

VSPG	10	Q	K	RP
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	❻ Flexible Holder

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side ,Direction	B	
	Compact		MB	
	Low Profile		HE	
	Low Profile	Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side ,Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
	Lightweight	Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
10	ø10
20	ø20
30	ø30

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●				Blank	*1, *2
Stroke 2 mm				●		-2	*3
Stroke 5 mm				●	●	-5	
Stroke 10 mm	●	●	●	●	●	-10	
Stroke 15 mm	●	●	●	●	●	-15	
Stroke 20 mm	●	●	●	●	●	-20	
Stroke 25 mm			●			-25	
Stroke 30 mm	●	●	●			-30	
Stroke 40 mm	●	●	●			-40	
Stroke 50 mm	●	●	●			-50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 10, -2 can be selected for ❸.

❹ Pad Shape

Code	Content	
Q	Suction Mark Prevention Type	

❺ Pad Material

Code	Content	
K	PEEK	
M	POM	
KE	Conductive PEEK	

❻ Flexible Holder

Code	Content
Blank	Resin Pad + With Flexible Holder
RP	Resin Pad Only

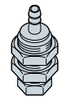
Model No. Notation

Rechargeable Battery Compatible Specification (Catalog No. CC-1226AA)

●Design compatible with rechargeable battery manufacturing process

VSP – ..... – P4□

❼ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8, Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4, Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6, Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø4, Push-in fitting, without spring cover			●	●												4C	
ø6, Push-in fitting, without spring cover			●	●												6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●												4TC	
ø6, Barb fitting, without spring cover			●	●												6TC	

*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for (7). Additionally, for (3) Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❼.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❽ Buffer Load

Code	Content	
Blank	Standard Load or No Buffer	*1 *2
L	Low Load (1/4 of Standard Load)	

*1: For ❶ Holder Shape other than LFC, ❽ is 'Blank'.
*2: For ❸ Stroke Option -2, ❽ is 'Blank'.

❾ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*1: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

❿ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	*1

*1 ❿T2 can be selected when ❷ Pad Diameter is 20 or 30.
*2: For dimensions with the direct mount filter, please refer to P. 1064.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

Holder Shape	Pad Diameter	Push-in fitting ø4 4	ø4 4C	ø6 6	ø6 6C	Barb fitting ø4 4T	ø4 4TC	ø6 6T	ø6 6TC
A	ø10			●				●	
	ø20, ø30	●		●		●		●	
B	All sizes	●		●		●		●	
C	All sizes	●	●	●	●	●	●	●	●
D	All sizes	●	●	●	●	●	●	●	●

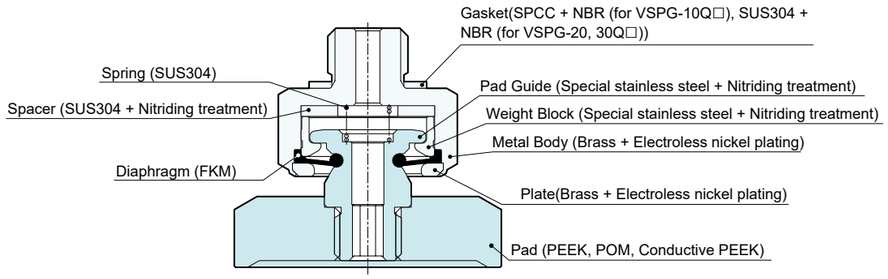
Holder Shape	Pad Diameter	Thread M14	Thread Blank
F	All sizes		●

Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø10		●		●	
	ø20, ø30		●		●	●
MB	All sizes	●	●	●	●	●
MC	All sizes	●	●		●	●
MD	All sizes	●	●	●	●	●
LFC	ø10		●		●	●
	ø20, ø30		●	●	●	●
LFD	ø10		●		●	●
	ø20, ø30		●	●	●	●
HC	All sizes	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

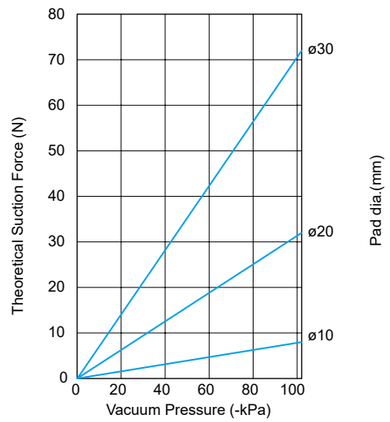
Flexible Holder Part Specifications

Item	Flexible Holder Part
Operating Fluid	Air
Operating Vacuum Pressure	-100 to 0 kPa
Operating Temperature Range	0 to 60°C (No freezing)

Internal Structure Diagram



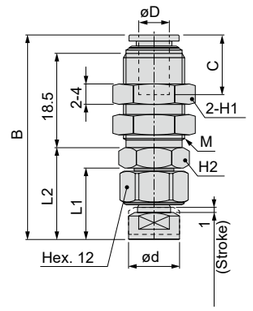
Theoretical Suction Force



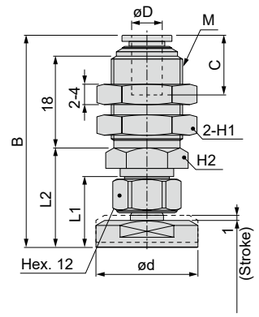
*Theoretical suction force is a value under static conditions. For actual use, apply a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A10Q□-6



●VSP-A20, 30Q□4/6

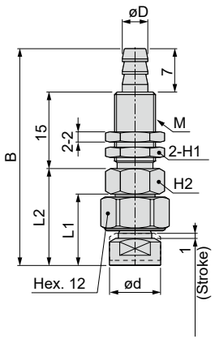


Unit: mm

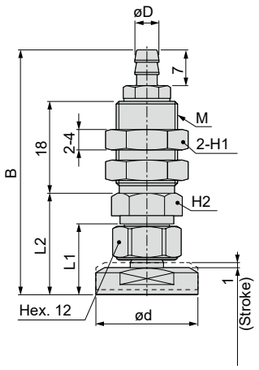
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	Tube End C	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10Q□-6	10	6	M12x1	40.3	14	18	11.9	14	12	27
VSP-A20Q□-4	20	4	M12x1	50.8	13.9	19.9	11.2	14	12	35
VSP-A20Q□-6		6	M14x1	41.8		19.5	11.9	17	14	41
VSP-A30Q□-4	30	4	M12x1	50.8	13.9	19.9	11.2	14	12	39
VSP-A30Q□-6		6	M14x1	41.8		19.5	11.9	17	14	45

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A10Q□-6T



●VSP-A20, 30Q□-4T/6T

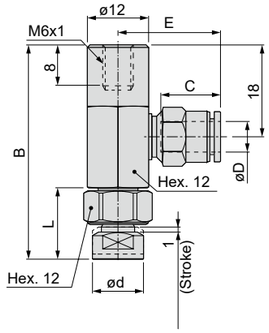


Unit: mm

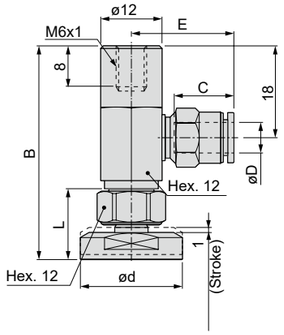
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	Width Across Flats H1	Width Across Flats H2	Weight (g)
VSP-A10Q□-6T	10	6	M8x0.75	41	14	19	10	10	17
VSP-A20Q□-4T	20	4	M12x1	47.9	13.9	19.9	14	12	34
VSP-A20Q□-6T		6							
VSP-A30Q□-4T	30	4	M12x1	47.9	13.9	19.9	14	12	36
VSP-A30Q□-6T		6							

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B10Q□4/6



●VSP-B20, 30Q□4/6

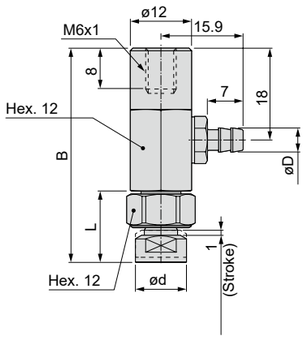


Unit: mm

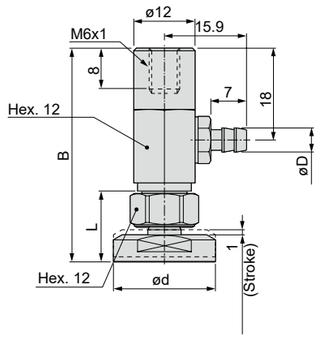
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-B10Q□-4	10	4	42	14	11.2	18.8	35
VSP-B10Q□-6		6			11.9	20.1	36
VSP-B20Q□-4	20	4	41.9	13.9	11.2	18.8	37
VSP-B20Q□-6		6			11.9	20.1	38
VSP-B30Q□-4	30	4	41.9	13.9	11.2	18.8	41
VSP-B30Q□-6		6			11.9	20.1	42

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B10Q□-4T/6T



●VSP-B20, 30Q□-4T/6T

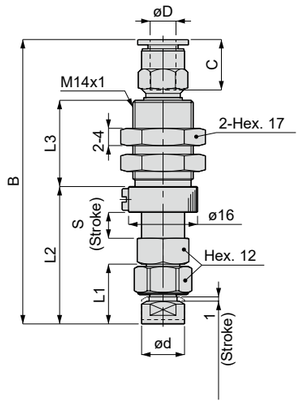


Unit: mm

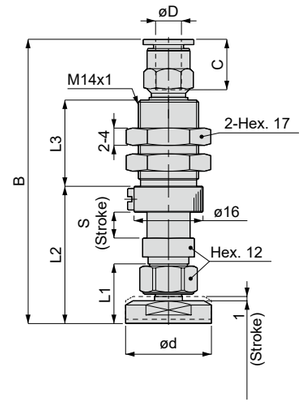
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-B10Q□-4T	10	2.5	42	14	34
VSP-B10Q□-6T		4			
VSP-B20Q□-4T	20	2.5	41.9	13.9	36
VSP-B20Q□-6T		4			
VSP-B30Q□-4T	30	2.5	41.9	13.9	38
VSP-B30Q□-6T		4			

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10Q□4/6
●VSP-C10-□Q□-4/6



●VSP-C20, 30Q□4/6
●VSP-C20, 30-□Q□-4/6

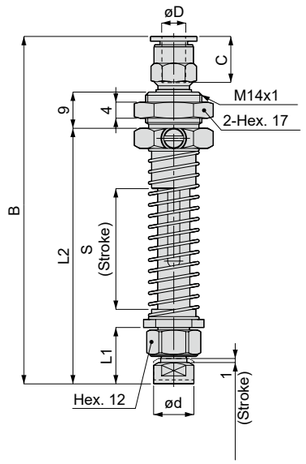


Unit: mm

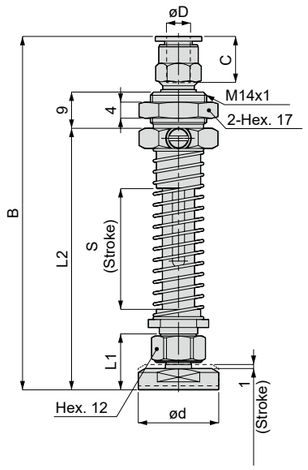
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10Q□-4	10	4	65	14	32	20	11.2	6	4.0 to 7.1	40
VSP-C10Q□-6		6	66.3				11.9			41
VSP-C10-10Q□-4		4	69.5		36.5		11.2	10	2.0 to 5.2	41
VSP-C10-10Q□-6		6	70.8				11.9			42
VSP-C10-15Q□-4		4	79.5		41.5	25	11.2	15	2.0 to 5.9	46
VSP-C10-15Q□-6		6	80.8				11.9			47
VSP-C10-20Q□-4		4	95.5		48.5	34	11.2	20	1.1 to 4.8	54
VSP-C10-20Q□-6		6	96.8				11.9			55
VSP-C20Q□-4	20	4	64.9	13.9	31.9	20	11.2	6	7.0 to 12.6	43
VSP-C20Q□-6		6	66.2				11.9			44
VSP-C20-10Q□-4		4	70.9		37.9		11.2	10	3.3 to 10.0	45
VSP-C20-10Q□-6		6	72.2				11.9			46
VSP-C20-15Q□-4		4	80.9		42.9	25	11.2	15	3.3 to 10.4	50
VSP-C20-15Q□-6		6	82.2				11.9			51
VSP-C20-20Q□-4		4	96.9		49.9	34	11.2	20	2.0 to 8.7	57
VSP-C20-20Q□-6		6	98.2				11.9			58
VSP-C30Q□-4	30	4	64.9	13.9	31.9	20	11.2	6	7.0 to 12.6	47
VSP-C30Q□-6		6	66.2				11.9			48
VSP-C30-10Q□-4		4	70.9		37.9		11.2	10	3.3 to 10.0	49
VSP-C30-10Q□-6		6	72.2				11.9			50
VSP-C30-15Q□-4		4	80.9		42.9	25	11.2	15	3.3 to 10.4	54
VSP-C30-15Q□-6		6	82.2				11.9			55
VSP-C30-20Q□-4		4	96.9		49.9	34	11.2	20	2.0 to 8.7	61
VSP-C30-20Q□-6		6	98.2				11.9			62

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C10-□Q□-4C/6C



●VSP-C20, 30-□Q□-4C/6C

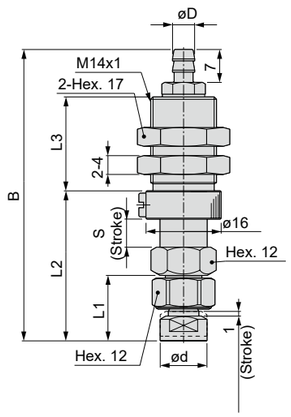


Unit: mm

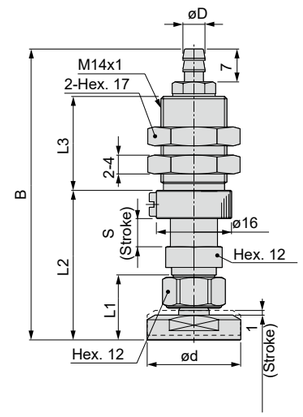
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20Q□-4C	10	4	72.5	14	50.5	11.2	20	1.5 to 4.9	49
VSP-C10-20Q□-6C		6	73.8			11.9			50
VSP-C10-30Q□-4C		4	85.5		63.5	11.2	30	1.1 to 4.8	54
VSP-C10-30Q□-6C		6	86.8			11.9			55
VSP-C10-40Q□-4C		4	98.5		76.5	11.2	40	1.0 to 4.5	59
VSP-C10-40Q□-6C		6	99.8			11.9			60
VSP-C10-50Q□-4C		4	111.5		89.5	11.2	50	0.9 to 4.5	64
VSP-C10-50Q□-6C		6	112.8			11.9			65
VSP-C20-20Q□-4C	20	4	73.9	13.9	51.9	11.2	20	1.5 to 4.9	53
VSP-C20-20Q□-6C		6	75.2			11.9			54
VSP-C20-30Q□-4C		4	86.9		64.9	11.2	30	1.1 to 4.8	58
VSP-C20-30Q□-6C		6	88.2			11.9			59
VSP-C20-40Q□-4C		4	99.9		77.9	11.2	40	1.0 to 4.5	63
VSP-C20-40Q□-6C		6	101.2			11.9			64
VSP-C20-50Q□-4C		4	112.9		90.9	11.2	50	0.9 to 4.5	68
VSP-C20-50Q□-6C		6	114.2			11.9			69
VSP-C30-20Q□-4C	30	4	73.9	13.9	51.9	11.2	20	1.5 to 4.9	57
VSP-C30-20Q□-6C		6	75.2			11.9			58
VSP-C30-30Q□-4C		4	86.9		64.9	11.2	30	1.1 to 4.8	62
VSP-C30-30Q□-6C		6	88.2			11.9			63
VSP-C30-40Q□-4C		4	99.9		77.9	11.2	40	1.0 to 4.5	67
VSP-C30-40Q□-6C		6	101.2			11.9			68
VSP-C30-50Q□-4C		4	112.9		90.9	11.2	50	0.9 to 4.5	72
VSP-C30-50Q□-6C		6	114.2			11.9			73

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C10Q□-4T/6T
●VSP-C10-□Q□-4T/6T



●VSP-C20, 30Q□-4T/6T
●VSP-C20, 30-□Q□-4T/6T

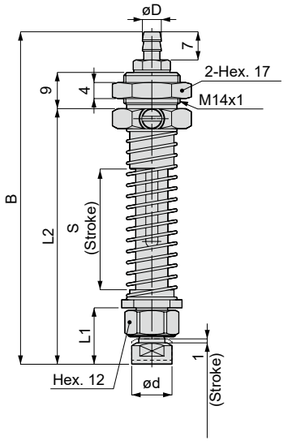


Unit: mm

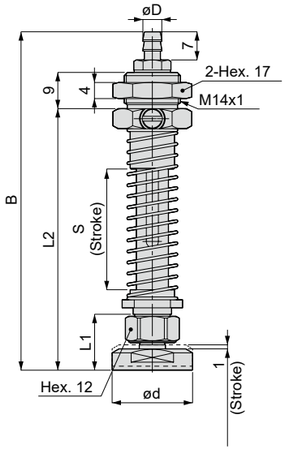
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-C10Q□-4T	10	4	62.1	14	32	20	6	4.0 to 7.1	39
VSP-C10Q□-6T		6							
VSP-C10-10Q□-4T		4	66.6		36.5		10	2.0 to 5.2	40
VSP-C10-10Q□-6T		6							
VSP-C10-15Q□-4T		4	76.6		41.5	25	15	2.0 to 5.9	45
VSP-C10-15Q□-6T		6							
VSP-C10-20Q□-4T		4	92.6		48.5	34	20	1.1 to 4.8	53
VSP-C10-20Q□-6T		6							
VSP-C20Q□-4T	20	4	62	13.9	31.9	20	6	7.0 to 12.6	43
VSP-C20Q□-6T		6							
VSP-C20-10Q□-4T		4	68		37.9		10	3.3 to 10.0	44
VSP-C20-10Q□-6T		6							
VSP-C20-15Q□-4T		4	78		42.9	25	15	3.3 to 10.4	49
VSP-C20-15Q□-6T		6							
VSP-C20-20Q□-4T		4	94		49.9	34	20	2.0 to 8.7	56
VSP-C20-20Q□-6T		6							
VSP-C30Q□-4T	30	4	62	13.9	31.9	20	6	7.0 to 12.6	46
VSP-C30Q□-6T		6							
VSP-C30-10Q□-4T		4	68		37.9		10	3.3 to 10.0	48
VSP-C30-10Q□-6T		6							
VSP-C30-15Q□-4T		4	78		42.9	25	15	3.3 to 10.4	53
VSP-C30-15Q□-6T		6							
VSP-C30-20Q□-4T		4	94		49.9	34	20	1.1 to 4.8	60
VSP-C30-20Q□-6T		6							

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C10-□Q□-4TC/6TC



●VSP-C20, 30-□Q□-4TC/6TC

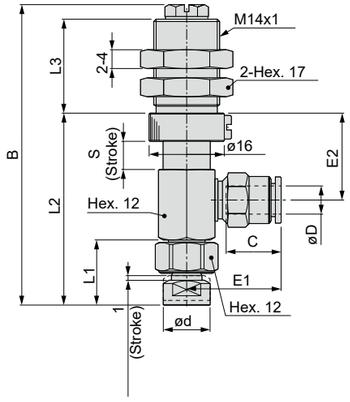


Unit: mm

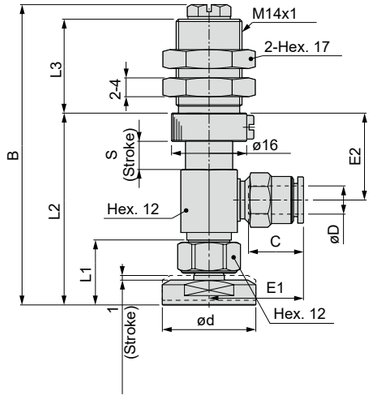
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20Q□-4TC	10	4	69.6	14	50.5	20	1.5 to 4.9	47
VSP-C10-20Q□-6TC		6						
VSP-C10-30Q□-4TC		4	82.6		63.5	30	1.1 to 4.8	53
VSP-C10-30Q□-6TC		6						
VSP-C10-40Q□-4TC		4	95.6		76.5	40	1.0 to 4.5	58
VSP-C10-40Q□-6TC		6						
VSP-C10-50Q□-4TC		4	108.6		89.5	50	0.9 to 4.5	63
VSP-C10-50Q□-6TC		6						
VSP-C20-20Q□-4TC	20	4	71	13.9	51.9	20	1.5 to 4.9	52
VSP-C20-20Q□-6TC		6						
VSP-C20-30Q□-4TC		4	84		64.9	30	1.1 to 4.8	57
VSP-C20-30Q□-6TC		6						
VSP-C20-40Q□-4TC		4	97		77.9	40	1.0 to 4.5	62
VSP-C20-40Q□-6TC		6						
VSP-C20-50Q□-4TC		4	110		90.9	50	0.9 to 4.5	67
VSP-C20-50Q□-6TC		6						
VSP-C30-20Q□-4TC	30	4	71	13.9	51.9	20	1.5 to 4.9	56
VSP-C30-20Q□-6TC		6						
VSP-C30-30Q□-4TC		4	84		64.9	30	1.1 to 4.8	61
VSP-C30-30Q□-6TC		6						
VSP-C30-40Q□-4TC		4	97		77.9	40	1.0 to 4.5	66
VSP-C30-40Q□-6TC		6						
VSP-C30-50Q□-4TC		4	110		90.9	50	0.9 to 4.5	71
VSP-C30-50Q□-6TC		6						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10Q□4/6
●VSP-D10-□Q□-4/6



●VSP-D20, 30Q□4/6
●VSP-D20, 30-□Q□-4/6

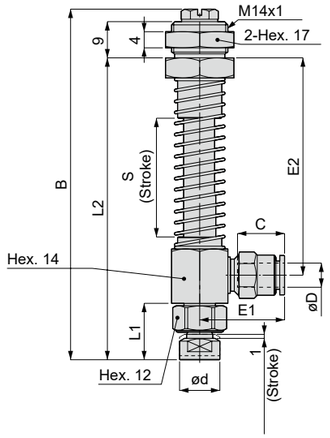


Unit: mm

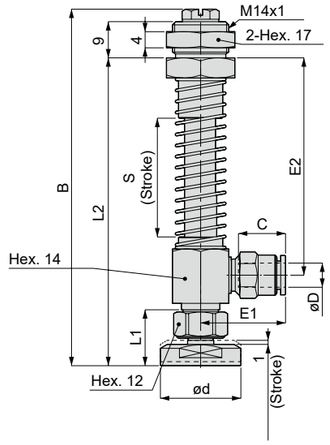
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10Q□-4	10	4	64.1	14	41	20	11.2	18.8	18.5	6	4.0 to 7.1	52
VSP-D10Q□-6		6					11.9	20.1				53
VSP-D10-10Q□-4		4	69.1		46		11.2	18.8	25	10	2.0 to 5.2	55
VSP-D10-10Q□-6		6					11.9	20.1				56
VSP-D10-15Q□-4		4	79.1		51	25	11.2	18.8	30	15	2.0 to 5.9	61
VSP-D10-15Q□-6		6					11.9	20.1				62
VSP-D10-20Q□-4		4	95.1		58	34	11.2	18.8	37	20	1.1 to 4.8	71
VSP-D10-20Q□-6		6					11.9	20.1				72
VSP-D20Q□-4	20	4	64	13.9	40.9	20	11.2	18.8	18.5	6	7.0 to 12.6	55
VSP-D20Q□-6		6					11.9	20.1				56
VSP-D20-10Q□-4		4	70		46.9		11.2	18.8	24.5	10	3.3 to 10.0	58
VSP-D20-10Q□-6		6					11.9	20.1				59
VSP-D20-15Q□-4		4	80		51.9	25	11.2	18.8	29.5	15	3.3 to 10.4	65
VSP-D20-15Q□-6		6					11.9	20.1				66
VSP-D20-20Q□-4		4	96		58.9	34	11.2	18.8	36.5	20	2.0 to 8.7	75
VSP-D20-20Q□-6		6					11.9	20.1				76
VSP-D30Q□-4	30	4	64	13.9	40.9	20	11.2	18.8	18.5	6	7.0 to 12.6	59
VSP-D30Q□-6		6					11.9	20.1				60
VSP-D30-10Q□-4		4	70		46.9		11.2	18.8	24.5	10	3.3 to 10.0	62
VSP-D30-10Q□-6		6					11.9	20.1				63
VSP-D30-15Q□-4		4	80		51.9	25	11.2	18.8	29.5	15	3.3 to 10.4	69
VSP-D30-15Q□-6		6					11.9	20.1				70
VSP-D30-20Q□-4		4	96		58.9	34	11.2	18.8	36.5	20	2.0 to 8.7	79
VSP-D30-20Q□-6		6					11.9	20.1				80

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D10-□Q□-4C/6C



●VSP-D20, 30-□Q□-4C/6C

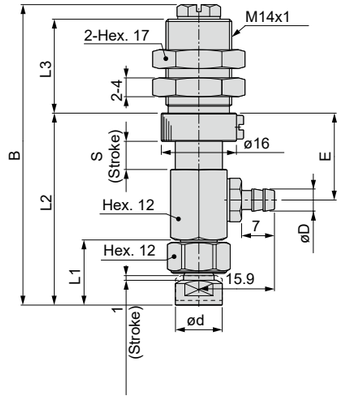


Unit: mm

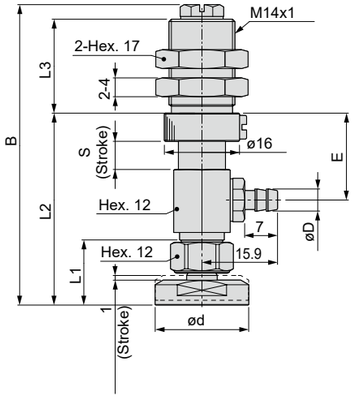
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20Q□-4C	10	4	74.1	14	62	11.2	19.8	40.5	20	1.5 to 4.9	70
VSP-D10-20Q□-6C		6				11.9	21.1				71
VSP-D10-30Q□-4C		4	87.1		75	11.2	19.8	53.5	30	1.1 to 4.8	77
VSP-D10-30Q□-6C		6				11.9	21.1				78
VSP-D10-40Q□-4C		4	100.1		88	11.2	19.8	66.5	40	1.0 to 4.5	83
VSP-D10-40Q□-6C		6				11.9	21.1				84
VSP-D10-50Q□-4C		4	113.1		101	11.2	19.8	79.5	50	0.9 to 4.5	90
VSP-D10-50Q□-6C		6				11.9	21.1				91
VSP-D20-20Q□-4C	20	4	75.5	13.9	63.4	11.2	19.8	41	20	1.5 to 4.9	73
VSP-D20-20Q□-6C		6				11.9	21.1				74
VSP-D20-30Q□-4C		4	88.5		76.4	11.2	19.8	54	30	1.1 to 4.8	80
VSP-D20-30Q□-6C		6				11.9	21.1				81
VSP-D20-40Q□-4C		4	101.5		89.4	11.2	19.8	67	40	1.0 to 4.5	86
VSP-D20-40Q□-6C		6				11.9	21.1				87
VSP-D20-50Q□-4C		4	114.5		102.4	11.2	19.8	80	50	0.9 to 4.5	93
VSP-D20-50Q□-6C		6				11.9	21.1				94
VSP-D30-20Q□-4C	30	4	75.5	13.9	63.4	11.2	19.8	41	20	1.5 to 4.9	77
VSP-D30-20Q□-6C		6				11.9	21.1				78
VSP-D30-30Q□-4C		4	88.5		76.4	11.2	19.8	54	30	1.1 to 4.8	84
VSP-D30-30Q□-6C		6				11.9	21.1				85
VSP-D30-40Q□-4C		4	101.5		89.4	11.2	19.8	67	40	1.0 to 4.5	90
VSP-D30-40Q□-6C		6				11.9	21.1				91
VSP-D30-50Q□-4C		4	114.5		102.4	11.2	19.8	80	50	0.9 to 4.5	97
VSP-D30-50Q□-6C		6				11.9	21.1				98

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10Q□-4T/6T
●VSP-D10-□Q□-4T/-6T



●VSP-D20, 30Q□-4T/6T
●VSP-D20, 30-□Q□-4T/-6T

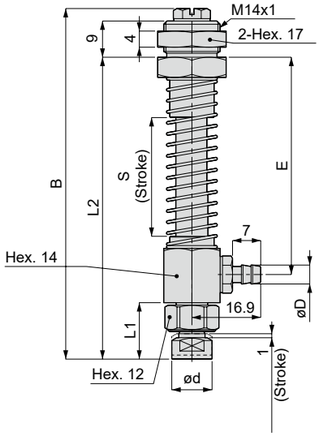


Unit: mm

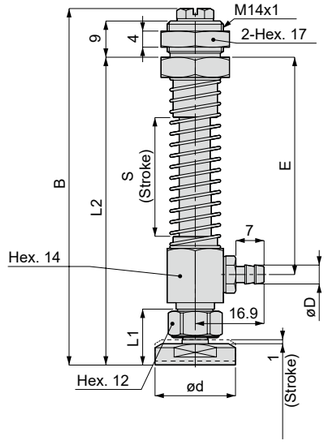
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10Q□-4T	10	2.5	64.1	14	41	20	18.5	6	4.0 to 7.1	51
VSP-D10Q□-6T		4								
VSP-D10-10Q□-4T		2.5	69.1		46		25	10	2.0 to 5.2	56
VSP-D10-10Q□-6T		4								
VSP-D10-15Q□-4T		2.5	79.1		51	25	30	15	2.0 to 5.9	62
VSP-D10-15Q□-6T		4								
VSP-D10-20Q□-4T		2.5	95.1		58	34	37	20	1.1 to 4.8	72
VSP-D10-20Q□-6T		4								
VSP-D20Q□-4T	20	2.5	64	13.9	40.9	20	18.5	6	7.0 to 12.6	53
VSP-D20Q□-6T		4								
VSP-D20-10Q□-4T		2.5	70		46.9		24.5	10	3.3 to 10.0	59
VSP-D20-10Q□-6T		4								
VSP-D20-15Q□-4T		2.5	80		51.9	25	29.5	15	3.3 to 10.4	66
VSP-D20-15Q□-6T		4								
VSP-D20-20Q□-4T		2.5	96		58.9	34	36.5	20	2.0 to 8.7	76
VSP-D20-20Q□-6T		4								
VSP-D30Q□-4T	30	2.5	64	13.9	40.9	20	18.5	6	7.0 to 12.6	57
VSP-D30Q□-6T		4								
VSP-D30-10Q□-4T		2.5	70		46.9		24.5	10	3.3 to 10.0	63
VSP-D30-10Q□-6T		4								
VSP-D30-15Q□-4T		2.5	80		51.9	25	29.5	15	3.3 to 10.4	70
VSP-D30-15Q□-6T		4								
VSP-D30-20Q□-4T		2.5	96		58.9	34	36.5	20	2.0 to 8.7	80
VSP-D30-20Q□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D10-□Q□-4TC/6TC



●VSP-D20, 30-□Q□-4TC/6TC

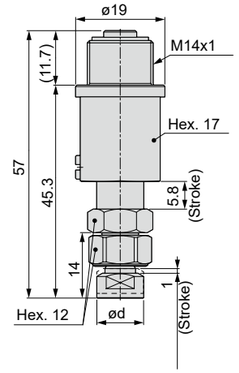


Unit: mm

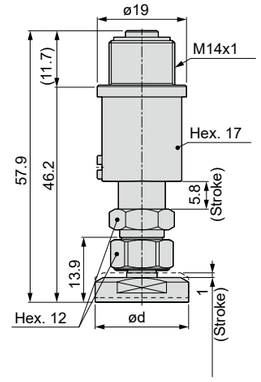
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20Q□-4TC	10	2.5	74.1	14	62	40.5	20	1.5 to 4.9	69
VSP-D10-20Q□-6TC		4							
VSP-D10-30Q□-4TC		2.5	87.1		75	53.5	30	1.1 to 4.8	76
VSP-D10-30Q□-6TC		4							
VSP-D10-40Q□-4TC		2.5	100.1		88	66.5	40	1.0 to 4.5	82
VSP-D10-40Q□-6TC		4							
VSP-D10-50Q□-4TC		2.5	113.1		101	79.5	50	0.9 to 4.5	89
VSP-D10-50Q□-6TC		4							
VSP-D20-20Q□-4TC	20	4	75.5	13.9	63.4	41	20	1.5 to 4.9	72
VSP-D20-20Q□-6TC		6							
VSP-D20-30Q□-4TC		4	88.5		76.4	54	30	1.1 to 4.8	79
VSP-D20-30Q□-6TC		6							
VSP-D20-40Q□-4TC		4	101.5		89.4	67	40	1.0 to 4.5	85
VSP-D20-40Q□-6TC		6							
VSP-D20-50Q□-4TC		4	114.5		102.4	80	50	0.9 to 4.5	92
VSP-D20-50Q□-6TC		6							
VSP-D30-20Q□-4TC	30	4	75.5	13.9	63.4	41	20	1.5 to 4.9	76
VSP-D30-20Q□-6TC		6							
VSP-D30-30Q□-4TC		4	88.5		76.4	54	30	1.1 to 4.8	83
VSP-D30-30Q□-6TC		6							
VSP-D30-40Q□-4TC		4	101.5		89.4	67	40	1.0 to 4.5	89
VSP-D30-40Q□-6TC		6							
VSP-D30-50Q□-4TC		4	114.5		102.4	80	50	0.9 to 4.5	96
VSP-D30-50Q□-6TC		6							

External Dimension Diagram (Direct Mount, Fixed Type, VSP-F, Male Thread)

●VSP-F10Q□



●VSP-F20, 30Q□

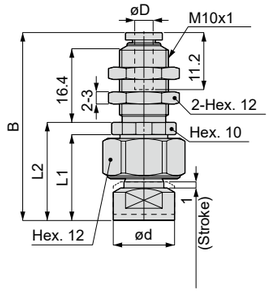


Unit: mm

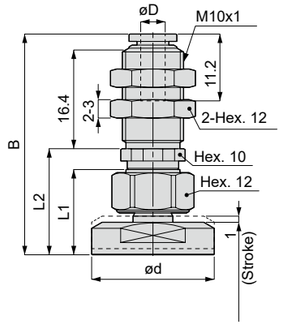
Model No.	Pad Diameter ød	Spring Force (N)	Weight (g)
VSP-F10Q□	10	7.9 to 15	61
VSP-F20Q□	20	7.9 to 15	63
VSP-F30Q□	30	7.9 to 15	67

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA10Q□-4



●VSP-MA20, 30Q□-4

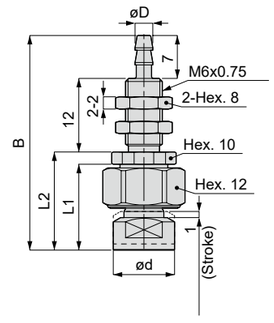


Unit: mm

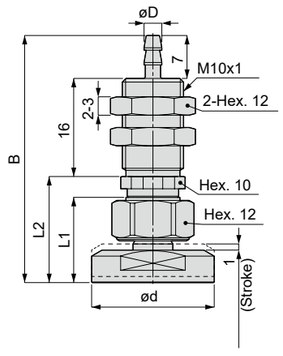
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Weight (g)
VSP-MA10Q□-4	10	4	35	14	16	12
VSP-MA20Q□-4	20	4	36.5	13.9	17.5	16
VSP-MA30Q□-4	30	4	36.5	13.9	17.5	20

External Dimension Diagram (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MA, Barb Fitting)

●VSP-MA10Q□-4T



●VSP-MA20, 30Q□-4T/6T

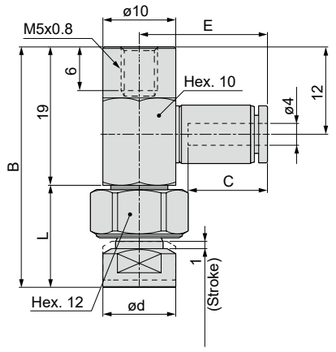


Unit: mm

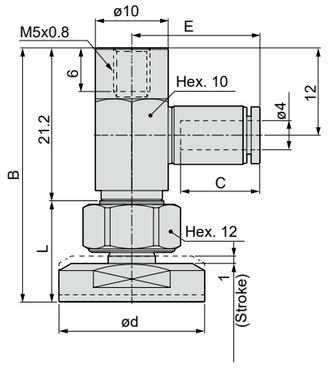
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Weight (g)
VSP-MA10Q□-4T	10	2.5	35	14	16	9.1
VSP-MA20Q□-4T	20	2.5	40.5	13.9	17.5	16
VSP-MA20Q□-6T		4				
VSP-MA30Q□-4T	30	2.5	40.5	13.9	17.5	20
VSP-MA30Q□-6T		4				

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB10Q□-2/4/6



●VSP-MB20, 30Q□-2/4/6

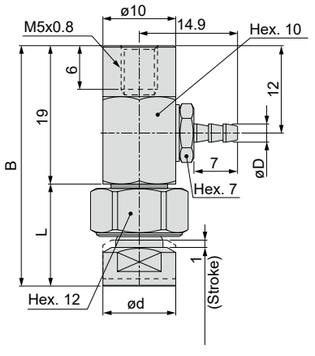


Unit: mm

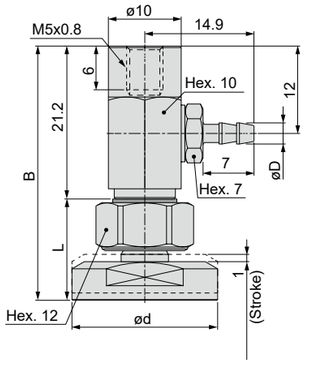
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB10Q□-2	10	1.8	33	14	8.4	13.7	13
VSP-MB10Q□-4		4			11.2	17.8	14
VSP-MB10Q□-6		6			11.9	19.6	15
VSP-MB20Q□-2	20	1.8	35.1	13.9	8.4	13.7	16
VSP-MB20Q□-4		4			11.2	17.8	17
VSP-MB20Q□-6		6			11.9	19.6	18
VSP-MB30Q□-2	30	1.8	35.1	13.9	8.4	13.7	20
VSP-MB30Q□-4		4			11.2	17.8	21
VSP-MB30Q□-6		6			11.9	19.6	22

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB10Q□-4T/6T



●VSP-MB20, 30Q□-4T/6T

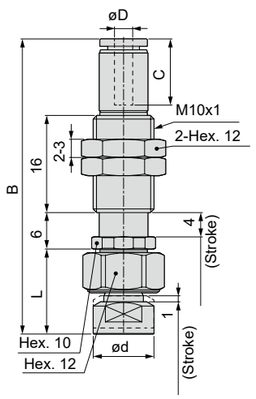


Unit: mm

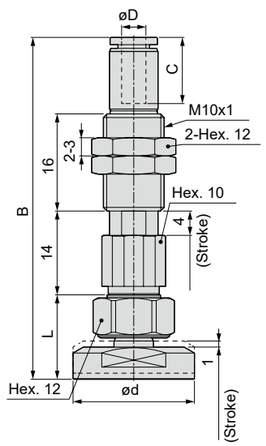
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MB10Q□-4T	10	2.5	33	14	13
VSP-MB10Q□-6T		4			
VSP-MB20Q□-4T	20	2.5	35.1	13.9	16
VSP-MB20Q□-6T		4			
VSP-MB30Q□-4T	30	2.5	35.1	13.9	20
VSP-MB30Q□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC10Q□-2/4



●VSP-MC20, 30Q□-2/4

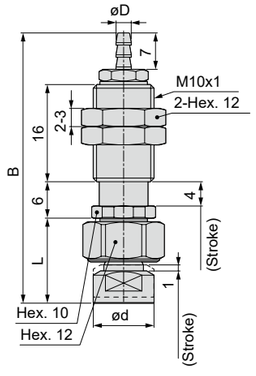


Unit: mm

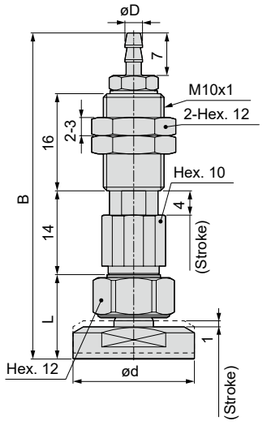
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC10Q□-2	10	1.8	44.9	14	8.4	1 to 1.3	21
VSP-MC10Q□-4		4	49		11.2		22
VSP-MC20Q□-2	20	1.8	52.8	13.9	8.4	1 to 1.3	27
VSP-MC20Q□-4		4	56.9		11.2		28
VSP-MC30Q□-2	30	1.8	52.8	13.9	8.4	1 to 1.3	31
VSP-MC30Q□-4		4	56.9		11.2		32

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC10Q□-4T/6T



●VSP-MC20, 30Q□-4T/6T

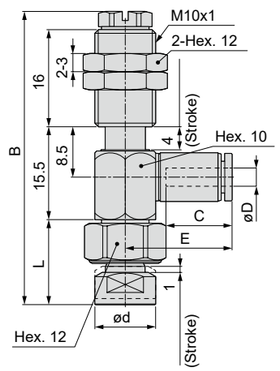


Unit: mm

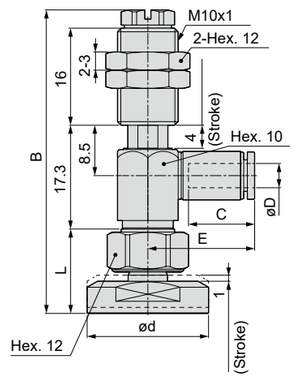
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC10Q□-4T	10	2.5	46.1	14	0.5 to 0.6	20
VSP-MC10Q□-6T		4				
VSP-MC20Q□-4T	20	2.5	53.8	13.9	1 to 1.3	27
VSP-MC20Q□-6T		4				
VSP-MC30Q□-4T	30	2.5	53.8	13.9	1 to 1.3	31
VSP-MC30Q□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD10Q□-2/4/6



●VSP-MD20, 30Q□-2/4/6

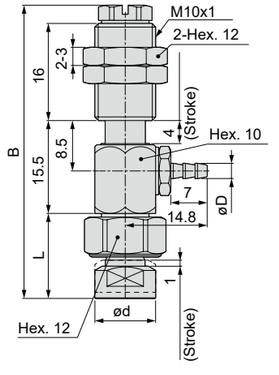


Unit: mm

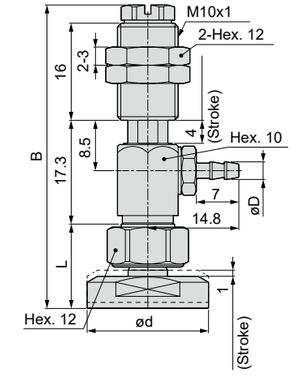
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD10Q□-2	10	1.8	48.5	14	8.4	13.6	1 to 1.3	28
VSP-MD10Q□-4		4			11.2	17.7		29
VSP-MD10Q□-6		6			11.9	19.5		30
VSP-MD20Q□-2	20	1.8	50.2	13.9	8.4	13.6	1 to 1.3	31
VSP-MD20Q□-4		4			11.2	17.7		32
VSP-MD20Q□-6		6			11.9	19.5		33
VSP-MD30Q□-2	30	1.8	50.2	13.9	8.4	13.6	1 to 1.3	35
VSP-MD30Q□-4		4			11.2	17.7		36
VSP-MD30Q□-6		6			11.9	19.5		37

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD10Q□-4T/6T



●VSP-MD20, 30Q□-4T/6T

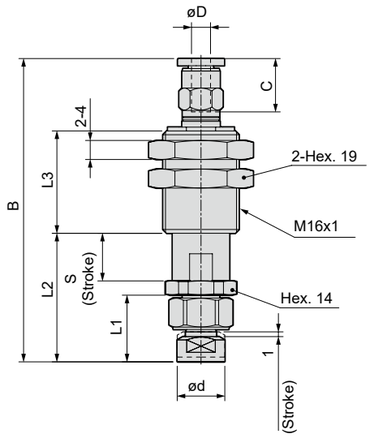


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD10Q□-4T	10	2.5	48.5	14	1 to 1.3	28
VSP-MD10Q□-6T		4				
VSP-MD20Q□-4T	20	2.5	50.2	13.9	1 to 1.3	30
VSP-MD20Q□-6T		4				
VSP-MD30Q□-4T	30	2.5	50.2	13.9	1 to 1.3	34
VSP-MD30Q□-6T		4				

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10-□Q□-2/4/6

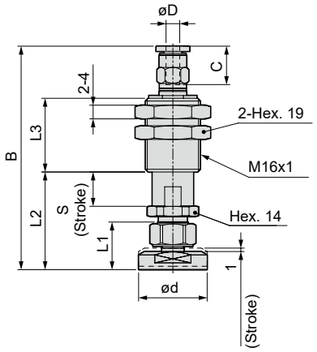


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10Q□-2	10	1.8	59.6	14	27	21.5	8.4	10	1.0 to 2.4	28
VSP-HC10-10Q□-4		4	63.7				11.2			29
VSP-HC10-10Q□-6		6	65				11.9			30
VSP-HC10-15Q□-2		1.8	69.6		32	26.5	8.4	15	1.0 to 2.7	30
VSP-HC10-15Q□-4		4	73.7				11.2			31
VSP-HC10-15Q□-6		6	75				11.9			32
VSP-HC10-20Q□-2		1.8	79.6		37	31.5	8.4	20	1.0 to 3.0	32
VSP-HC10-20Q□-4		4	83.7				11.2			33
VSP-HC10-20Q□-6		6	85				11.9			34
VSP-HC10-25Q□-2		1.8	90.1		42	37	8.4	25		34
VSP-HC10-25Q□-4		4	94.2				11.2			35
VSP-HC10-25Q□-6		6	95.5				11.9			36
VSP-HC10-30Q□-2		1.8	101.1		47	43	8.4	30		36
VSP-HC10-30Q□-4		4	105.2				11.2			37
VSP-HC10-30Q□-6		6	106.5				11.9			38
VSP-HC10-40Q□-2		1.8	123.1		57	55	8.4	40		40
VSP-HC10-40Q□-4		4	127.2				11.2			41
VSP-HC10-40Q□-6		6	128.5				11.9			42
VSP-HC10-50Q□-2		1.8	144.6		67	66.5	8.4	50	1.0 to 3.1	45
VSP-HC10-50Q□-4		4	148.7				11.2			46
VSP-HC10-50Q□-6		6	150				11.9			47

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20, 30-□Q□-2/4/6

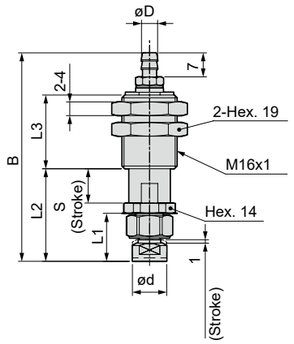


Unit: mm

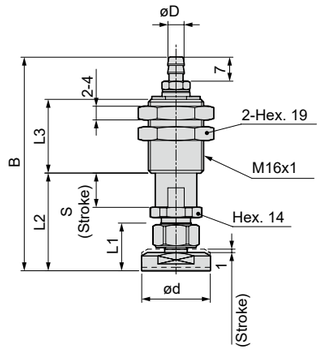
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10Q□-2	20	1.8	61.1	13.9	28.5	21.5	8.4	10	1.0 to 2.4	37
VSP-HC20-10Q□-4		4	65.2				11.2			38
VSP-HC20-10Q□-6		6	66.5				11.9			39
VSP-HC20-15Q□-2		1.8	71.1		33.5	26.5	8.4	15	1.0 to 2.7	39
VSP-HC20-15Q□-4		4	75.2				11.2			40
VSP-HC20-15Q□-6		6	76.5				11.9			41
VSP-HC20-20Q□-2		1.8	81.1		38.5	31.5	8.4	20	1.0 to 3.0	41
VSP-HC20-20Q□-4		4	85.2				11.2			42
VSP-HC20-20Q□-6		6	86.5				11.9			43
VSP-HC20-25Q□-2		1.8	91.6		43.5	37	8.4	25		43
VSP-HC20-25Q□-4		4	95.7				11.2			44
VSP-HC20-25Q□-6		6	97				11.9			45
VSP-HC20-30Q□-2		1.8	102.6		48.5	43	8.4	30		45
VSP-HC20-30Q□-4		4	106.7				11.2			46
VSP-HC20-30Q□-6		6	108				11.9			47
VSP-HC20-40Q□-2		1.8	124.6		58.5	55	8.4	40		49
VSP-HC20-40Q□-4		4	128.7				11.2			50
VSP-HC20-40Q□-6		6	130				11.9			51
VSP-HC20-50Q□-2		1.8	146.1		68.5	66.5	8.4	50	1.0 to 3.1	53
VSP-HC20-50Q□-4		4	150.2				11.2			54
VSP-HC20-50Q□-6		6	151.5				11.9			55
VSP-HC30-10Q□-2	30	1.8	61.1	13.9	28.5	21.5	8.4	10	1.0 to 2.4	47
VSP-HC30-10Q□-4		4	65.2				11.2			48
VSP-HC30-10Q□-6		6	66.5				11.9			49
VSP-HC30-15Q□-2		1.8	71.1		33.5	26.5	8.4	15	1.0 to 2.7	49
VSP-HC30-15Q□-4		4	75.2				11.2			50
VSP-HC30-15Q□-6		6	76.5				11.9			51
VSP-HC30-20Q□-2		1.8	81.1		38.5	31.5	8.4	20	1.0 to 3.0	51
VSP-HC30-20Q□-4		4	85.2				11.2			52
VSP-HC30-20Q□-6		6	86.5				11.9			53
VSP-HC30-25Q□-2		1.8	91.6		43.5	37	8.4	25		53
VSP-HC30-25Q□-4		4	95.7				11.2			54
VSP-HC30-25Q□-6		6	97				11.9			55
VSP-HC30-30Q□-2		1.8	102.6		48.5	43	8.4	30		55
VSP-HC30-30Q□-4		4	106.7				11.2			56
VSP-HC30-30Q□-6		6	108				11.9			57
VSP-HC30-40Q□-2		1.8	124.6		58.5	55	8.4	40		59
VSP-HC30-40Q□-4		4	128.7				11.2			60
VSP-HC30-40Q□-6		6	130				11.9			61
VSP-HC30-50Q□-2		1.8	146.1		68.5	66.5	8.4	50	1.0 to 3.1	63
VSP-HC30-50Q□-4		4	150.2				11.2			64
VSP-HC30-50Q□-6		6	151.5				11.9			65

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10-□Q□-4T/6T



●VSP-HC20, 30-□Q□-4T/6T

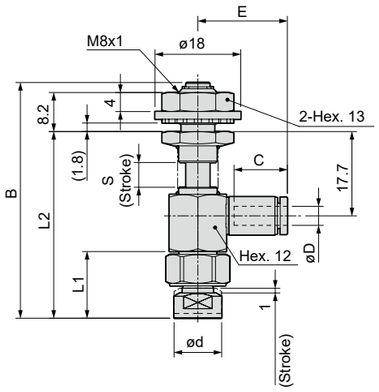


Unit: mm

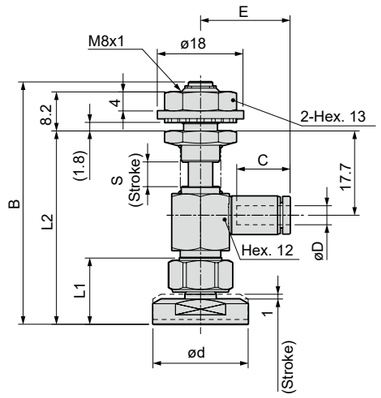
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10Q□-4T	10	2.5	60.8	14	27	21.5	10	1.0 to 2.4	27
VSP-HC10-10Q□-6T		4							
VSP-HC10-15Q□-4T		2.5	70.8		32	26.5	15	1.0 to 2.7	29
VSP-HC10-15Q□-6T		4							
VSP-HC10-20Q□-4T		2.5	80.8		37	31.5	20	1.0 to 3.0	31
VSP-HC10-20Q□-6T		4							
VSP-HC10-25Q□-4T		2.5	91.3		42	37	25		34
VSP-HC10-25Q□-6T		4							
VSP-HC10-30Q□-4T		2.5	102.3		47	43	30		36
VSP-HC10-30Q□-6T		4							
VSP-HC10-40Q□-4T		2.5	124.3		57	55	40		40
VSP-HC10-40Q□-6T		4							
VSP-HC10-50Q□-4T		2.5	145.8		67	66.5	50	1.0 to 3.1	44
VSP-HC10-50Q□-6T		4							
VSP-HC20-10Q□-4T	20	2.5	62.3	13.9	28.5	21.5	10	1.0 to 2.4	36
VSP-HC20-10Q□-6T		4							
VSP-HC20-15Q□-4T		2.5	72.3		33.5	26.5	15	1.0 to 2.7	38
VSP-HC20-15Q□-6T		4							
VSP-HC20-20Q□-4T		2.5	82.3		38.5	31.5	20	1.0 to 3.0	48
VSP-HC20-20Q□-6T		4							
VSP-HC20-25Q□-4T		2.5	92.8		43.5	37	25		51
VSP-HC20-25Q□-6T		4							
VSP-HC20-30Q□-4T		2.5	103.8		48.5	43	30		53
VSP-HC20-30Q□-6T		4							
VSP-HC20-40Q□-4T		2.5	125.8		58.5	55	40		57
VSP-HC20-40Q□-6T		4							
VSP-HC20-50Q□-4T		2.5	147.3		68.5	66.5	50	1.0 to 3.1	61
VSP-HC20-50Q□-6T		4							
VSP-HC30-10Q□-4T	30	2.5	62.3	13.9	28.5	21.5	10	1.0 to 2.4	46
VSP-HC30-10Q□-6T		4							
VSP-HC30-15Q□-4T		2.5	72.3		33.5	26.5	15	1.0 to 2.7	48
VSP-HC30-15Q□-6T		4							
VSP-HC30-20Q□-4T		2.5	82.3		38.5	31.5	20	1.0 to 3.0	58
VSP-HC30-20Q□-6T		4							
VSP-HC30-25Q□-4T		2.5	92.8		43.5	37	25		61
VSP-HC30-25Q□-6T		4							
VSP-HC30-30Q□-4T		2.5	103.8		48.5	43	30		63
VSP-HC30-30Q□-6T		4							
VSP-HC30-40Q□-4T		2.5	125.8		58.5	55	40		67
VSP-HC30-40Q□-6T		4							
VSP-HC30-50Q□-4T		2.5	147.3		68.5	66.5	50	1.0 to 3.1	71
VSP-HC30-50Q□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Push-in fitting)

●VSP-HD10Q□-2/4/6



●VSP-HD20, 30Q□-2/4/6

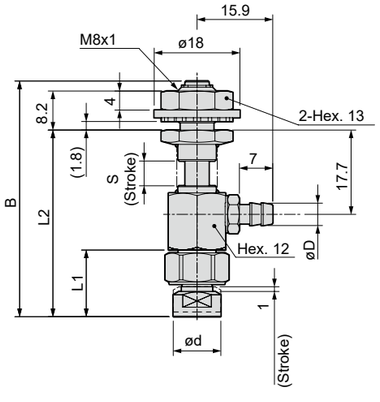


Unit: mm

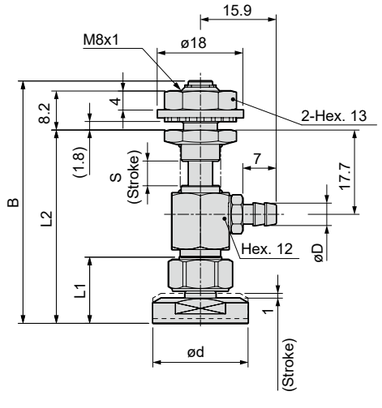
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10Q□-2	10	1.8	49.5	14	39.2	8.4	14.7	5.2	1.6 to 2.9	36
VSP-HD10Q□-4		4				11.2	18.8			37
VSP-HD10Q□-6		6				11.9	20.6			38
VSP-HD20Q□-2	20	1.8	50.9	13.9	40.6	8.4	14.7	5.2	1.6 to 2.9	47
VSP-HD20Q□-4		4				11.2	18.8			48
VSP-HD20Q□-6		6				11.9	20.6			49
VSP-HD30Q□-2	30	1.8	50.9	13.9	40.6	8.4	14.7	5.2	1.6 to 2.9	56
VSP-HD30Q□-4		4				11.2	18.8			57
VSP-HD30Q□-6		6				11.9	20.6			58

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side ,VSP-HD, Barb Fitting)

●VSP-HD10Q□-4T/6T



●VSP-HD20, 30Q□-4T/6T

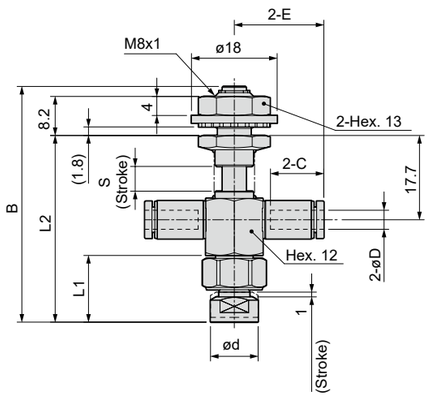


Unit: mm

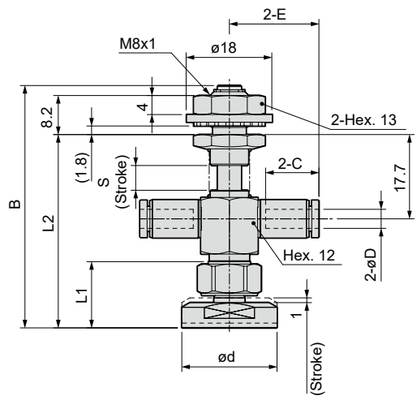
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10Q□-4T	10	2.5	49.5	14	39.2	5.2	1.6 to 2.9	37
VSP-HD10Q□-6T		4						
VSP-HD20Q□-4T	20	2.5	50.9	13.9	40.6	5.2	1.6 to 2.9	46
VSP-HD20Q□-6T		4						
VSP-HD30Q□-4T	30	2.5	50.9	13.9	40.6	5.2	1.6 to 2.9	56
VSP-HD30Q□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Push-in fitting)

●VSP-HDW10Q□-2/4/6



●VSP-HDW20, 30Q□-2/4/6

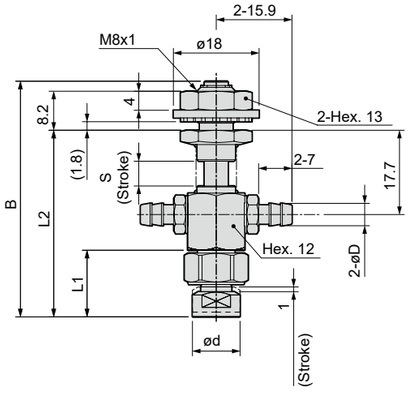


Unit: mm

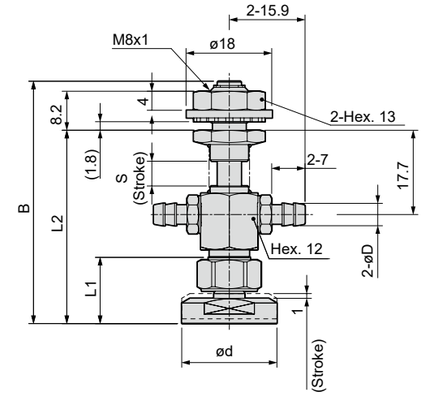
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10Q□-2	10	1.8	49.5	14	39.2	8.4	14.7	5.2	1.6 to 2.9	39
VSP-HDW10Q□-4		4				11.2	18.8			41
VSP-HDW10Q□-6		6				11.9	20.6			43
VSP-HDW20Q□-2	20	1.8	50.9	13.9	40.6	8.4	14.7	5.2	1.6 to 2.9	48
VSP-HDW20Q□-4		4				11.2	18.8			50
VSP-HDW20Q□-6		6				11.9	20.6			52
VSP-HDW30Q□-2	30	1.8	50.9	13.9	40.6	8.4	14.7	5.2	1.6 to 2.9	58
VSP-HDW30Q□-4		4				11.2	18.8			60
VSP-HDW30Q□-6		6				11.9	20.6			62

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Barb Fitting)

●VSP-HDW10Q□-4T/6T



●VSP-HDW20, 30Q□-4T/6T

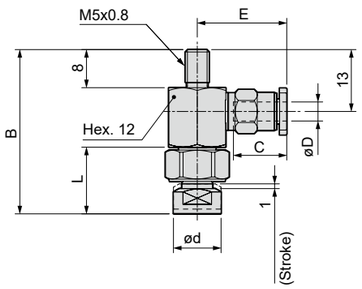


Unit: mm

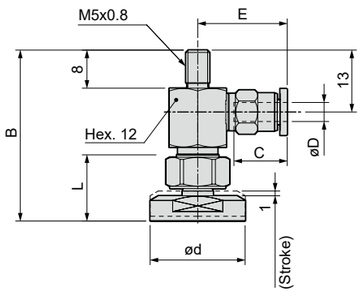
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10Q□-4T	10	2.5	49.5	14	39.2	5.2	1.6 to 2.9	38
VSP-HDW10Q□-6T		4						
VSP-HDW20Q□-4T	20	2.5	50.9	13.9	40.6	5.2	1.6 to 2.9	47
VSP-HDW20Q□-6T		4						
VSP-HDW30Q□-4T	30	2.5	50.9	13.9	40.6	5.2	1.6 to 2.9	57
VSP-HDW30Q□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Push-in fitting)

●VSP-HE10Q□-2/4/6



●VSP-HE20, 30Q□-2/4/6

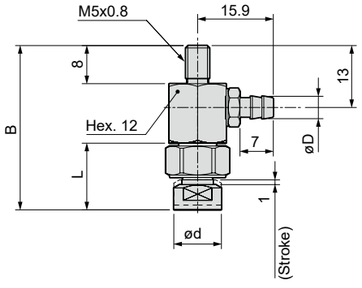


Unit: mm

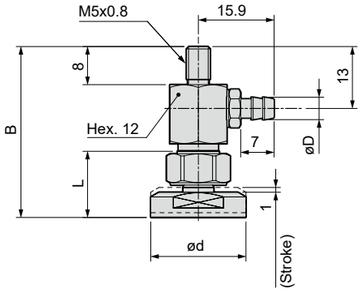
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE10Q□-2	10	1.8	34.5	14	8.4	14.7	23
VSP-HE10Q□-4		4			11.2	18.8	24
VSP-HE10Q□-6		6			11.9	20.6	25
VSP-HE20Q□-2	20	1.8	35.9	13.9	8.4	14.7	31
VSP-HE20Q□-4		4			11.2	18.8	32
VSP-HE20Q□-6		6			11.9	20.6	33
VSP-HE30Q□-2	30	1.8	35.9	13.9	8.4	14.7	41
VSP-HE30Q□-4		4			11.2	18.8	42
VSP-HE30Q□-6		6			11.9	20.6	43

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side ,VSP-HE, Barb Fitting)

●VSP-HE10Q□-4T/6T



●VSP-HE20, 30Q□-4T/6T

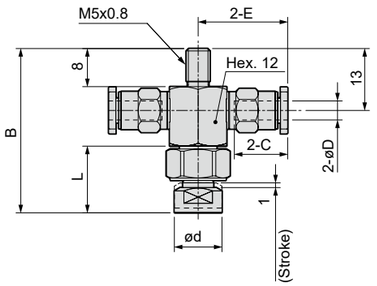


Unit: mm

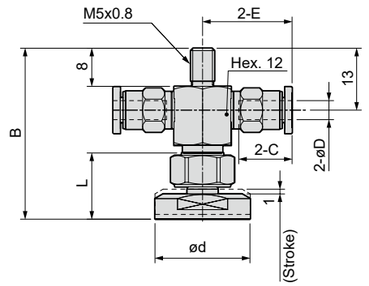
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE10Q□-4T	10	2.5	34.5	14	23
VSP-HE10Q□-6T		4			
VSP-HE20Q□-4T	20	2.5	35.9	13.9	31
VSP-HE20Q□-6T		4			
VSP-HE30Q□-4T	30	2.5	35.9	13.9	41
VSP-HE30Q□-6T		4			

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Push-in fitting)

●VSP-HEW10Q□-2/4/6



●VSP-HEW20, 30Q□-2/4/6

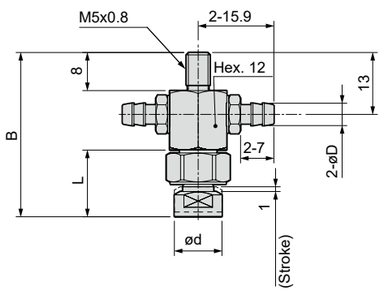


Unit: mm

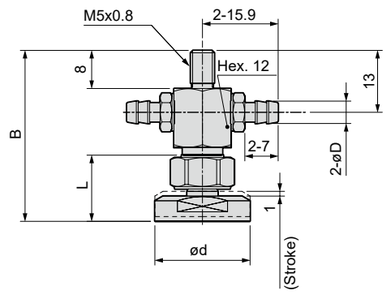
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW10Q□-2	10	1.8	34.5	14	8.4	14.7	25
VSP-HEW10Q□-4		4			11.2	18.8	27
VSP-HEW10Q□-6		6			11.9	20.6	29
VSP-HEW20Q□-2	20	1.8	35.9	13.9	8.4	14.7	33
VSP-HEW20Q□-4		4			11.2	18.8	35
VSP-HEW20Q□-6		6			11.9	20.6	37
VSP-HEW30Q□-2	30	1.8	35.9	13.9	8.4	14.7	43
VSP-HEW30Q□-4		4			11.2	18.8	45
VSP-HEW30Q□-6		6			11.9	20.6	47

External Dimension Diagram (Low Profile, Fixed Type, Vacuum Outlet Both Sides, VSP-HEW, Barb Fitting)

●VSP-HEW10Q□-4T/6T



●VSP-HEW20, 30Q□-4T/6T

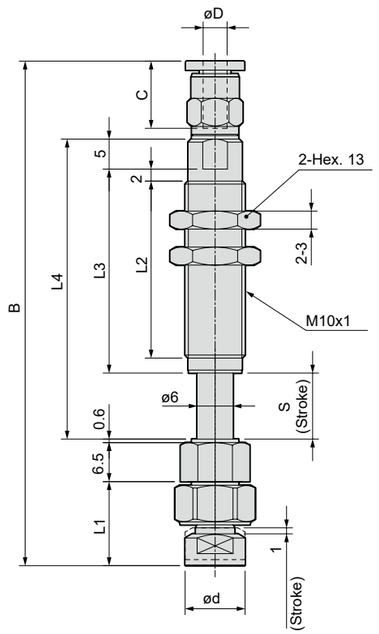


Unit: mm

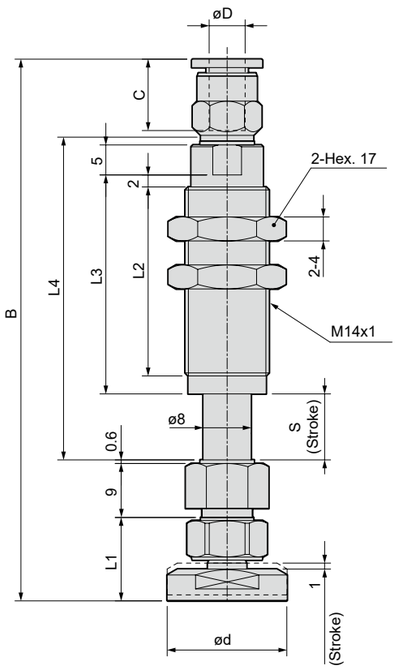
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW10Q□-4T	10	2.5	34.5	14	24
VSP-HEW10Q□-6T		4			
VSP-HEW20Q□-4T	20	2.5	35.9	13.9	32
VSP-HEW20Q□-6T		4			
VSP-HEW30Q□-4T	30	2.5	35.9	13.9	42
VSP-HEW30Q□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC10-□Q□-4



●VSP-LFC20, 30-□Q□-4/6



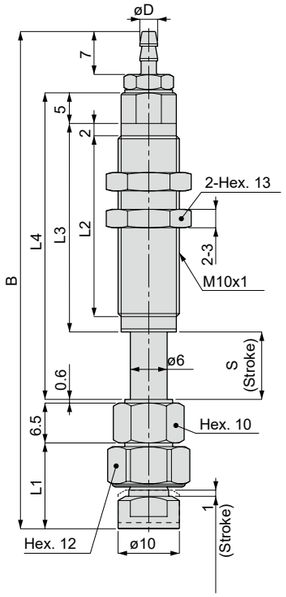
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2Q□-4	10	4	68.1	14	21.5	26	34	11.2	2	1.3 to 1.8	33
VSP-LFC10-5Q□-4			74.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	35
VSP-LFC10-10Q□-4			84.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	37
VSP-LFC10-15Q□-4			94.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	39
VSP-LFC10-20Q□-4			104.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	41
VSP-LFC20-5Q□-4	20	4	79	13.9	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	61
VSP-LFC20-5Q□-6		6	80.3					11.9			62
VSP-LFC20-10Q□-4		4	89		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	63
VSP-LFC20-10Q□-6		6	90.3					11.9			64
VSP-LFC20-15Q□-4		4	99		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	66
VSP-LFC20-15Q□-6		6	100.3					11.9			67
VSP-LFC20-20Q□-4		4	109		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	69
VSP-LFC20-20Q□-6		6	110.3					11.9			70
VSP-LFC30-5Q□-4	30	4	79	13.9	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	65
VSP-LFC30-5Q□-6		6	80.3					11.9			66
VSP-LFC30-10Q□-4		4	89		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	67
VSP-LFC30-10Q□-6		6	90.3					11.9			68
VSP-LFC30-15Q□-4		4	99		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	70
VSP-LFC30-15Q□-6		6	100.3					11.9			71
VSP-LFC30-20Q□-4		4	109		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	73
VSP-LFC30-20Q□-6		6	110.3					11.9			74

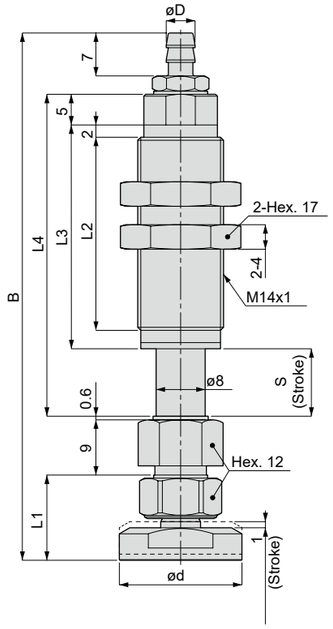
* Values inSide ,brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC10-□Q□-4T/6T



●VSP-LFC20, 30-□Q□-4T/6T



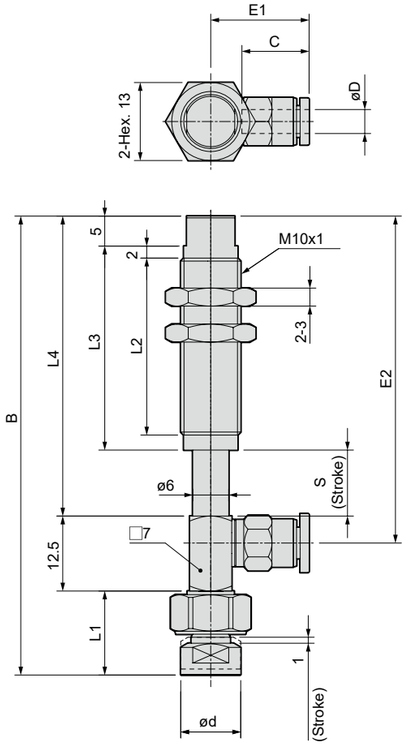
Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2Q□-4T	10	2.5	65.2	14	21.5	26	34	2	1.3 to 1.8	31
VSP-LFC10-2Q□-6T		4								
VSP-LFC10-5Q□-4T		2.5	71.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	33
VSP-LFC10-5Q□-6T		4								
VSP-LFC10-10Q□-4T		2.5	81.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	35
VSP-LFC10-10Q□-6T		4								
VSP-LFC10-15Q□-4T		2.5	91.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	37
VSP-LFC10-15Q□-6T		4								
VSP-LFC10-20Q□-4T		2.5	101.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	39
VSP-LFC10-20Q□-6T		4								
VSP-LFC20-5Q□-4T	20	2.5	76.1	13.9	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	56
VSP-LFC20-5Q□-6T		4								
VSP-LFC20-10Q□-4T		2.5	86.1		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	58
VSP-LFC20-10Q□-6T		4								
VSP-LFC20-15Q□-4T		2.5	96.1		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	61
VSP-LFC20-15Q□-6T		4								
VSP-LFC20-20Q□-4T		2.5	106.1		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	64
VSP-LFC20-20Q□-6T		4								
VSP-LFC30-5Q□-4T	30	2.5	76.1	13.9	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	60
VSP-LFC30-5Q□-6T		4								
VSP-LFC30-10Q□-4T		2.5	86.1		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	62
VSP-LFC30-10Q□-6T		4								
VSP-LFC30-15Q□-4T		2.5	96.1		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	65
VSP-LFC30-15Q□-6T		4								
VSP-LFC30-20Q□-4T		2.5	106.1		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	68
VSP-LFC30-20Q□-6T		4								

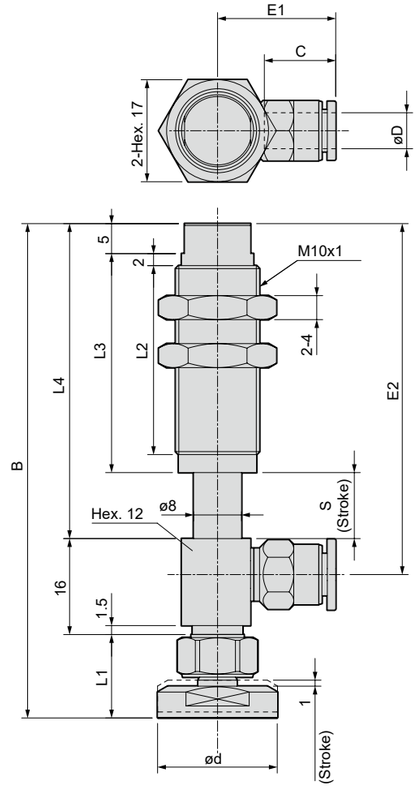
* Values inSide ,brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Push-in fitting)

●VSP-LFD10-□Q□-4T



●VSP-LFD20, 30-□Q□-4/6

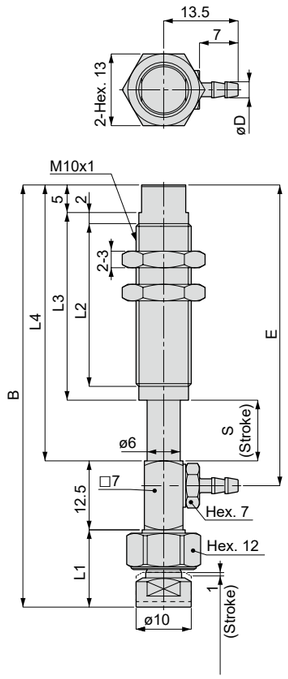


Unit: mm

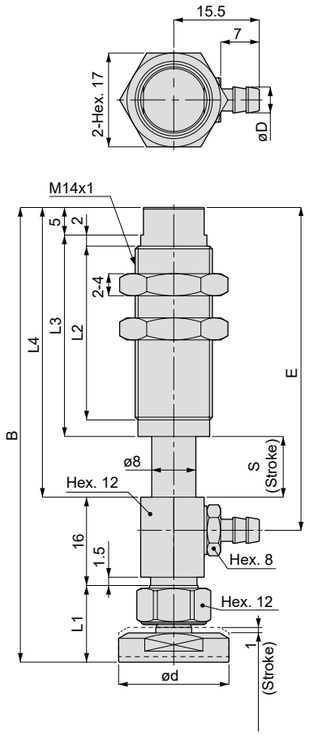
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5Q□-4	10	4	66.5	14	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	31
VSP-LFD10-10Q□-4			76.5		29.5	34	50			54.5	10	1.3 to 3.3	33
VSP-LFD10-15Q□-4			86.5		34.5	39	60			64.5	15	1.3 to 4.2	36
VSP-LFD10-20Q□-4			96.5		39.5	44	70			74.5	20	1.3 to 5.1	39
VSP-LFD20-5Q□-4	20	4	72.4	13.9	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	62
VSP-LFD20-5Q□-6		6						11.9	19.7				63
VSP-LFD20-10Q□-4		4	82.4		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	66
VSP-LFD20-10Q□-6		6						11.9	19.7				67
VSP-LFD20-15Q□-4		4	92.4		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	70
VSP-LFD20-15Q□-6		6						11.9	19.7				71
VSP-LFD20-20Q□-4		4	102.4		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	74
VSP-LFD20-20Q□-6		6						11.9	19.7				75
VSP-LFD30-5Q□-4	30	4	72.4	13.9	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	66
VSP-LFD30-5Q□-6		6						11.9	19.7				67
VSP-LFD30-10Q□-4		4	82.4		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	70
VSP-LFD30-10Q□-6		6						11.9	19.7				71
VSP-LFD30-15Q□-4		4	92.4		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	74
VSP-LFD30-15Q□-6		6						11.9	19.7				75
VSP-LFD30-20Q□-4		4	102.4		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	78
VSP-LFD30-20Q□-6		6						11.9	19.7				79

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side ,VSP-LFD, Barb Fitting)

●VSP-LFD10-□Q□-4T/6T



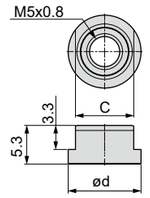
●VSP-LFD20, 30-□Q□-4T/6T



Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5Q□-4T	10	2.5	66.5	14	24.5	29	40	44.5	5	1.3 to 2.4	30
VSP-LFD10-5Q□-6T		4									
VSP-LFD10-10Q□-4T		2.5	76.5		29.5	34	50	54.5	10	1.3 to 3.3	32
VSP-LFD10-10Q□-6T		4									
VSP-LFD10-15Q□-4T		2.5	86.5		34.5	39	60	64.5	15	1.3 to 4.2	34
VSP-LFD10-15Q□-6T		4									
VSP-LFD10-20Q□-4T		2.5	96.5		39.5	44	70	74.5	20	1.3 to 5.1	36
VSP-LFD10-20Q□-6T		4									
VSP-LFD20-5Q□-4T	20	2.5	72.4	13.9	26.5	31.5	42.5	48.5	5	4.5 to 6.5	58
VSP-LFD20-5Q□-6T		4									
VSP-LFD20-10Q□-4T		2.5	82.4		31.5	36.5	52.5	58.5	10	4.5 to 8.2	61
VSP-LFD20-10Q□-6T		4									
VSP-LFD20-15Q□-4T		2.5	92.4		36.5	41.5	62.5	68.5	15	4.5 to 9.9	65
VSP-LFD20-15Q□-6T		4									
VSP-LFD20-20Q□-4T		2.5	102.4		41.5	46.5	72.5	78.5	20	4.5 to 14.9	69
VSP-LFD20-20Q□-6T		4									
VSP-LFD30-5Q□-4T	30	2.5	72.4	13.9	26.5	31.5	42.5	48.5	5	4.5 to 6.5	62
VSP-LFD30-5Q□-6T		4									
VSP-LFD30-10Q□-4T		2.5	82.4		31.5	36.5	52.5	58.5	10	4.5 to 8.2	64
VSP-LFD30-10Q□-6T		4									
VSP-LFD30-15Q□-4T		2.5	92.4		36.5	41.5	62.5	68.5	15	4.5 to 9.9	69
VSP-LFD30-15Q□-6T		4									
VSP-LFD30-20Q□-4T		2.5	102.4		41.5	46.5	72.5	78.5	20	4.5 to 14.9	73
VSP-LFD30-20Q□-6T		4									

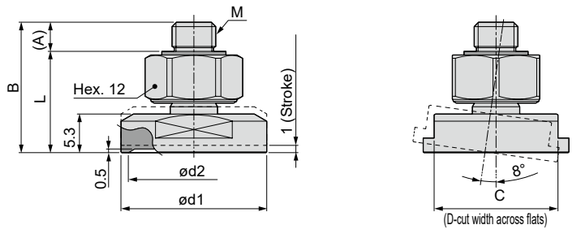
Resin Pad Only External Dimension Diagram

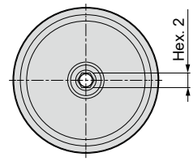


Unit: mm

Resin Pad Single Unit Model No.	Pad Diameter ød	C	Weight (g)	Applicable Pad Model No.
VSPG-10Q□-RP	10	8	0.4	VSP-□10Q□
VSPG-20Q□-RP	20	17	2	VSP-□20Q□
VSPG-30Q□-RP	30	27	4.6	VSP-□30Q□

Pad with Flexible Holder External Dimension Diagram





Unit: mm

Model No.	Pad Diameter ød1	Effective Diameter ød2	M	A	B	L	C	Weight (g)
VSPG-10Q□	10	8	M4x0.7	2.9	16.9	14	8	7
VSPG-20Q□	20	18	M6x1	4	17.9	13.9	17	10
VSPG-30Q□	30	28	M6x1	4	17.9	13.9	27	14

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad, Suction Mark Prevention Type, VSP-□Q□Series

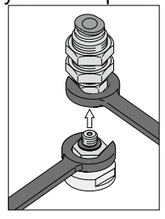
Design / Selection

Warning

■If the workpiece is at risk of falling off, be sure to provide a preventive measure for safety.
■When mounting the pad holder, be sure to fix it securely. Loosening can risk causing trouble.
■Malfunctions may occur due to leakage or clogging in the vacuum circuit as well as abrasion, cracking or deterioration of the pad, galling of the sliding part of the pad holder, or loose connections. Perform maintenance checks regularly.
■When performing transport with the pad, consider the acceleration, impact and wind pressure. The workpiece may detach during transport.

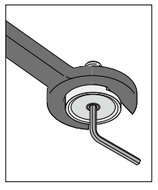
Caution

■Compared to conventional rubber suction pads, the suction mark prevention resin attachment for the lip portion reduces suction marks; however, confirm with an actual device the effects to the suction marks on the workpieces are acceptable.
■Keep the flow rate of the vacuum source as large as possible. Also, vacuum holding usage is not possible.
■Select a sensor suitable for the working conditions.
■The interior of the flexible holder for the suction mark prevention Suction Pads may wear depending on its structure and usage. When adopting for use in a clean environment, please confirm there is no impact from dust generation due to wear before use.
■This product has a 1 mm stroke on the flexible holder, allowing it to track even subtle workpiece inclinations. If a buffer function is necessary, use it in conjunction with a spring-type holder. Also, when using a spring-type holder, minimize the lateral force applied to the sliding parts. Holder wear may cause operational failure or dust generation.
■There is no rotation-stop structure between the suction mark prevention Suction Pads flexible holder and the resin pad. Please note that it is not suitable for rotational transport.
■Suction mark prevention Suction Pads generate more vacuum pressure leakage from the lip than rubber pads. Please note that it cannot be used for vacuum holding. Also, secure the vacuum flow rate as large as possible to minimize pressure drop due to leakage.
■Clean the suction surface of the Suction Pads before use. Adhered substances may remain as suction marks. When cleaning, be careful not to scratch the suction surface and do not use organic solvents.
■Special stainless steel is used for this product, but it is not intended to prevent rust. Rust may occur depending on the operating environment.
■When attaching the flexible holder to the actual device or the pad holder, tighten using an appropriate tool with reference to the following tightening torque and confirm that there is no looseness.



Thread Size	Tightening Torque
M4x0.7	0.7 to 0.8 N·m
M6x1	1.5 to 2.0 N·m

■The resin pad mounting screws on the flexible holder may loosen due to creep. Perform regular checks for looseness. If looseness occurs, refer to the tightening torque below and perform regular tightening or replace the suction pad part as appropriate.



Vacuum Pad Material	Thread Size	Tightening Torque
PEEK	M5x0.8	1.4 to 2.1 N·m
Conductive PEEK	M5x0.8	2.0 to 2.3 N·m
POM	M5x0.8	0.6 to 0.7 N·m

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad, Packaging Bag Type

VSP-□PB□ Series

Suction pad compatible with various bagged workpieces, adopting a 2-layer structure for the pad part.

RoHS

Compatible with general bagged workpieces, offering 2 types of bellows stages and 2 types of lip hardness.

Abundant holder variations

Shape	2 types

●Standard..... 2 types

Piping Connection	6 types

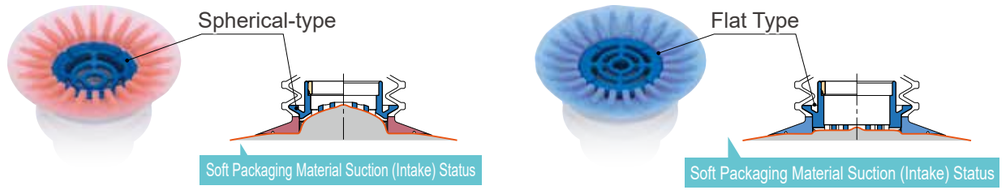
●Push-in fitting (ø4 to ø12) .....5 types
●Screw-in (M5)..... 1 type

Achieves workpiece conformity and posture stabilization during transport.

Soft material used for the lip part, hard material used for the bellows part.

Suction prevention adapter selectable from spherical-type and flat type. Also selectable with stainless steel mesh.

*Resin for suction prevention adapter conforms to Food Sanitation Act, FDA compliant.



Suction prevention adapter also selectable with stainless steel mesh.

Prevents suction of foreign matter, preventing trouble in the vacuum system.

Pad surface treatment (option) available, applying special processing to reduce suction marks.

	-FG
Surface Treatment	Fluorine Coating
Compatible Material	Silicone Conductive Silicone
Features	Surface modification with special treatment prevents sticking to the workpiece. Improved pad durability and abrasion resistance.

Pad Shape

Pad Cross-sectional Diagram

2 types of lip hardness available.

Ultra Soft Material (Pink): For easily deformable packaging bags
Soft Material (Blue): For thick vinyl/sheet-like packaging bags

Lip Hardness: 20°

Lip Hardness: 40°

Recommended Workpiece

Bags containing liquids, pouch packs, etc.

2 types of bellows stages available.

5 Stages: For packaging bags with workpiece inclination or uneven steps
3 Stages: For space saving or suppressing workpiece wobble

Pad Diameter

4 types 20 25 30 40

Pad Material

4 types

- Silicone (Bellows 3 Stages) Hardness 20°
- Silicone (Bellows 3 Stages) Hardness 40°
- Silicone (Bellows 5 Stages) Hardness 20°
- Silicone (Bellows 5 Stages) Hardness 40°

Conforms to Food Sanitation Act, FDA compliant. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Food manufacturing lines, etc.
Transport process for general bagged workpieces

Soft Lip

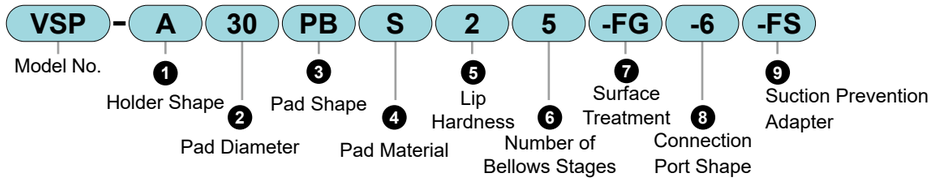
Soft — Compatible with bags containing liquids

Hard Lip

Hard — Compatible with pouch packs

Model No. Notation

●For Packaging Bags Type



1 Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
		Direct Mount Type	E	

2 Pad Diameter

Code	Content
20	ø20
25	ø25
30	ø30
40	ø40

3 Pad Shape

Code	Content	
PB	For Packaging Bags Type	

4 Pad Material

Code	Content
S	Silicone Rubber

5 Lip Hardness

Hardness	Color	Code	
20°	Pink	2	
40°	Blue	4	

6 Number of Bellows Stages

Code	Content	
3	Stages 3	
5	Stages 5	

7 Surface Treatment

Content	Compatible Pad Material	Compatible Pad Diameter	Code
None	S	All sizes	Blank
Fluorine Coating			-FG

8 Connection Size/Shape

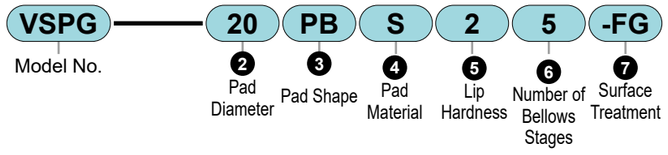
Content	Holder Shape A	Holder Shape E	Code	
Metric Male Thread M5 x 0.8		●	Blank	
ø4 Push-in fitting	●		-4	
ø6 Push-in fitting	●		-6	
ø8 Push-in fitting	●		-8	
ø10 Push-in fitting	●		-10	
ø12 Push-in fitting	●		-12	

*1: For ❷ Pad Diameter 20 and 25, options -4, -6, -8, and Blank can be selected for ❽.
*2: For ❷ Pad Diameter 30 and 40, any option except -4 can be selected for ❽.

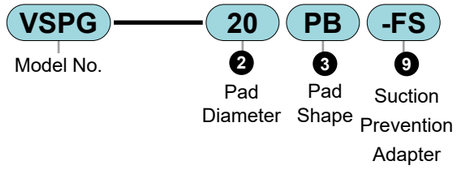
9 Suction Prevention Adapter

Code	Content	
-FS	Spherical-type - Without Stainless Steel Mesh	
-MS	Spherical-type - With Stainless Steel Mesh	
-FF	Flat Type - Without Stainless Steel Mesh	
-MF	Flat Type - With Stainless Steel Mesh	

●Pad Rubber Only

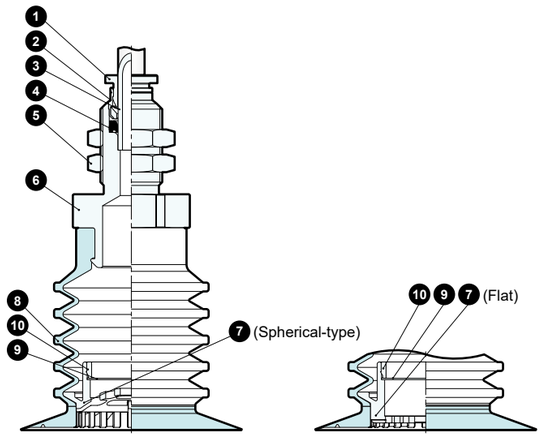


●Suction prevention adaptor only



Internal Structure Diagram

●Fixed vacuum outlet: Top (VSP-A) Case

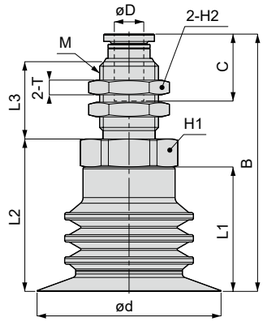


Part No.	Part Name	Material (Treatment)	Part No.	Part Name	Material (Treatment)
1	Release Ring	Acetal Resin	6	Metal Body	Aluminum alloy
2	Guide Ring	Brass (Electroless nickel plating)	7	Suction Prevention Adapter	Polypropylene
3	Locking Finger	Stainless steel	8	Vacuum Pad for Packaging Bags	Silicone Rubber
4	Elastomer Sleeve	Ethylene Propylene Rubber	9	Stainless Steel Mesh	Stainless Steel (SUS316)
5	Nut	Carbon Steel (Trivalent chromate)	10	Mesh Retainer	Aluminum alloy

MEMO

Dimensions diagram (fixed, vacuum Outlet on Top, VSP-A, bellows stage No.: 3 steps)

●VSP-E20, 25PBS□3-4/6/8
●VSP-E30, 40PBS□3-6/8/10/12

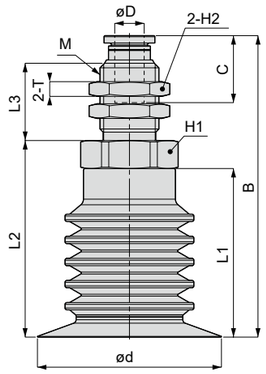


Unit: mm

Model No.	Pad Outer Diameter ød	Tube O.D. øD	M	B	L1	L2	L3	Tube End C	Width across flats H1	Width across flats H2	T	Weight (g)
VSP-A20PBS□3-4	20	4	M12x1	52.4	21.5	29.1	16.5	15.2	17	14	4	19
VSP-A20PBS□3-6		6	M14x1	56.3			20.5	17.2		17		24
VSP-A20PBS□3-8		8	M16x1	57.6			21	18.2		19		27
VSP-A25PBS□3-4	25	4	M12x1	53.4	22.5	30.1	16.5	15.2	17	14	4	19
VSP-A25PBS□3-6		6	M14x1	57.3			20.5	17.2		17		24
VSP-A25PBS□3-8		8	M16x1	58.6			21	18.2		19		27
VSP-A30PBS□3-6	30	6	M14x1	59.8	25	32.6	20.5	17.2	24	17	4	32
VSP-A30PBS□3-8		8	M16x1	61.1			21	18.2		19		35
VSP-A30PBS□3-10		10	M20x1	64			22.5	20.7		24	5	47
VSP-A30PBS□3-12		12	M22x1	68.3			25.5	23.3		27	6	62
VSP-A40PBS□3-6	40	6	M14x1	64.1	29.3	36.9	20.5	17.2	24	17	4	35
VSP-A40PBS□3-8		8	M16x1	65.4			21	18.2		19		38
VSP-A40PBS□3-10		10	M20x1	68.3			22.5	20.7		24	5	50
VSP-A40PBS□3-12		12	M22x1	72.6			25.5	23.3		27	6	65

Dimensions diagram (fixed, vacuum Outlet on Top, VSP-A, bellows stage No.: 5 steps)

●VSP-E20, 25PBS□5-4/6/8
●VSP-E30, 40PBS□5-6/8/10/12

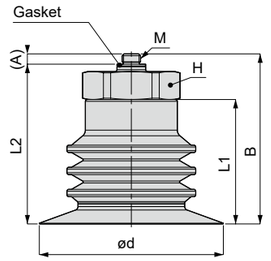


Unit: mm

Model No.	Pad Outer Diameter ød	Tube O.D. øD	M	B	L1	L2	L3	Tube End C	Width across flats H1	Width across flats H2	T	Weight (g)
VSP-A20PBS□5-4	20	4	M12x1	58.4	27.5	35.1	16.5	15.2	17	14	4	19
VSP-A20PBS□5-6		6	M14x1	62.3			20.5	17.2		17		24
VSP-A20PBS□5-8		8	M16x1	63.6			21	18.2		19		27
VSP-A25PBS□5-4	25	4	M12x1	60.4	29.5	37.1	16.5	15.2	17	14	4	20
VSP-A25PBS□5-6		6	M14x1	64.3			20.5	17.2		17		25
VSP-A25PBS□5-8		8	M16x1	65.6			21	18.2		19		28
VSP-A30PBS□5-6	30	6	M14x1	67.8	33	40.6	20.5	17.2	24	17	4	33
VSP-A30PBS□5-8		8	M16x1	69.1			21	18.2		19		36
VSP-A30PBS□5-10		10	M20x1	72			22.5	20.7		24	5	48
VSP-A30PBS□5-12		12	M22x1	76.3			25.5	23.3		27	6	63
VSP-A40PBS□5-6	40	6	M14x1	74.1	39.3	46.9	20.5	17.2	24	17	4	37
VSP-A40PBS□5-8		8	M16x1	75.4			21	18.2		19		40
VSP-A40PBS□5-10		10	M20x1	78.3			22.5	20.7		24	5	52
VSP-A40PBS□5-12		12	M22x1	82.6			25.5	23.3		27	6	67

Dimensions diagram (fixed, direct mounting, VSP-E bellows stage No.: 3 steps)

●VSP-E20 to 40PBS□3

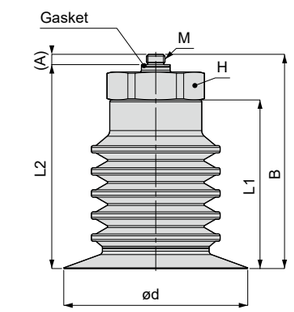


Unit: mm

Model No.	Pad Outer Diameter ød	A	B	L1	L2	Width across flats H	Weight (g)
VSP-E20PBS□3	20	2.8	33.9	21.5	31.1	17	9.7
VSP-A25PBS□3	25	2.8	34.9	22.5	32.1	17	11
VSP-A30PBS□3	30	2.8	37.4	25	34.6	24	19
VSP-A40PBS□3	40	2.8	41.7	29.3	38.9	24	22

Dimensions diagram (fixed, direct mounting, VSP-E bellows stage No.: 5 steps)

●VSP-E20 to 40PBS□5



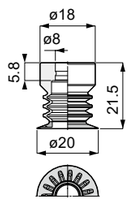
Unit: mm

Model No.	Pad Outer Diameter ød	A	B	L1	L2	Width across flats H	Weight (g)
VSP-A20PBS□5	20	2.8	39.9	27.5	37.1	17	10
VSP-A25PBS□5	25	2.8	41.9	29.5	39.1	17	11
VSP-A30PBS□5	30	2.8	45.4	33	42.6	24	20
VSP-A40PBS□5	40	2.8	51.7	39.3	48.9	24	24

VSPG-□PB□ Series

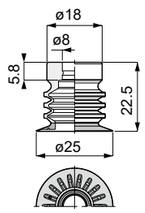
Pad Rubber Only External Dimension Diagram (Number of Bellows Stages: 3 steps)

●VSPG-20PBS□3



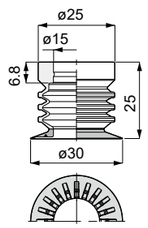
Weight: 2.8 g

●VSPG-25PBS□3



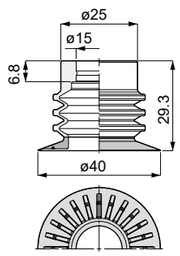
Weight: 3.1 g

●VSPG-30PBS□3



Weight: 4.8 g

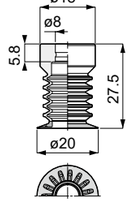
●VSPG-40PBS□3



Weight: 7.2 g

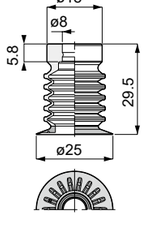
Pad Rubber Only External Dimension Diagram (Number of Bellows Stages: 5 steps)

●VSPG-20PBS□5



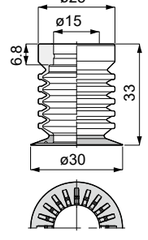
Weight: 3.1 g

●VSPG-25PBS□5



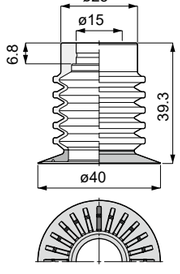
Weight: 3.6 g

●VSPG-30PBS□5



Weight: 5.7 g

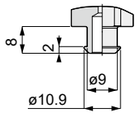
●VSPG-40PBS□5



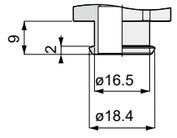
Weight: 8.8 g

Pad Fitting Part Dimensions

●VSPG-20, 25PBS□



●VSPG-30, 40PBS□



MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions,Intro 15 for details.

Individual Precautions: Suction Pad, Packaging Bag Type, VSP-□PB□Series

Design / Selection

Warning

■When mounting the Suction Pads holder for the partition on the actual device, refer to the following mounting nut tightening torque for the pad holder partition and tighten using an appropriate tool to prevent looseness.

●Pad holder partition mounting nut tightening torque

Nut Size	Tightening Torque
M12x1	12 to 14 N·m
M14x1	18 to 21 N·m
M16x1	18 to 21 N·m
M20x1	19 to 21 N·m
M22x1	19 to 21 N·m

■When installing the direct mounting Suction Pads holder on the actual machine, refer to the following tightening torque and tighten using an appropriate tool, and check that there are no looseness.

●Tightening Torque

Thread Size	Tightening Torque
M5x0.8	1 to 1.5 N·m

■The direct mounting Suction Pads holder has a gasket seal. When mounting to the actual machine, confirm that the gasket contact surface is smooth and free from scratches, dents, etc.

■Due to the pad characteristics, the theoretical suction force of the packaging bag type pads may exceed the strength of the pads themselves depending on the degree of vacuum. Use the safety factor at 1/16 or more when lifting horizontally and 1/25 or more when lifting vertically. Always perform tests on the actual machine before use.

Caution

■Use the pressing allowable stroke as a guide for the packaging bag type and take care not to overcrush it. Excessive crushing may accelerate wear of the bellows part, cause cracks in the lip part, or lead to deformation due to strain, potentially causing suction failure.

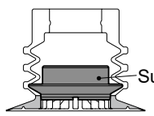
■Be sure to attach a suction prevention adapter to the packaging bag type pad. Using without the suction prevention adapter may deform the suction pad, potentially causing suction failure.

■When attaching or detaching the suction prevention adaptor to/from the vacuum pad for the packaging bag, the lip may be damaged if the lip is pulled too much.

■Since the suction prevention adapter with stainless steel mesh structure reduces the suction flow rate, perform suction test using the actual device.

■Check the clogging regularly for the suction prevention adapter with stainless steel mesh. Clogging can cause performance degradation or trouble. Clean or replace with a new one as necessary.

■Refer to the figure and install the suction prevention adapter in the appropriate position. Failure to mount in the correct position may cause suction failure.



■The spherical type of the suction prevention adapter is installed deeper than the pad's suction surface. Therefore, when suctioning a flat, rigid workpiece, the ribs on the pad surface can tilt in one direction, applying a rotational load. This rotational force can cause screws to loosen or the mounting to break. When suctioning flat, rigid workpieces, please use the flat type of the suction prevention adapter.

MEMO

Suction Pad, Metal Detector Compatible-type

VSP-□BE□, □BD□ Series

Suction pad that reacts to metal detectors when contamination occurs due to fallen pad rubber fragments.

RoHS

Silicone rubber blended with metal powder, ideal for production lines such as for food.

Abundant holder variations

Shape 16 types
- Standard ....5 types
- Compact.....Class 4
- Low dust generation .....2 types
- Lightweight3 types
- Low back 2 types

Piping Connection 15 types
- Push-in fitting (ø1.8 to ø6) .... 3 types
- Barbed fitting (ø4, ø6) ..... 2 types

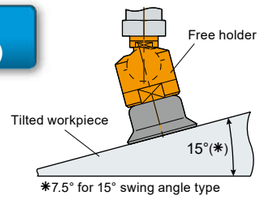
Stroke 11 types

2 mm to 50 mm
(Depends on pad diameter, holder)

Low particle generation holders (LFC, LFD) with less abrasion powder from sliding and low noise are available

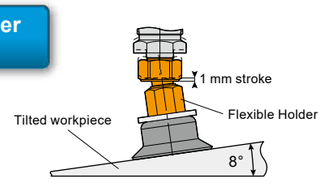
Assembly option for swing (free holder, flexible holder) that follows inclined workpiece surfaces is supported

Free holder (F1:30°, F2:15°)



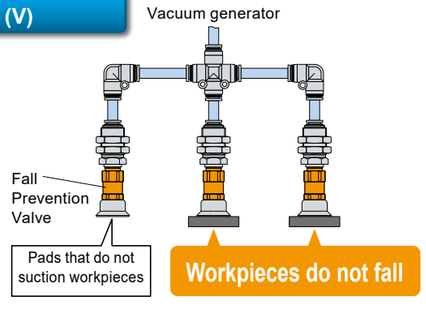
Flexible Holder (CF)

After removing the workpiece, returns to the normal position (vertical)



Assembly option for drop prevention valve (V) that reduces vacuum drop in separate circuits even without a workpiece is supported

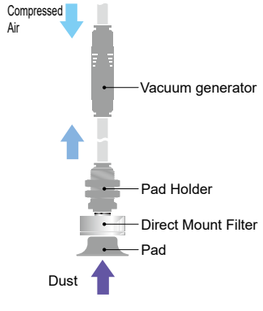
Drop Prevention Valve (V)



Removes dust during workpiece suction

Direct Mount Filter (T1, T2)

Filtration Area
T1: 1.7 cm², T2: 7 cm²

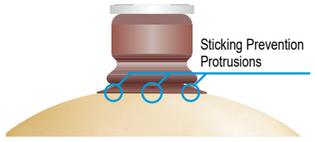


Pad Shape

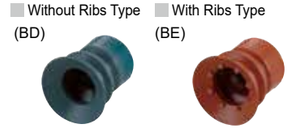
Pad Cross-sectional Diagram

Bellows Shape

With protrusions to suppress sticking between the lip and bellows part



Suction surface available with ribs and without ribs suitable for spherical workpieces.



Recommended Workpiece

Processes where contamination by foreign matter is undesirable, such as food manufacturing lines.

Iron powder specification and SUS powder specification available.

- Iron Powder... Response ratio twice that of competitors (according to our research)
- SUS Powder... Rubber wear powder is resistant to rusting

Pad Diameter

3 types 10 15 20

Pad Material

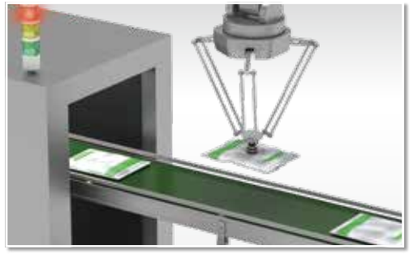
4 types
- Metal Detection Silicone (Iron Powder Spec.) Hardness 30°
- Metal Detection Silicone (Iron Powder Spec.) Hardness 50°
- Metal Detection Silicone (SUS Spec.) Hardness 30°
- Metal Detection Silicone (SUS Spec.) Hardness 50°

Conforms to Food Sanitation Act, FDA compliant. (Holder is not compliant / Suction pad is compliant only for workpiece contact area)

Solution Examples

Food manufacturing lines, etc.

Reacts to metal detectors, preventing the outflow of contaminated products.



Workpieces with uneven suction surfaces

Flexibly handles workpieces with irregularities such as retort pouches.

Model No. Notation

●For Metal Detectors Type

Suction Pad

VSP – C – 20 – -20 – BE – SF3 – 6 – [ ] – F1 – V – T1

VSP	C	20	-20	BE	SF3	6	[ ]	F1	V	T1
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Stroke Option	❹ Pad Shape	❺ Pad Material	❻ Connection Port Shape	❼ Buffer Load	❽ Pad Swing	❾ Drop Prevention Valve	❿ Direct Mount Filter

Pad Rubber Only

VSPG — 20 — BE — SF3

VSPG	20	BE	SF3
Model No.	❷	❹	❺

Pad Rubber + Set with Fixing Screw

VSPG — 20 — BE — SF3 A

VSPG	20	BE	SF3	A
Model No.	❷ Pad Diameter	❹ Pad Shape	❺ Pad Material	

❶ Holder Shape

Buffer Present/Absent	Type	Vacuum Outlet	Code	
Fixed Type	Standard	Top Direction	A	
	Compact		MA	
	Standard	Side Direction	B	
	Compact		MB	
	Low Profile		HE	
		Both Sides Direction	HEW	
Buffer Type	Standard	Top Direction	C	
	Compact		MC	
	Low Particle Generation		LFC	
	Lightweight		HC	
	Standard	Side Direction	D	
	Compact		MD	
	Low Particle Generation		LFD	
	Lightweight		HD	
		Both Sides Direction	HDW	
	Standard	Direct Mount Type	F	

❷ Pad Diameter

Code	Content
10	ø10
15	ø15
20	ø20

❸ Stroke Option

Content	Holder Shape C	D	HC	LFC	LFD	Code	
Specified Stroke, or No Buffer	●	●				Blank	*1, *2
Stroke 2 mm				●		–2	*3
Stroke 5 mm				●	●	–5	
Stroke 10 mm	●	●	●	●	●	–10	
Stroke 15 mm	●	●	●	●	●	–15	
Stroke 20 mm	●	●	●	●	●	–20	
Stroke 25 mm			●			–25	
Stroke 30 mm	●	●	●			–30	
Stroke 40 mm	●	●	●			–40	
Stroke 50 mm	●	●	●			–50	

*1: For ❶ Holder Shape other than C, D, HC, LFC, and LFD, ❸ is 'Blank'.
*2: For the specified stroke of ❸ 'Blank', please confirm the stroke dimension on the external dimension drawing.
*3: When ❷ Pad Diameter is 10 or 15, -2 can be selected for ❸.

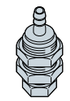
❹ Pad Shape

Code	Content		
BE	Bellows Type (With Protrusions)	With Ribs	
BD		Without Ribs	

❺ Pad Material

Code	Content			
SF3	Metal Detection Silicone Rubber	Iron Powder Specification	Hardness 30°	Reddish Brown
SF5			Hardness 50°	Dark Green
SS3		SUS Powder Specification	Hardness 30°	Brown
SS5			Hardness 50°	Green

❻ Connection Size/Shape

Content	Holder Shape A	B	C	D	MA	MB	MC	MD	LFC	LFD	HC	HD	HDW	HE	HEW	Code	
(❶: When F)																Blank	
ø1.8 Push-in fitting						●	●	●			●	●	●	●	●	2	
ø4 Push-in fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4	
ø6 Push-in fitting	●	●	●	●		●		●	●	●	●	●	●	●	●	6	
ø4 Push-in fitting, without spring cover			●	●												4C	
ø6 Push-in fitting, without spring cover			●	●												6C	
ø4, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	4T	
ø6, Barb fitting	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6T	
ø4, Barb fitting, without spring cover			●	●												4TC	
ø6, Barb fitting, without spring cover			●	●												6TC	

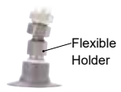
*1: For ❶ Holder Shape C and D with ❸ Stroke Option -20 to -50, options 4C, 6C, 4TC, and 6TC can be selected for ❻. Additionally, for ❸ Stroke Option -30 to -50, only 4C, 6C, 4TC, and 6TC can be selected for ❻.
*2: The selectable Port Size/Shape varies depending on the ❷ Pad Diameter. Please check the combination table below.

❼ Buffer Load

Code	Content	
Blank	Standard Load or No Buffer	*1, *2
L	Low Load (1/4 of Standard Load)	

*1: For ❶ Holder Shape other than LFC, ❼ is 'Blank'.
*2: For ❸ Stroke Option -2, ❼ is 'Blank'.

❽ Pad Swing

Code	Content	
Blank	None	
F1	With Free Holder (Angle 30°)	Free Holder
F2	With Free Holder (Angle 15°)	
CF	With Flexible Holder (Angle 8°)	 Flexible Holder

*1: For dimensions with the pad swivel function, please refer to P. 1060 and P. 1062.

❾ Drop Prevention Valve

Code	Content	
Blank	None	
V	With Drop Prevention Valve	Drop Prevention Valve

*1: For dimensions with the drop prevention valve, please refer to P. 1083 and P. 1084.

❿ Direct Mount Filter

Code	Content	
Blank	None	
T1	With Direct Mount Filter (Filtration Area 1.7 cm²)	Direct Mount Filter
T2	With Direct Mount Filter (Filtration Area 7 cm²)	

*1: ❿T2 can be selected when ❷ Pad Diameter is 20.
*2: For dimensions with the direct mount filter, please refer to P. 1064.

Holder Shape - Pad Diameter - Pad Shape - Connection Size/Shape Combination Table

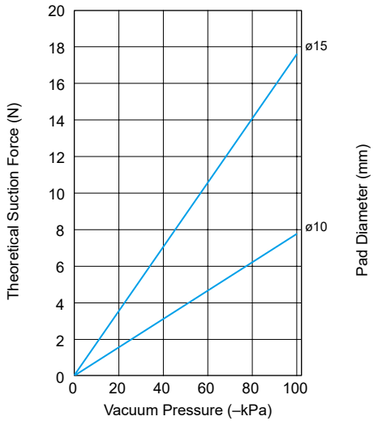
Holder Shape	Pad Diameter	Push-in fitting ø4 4	ø4 4C	ø6 6	ø6 6C	Barb fitting ø4 4T	ø4 4TC	ø6 6T	ø6 6TC
A	ø10, ø15			●				●	
	ø20	●		●		●		●	
B	All sizes	●		●		●		●	
C	All sizes	●	●	●	●	●	●	●	●
D	All sizes	●	●	●	●	●	●	●	●

Holder Shape	Pad Diameter	Thread M14 Blank
F	All sizes	●

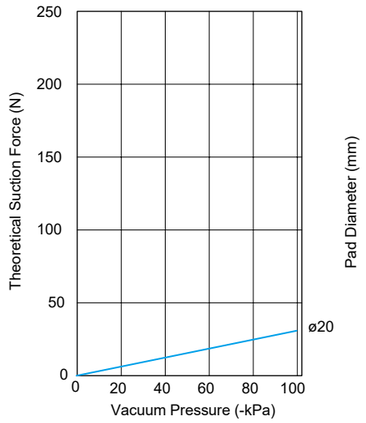
Holder Shape	Pad Diameter	Push-in fitting ø1.8 2	ø4 4	ø6 6	Barb fitting ø4 4T	ø6 6T
MA	ø10, ø15		●		●	
	ø20		●		●	●
MB	All sizes	●	●	●	●	●
MC	All sizes	●	●		●	●
MD	All sizes	●	●	●	●	●
LFC	ø10, ø15		●		●	●
	ø20		●	●	●	●
LFD	ø10, ø15		●		●	●
	ø20		●	●	●	●
HC	All sizes	●	●	●	●	●
HD	All sizes	●	●	●	●	●
HDW	All sizes	●	●	●	●	●
HE	All sizes	●	●	●	●	●
HEW	All sizes	●	●	●	●	●

Theoretical Suction Force

●Pad diameter: ø10mm, ø15 mm



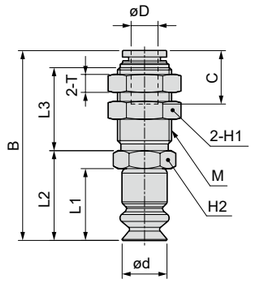
●Pad diameter: ø20 mm



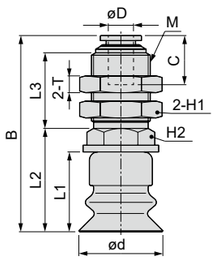
Theoretical suction force is a value under static conditions. For actual use, consider a safety factor of 1/4 for horizontal lifting and 1/8 for vertical lifting. Regarding the suction force of the metal detector compatible-type, due to pad characteristics, it may not be possible to secure the calculated suction force (theoretical suction force x safety factor) due to factors such as vacuum level, pad material, and adsorbed object. For selection, refer to "How to select Suction Pads" (P. 412) Use the suction force obtained with this formula as a guide, and make sure that there is no problem with the suction capacity on the actual machine.

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Push-in fitting)

●VSP-A10, 15BE (BD)□-6



●VSP-A20BE (BD)□-4/6

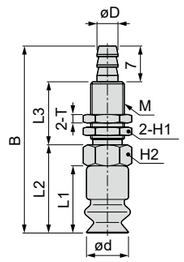


Unit: mm

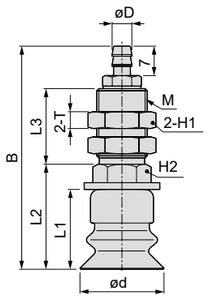
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L1	L2	L3	Tube End C	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A10BE (BD)□-6	10	6	M12x1	42.3	16	20	18.5	11.9	14	12	4	22
VSP-A15BE (BD)□-6	15	6	M12x1	42.3	16	20	18.5	11.9	14	12	4	22
VSP-A20BE (BD)□-4	20	4	M12x1	55.9	19	25	18	11.2	14	12	4	31
VSP-A20BE (BD)□-6		6	M14x1	46.9		24.6		11.9	17	14		37

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Top, VSP-A, Barb fitting)

●VSP-A10, 15BE (BD)□-6T



●VSP-A20BE (BD)□-4T/6T

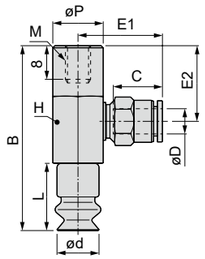


Unit: mm

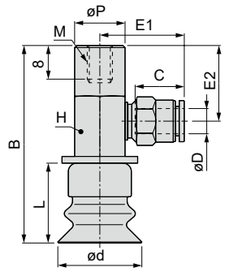
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	Width Across Flats H1	Width Across Flats H2	T	Weight (g)
VSP-A10BE (BD)□-6T	10	4	M8x0.75	43	16	21	15	10	10	2	12
VSP-A15BE (BD)□-6T	15	4	M8x0.75	43	16	21	15	10	10	2	13
VSP-A20BE (BD)□-4T	20	2.5	M12x1	53	19	25	18	14	12	4	30
VSP-A20BE (BD)□-6T		4									

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Push-in fitting)

●VSP-B10, 15BE (BD)□-4/6



●VSP-B20BE (BD)□-4/6

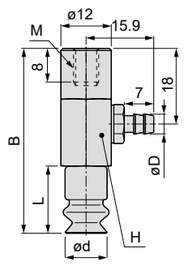


Unit: mm

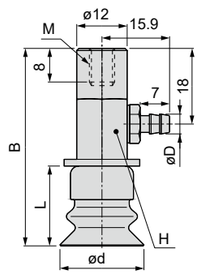
Model No.	Pad Diameter ød	Tube O.D. øD	Mounting screw M	B	L	Tube End C	øP	E1	E2	Width Across Flats H	Weight (g)
VSP-B10BE (BD)□-4	10	4	M6x1	44	16	11.2	12	18.8	18	12	30
VSP-B10BE (BD)□-6		6				11.9		20.1			31
VSP-B15BE (BD)□-4	15	4	M6x1	44	16	11.2	12	18.8	18	12	30
VSP-B15BE (BD)□-6		6				11.9		20.1			31
VSP-B20BE (BD)□-4	20	4	M6x1	47	19	11.2	12	18.8	18	12	33
VSP-B20BE (BD)□-6		6				11.9		20.1			34

Outline Dimension Drawing (Fixed Type, Vacuum Outlet on Side, VSP-B, Barb Fitting)

●VSP-B10, 15BE (BD)□-4T/6T



●VSP-B20BE (BD)□-4T/6T

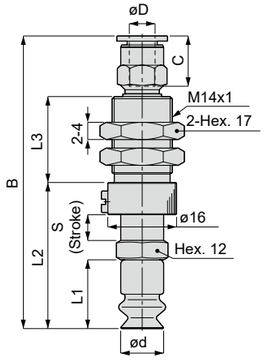


Unit: mm

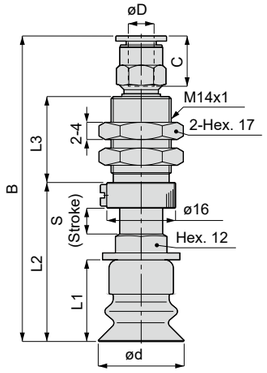
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L	Width Across Flats H	Weight (g)
VSP-B10BE (BD)□-4T	10	2.5	M6x1	44	16	12	29
VSP-B10BE (BD)□-6T		4					
VSP-B15BE (BD)□-4T	15	2.5	M6x1	44	16	12	30
VSP-B15BE (BD)□-6T		4					
VSP-B20BE (BD)□-4T	20	2.5	M6x1	47	19	12	32
VSP-B20BE (BD)□-6T		4					

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting)

●VSP-C10, 15BE (BD)□-4/6
●VSP-C10, 15-□BE (BD)□-4/6



●VSP-C20BE (BD)□-4/6
●VSP-C20-□BE (BD)□-4/6

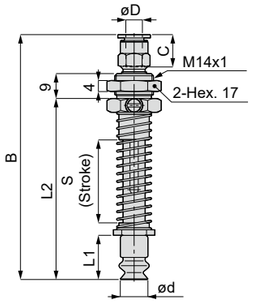


Unit: mm

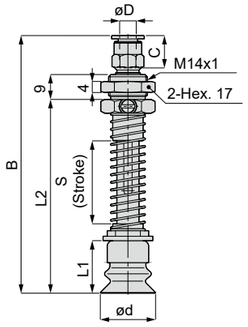
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10BE (BD)□-4	10	4	67	16	34	20	11.2	6	4.0 to 7.1	35
VSP-C10BE (BD)□-6		6	68.3				11.9			36
VSP-C10-10BE (BD)□-4		4	71.5		38.5		11.2	10	2.0 to 5.2	36
VSP-C10-10BE (BD)□-6		6	72.8				11.9			37
VSP-C10-15BE (BD)□-4		4	81.5		43.5	25	11.2	15	2.0 to 5.9	41
VSP-C10-15BE (BD)□-6		6	82.8				11.9			42
VSP-C10-20BE (BD)□-4		4	97.5		50.5	34	11.2	20	1.1 to 4.8	49
VSP-C10-20BE (BD)□-6		6	98.8				11.9			50
VSP-C15BE (BD)□-4	15	4	67	16	34	20	11.2	6	4.0 to 7.1	36
VSP-C15BE (BD)□-6		6	68.3				11.9			37
VSP-C15-10BE (BD)□-4		4	71.5		38.5		11.2	10	2.0 to 5.2	37
VSP-C15-10BE (BD)□-6		6	72.8				11.9			38
VSP-C15-15BE (BD)□-4		4	81.5		43.5	25	11.2	15	2.0 to 5.9	42
VSP-C15-15BE (BD)□-6		6	82.8				11.9			43
VSP-C15-20BE (BD)□-4		4	97.5		50.5	34	11.2	20	1.1 to 4.8	49
VSP-C15-20BE (BD)□-6		6	98.8				11.9			50
VSP-C20BE (BD)□-4	20	4	70	19	37	20	11.2	6	7.0 to 12.6	39
VSP-C20BE (BD)□-6		6	71.3				11.9			40
VSP-C20-10BE (BD)□-4		4	76		43		11.2	10	3.3 to 10.0	41
VSP-C20-10BE (BD)□-6		6	77.3				11.9			42
VSP-C20-15BE (BD)□-4		4	86		48	25	11.2	15	3.3 to 10.4	46
VSP-C20-15BE (BD)□-6		6	87.3				11.9			47
VSP-C20-20BE (BD)□-4		4	102		55	34	11.2	20	2.0 to 8.7	53
VSP-C20-20BE (BD)□-6		6	103.3				11.9			54

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Push-in fitting without Spring Cover)

●VSP-C10, 15-□BE (BD)□-4C/6C



●VSP-C20-□BE (BD)□-4C/6C

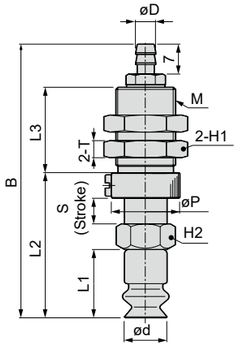


Unit: mm

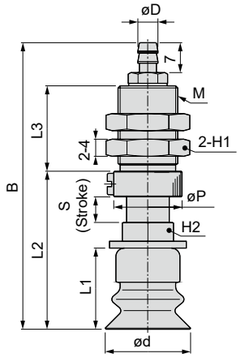
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20BE (BD)□-4C	10	4	74.5	16	52.5	11.2	20	1.5 to 4.9	43
VSP-C10-20BE (BD)□-6C		6	75.8			11.9			44
VSP-C10-30BE (BD)□-4C		4	87.5		65.5	11.2	30	1.1 to 4.8	48
VSP-C10-30BE (BD)□-6C		6	88.8			11.9			49
VSP-C10-40BE (BD)□-4C		4	100.5		78.5	11.2	40	1.0 to 4.5	54
VSP-C10-40BE (BD)□-6C		6	101.8			11.9			55
VSP-C10-50BE (BD)□-4C		4	113.5		91.5	11.2	50	0.9 to 4.5	59
VSP-C10-50BE (BD)□-6C		6	114.8			11.9			60
VSP-C15-20BE (BD)□-4C	15	4	74.5	16	52.5	11.2	20	1.5 to 4.9	43
VSP-C15-20BE (BD)□-6C		6	75.8			11.9			44
VSP-C15-30BE (BD)□-4C		4	87.5		65.5	11.2	30	1.1 to 4.8	48
VSP-C15-30BE (BD)□-6C		6	88.8			11.9			49
VSP-C15-40BE (BD)□-4C		4	100.5		78.5	11.2	40	1.0 to 4.5	54
VSP-C15-40BE (BD)□-6C		6	101.8			11.9			55
VSP-C15-50BE (BD)□-4C		4	113.5		91.5	11.2	50	0.9 to 4.5	59
VSP-C15-50BE (BD)□-6C		6	114.8			11.9			60
VSP-C20-20BE (BD)□-4C	20	4	79	19	57	11.2	20	1.5 to 4.9	49
VSP-C20-20BE (BD)□-6C		6	80.3			11.9			50
VSP-C20-30BE (BD)□-4C		4	92		70	11.2	30	1.1 to 4.8	54
VSP-C20-30BE (BD)□-6C		6	93.3			11.9			55
VSP-C20-40BE (BD)□-4C		4	105		83	11.2	40	1.0 to 4.5	59
VSP-C20-40BE (BD)□-6C		6	106.3			11.9			60
VSP-C20-50BE (BD)□-4C		4	118		96	11.2	50	0.9 to 4.5	64
VSP-C20-50BE (BD)□-6C		6	119.3			11.9			65

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting)

●VSP-C10, 15BE (BD)□-4T/6T
●VSP-C10, 15-□BE (BD)□-4T/6T



●VSP-C20BE (BD)□-4T/6T
●VSP-C20-□BE (BD)□-4T/6T

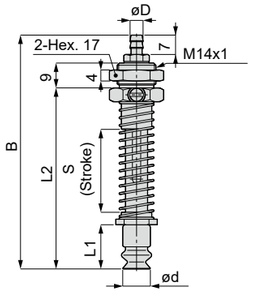


Unit: mm

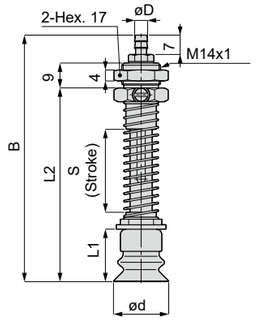
Model No.	Pad Diameter ød	Tube I.D. øD	Mounting screw M	B	L1	L2	L3	øP	Width Across Flats H1	Width Across Flats H2	T	Stroke S	Spring Force (N)	Weight (g)
VSP-C10BE (BD)□-4T	10	2.5	M14xx1	64.1	16	34	20	16	17	12	4	6	4.0 to 7.1	34
VSP-C10BE (BD)□-6T		4												
VSP-C10-10BE (BD)□-4T		2.5		68.6		38.5						10	2.0 to 5.2	35
VSP-C10-10BE (BD)□-6T		4												
VSP-C10-15BE (BD)□-4T		2.5		78.6		43.5	25					15	2.0 to 5.9	40
VSP-C10-15BE (BD)□-6T		4												
VSP-C10-20BE (BD)□-4T		2.5		94.6		50.5	34					20	1.1 to 4.8	48
VSP-C10-20BE (BD)□-6T		4												
VSP-C15BE (BD)□-4T	15	2.5	M14xx1	64.1	16	34	20	16	17	12	4	6	4.0 to 7.1	35
VSP-C15BE (BD)□-6T		4												
VSP-C15-10BE (BD)□-4T		2.5		68.6		38.5						10	2.0 to 5.2	36
VSP-C15-10BE (BD)□-6T		4												
VSP-C15-15BE (BD)□-4T		2.5		78.6		43.5	25					15	2.0 to 5.9	41
VSP-C15-15BE (BD)□-6T		4												
VSP-C15-20BE (BD)□-4T		2.5		94.6		50.5	34					20	1.1 to 4.8	48
VSP-C15-20BE (BD)□-6T		4												
VSP-C20BE (BD)□-4T	20	2.5	M14xx1	67.1	19	37	20	16	17	12	4	6	7.0 to 12.6	38
VSP-C20BE (BD)□-6T		4												
VSP-C20-10BE (BD)□-4T		2.5		73.1		43						10	3.3 to 10.0	40
VSP-C20-10BE (BD)□-6T		4												
VSP-C20-15BE (BD)□-4T		2.5		83.1		48	25					15	3.3 to 10.4	45
VSP-C20-15BE (BD)□-6T		4												
VSP-C20-20BE (BD)□-4T		2.5		99.1		55	34					20	2.0 to 8.7	52
VSP-C20-20BE (BD)□-6T		4												

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Top, VSP-C, Barb Fitting without Spring Cover)

●VSP-C10, 15-□BE (BD)□-4TC/6TC



●VSP-C20-□BE (BD)□-4TC/6TC

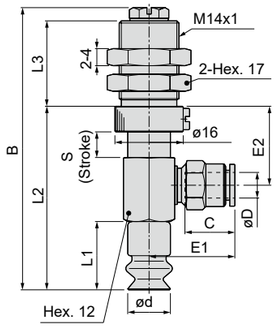


Unit: mm

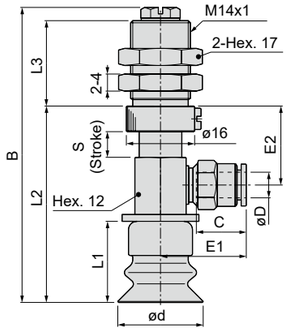
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-C10-20BE (BD)□-4TC	10	2.5	71.6	16	52.5	20	1.5 to 4.9	43
VSP-C10-20BE (BD)□-6TC		4						
VSP-C10-30BE (BD)□-4TC		2.5	84.6		65.5	30	1.1 to 4.8	48
VSP-C10-30BE (BD)□-6TC		4						
VSP-C10-40BE (BD)□-4TC		2.5	97.6		78.5	40	1.0 to 4.5	53
VSP-C10-40BE (BD)□-6TC		4						
VSP-C10-50BE (BD)□-4TC		2.5	110.6		91.5	50	0.9 to 4.5	59
VSP-C10-50BE (BD)□-6TC		4						
VSP-C15-20BE (BD)□-4TC	15	2.5	71.6	16	52.5	20	1.5 to 4.9	43
VSP-C15-20BE (BD)□-6TC		4						
VSP-C15-30BE (BD)□-4TC		2.5	84.6		65.5	30	1.1 to 4.8	48
VSP-C15-30BE (BD)□-6TC		4						
VSP-C15-40BE (BD)□-4TC		2.5	97.6		78.5	40	1.0 to 4.5	53
VSP-C15-40BE (BD)□-6TC		4						
VSP-C15-50BE (BD)□-4TC		2.5	110.6		91.5	50	0.9 to 4.5	59
VSP-C15-50BE (BD)□-6TC		4						
VSP-C20-20BE (BD)□-4TC	20	2.5	76.1	19	57	20	1.5 to 4.9	48
VSP-C20-20BE (BD)□-6TC		4						
VSP-C20-30BE (BD)□-4TC		2.5	89.1		70	30	1.1 to 4.8	53
VSP-C20-30BE (BD)□-6TC		4						
VSP-C20-40BE (BD)□-4TC		2.5	102.1		83	40	1.0 to 4.5	58
VSP-C20-40BE (BD)□-6TC		4						
VSP-C20-50BE (BD)□-4TC		2.5	115.1		96	50	0.9 to 4.5	63
VSP-C20-50BE (BD)□-6TC		4						

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in fitting)

●VSP-D10, 15BE (BD)□-4/6
●VSP-D10, 15-□BE (BD)□-4/-6



●VSP-D20BE (BD)□-4/6
●VSP-D20-□BE (BD)□-4/-6

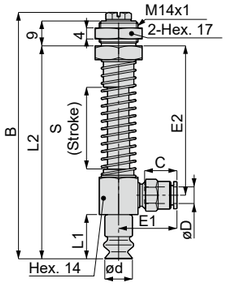


Unit: mm

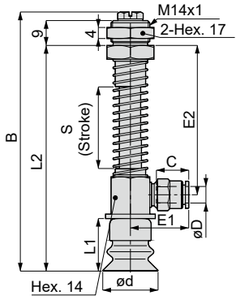
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10BE (BD)□-4	10	4	66.1	16	43	20	11.2	18.8	18.5	6	4.0 to 7.1	47
VSP-D10BE (BD)□-6		6					11.9	20.1				48
VSP-D10-10BE (BD)□-4		4	71.1		48		11.2	18.8	25	10	2.0 to 5.2	50
VSP-D10-10BE (BD)□-6		6					11.9	20.1				51
VSP-D10-15BE (BD)□-4		4	81.1		53	25	11.2	18.8	30	15	2.0 to 5.9	56
VSP-D10-15BE (BD)□-6		6					11.9	20.1				57
VSP-D10-20BE (BD)□-4		4	97.1		60	34	11.2	18.8	37	20	1.1 to 4.8	66
VSP-D10-20BE (BD)□-6		6					11.9	20.1				67
VSP-D15BE (BD)□-4	15	4	66.1	16	43	20	11.2	18.8	18.5	6	4.0 to 7.1	48
VSP-D15BE (BD)□-6		6					11.9	20.1				49
VSP-D15-10BE (BD)□-4		4	71.1		48		11.2	18.8	25	10	2.0 to 5.2	51
VSP-D15-10BE (BD)□-6		6					11.9	20.1				52
VSP-D15-15BE (BD)□-4		4	81.1		53	25	11.2	18.8	30	15	2.0 to 5.9	56
VSP-D15-15BE (BD)□-6		6					11.9	20.1				57
VSP-D15-20BE (BD)□-4		4	97.1		60	34	11.2	18.8	37	20	1.1 to 4.8	67
VSP-D15-20BE (BD)□-6		6					11.9	20.1				68
VSP-D20BE (BD)□-4	20	4	69.1	19	46	20	11.2	18.8	18.5	6	7.0 to 12.6	51
VSP-D20BE (BD)□-6		6					11.9	20.1				52
VSP-D20-10BE (BD)□-4		4	75.1		52		11.2	18.8	24.5	10	3.3 to 10.0	54
VSP-D20-10BE (BD)□-6		6					11.9	20.1				55
VSP-D20-15BE (BD)□-4		4	85.1		57	25	11.2	18.8	29.5	15	3.3 to 10.4	61
VSP-D20-15BE (BD)□-6		6					11.9	20.1				62
VSP-D20-20BE (BD)□-4		4	101.1		64	34	11.2	18.8	36.5	20	2.0 to 8.7	71
VSP-D20-20BE (BD)□-6		6					11.9	20.1				72

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Push-in Fitting without Spring Cover)

●VSP-D10, 15-□BE (BD)□-4C/6C



●VSP-D20-□BE (BD)□-4C/6C

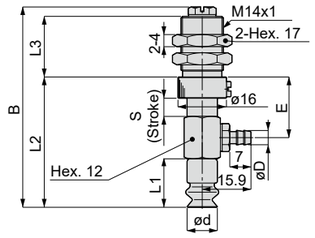


Unit: mm

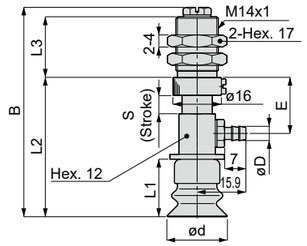
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20BE (BD)□-4C	10	4	76.1	16	64	11.2	19.8	40.5	20	1.5 to 4.9	69
VSP-D10-20BE (BD)□-6C		6				11.9	21.1				70
VSP-D10-30BE (BD)□-4C		4	89.1		77	11.2	19.8	53.5	30	1.1 to 4.8	75
VSP-D10-30BE (BD)□-6C		6				11.9	21.1				76
VSP-D10-40BE (BD)□-4C		4	102.1		90	11.2	19.8	66.5	40	1.0 to 4.5	82
VSP-D10-40BE (BD)□-6C		6				11.9	21.1				83
VSP-D10-50BE (BD)□-4C		4	115.1		103	11.2	19.8	79.5	50	0.9 to 4.5	89
VSP-D10-50BE (BD)□-6C		6				11.9	21.1				90
VSP-D15-20BE (BD)□-4C	15	4	76.1	16	64	11.2	19.8	40.5	20	1.5 to 4.9	69
VSP-D15-20BE (BD)□-6C		6				11.9	21.1				70
VSP-D15-30BE (BD)□-4C		4	89.1		77	11.2	19.8	53.5	30	1.1 to 4.8	75
VSP-D15-30BE (BD)□-6C		6				11.9	21.1				76
VSP-D15-40BE (BD)□-4C		4	102.1		90	11.2	19.8	66.5	40	1.0 to 4.5	82
VSP-D15-40BE (BD)□-6C		6				11.9	21.1				83
VSP-D15-50BE (BD)□-4C		4	115.1		103	11.2	19.8	79.5	50	0.9 to 4.5	89
VSP-D15-50BE (BD)□-6C		6				11.9	21.1				90
VSP-D20-20BE (BD)□-4C	20	4	80.6	19	68.5	11.2	19.8	41	20	1.5 to 4.9	70
VSP-D20-20BE (BD)□-6C		6				11.9	21.1				71
VSP-D20-30BE (BD)□-4C		4	93.6		81.5	11.2	19.8	54	30	1.1 to 4.8	77
VSP-D20-30BE (BD)□-6C		6				11.9	21.1				78
VSP-D20-40BE (BD)□-4C		4	106.6		94.5	11.2	19.8	67	40	1.0 to 4.5	82
VSP-D20-40BE (BD)□-6C		6				11.9	21.1				83
VSP-D20-50BE (BD)□-4C		4	119.6		107.5	11.2	19.8	80	50	0.9 to 4.5	90
VSP-D20-50BE (BD)□-6C		6				11.9	21.1				91

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting)

●VSP-D10, 15BE (BD)□-4T/6T
●VSP-D10, 15-□BE (BD)□-4T/6T



●VSP-D20BE (BD)□-4T/6T
●VSP-D20-□BE (BD)□-4T/6T

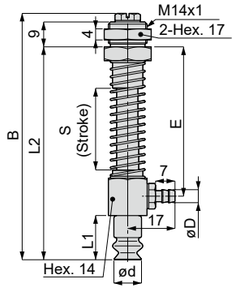


Unit: mm

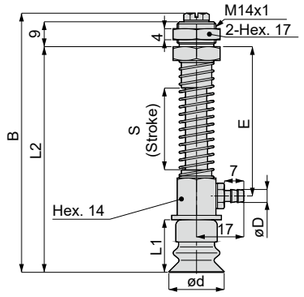
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10BE (BD)□-4T	10	2.5	66.1	16	43	20	18.5	6	4.0 to 7.1	47
VSP-D10BE (BD)□-6T		4								
VSP-D10-10BE (BD)□-4T		2.5	71.1		48		25	10	2.0 to 5.2	50
VSP-D10-10BE (BD)□-6T		4								
VSP-D10-15BE (BD)□-4T		2.5	81.1		53	25	30	15	2.0 to 5.9	55
VSP-D10-15BE (BD)□-6T		4								
VSP-D10-20BE (BD)□-4T		2.5	97.1		60	34	37	20	1.1 to 4.8	66
VSP-D10-20BE (BD)□-6T		4								
VSP-D15BE (BD)□-4T	15	2.5	66.1	16	43	20	18.5	6	4.0 to 7.1	47
VSP-D15BE (BD)□-6T		4								
VSP-D15-10BE (BD)□-4T		2.5	71.1		48		25	10	2.0 to 5.2	50
VSP-D15-10BE (BD)□-6T		4								
VSP-D15-15BE (BD)□-4T		2.5	81.1		53	25	30	15	2.0 to 5.9	55
VSP-D15-15BE (BD)□-6T		4								
VSP-D15-20BE (BD)□-4T		2.5	97.1		60	34	37	20	1.1 to 4.8	66
VSP-D15-20BE (BD)□-6T		4								
VSP-D20BE (BD)□-4T	20	2.5	69.1	19	46	20	18.5	6	7.0 to 12.6	50
VSP-D20BE (BD)□-6T		4								
VSP-D20-10BE (BD)□-4T		2.5	75.1		52		24.5	10	3.3 to 10.0	54
VSP-D20-10BE (BD)□-6T		4								
VSP-D20-15BE (BD)□-4T		2.5	85.1		57	25	29.5	15	3.3 to 10.4	61
VSP-D20-15BE (BD)□-6T		4								
VSP-D20-20BE (BD)□-4T		2.5	101.1		64	34	36.5	20	2.0 to 8.7	71
VSP-D20-20BE (BD)□-6T		4								

Outline Dimension Drawing (Buffer Type, Vacuum Outlet on Side, VSP-D, Barb Fitting without Spring Cover)

●VSP-D10, 15-□BE (BD)□-4TC/6TC



●VSP-D20-□BE (BD)□-4TC/6TC

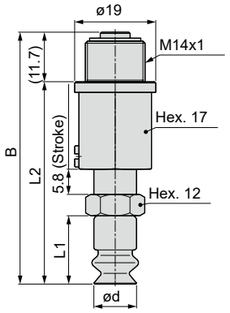


Unit: mm

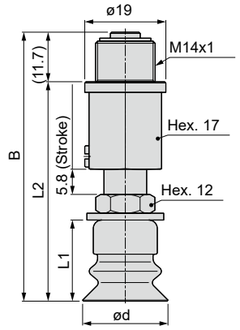
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	E	Stroke S	Spring Force (N)	Weight (g)
VSP-D10-20BE (BD)□-4TC	10	2.5	76.1	16	64	40.5	20	1.5 to 4.9	60
VSP-D10-20BE (BD)□-6TC		4							
VSP-D10-30BE (BD)□-4TC		2.5	89.1		77	53.5	30	1.1 to 4.8	67
VSP-D10-30BE (BD)□-6TC		4							
VSP-D10-40BE (BD)□-4TC		2.5	102.1		90	66.5	40	1.0 to 4.5	74
VSP-D10-40BE (BD)□-6TC		4							
VSP-D10-50BE (BD)□-4TC		2.5	115.1		103	79.5	50	0.9 to 4.5	80
VSP-D10-50BE (BD)□-6TC		4							
VSP-D15-20BE (BD)□-4TC	15	2.5	76.1	16	64	40.5	20	1.5 to 4.9	61
VSP-D15-20BE (BD)□-6TC		4							
VSP-D15-30BE (BD)□-4TC		2.5	89.1		77	53.5	30	1.1 to 4.8	68
VSP-D15-30BE (BD)□-6TC		4							
VSP-D15-40BE (BD)□-4TC		2.5	102.1		90	66.5	40	1.0 to 4.5	75
VSP-D15-40BE (BD)□-6TC		4							
VSP-D15-50BE (BD)□-4TC		2.5	115.1		103	79.5	50	0.9 to 4.5	81
VSP-D15-50BE (BD)□-6TC		4							
VSP-D20-20BE (BD)□-4TC	20	4	80.6	19	68.5	41	20	1.5 to 4.9	68
VSP-D20-20BE (BD)□-6TC		6							
VSP-D20-30BE (BD)□-4TC		4	93.6		81.5	54	30	1.1 to 4.8	75
VSP-D20-30BE (BD)□-6TC		6							
VSP-D20-40BE (BD)□-4TC		4	106.6		94.5	67	40	1.0 to 4.5	81
VSP-D20-40BE (BD)□-6TC		6							
VSP-D20-50BE (BD)□-4TC		4	119.6		107.5	80	50	0.9 to 4.5	88
VSP-D20-50BE (BD)□-6TC		6							

Outline Dimension Drawing (Buffer Type, Direct Mount Type, VSP-F, Male Thread)

●VSP-F10, 15BE (BD)□



●VSP-F20BE (BD)□

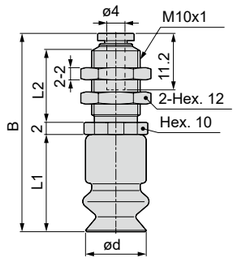


Unit: mm

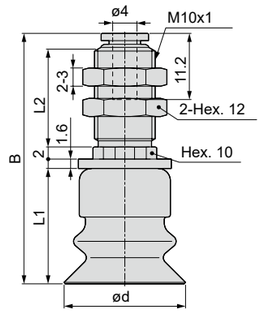
Model No.	Pad Diameter ød	B	L1	L2	Spring Force (N)	Weight (g)
VSP-F10BE (BD)□	10	59	16	47.3	7.9 to 15	58
VSP-F15BE (BD)□	15	59	16	47.3	7.9 to 15	58
VSP-F20BE (BD)□	20	63	19	51.3	7.9 to 15	62

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Push-in fitting)

●VSP-MA10, 15BE (BD)□-4



●VSP-MA20BE (BD)□-4

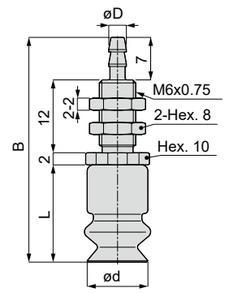


Unit: mm

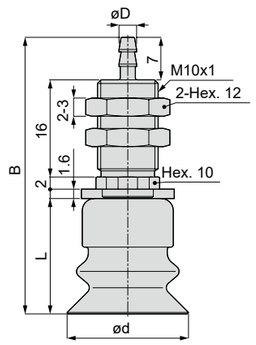
Model No.	Pad Diameter ød	B	L1	L2	Weight (g)
VSP-MA10BE (BD)□-4	10	37	16	16.4	6.6
VSP-MA15BE (BD)□-4	15	37	16	16.4	7.1
VSP-MA20BE (BD)□-4	20	41.6	19	16.4	12

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Top, VSP-MA, Barb Fitting)

●VSP-MA10, 15BE (BD)□-4T



●VSP-MA20BE (BD)□-4T/6T

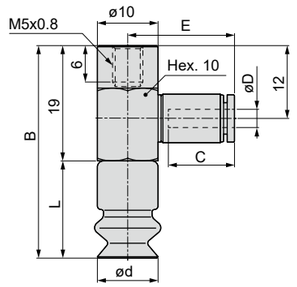


Unit: mm

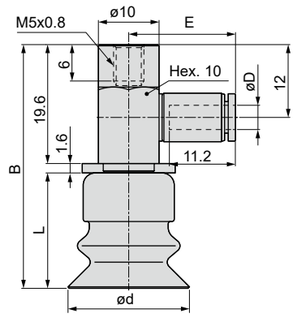
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-MA10BE (BD)□-4T	10	2.5	37	16	3.8
VSP-MA15BE (BD)□-4T	15	2.5	37	16	4.3
VSP-MA20BE (BD)□-4T	20	2.5	45.6	19	12
VSP-MA20BE (BD)□-6T		4			

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Push-in fitting)

●VSP-MB10, 15BE (BD)□-2/4/6



●VSP-MB20BE (BD)□-2/4/6

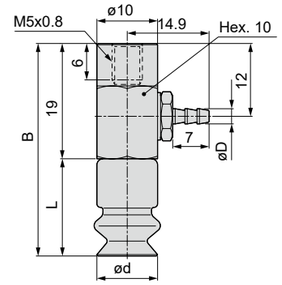


Unit: mm

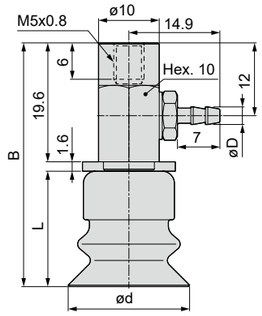
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-MB10BE (BD)□-2	10	1.8	35	16	8.4	13.7	7.7
VSP-MB10BE (BD)□-4		4			11.2	17.8	8.4
VSP-MB10BE (BD)□-6		6			11.9	19.6	9.8
VSP-MB15BE (BD)□-2	15	1.8	35	16	8.4	13.7	8.2
VSP-MB15BE (BD)□-4		4			11.2	17.8	8.9
VSP-MB15BE (BD)□-6		6			11.9	19.6	10.3
VSP-MB20BE (BD)□-2	20	1.8	40.2	19	8.4	13.7	12
VSP-MB20BE (BD)□-4		4			11.2	17.8	13
VSP-MB20BE (BD)□-6		6			11.9	19.6	14

Outline Dimension Drawing (Compact, Fixed Type, Vacuum Outlet on Side, VSP-MB, Barb Fitting)

●VSP-MB10, 15BE (BD)□-4T/6T



●VSP-MB20BE (BD)□-4T/6T

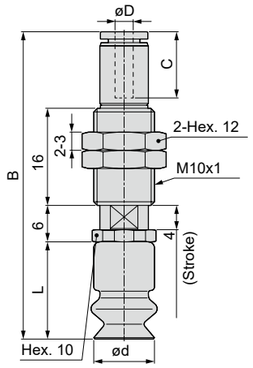


Unit: mm

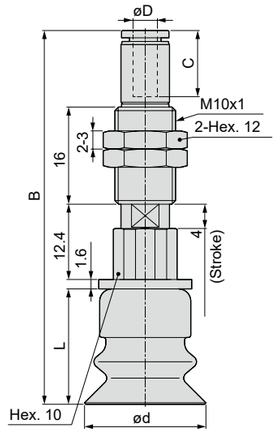
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Weight (g)
VSP-MB10BE (BD)□-4T	10	2.5	35	16	7.2
VSP-MB10BE (BD)□-6T		4			
VSP-MB15BE (BD)□-4T	15	2.5	35	16	7.7
VSP-MB15BE (BD)□-6T		4			
VSP-MB20BE (BD)□-4T	20	2.5	40.2	19	12
VSP-MB20BE (BD)□-6T		4			

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Push-in fitting)

●VSP-MC10, 15BE (BD)□-2/4



●VSP-MC20BE (BD)□-2/4

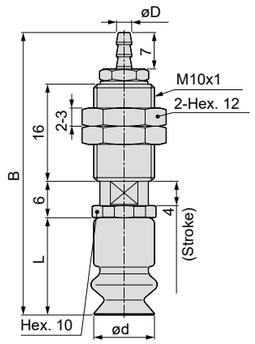


Unit: mm

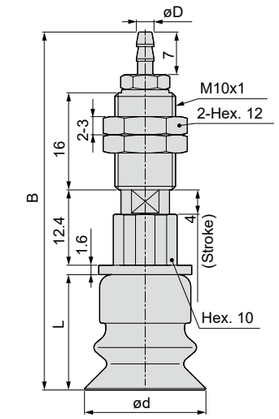
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	Spring Force (N)	Weight (g)
VSP-MC10BE (BD)□-2	10	1.8	46.9	16	8.4	0.5 to 0.6	15
VSP-MC10BE (BD)□-4		4	51		11.2		16
VSP-MC15BE (BD)□-2	15	1.8	46.9	16	8.4	0.5 to 0.6	16
VSP-MC15BE (BD)□-4		4	51		11.2		17
VSP-MC20BE (BD)□-2	20	1.8	57.9	19	8.4	1 to 1.3	23
VSP-MC20BE (BD)□-4		4	62		11.2		24

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Top, VSP-MC, Barb Fitting)

●VSP-MC10, 15BE (BD)□-4T/6T



●VSP-MC20BE (BD)□-4T/6T

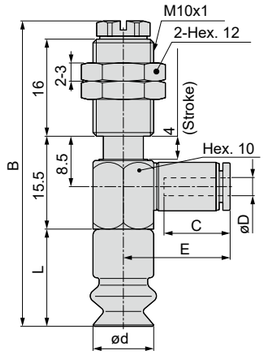


Unit: mm

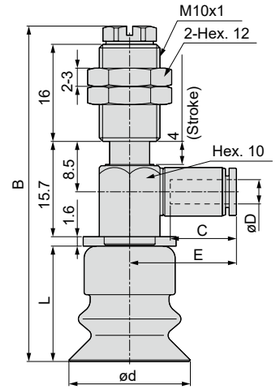
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MC10BE (BD)□-4T	10	2.5	48.1	16	0.5 to 0.6	15
VSP-MC10BE (BD)□-6T		4				
VSP-MC15BE (BD)□-4T	15	2.5	48.1	16	0.5 to 0.6	16
VSP-MC15BE (BD)□-6T		4				
VSP-MC20BE (BD)□-4T	20	2.5	59.1	19	1 to 1.3	23
VSP-MC20BE (BD)□-6T		4				

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Push-in fitting)

●VSP-MD10, 15BE (BD)□-2/4/6



●VSP-MD20BE (BD)□-2/4/6

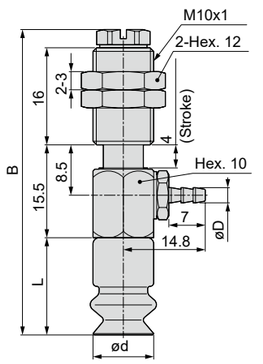


Unit: mm

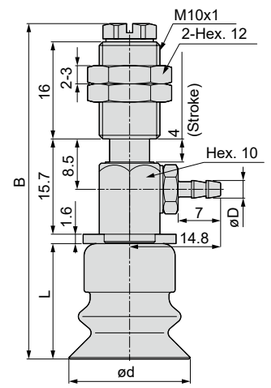
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Spring Force (N)	Weight (g)
VSP-MD10BE (BD)□-2	10	1.8	50.5	16	8.4	13.6	1 to 1.3	23
VSP-MD10BE (BD)□-4		4			11.2	17.7		24
VSP-MD10BE (BD)□-6		6			11.9	19.5		25
VSP-MD15BE (BD)□-2	15	1.8	50.5	16	8.4	13.6	1 to 1.3	24
VSP-MD15BE (BD)□-4		4			11.2	17.7		25
VSP-MD15BE (BD)□-6		6			11.9	19.5		26
VSP-MD20BE (BD)□-2	20	1.8	55.3	19	8.4	13.6	1 to 1.3	27
VSP-MD20BE (BD)□-4		4			11.2	17.7		28
VSP-MD20BE (BD)□-6		6			11.9	19.5		29

Outline Dimension Drawing (Compact, Buffer Type, Vacuum Outlet on Side, VSP-MD, Barb Fitting)

●VSP-MD10, 15BE (BD)□-4T/6T



●VSP-MD20BE (BD)□-4T/6T

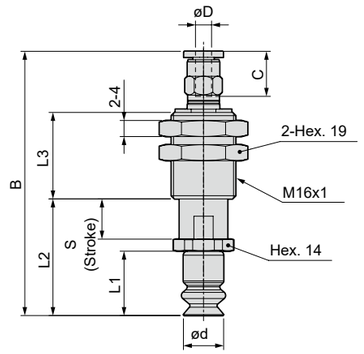


Unit: mm

Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Spring Force (N)	Weight (g)
VSP-MD10BE (BD)□-4T	10	2.5	50.5	16	1 to 1.3	22
VSP-MD10BE (BD)□-6T		4				
VSP-MD15BE (BD)□-4T	15	2.5	50.5	16	1 to 1.3	23
VSP-MD15BE (BD)□-6T		4				
VSP-MD20BE (BD)□-4T	20	2.5	55.3	19	1 to 1.3	27
VSP-MD20BE (BD)□-6T		4				

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC10, 15-□BE (BD)□-2/4/6

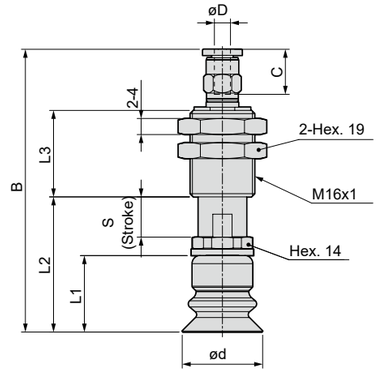


Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10BE (BD)□-2	10	1.8	61.6	16	29	21.5	8.4	10	1.0 to 2.4	22
VSP-HC10-10BE (BD)□-4		4	65.7				11.2			23
VSP-HC10-10BE (BD)□-6		6	67				11.9			24
VSP-HC10-15BE (BD)□-2		1.8	71.6		34	26.5	8.4	15	1.0 to 2.7	24
VSP-HC10-15BE (BD)□-4		4	75.7				11.2			25
VSP-HC10-15BE (BD)□-6		6	77				11.9			26
VSP-HC10-20BE (BD)□-2		1.8	81.6		39	31.5	8.4	20	1.0 to 3.0	26
VSP-HC10-20BE (BD)□-4		4	85.7				11.2			27
VSP-HC10-20BE (BD)□-6		6	87				11.9			28
VSP-HC10-25BE (BD)□-2		1.8	92.1		44	37	8.4	25	1.0 to 3.0	28
VSP-HC10-25BE (BD)□-4		4	96.2				11.2			29
VSP-HC10-25BE (BD)□-6		6	97.5				11.9			30
VSP-HC10-30BE (BD)□-2		1.8	103.1		49	43	8.4	30	1.0 to 3.0	30
VSP-HC10-30BE (BD)□-4		4	107.2				11.2			31
VSP-HC10-30BE (BD)□-6		6	108.5				11.9			32
VSP-HC10-40BE (BD)□-2		1.8	125.1		59	55	8.4	40	1.0 to 3.0	34
VSP-HC10-40BE (BD)□-4		4	129.2				11.2			35
VSP-HC10-40BE (BD)□-6		6	130.5				11.9			36
VSP-HC10-50BE (BD)□-2		1.8	146.6		69	66.5	8.4	50	1.0 to 3.1	39
VSP-HC10-50BE (BD)□-4		4	150.7				11.2			40
VSP-HC10-50BE (BD)□-6		6	152				11.9			41
VSP-HC15-10BE (BD)□-2	15	1.8	61.6	16	29	21.5	8.4	10	1.0 to 2.4	22
VSP-HC15-10BE (BD)□-4		4	65.7				11.2			23
VSP-HC15-10BE (BD)□-6		6	67				11.9			24
VSP-HC15-15BE (BD)□-2		1.8	71.6		34	26.5	8.4	15	1.0 to 2.7	24
VSP-HC15-15BE (BD)□-4		4	75.7				11.2			25
VSP-HC15-15BE (BD)□-6		6	77				11.9			26
VSP-HC15-20BE (BD)□-2		1.8	81.6		39	31.5	8.4	20	1.0 to 3.0	26
VSP-HC15-20BE (BD)□-4		4	85.7				11.2			27
VSP-HC15-20BE (BD)□-6		6	87				11.9			28
VSP-HC15-25BE (BD)□-2		1.8	92.1		44	37	8.4	25	1.0 to 3.0	28
VSP-HC15-25BE (BD)□-4		4	96.2				11.2			29
VSP-HC15-25BE (BD)□-6		6	97.5				11.9			30
VSP-HC15-30BE (BD)□-2		1.8	103.1		49	43	8.4	30	1.0 to 3.0	30
VSP-HC15-30BE (BD)□-4		4	107.2				11.2			31
VSP-HC15-30BE (BD)□-6		6	108.5				11.9			32
VSP-HC15-40BE (BD)□-2		1.8	125.1		59	55	8.4	40	1.0 to 3.0	34
VSP-HC15-40BE (BD)□-4		4	129.2				11.2			35
VSP-HC15-40BE (BD)□-6		6	130.5				11.9			36
VSP-HC15-50BE (BD)□-2		1.8	146.6		69	66.5	8.4	50	1.0 to 3.1	39
VSP-HC15-50BE (BD)□-4		4	150.7				11.2			40
VSP-HC15-50BE (BD)□-6		6	152				11.9			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Push-in fitting)

●VSP-HC20-□BE (BD)□-2/4/6

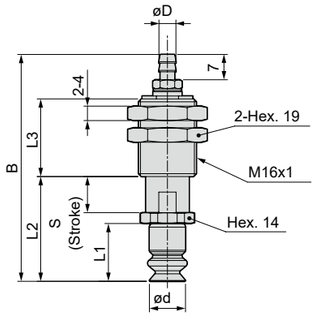


Unit: mm

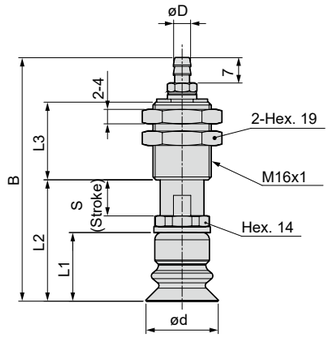
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-HC20-10BE (BD)□-2	20	1.8	66.2	19	33.6	21.5	8.4	10	1.0 to 2.4	27
VSP-HC20-10BE (BD)□-4		4	70.3				11.2			28
VSP-HC20-10BE (BD)□-6		6	71.6				11.9			29
VSP-HC20-15BE (BD)□-2		1.8	76.2		38.6	26.5	8.4	15	1.0 to 2.7	29
VSP-HC20-15BE (BD)□-4		4	80.3				11.2			30
VSP-HC20-15BE (BD)□-6		6	81.6				11.9			31
VSP-HC20-20BE (BD)□-2		1.8	86.2		43.6	31.5	8.4	20	1.0 to 3.0	31
VSP-HC20-20BE (BD)□-4		4	90.3				11.2			32
VSP-HC20-20BE (BD)□-6		6	91.6				11.9			33
VSP-HC20-25BE (BD)□-2		1.8	96.7		48.6	37	8.4	25	1.0 to 3.0	33
VSP-HC20-25BE (BD)□-4		4	100.8				11.2			34
VSP-HC20-25BE (BD)□-6		6	102.1				11.9			35
VSP-HC20-30BE (BD)□-2		1.8	107.7		53.6	43	8.4	30	1.0 to 3.0	35
VSP-HC20-30BE (BD)□-4		4	111.8				11.2			36
VSP-HC20-30BE (BD)□-6		6	113.1				11.9			37
VSP-HC20-40BE (BD)□-2		1.8	129.7		63.6	55	8.4	40	1.0 to 3.0	39
VSP-HC20-40BE (BD)□-4		4	133.8				11.2			40
VSP-HC20-40BE (BD)□-6		6	135.1				11.9			41
VSP-HC20-50BE (BD)□-2		1.8	151.2		73.6	66.5	8.4	50	1.0 to 3.1	43
VSP-HC20-50BE (BD)□-4		4	155.3				11.2			44
VSP-HC20-50BE (BD)□-6		6	156.6				11.9			45

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Top, VSP-HC, Barb Fitting)

●VSP-HC10, 15-□BE (BD)□-4T/6T



●VSP-HC20-□BE (BD)□-4T/6T

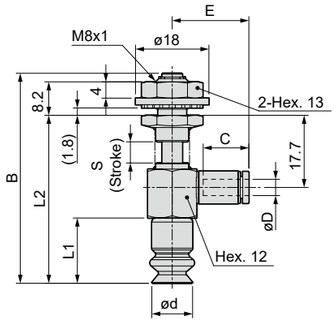


Unit: mm

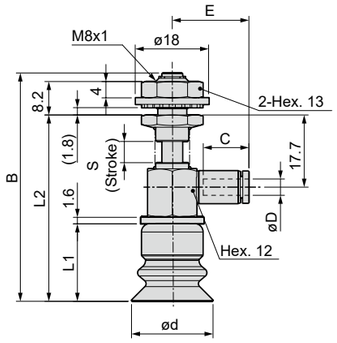
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	Stroke S	Spring Force (N)	Weight (g)
VSP-HC10-10BE (BD)□-4T	10	2.5	62.8	16	29	21.5	10	1.0 to 2.4	21
VSP-HC10-10BE (BD)□-6T		4							
VSP-HC10-15BE (BD)□-4T		2.5	72.8		34	26.5	15	1.0 to 2.7	23
VSP-HC10-15BE (BD)□-6T		4							
VSP-HC10-20BE (BD)□-4T		2.5	82.8		39	31.5	20	1.0 to 3.0	25
VSP-HC10-20BE (BD)□-6T		4							
VSP-HC10-25BE (BD)□-4T		2.5	93.3		44	37	25	1.0 to 3.0	28
VSP-HC10-25BE (BD)□-6T		4							
VSP-HC10-30BE (BD)□-4T		2.5	104.3		49	43	30	1.0 to 3.0	30
VSP-HC10-30BE (BD)□-6T		4							
VSP-HC10-40BE (BD)□-4T		2.5	126.3		59	55	40	1.0 to 3.0	34
VSP-HC10-40BE (BD)□-6T		4							
VSP-HC10-50BE (BD)□-4T		2.5	147.8		69	66.5	50	1.0 to 3.1	38
VSP-HC10-50BE (BD)□-6T		4							
VSP-HC15-10BE (BD)□-4T	15	2.5	62.8	16	29	21.5	10	1.0 to 2.4	21
VSP-HC15-10BE (BD)□-6T		4							
VSP-HC15-15BE (BD)□-4T		2.5	72.8		34	26.5	15	1.0 to 2.7	23
VSP-HC15-15BE (BD)□-6T		4							
VSP-HC15-20BE (BD)□-4T		2.5	82.8		39	31.5	20	1.0 to 3.0	25
VSP-HC15-20BE (BD)□-6T		4							
VSP-HC15-25BE (BD)□-4T		2.5	93.3		44	37	25	1.0 to 3.0	28
VSP-HC15-25BE (BD)□-6T		4							
VSP-HC15-30BE (BD)□-4T		2.5	104.3		49	43	30	1.0 to 3.0	30
VSP-HC15-30BE (BD)□-6T		4							
VSP-HC15-40BE (BD)□-4T		2.5	126.3		59	55	40	1.0 to 3.0	34
VSP-HC15-40BE (BD)□-6T		4							
VSP-HC15-50BE (BD)□-4T		2.5	147.8		69	66.5	50	1.0 to 3.1	38
VSP-HC15-50BE (BD)□-6T		4							
VSP-HC20-10BE (BD)□-4T	20	2.5	67.4	19	33.6	21.5	10	1.0 to 2.4	25
VSP-HC20-10BE (BD)□-6T		4							
VSP-HC20-15BE (BD)□-4T		2.5	77.4		38.6	26.5	15	1.0 to 2.7	27
VSP-HC20-15BE (BD)□-6T		4							
VSP-HC20-20BE (BD)□-4T		2.5	87.4		43.6	31.5	20	1.0 to 3.0	29
VSP-HC20-20BE (BD)□-6T		4							
VSP-HC20-25BE (BD)□-4T		2.5	97.9		48.6	37	25	1.0 to 3.0	31
VSP-HC20-25BE (BD)□-6T		4							
VSP-HC20-30BE (BD)□-4T		2.5	108.9		53.6	43	30	1.0 to 3.0	34
VSP-HC20-30BE (BD)□-6T		4							
VSP-HC20-40BE (BD)□-4T		2.5	130.9		63.6	55	40	1.0 to 3.0	38
VSP-HC20-40BE (BD)□-6T		4							
VSP-HC20-50BE (BD)□-4T		2.5	152.4		73.6	66.5	50	1.0 to 3.1	42
VSP-HC20-50BE (BD)□-6T		4							

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Push-in fitting)

●VSP-HD10, 15BE (BD)□-2/4/6



●VSP-HD20BE (BD)□-2/4/6

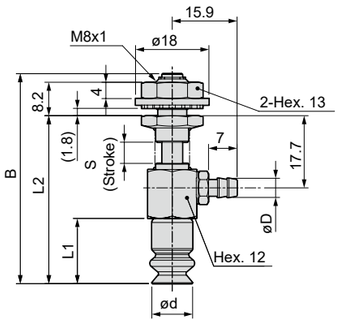


Unit: mm

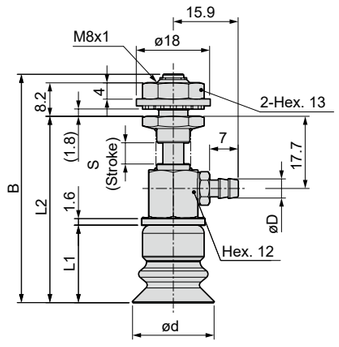
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10BE (BD)□-2	10	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	32
VSP-HD10BE (BD)□-4		4				11.2	18.8			33
VSP-HD10BE (BD)□-6		6				11.9	20.6			34
VSP-HD15BE (BD)□-2	15	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HD15BE (BD)□-4		4				11.2	18.8			34
VSP-HD15BE (BD)□-6		6				11.9	20.6			35
VSP-HD20BE (BD)□-2	20	1.8	56	19	45.7	8.4	14.7	5.2	1.6 to 2.9	36
VSP-HD20BE (BD)□-4		4				11.2	18.8			37
VSP-HD20BE (BD)□-6		6				11.9	20.6			38

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet on Side, VSP-HD, Barb Fitting)

●VSP-HD10, 15BE (BD)□-4T/6T



●VSP-HD20BE (BD)□-4T/6T

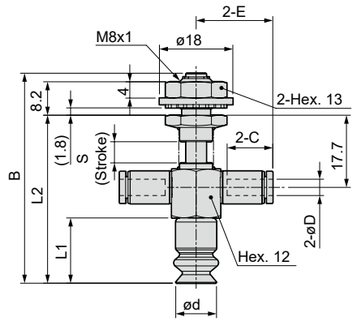


Unit: mm

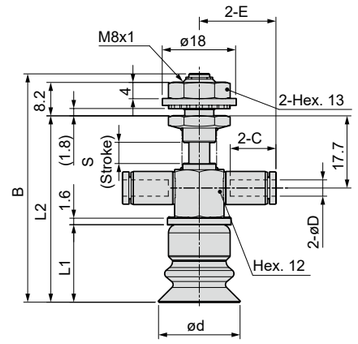
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HD10BE (BD)□-4T	10	2.5	51.5	16	41.2	5.2	1.6 to 2.9	31
VSP-HD10BE (BD)□-6T		4						
VSP-HD15BE (BD)□-4T	15	2.5	51.5	16	41.2	5.2	1.6 to 2.9	32
VSP-HD15BE (BD)□-6T		4						
VSP-HD20BE (BD)□-4T	20	2.5	56	19	45.7	5.2	1.6 to 2.9	36
VSP-HD20BE (BD)□-6T		4						

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Push-in fitting)

●VSP-HDW10, 15BE (BD)□-2/4/6



●VSP-HDW20BE (BD)□-2/4/6

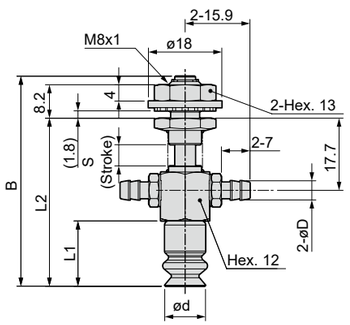


Unit: mm

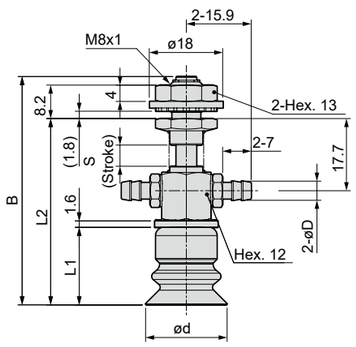
Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	Tube End C	E	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10BE (BD)□-2	10	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW10BE (BD)□-4		4				11.2	18.8			35
VSP-HDW10BE (BD)□-6		6				11.9	20.6			37
VSP-HDW15BE (BD)□-2	15	1.8	51.5	16	41.2	8.4	14.7	5.2	1.6 to 2.9	33
VSP-HDW15BE (BD)□-4		4				11.2	18.8			35
VSP-HDW15BE (BD)□-6		6				11.9	20.6			37
VSP-HDW20BE (BD)□-2	20	1.8	56	19	45.7	8.4	14.7	5.2	1.6 to 2.9	37
VSP-HDW20BE (BD)□-4		4				11.2	18.8			39
VSP-HDW20BE (BD)□-6		6				11.9	20.6			41

Outline Dimension Drawing (Lightweight Buffer Type, Vacuum Outlet Both Sides VSP-HDW, Barb Fitting)

●VSP-HDW10, 15BE (BD)□-4T/6T



●VSP-HDW20BE (BD)□-4T/6T

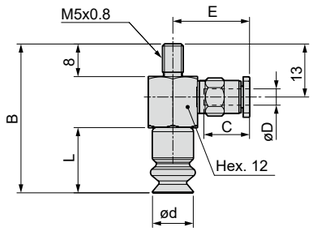


Unit: mm

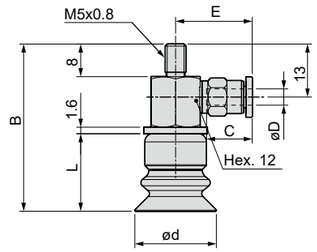
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	Stroke S	Spring Force (N)	Weight (g)
VSP-HDW10BE (BD)□-4T	10	2.5	51.5	16	41.2	5.2	1.6 to 2.9	32
VSP-HDW10BE (BD)□-6T		4						
VSP-HDW15BE (BD)□-4T	15	2.5	51.5	16	41.2	5.2	1.6 to 2.9	32
VSP-HDW15BE (BD)□-6T		4						
VSP-HDW20BE (BD)□-4T	20	2.5	56	19	45.7	5.2	1.6 to 2.9	37
VSP-HDW20BE (BD)□-6T		4						

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Push-in fitting)

●VSP-HE10, 15BE (BD)□-2/4/6



●VSP-HE20BE (BD)□-2/4/6

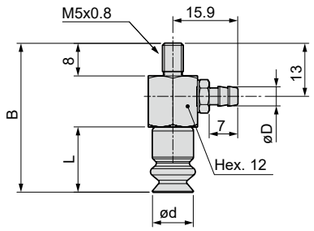


Unit: mm

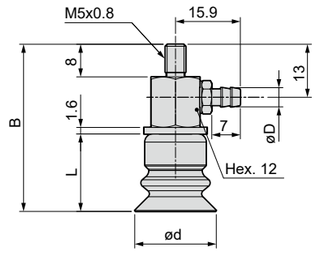
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HE10BE (BD)□-2	10	1.8	36.5	16	8.4	14.7	17
VSP-HE10BE (BD)□-4		4			11.2	18.8	18
VSP-HE10BE (BD)□-6		6			11.9	20.6	19
VSP-HE15BE (BD)□-2	15	1.8	36.5	16	8.4	14.7	17
VSP-HE15BE (BD)□-4		4			11.2	18.8	18
VSP-HE15BE (BD)□-6		6			11.9	20.6	19
VSP-HE20BE (BD)□-2	20	1.8	41	19	8.4	14.7	22
VSP-HE20BE (BD)□-4		4			11.2	18.8	23
VSP-HE20BE (BD)□-6		6			11.9	20.6	24

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet on Side, VSP-HE, Barb Fitting)

●VSP-HE10, 15BE (BD)□-4T/6T



●VSP-HE20BE (BD)□-4T/6T

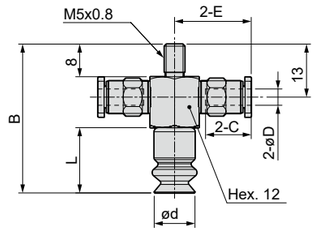


Unit: mm

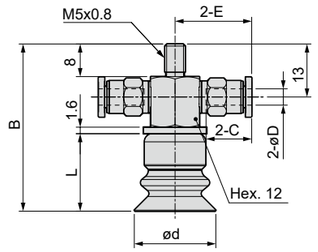
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HE10BE (BD)□-4T	10	2.5	36.5	16	16
VSP-HE10BE (BD)□-6T		4			
VSP-HE15BE (BD)□-4T	15	2.5	36.5	16	16
VSP-HE15BE (BD)□-6T		4			
VSP-HE20BE (BD)□-4T	20	2.5	41	19	21
VSP-HE20BE (BD)□-6T		4			

Outline Dimension Drawing (Low Profile Fixed Type, Vacuum Outlet Both Sides VSP-HE, Push-in fitting)

●VSP-HEW10, 15BE (BD)□-2/4/6



●VSP-HEW20BE (BD)□-2/4/6

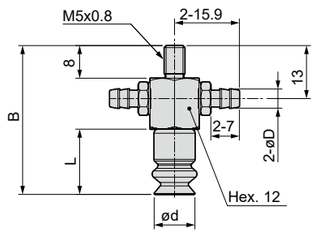


Unit: mm

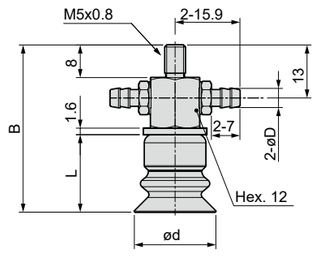
Model No.	Pad Diameter ød	Tube O.D. øD	B	L	Tube End C	E	Weight (g)
VSP-HEW10BE (BD)□-2	10	1.8	36.5	16	8.4	14.7	19
VSP-HEW10BE (BD)□-4		4			11.2	18.8	21
VSP-HEW10BE (BD)□-6		6			11.9	20.6	23
VSP-HEW15BE (BD)□-2	15	1.8	36.5	16	8.4	14.7	20
VSP-HEW15BE (BD)□-4		4			11.2	18.8	22
VSP-HEW15BE (BD)□-6		6			11.9	20.6	24
VSP-HEW20BE (BD)□-2	20	1.8	41	19	8.4	14.7	23
VSP-HEW20BE (BD)□-4		4			11.2	18.8	25
VSP-HEW20BE (BD)□-6		6			11.9	20.6	27

Outline Dimension Drawing (Low Profile Buffer Type, Vacuum Outlet Both Sides VSP-HEW, Barb Fitting)

●VSP-HEW10, 15BE (BD)□-4T/6T



●VSP-HEW20BE (BD)□-4T/6T

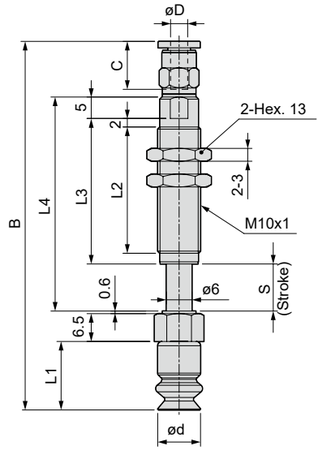


Unit: mm

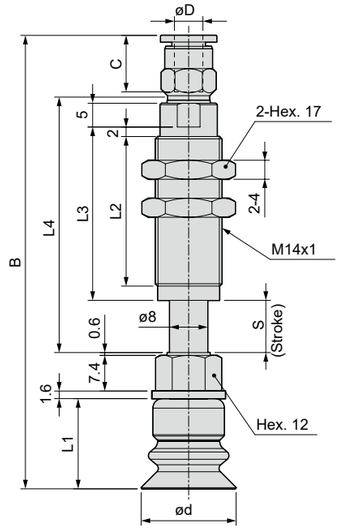
Model No.	Pad Diameter ød	Tube I.D. øD	B	L	Weight (g)
VSP-HEW10BE (BD)□-4T	10	2.5	36.5	16	17
VSP-HEW10BE (BD)□-6T		4			
VSP-HEW15BE (BD)□-4T	15	2.5	36.5	16	17
VSP-HEW15BE (BD)□-6T		4			
VSP-HEW20BE (BD)□-4T	20	2.5	41	19	21
VSP-HEW20BE (BD)□-6T		4			

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Push-in fitting)

●VSP-LFC10, 15-□BE (BD)□-4



●VSP-LFC20-□BE (BD)□-4/6



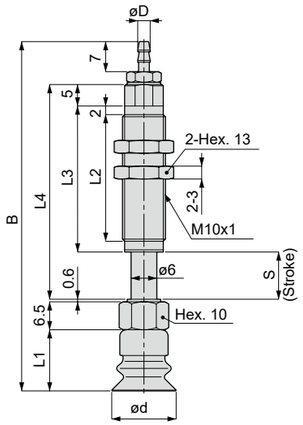
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2BE (BD)□-4	10	4	70.1	16	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC10-5BE (BD)□-4			76.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC10-10BE (BD)□-4			86.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC10-15BE (BD)□-4			96.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC10-20BE (BD)□-4			106.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC15-2BE (BD)□-4	15	4	70.1	16	21.5	26	34	11.2	2	1.3 to 1.8	28
VSP-LFC15-5BE (BD)□-4			76.1		24.5	29	40		5	1.3 to 2.4 [0.33 to 0.6]	30
VSP-LFC15-10BE (BD)□-4			86.1		29.5	34	50		10	1.3 to 3.3 [0.33 to 0.83]	32
VSP-LFC15-15BE (BD)□-4			96.1		34.5	39	60		15	1.3 to 4.2 [0.33 to 1.05]	34
VSP-LFC15-20BE (BD)□-4			106.1		39.5	44	70		20	1.3 to 5.1 [0.33 to 1.28]	36
VSP-LFC20-5BE (BD)□-4	20	4	84.1	19	26.5	31.5	42.5	11.2	5	4.5 to 6.5 [1.13 to 1.63]	57
VSP-LFC20-5BE (BD)□-6		6	85.4					11.9			58
VSP-LFC20-10BE (BD)□-4		4	94.1		31.5	36.5	52.5	11.2	10	4.5 to 8.2 [1.13 to 2.05]	59
VSP-LFC20-10BE (BD)□-6		6	95.4					11.9			60
VSP-LFC20-15BE (BD)□-4		4	104.1		36.5	41.5	62.5	11.2	15	4.5 to 9.9 [1.13 to 2.48]	62
VSP-LFC20-15BE (BD)□-6		6	105.4					11.9			63
VSP-LFC20-20BE (BD)□-4		4	114.1		41.5	46.5	72.5	11.2	20	4.5 to 14.9 [1.13 to 3.73]	65
VSP-LFC20-20BE (BD)□-6		6	115.4					11.9			66

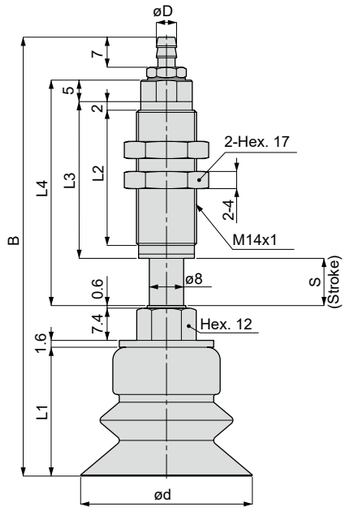
* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Top, VSP-LFC, Barb Fitting)

●VSP-LFC10, 15-□BE (BD)□-4T/6T



●VSP-LFC20-□BE (BD)□-4T/6T



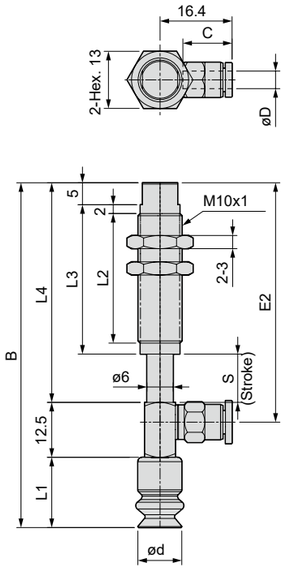
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Stroke S	Spring Force (N)	Weight (g)
VSP-LFC10-2BE (BD)□-4T	10	2.5	67.2	16	21.5	26	34	2	1.3 to 1.8	27
VSP-LFC10-2BE (BD)□-6T		4								
VSP-LFC10-5BE (BD)□-4T		2.5	73.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	29
VSP-LFC10-5BE (BD)□-6T		4								
VSP-LFC10-10BE (BD)□-4T		2.5	83.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	31
VSP-LFC10-10BE (BD)□-6T		4								
VSP-LFC10-15BE (BD)□-4T		2.5	93.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	33
VSP-LFC10-15BE (BD)□-6T		4								
VSP-LFC10-20BE (BD)□-4T		2.5	103.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	35
VSP-LFC10-20BE (BD)□-6T		4								
VSP-LFC15-2BE (BD)□-4T	15	2.5	67.2	16	21.5	26	34	2	1.3 to 1.8	27
VSP-LFC15-2BE (BD)□-6T		4								
VSP-LFC15-5BE (BD)□-4T		2.5	73.2		24.5	29	40	5	1.3 to 2.4 [0.33 to 0.6]	29
VSP-LFC15-5BE (BD)□-6T		4								
VSP-LFC15-10BE (BD)□-4T		2.5	83.2		29.5	34	50	10	1.3 to 3.3 [0.33 to 0.83]	31
VSP-LFC15-10BE (BD)□-6T		4								
VSP-LFC15-15BE (BD)□-4T		2.5	93.2		34.5	39	60	15	1.3 to 4.2 [0.33 to 1.05]	33
VSP-LFC15-15BE (BD)□-6T		4								
VSP-LFC15-20BE (BD)□-4T		2.5	103.2		39.5	44	70	20	1.3 to 5.1 [0.33 to 1.28]	35
VSP-LFC15-20BE (BD)□-6T		4								
VSP-LFC20-5BE (BD)□-4T	20	2.5	81.2	19	26.5	31.5	42.5	5	4.5 to 6.5 [1.13 to 1.63]	53
VSP-LFC20-5BE (BD)□-6T		4								
VSP-LFC20-10BE (BD)□-4T		2.5	91.2		31.5	36.5	52.5	10	4.5 to 8.2 [1.13 to 2.05]	55
VSP-LFC20-10BE (BD)□-6T		4								
VSP-LFC20-15BE (BD)□-4T		2.5	101.2		36.5	41.5	62.5	15	4.5 to 9.9 [1.13 to 2.48]	58
VSP-LFC20-15BE (BD)□-6T		4								
VSP-LFC20-20BE (BD)□-4T		2.5	111.2		41.5	46.5	72.5	20	4.5 to 14.9 [1.13 to 3.73]	61
VSP-LFC20-20BE (BD)□-6T		4								

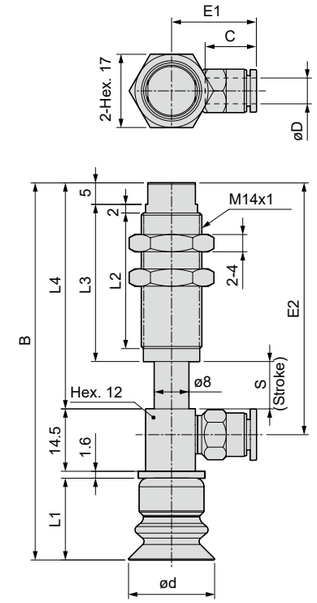
* Values inside brackets [ ] are loads for the low load type.

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Push-in fitting)

●VSP-LFD10, 15-□BE (BD)□-4



●VSP-LFD20-□BE (BD)□-4/6



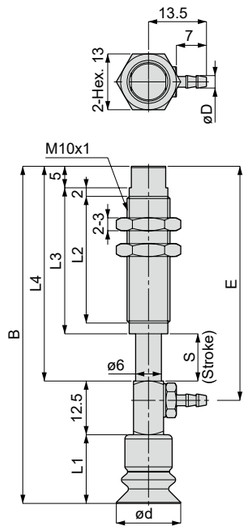
Unit: mm

Model No.	Pad Diameter ød	Tube O.D. øD	B	L1	L2	L3	L4	Tube End C	E1	E2	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5BE (BD)□-4	10	4	68.5	16	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	26
VSP-LFD10-10BE (BD)□-4			78.5		29.5	34	50			54.5	10	1.3 to 3.3	28
VSP-LFD10-15BE (BD)□-4			88.5		34.5	39	60			64.5	15	1.3 to 4.2	30
VSP-LFD10-20BE (BD)□-4			98.5		39.5	44	70			74.5	20	1.3 to 5.1	32
VSP-LFD15-5BE (BD)□-4	15	4	68.5	16	24.5	29	40	11.2	16.4	44.5	5	1.3 to 2.4	26
VSP-LFD15-10BE (BD)□-4			78.5		29.5	34	50			54.5	10	1.3 to 3.3	28
VSP-LFD15-15BE (BD)□-4			88.5		34.5	39	60			64.5	15	1.3 to 4.2	30
VSP-LFD15-20BE (BD)□-4			98.5		39.5	44	70			74.5	20	1.3 to 5.1	32
VSP-LFD20-5BE (BD)□-4	20	4	77.5	19	26.5	31.5	42.5	11.2	18.4	48.5	5	4.5 to 6.5	58
VSP-LFD20-5BE (BD)□-6		6						11.9	19.7				59
VSP-LFD20-10BE (BD)□-4		4	87.5		31.5	36.5	52.5	11.2	18.4	58.5	10	4.5 to 8.2	62
VSP-LFD20-10BE (BD)□-6		6						11.9	19.7				63
VSP-LFD20-15BE (BD)□-4		4	97.5		36.5	41.5	62.5	11.2	18.4	68.5	15	4.5 to 9.9	66
VSP-LFD20-15BE (BD)□-6		6						11.9	19.7				67
VSP-LFD20-20BE (BD)□-4		4	107.5		41.5	46.5	72.5	11.2	18.4	78.5	20	4.5 to 14.9	70
VSP-LFD20-20BE (BD)□-6		6						11.9	19.7				71

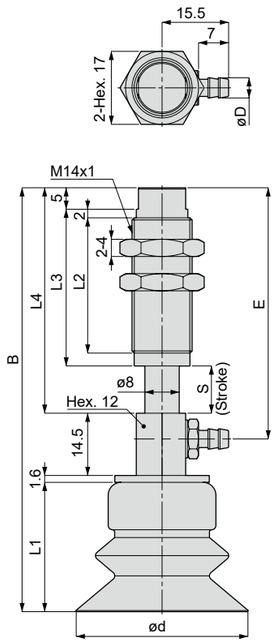
VSP-□BE, BD□ Series

Outline Dimension Drawing (Low Dust Generation Buffer Type, Vacuum Outlet on Side, VSP-LFD, Barb Fitting)

●VSP-LFD10, 15-□BE (BD)□-4T/6T



●VSP-LFD20-□BE (BD)□-4T/6T



Unit: mm

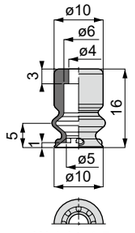
Model No.	Pad Diameter ød	Tube I.D. øD	B	L1	L2	L3	L4	E	Stroke S	Spring Force (N)	Weight (g)
VSP-LFD10-5BE (BD)□-4T	10	2.5	68.5	16	24.5	29	40	44.5	5	1.3 to 2.4	26
VSP-LFD10-5BE (BD)□-6T		4									
VSP-LFD10-10BE (BD)□-4T		2.5	78.5		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD10-10BE (BD)□-6T		4									
VSP-LFD10-15BE (BD)□-4T		2.5	88.5		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD10-15BE (BD)□-6T		4									
VSP-LFD10-20BE (BD)□-4T		2.5	98.5		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD10-20BE (BD)□-6T		4									
VSP-LFD15-5BE (BD)□-4T	15	2.5	68.5	16	24.5	29	40	44.5	5	1.3 to 2.4	26
VSP-LFD15-5BE (BD)□-6T		4									
VSP-LFD15-10BE (BD)□-4T		2.5	78.5		29.5	34	50	54.5	10	1.3 to 3.3	27
VSP-LFD15-10BE (BD)□-6T		4									
VSP-LFD15-15BE (BD)□-4T		2.5	88.5		34.5	39	60	64.5	15	1.3 to 4.2	29
VSP-LFD15-15BE (BD)□-6T		4									
VSP-LFD15-20BE (BD)□-4T		2.5	98.5		39.5	44	70	74.5	20	1.3 to 5.1	31
VSP-LFD15-20BE (BD)□-6T		4									
VSP-LFD20-5BE (BD)□-4T	20	2.5	77.5	19	26.5	31.5	42.5	48.5	5	4.5 to 6.5	54
VSP-LFD20-5BE (BD)□-6T		4									
VSP-LFD20-10BE (BD)□-4T		2.5	87.5		31.5	36.5	52.5	58.5	10	4.5 to 8.2	57
VSP-LFD20-10BE (BD)□-6T		4									
VSP-LFD20-15BE (BD)□-4T		2.5	97.5		36.5	41.5	62.5	68.5	15	4.5 to 9.9	61
VSP-LFD20-15BE (BD)□-6T		4									
VSP-LFD20-20BE (BD)□-4T		2.5	107.5		41.5	46.5	72.5	78.5	20	4.5 to 14.9	65
VSP-LFD20-20BE (BD)□-6T		4									

VSPG-□BE, BD□ Series

External Dimension Drawings

Pad Rubber Only External Dimension Diagram (Bellows Type with Projection and Ribs)

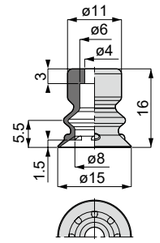
●VSPG-10BE□



Weight: 1.5 g

Allowable Pressing Stroke: 2.9 mm

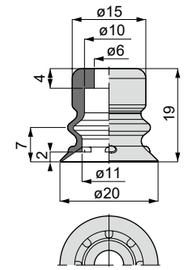
●VSPG-15BE□



Weight: 1.9 g

Allowable Pressing Stroke: 3.7 mm

●VSPG-20BE□

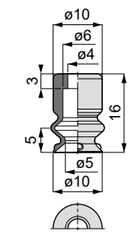


Weight: 3.8 g

Allowable Pressing Stroke: 4.5 mm

Pad Rubber Only External Dimension Diagram (Bellows Type with Projection, without Ribs)

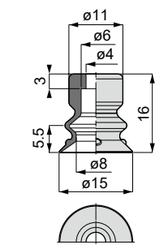
●VSPG-10BD□



Weight: 1.5 g

Allowable Pressing Stroke: 2.9 mm

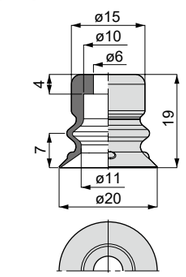
●VSPG-15BD□



Weight: 1.9 g

Allowable Pressing Stroke: 3.7 mm

●VSPG-20BD□

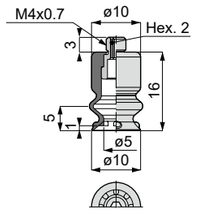


Weight: 3.7 g

Allowable Pressing Stroke: 4.5 mm

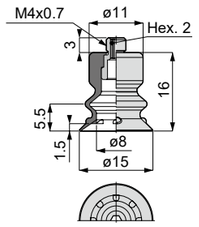
Pad Rubber + Set with Fixing Screw External Dimension Diagram (Bellows Type with Projection and Ribs)

●VSPG-10BE□A



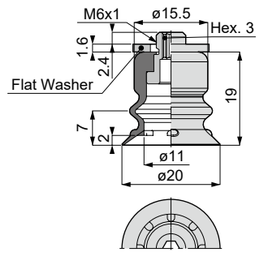
Allowable Pressing Stroke: 2.9 mm

●VSPG-15BE□A



Allowable Pressing Stroke: 3.7 mm

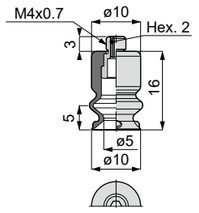
●VSPG-20BE□A



Allowable Pressing Stroke: 4.5 mm

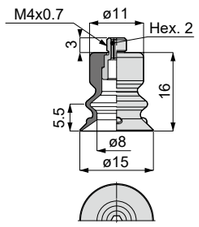
Pad Rubber + Set with Fixing Screw External Dimension Diagram (Bellows Type with Projection, without Ribs)

●VSPG-10BD□A



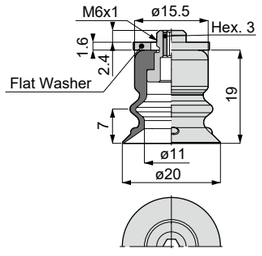
Allowable Pressing Stroke: 2.9 mm

●VSPG-15BD□A



Allowable Pressing Stroke: 3.7 mm

●VSPG-20BD□A



Allowable Pressing Stroke: 4.5 mm

Pneumatic Components

To Use This Product Safely

Please read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad, Metal Detector Compatible-type, VSP-□BE/BD□Series

Design / Selection

Warning

■ Because of the characteristics of the bellows pad material, the pads may stick to each other, so please check with the actual device. Also, tackiness may increase depending on the operating environment or pad wear. Review the pad shape, material, quantity, etc., as necessary.

■ Use the bellows so that it does not overcrush. Excessive crushing may accelerate wear of the bellows part, cause cracks in the lip part, or lead to deformation due to strain, potentially causing suction failure.

Caution

When selecting, please pay attention to the following and conduct suction tests with the actual machine.
① Metal detector compatible pads are made with blended metal powder.
② Durability deteriorates due to adsorption of heavy workpieces or excessive pressing adsorption, so be careful with selection.
③ Due to material properties, color unevenness may occur on the pad, but there are no performance issues.

■ Clean the suction surface of the Suction Pads before use. Adhered substances may remain as suction marks. When cleaning, be careful not to scratch the suction surface, and do not use organic solvents.

MEMO

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

Suction Pad, Mechanical Break Function Type

VSP-KE□Y□ Series

Suction pad with workpiece release function to prevent blow-off of small/lightweight workpieces

RoHS

Ideal for suction transport of small/lightweight workpieces that stick to the pad rubber due to static electricity, etc.

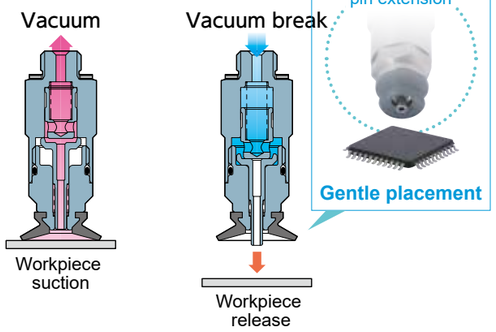
Piping Connection **3 types**

●Screw-in (M3, M4, M5)....Class 3

After releasing the workpiece with vacuum break air, the pin built into the holder pushes out to release the workpiece

Prevents workpiece blow-off

After pin extension, vacuum break air is not discharged, preventing workpiece blow-off



Pad Diameter

6 types 2.5 3 4 6 8 10

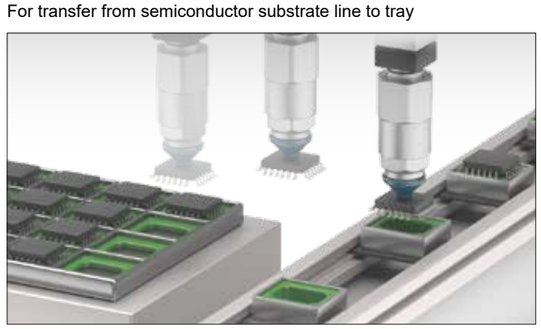
Pad Material

4 types Nitrile Silicone Conductive Silicone Fluorine

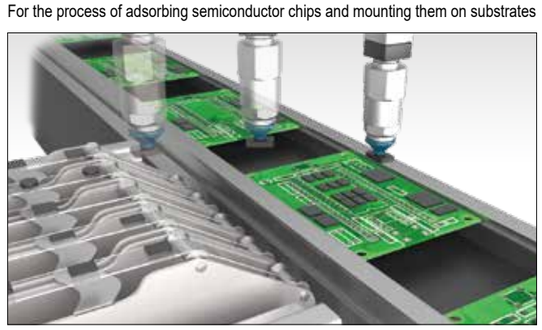
Solution Examples

Semiconductor production line

For transfer from semiconductor substrate line to tray



For the process of adsorbing semiconductor chips and mounting them on substrates



Model No. Notation

●With Mechanical Break Function

VSP - KE 6 Y N -M3

VSP	KE	6	Y	N	-M3
Model No.	❶ Holder Shape	❷ Pad Diameter	❸ Pad Shape	❹ Pad Material	❺ Connection Size/Shape

❶ Holder Shape

Code	Content	
KE	Direct Mount Type, Mechanical Break Function	

❷ Pad Diameter

Code	Content
2.5	ø2.5
3	ø3
4	ø4
6	ø6
8	ø8
10	ø10

❸ Pad Shape

Code	Content	
Y	For Mechanical Break Function Type	

❹ Pad Material

Code	Content
N	Nitrile rubber
S	Silicone Rubber
F	Fluororubber
SE	Conductive Silicone Rubber

❺ Connection Size/Shape

Code	Content
-M3	Metric Male Thread M3 x 0.5
-M4	Metric Male Thread M4 x 0.7
-M5	Metric Male Thread M5 x 0.8

●Pad Rubber Only

VSPG - 6 Y N

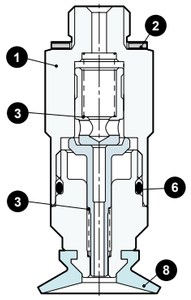
VSPG	6	Y	N
Model No.	❷ Pad Diameter	❸ Pad Shape	❹ Pad Material

Specifications

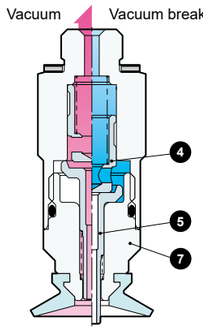
Item		VSP-KE□Y□
Operating Fluid		Air
Operating Pressure Range	Positive Pressure	0.03 to 0.5 MPa
	Negative Pressure	-101 to -30 kPa
Operating Temperature Range		0 to 60°C (No freezing)
Suction Flow Rate		4 L/min (ANR)(*1)
Break Valve Body Operating Pressure		30 kPa
Vacuum Valve Body Operating Pressure		-30 kPa

*1: When supply pressure is ≤ -80 kPa

Internal Structure Diagram



Non-energized state



Energized state

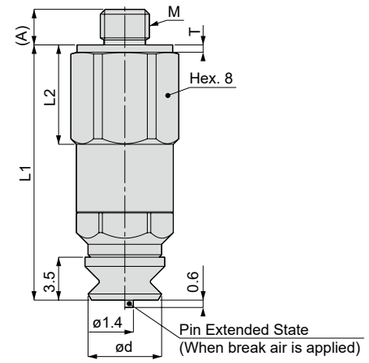
Valve body operation in vacuum break air energized state

When vacuum break air is applied, the vacuum valve body (Fig. ❹ above) and the break valve body (pin)(Fig. ❺ above) are pushed out and protrude. Simultaneously, the break valve body (pin)(Fig. ❺ above) hits the recess of the holder (Fig. ❼ above) and blocks the flow of break air. This suppresses workpiece blow-off.

Part No.	Part Name	Material	Part No.	Part Name	Material
1	Metal Body	Special Stainless Steel	5	Break Valve Body (Pin)	Special Stainless Steel
2	Gasket	Stainless Steel + Nitrile Rubber	6	O-ring	Special Stainless Steel
3	Spring	Stainless steel	7	Holder	Special Stainless Steel
4	Vacuum Valve Body	Special Stainless Steel			

Dimensions diagram (fixed, vacuum Outlet on Top, VSP-A, bellows stage No.: 3 steps)

●VSP-KE□Y□-M3/M4/M5

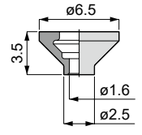


Unit: mm

Model No.	Pad Outer Diameter ød	Mounting screw M	A	L1	L2	T	Weight (g)
VSP-KE2.5Y□-M3	2.5	M3x0.5	2.5	20.7	8	0.5	5.3
VSP-KE2.5Y□-M4		M4x0.7	2.9	20.8	8.1	0.6	5.7
VSP-KE2.5Y□-M5		M5x0.8	3	20.4	7.7	0.5	5.8
VSP-KE3Y□-M3	3	M3x0.5	2.5	20.7	8	0.5	5.3
VSP-KE3Y□-M4		M4x0.7	2.9	20.8	8.1	0.6	5.7
VSP-KE3Y□-M5		M5x0.8	3	20.4	7.7	0.5	5.8
VSP-KE4Y□-M3	4	M3x0.5	2.5	20.7	8	0.5	5.3
VSP-KE4Y□-M4		M4x0.7	2.9	20.8	8.1	0.6	5.7
VSP-KE4Y□-M5		M5x0.8	3	20.4	7.7	0.5	5.8
VSP-KE6Y□-M3	6	M3x0.5	2.5	20.7	8	0.5	5.3
VSP-KE6Y□-M4		M4x0.7	2.9	20.8	8.1	0.6	5.7
VSP-KE6Y□-M5		M5x0.8	3	20.4	7.7	0.5	5.8
VSP-KE8Y□-M3	8	M3x0.5	2.5	20.7	8	0.5	5.4
VSP-KE8Y□-M4		M4x0.7	2.9	20.8	8.1	0.6	5.8
VSP-KE8Y□-M5		M5x0.8	3	20.4	7.7	0.5	5.9
VSP-KE10Y□-M3	10	M3x0.5	2.5	20.7	8	0.5	5.4
VSP-KE10Y□-M4		M4x0.7	2.9	20.8	8.1	0.6	5.8
VSP-KE10Y□-M5		M5x0.8	3	20.4	7.7	0.5	5.9

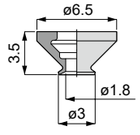
Pad Rubber Only External Dimension Diagram (Pad Dedicated to Mechanical Break Function)

●VSPG-2.5Y□



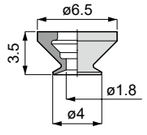
Weight: 0.1 g

●VSPG-3Y□



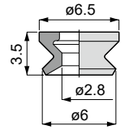
Weight: 0.1 g

●VSPG-4Y□



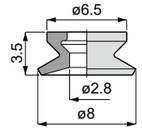
Weight: 0.1 g

●VSPG-6Y□



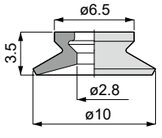
Weight: 0.1 g

●VSPG-8Y□



Weight: 0.2 g

●VSPG-10Y□



Weight: 0.2 g

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad, Mechanical Break Function Type, VSP-□KE□Y□ Series

Design / Selection

Warning

■Suction of foreign matter may cause a significant reduction in performance. Use the workpiece and operating environment in a clean state.

Caution

■The pin protruding load is 1 N or less (when using 0.2 MPa). If there is risk of damage or scratches to the workpiece due to contact, lower the vacuum burst pressure and check with the actual device before use.
■When mounting the product, refer to the tightening torque in the table below. Failure to tighten with the proper torque may cause malfunction, reduced service life, and loosening.

Thread Size	Tightening Torque(N·m)
M3x0.5	0.7
M4x0.7	0.9 to 1.1
M5x0.8	1.0 to 1.5

MEMO

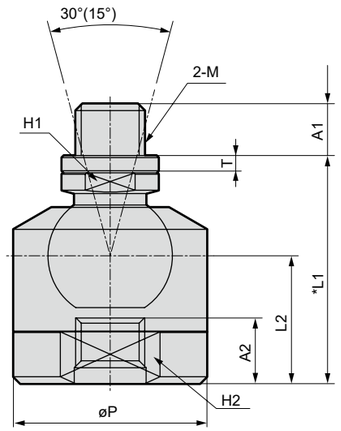
Regarding Suction Pad Option / Free Holder (Swivel) [Code; F1, F2]

Applicable Pad List Table

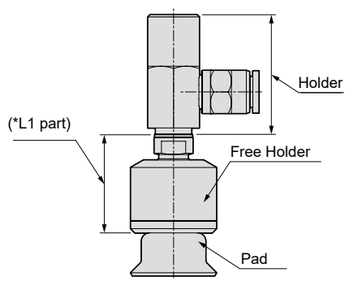
Pad Shape	Free Holder Part Model No.(Custom Product) *1		
	VSP-FH10-F□	VSP-FH20-F□	VSP-FH60-F□
Standard Type General-type: R	ø10, ø15	ø20 to ø50	ø60 to ø100
Standard Type Deep Type: A	ø15	ø20 to ø50	ø60 to ø100
Sponge-type: S	-	ø10 to ø50	ø70, ø100
Bellows Type: B	ø10, ø15	ø20 to ø50	ø60, ø80, ø100
Multi-stage Bellows: W	ø10	ø20 to ø50	-
Oval-type: E	-	All sizes	-
Soft Type: L	ø4 to ø15	ø20 to ø40	-
Soft Bellows Type: LB	ø6 to ø15	ø20	-
Anti-slip Type: K	ø10	ø20 to ø50	-
Flat Type: F, FH	ø10, ø15	ø20 to ø30	-
Metal Detector Compatible-type: BE, BD	ø10, ø15	ø20	-

*1: For the □ mark, select the Code below.
1: Swivel Angle 30° Type
2: Swivel Angle 15° Type

External Dimension Drawings



Free Holder Mounting Example



*When selecting the option with a free holder using the suction pad product model No., the total pad length will be the dimension obtained by adding *L1 from the dimension table below.

Part Model No.	M	A1	A2	*L1	L2	øP	Width across flats H1	Width across flats H2	T	Weight (g)
VSP-FH10-F□	M4x0.7	3.4	7	19.7	11.1	15	4	-	0.6	10
VSP-FH20-F□	M6x1	5.5	6.6	22.9	12.4	20	7	-	0.5	20
VSP-FH60-F□	M10x1.5	7.5	9.5	33	18.5	28	12	24	2.5	60

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Option / Free Holder (Swivel) F1, F2

Design / Selection

Warning

■Do not use the free holder in combination with other than CKD Suction Pads or for other than the intended use. It is designed for our suction pads, and improper use may cause main body damage.
■When transporting via the free holder, consider the acceleration, impact and wind pressure. Adsorbed objects may detach during transport, potentially causing main body damage.
■Do not apply excessive force to the free holder. This may cause main body damage.

Caution

■Note the orientation of the free holder during suction. Posture changes depending on the Weight after suction or acceleration/impact during transport.
■When mounting or replacing the free holder, refer to the tightening torque in the table below, and use an appropriate tool to tighten the holder using the outer-diameter dihedral cut section.

Tightening Torque

Thread Size	Tightening Torque
M4x0.7	0.6 to 0.7 N·m
M6x1	1.5 to 2 N·m
M10x1.5	5 to 7 N·m

Vacuum Components
Suction Pad
Standard
Sponge
Bellows
Multi-stage Bellows
Oblong
Soft
Soft Bellows
Non-slip
Thin Workpiece
Flat
Suction Mark Prevention
For Packaging Bags
For Metal Detectors
With Mechanical Break Function
Ending

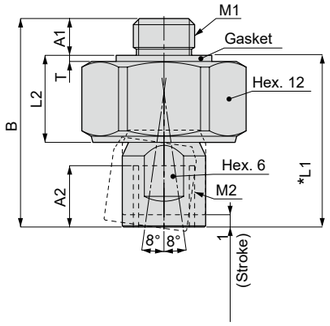
Regarding Suction Pad Option / Flexible Holder (Swivel) [Code; CF]

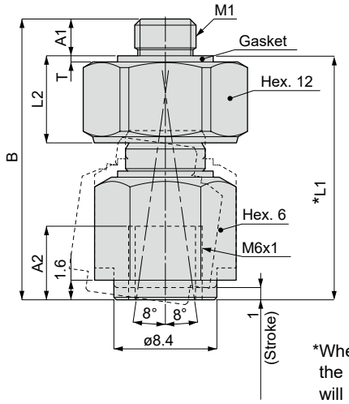
Applicable Pad List Table

Pad Shape	Flexible Holder Part Model No.(Custom Product)		
	VSP-CF4-M4	VSP-CF6-M6	VSP-CF5-M5 *1
Standard Type General-type: R	ø10, ø15	ø20 to ø50	ø1 to ø8
Standard deep: A	ø15	ø20 to ø50	-
Standard Type Compact: RM	-	-	ø0.7 to ø4
Sponge-type: S	-	ø10 to ø50	-
Bellows Type: B	ø10, ø15	ø20 to ø50	ø2 to ø8
Multi-stage Bellows Type: W	ø10	ø20 to ø50	ø6, ø8
Oval-type: E	-	All sizes	-
Soft Type: L	ø4 to ø15	ø20 to ø40	-
Soft Bellows Type: LB	ø6 to ø15	ø20	-
Anti-slip Type: K	ø10	ø20 to ø50	-
Thin Object Type: P	-	-	ø8 to ø20
Flat Type: F, FH	ø10, ø15	ø20 to ø30	-
Metal Detector Compatible-type: BE, BD	ø10, ø15	ø20	-

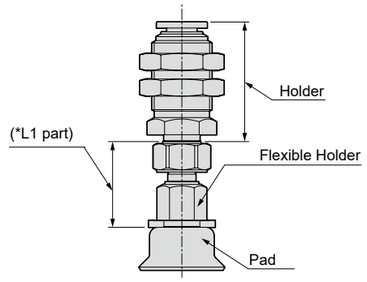
*1) Limited to holder shape ME, E M5 connection.

External Dimension Drawings





Flexible Holder Mounting Example



*When selecting the option with a flexible holder using the suction pad product model No., the total pad length will be the dimension obtained by adding *L1 from the dimension table below.

Part Model No.	M1	M2	A1	A2	B	*L1	L2	T	Weight (g)
VSP-CF4-M4	M4X0.7	M4X0.7	2.9	4	16	13.1	7.2	0.6	6.1
VSP-CF5-M5	M5 x 0.8	M5 x 0.8	3	5	17	14	7.1	0.5	6.1
VSP-CF6-M6	M6X1	M6X1	4	6	24	20	7.1	0.5	12

Pneumatic Components

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Option / Flexible Holder (Swivel) CF

Design / Selection

Caution

- The interior of the flexible holder may wear depending on its structure and usage. When using in a clean environment, confirm that there is no dust generation impact due to wear.
- There is no rotation-stop structure between the flexible holder and the vacuum pad. Please note that it is not suitable for rotational transport.
- Special stainless steel is used for this product, but it is not intended to prevent rust. Rust may occur depending on the operating environment.
- When attaching the flexible holder to the actual device or the pad holder, tighten using an appropriate tool with reference to the tightening torque in the table below and confirm that there is no looseness.

Tightening Torque

Thread Size	Tightening Torque
M4x0.7	0.7 to 0.8 N·m
M5x0.8	1.0 to 1.5 N·m
M6x1	1.5 to 2.0 N·m

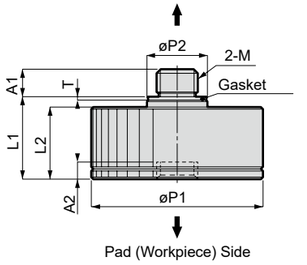
Regarding Suction Pad Option / Direct Mount Filter [Code; T1, T2]

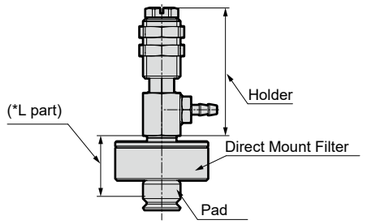
Applicable Pad List Table

Pad Shape	Filter Part Model No.		
	VSP-T1-M4	VSP-T1-M6	VSP-T2-M6
Standard Type General-type: R	ø10, ø15	ø20 to ø50	
Standard deep: A	ø15	ø20 to ø50	
Sponge-type: S	-	ø10 to ø50	
Bellows Type: B	ø10, ø15	ø20 to ø50	
Multi-stage Bellows Type: W	ø10	ø20 to ø50	
Oval-type: E	-	All sizes	
Soft Type: L	ø4 to ø15	ø20 to ø40	
Soft Bellows Type: LB	ø6 to ø15	ø20	
Anti-slip Type: K	ø10	ø20 to ø50	
Flat Type: F, FH	ø10, ø15	ø20 to ø30	
Suction mark prevention: Q	ø10, ø15	ø20 to ø30	
Metal Detector Compatible-type: BE, BD	ø10, ø15	ø20	

External Dimension Drawings

Filter Mounting Example

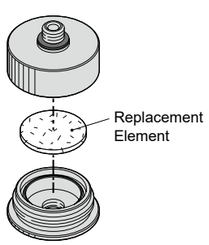




*When selecting the option with a filter using the suction pad product model No., the total pad length will be the dimension obtained by adding L from the dimension table below.

Part Model No.	M	A1	A2	L	øP1	øP2	Filtration Area (cm²)	Weight (g)
VSP-T1-M4	M4x0.7	2.9	2.5	12.1	25	7.8	1.7	20
VSP-T1-M6	M6x1	4		12		8.8		21
VSP-T2-M6	M6x1	4	3.8	15.5	40	8.8	7	59

Maintenance Parts



Part Model No.	Replacement Element
VSP-T1-M4	VSP-T1-E
VSP-T1-M6	
VSP-T2-M6	VSP-T2-E

To Use This Product Safely

Be sure to read this before use.
For general pneumatic components precautions, Intro 15 for details.

Individual Precautions: Suction Pad Option / Direct Mount Filter T1, T2

Design / Selection

Warning

■Regularly perform maintenance and inspection for the filter element of the direct mounting filter. Clogging of the element causes performance degradation or trouble. For element replacement work, understand the dust removal method and vacuum filter replacement element in the main text well, set the internal pressure of the filter to atmospheric pressure, confirm safety, and then proceed.

Caution

■Precautions for body mounting and removal
① Use an appropriate tool to mount/remove the product.
② When mounting, tighten referring to the tightening torque for each screw size (table below).

Tightening Torque

Thread Size	Tightening Torque
M4x0.7	0.6 to 0.7 N·m
M6x1	1.5 to 2 N·m