



Single Unit Ejector (Solenoid Valve Direct Mount Type)

# VSH Series



# VSH Series

Model No. Notation

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

● Design compatible with rechargeable battery manufacturing process

VSH - ..... - P4□

\* Please inquire for details.

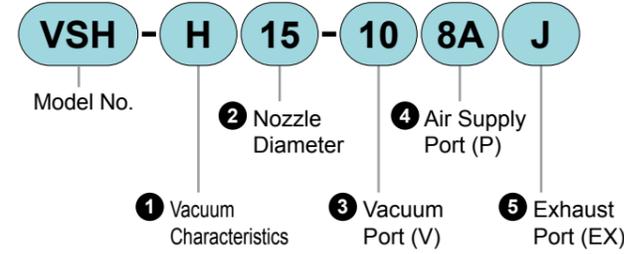
Food Manufacturing Process Compatible Specification (Catalog No. CC-1271AA)

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

VSH - ..... - FP□

Model No. Notation

● Discrete ejector (solenoid valve direct mounting)



## Simple vacuum ejector that converts compressed air to vacuum

### Abundant vacuum characteristic variations

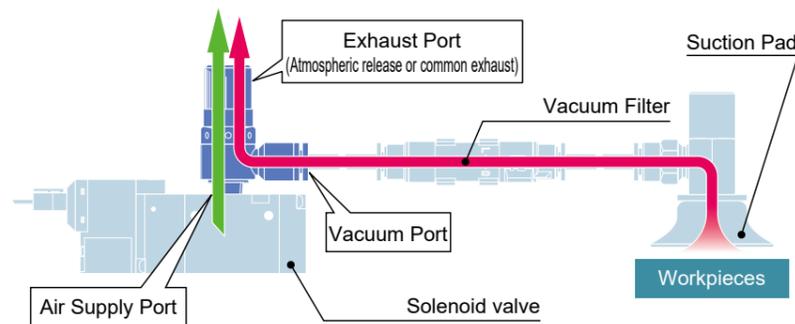
Nozzle Diameter	Suction Flow Rate (L/min (ANR))			Air Consumption (L/min (ANR))			Ultimate Vacuum Pressure (-kPa)		
	H	L	E	H	L	E	H	L	E
0.5 mm	7	12		11.5			90	66	
0.7 mm	13	26	10.5	23	17		93	66	92
1.0 mm	28	42	21	46	34		93	66	92
1.2 mm	38		27	70		47	93		92
1.5 mm	63	95	42	100	70		93	66	92
2.0 mm	104	174	82	200	150		93	66	92

\* Rated supply pressure; H, L⇒0.5 MPa, E⇒0.35 MPa

### Abundant lineup of types with different performance and shapes, compatible with various conditions

### Direct mounting possible on solenoid valves, manifold blocks, etc.

### Piping Example



#### 1 Vacuum Characteristics

Code	Content
H	High Vacuum/Medium Flow Type
L	Medium Vacuum/High Flow Type
E	High Vacuum/Low Flow Type

Note) For items 1 and 2, the combinations 'E05' and 'L12' cannot be selected.

#### 2 Nozzle Diameter

Code	Content
05	ø0.5
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5
20	ø2.0

Note) For items 1 and 2, the combinations 'E05' and 'L12' cannot be selected.

#### 3 Vacuum Port (V)

Code	Content
4	ø4 Push-in fitting
6	ø6 Push-in fitting
8	ø8 Push-in fitting
10	ø10 Push-in fitting
12	ø12 Push-in fitting

#### 4 Air Supply Port (P)

Code	Content
M5	M5×0.8
6A	R1/8
8A	R1/4
10A	R3/8

#### 5 Exhaust Port (EX)

Code	Content
S	Atmospheric Release with Silencer
J	Centralized Exhaust

Maintenance Part Model No. \* For details on the maintenance parts, refer to P. 127.

● Silencer Kit

VSH - 6A - SK

Model No.

1 Air Supply Port (P)

#### 1 Air Supply Port (P)

Code	Content
M5	M5×0.8
6A	R1/8
8A	R1/4

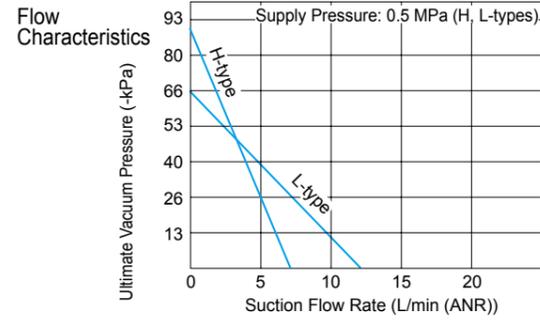
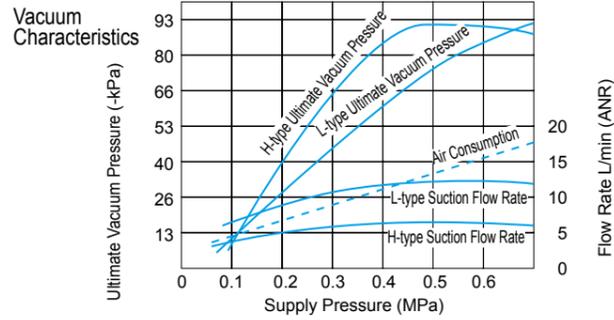
#### Model No./Port Combination Table

Vacuum Port (V)	4	6	8	10	12			
Air Supply Port (P)	M5	6A	6A	8A	8A	10A	8A	10A
Model No.								
VSH-H05	●	●						
VSH-H07		●						
VSH-H10		●	●					
VSH-H12		●	●					
VSH-H15				●	●			
VSH-H20				●	●	●	●	●
VSH-L05	●	●						
VSH-L07		●	●					
VSH-L10		●	●					
VSH-L15				●	●		●	
VSH-L20				●	●	●	●	●
VSH-E07		●						
VSH-E10		●	●					
VSH-E12		●	●					
VSH-E15				●	●			
VSH-E20				●	●	●	●	●

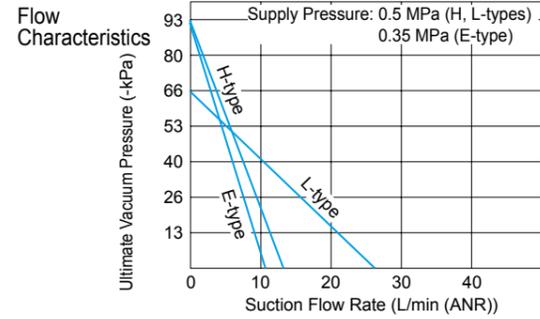
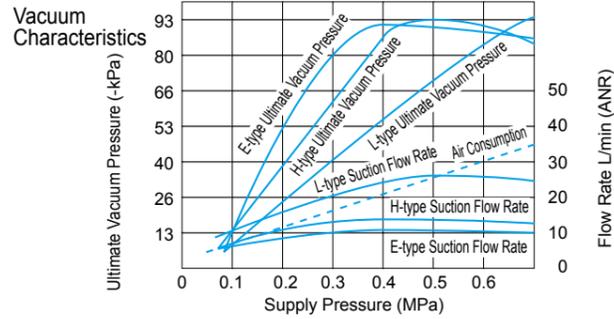
Vacuum Characteristics, Flow Characteristics

Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption

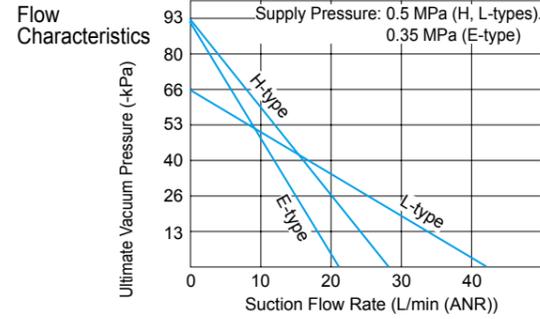
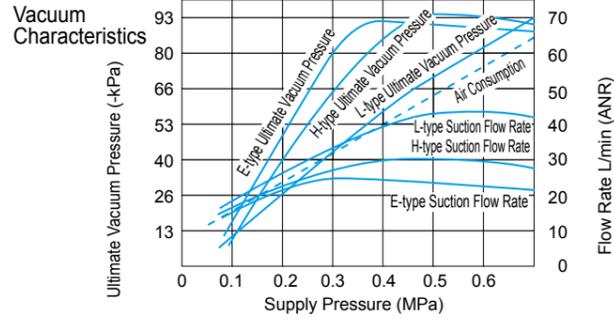
●VSH-□05



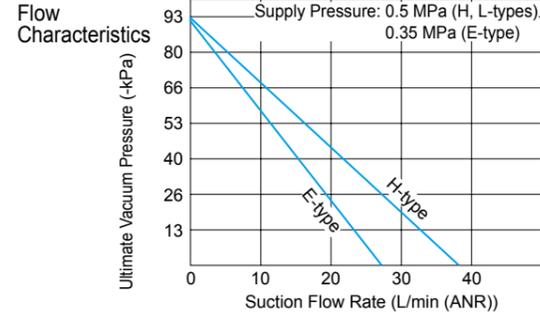
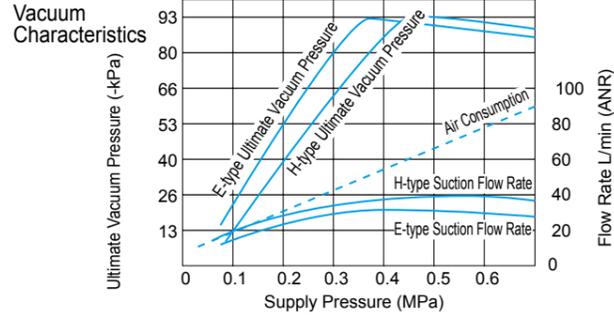
●VSH-□07



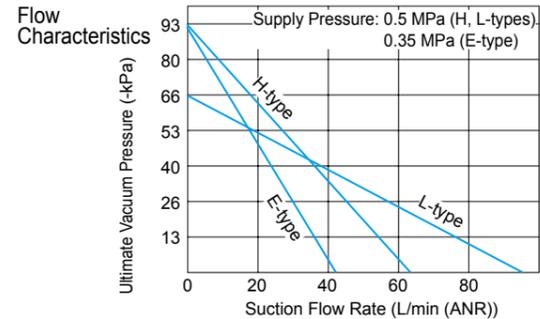
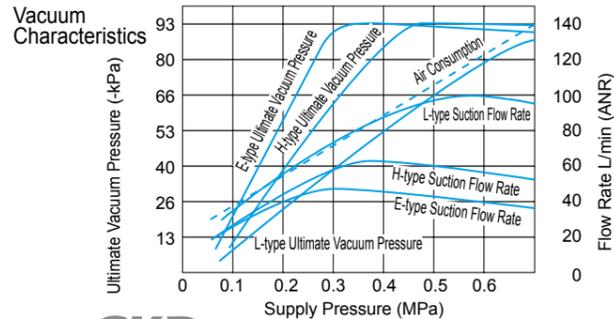
●VSH-□10



●VSH-12



●VSH-□15



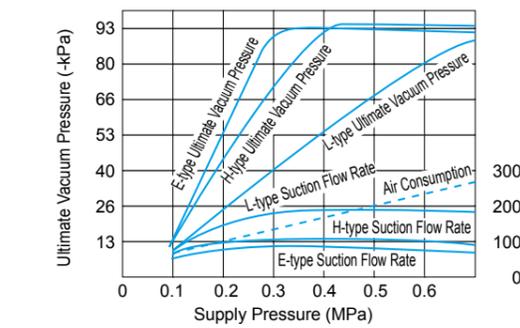
Vacuum Characteristics, Flow Characteristics

Vacuum Characteristics, Flow Characteristics

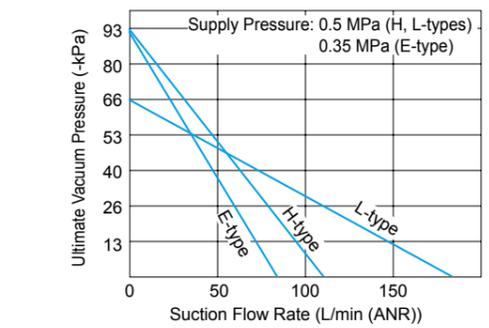
Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption

●VSH-□20

Vacuum Characteristics



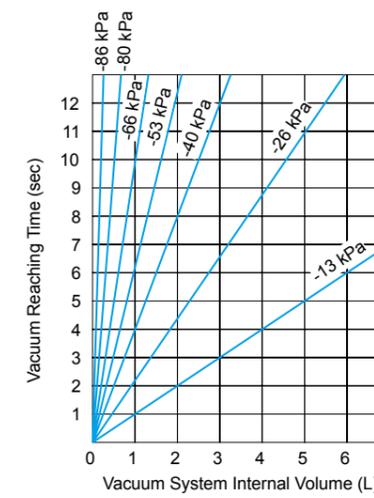
Flow Characteristics



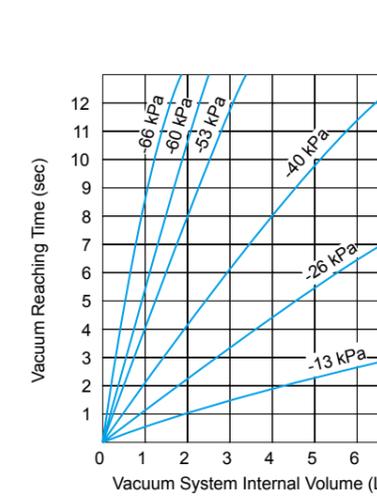
Vacuum Characteristics

(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)  
\* Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.

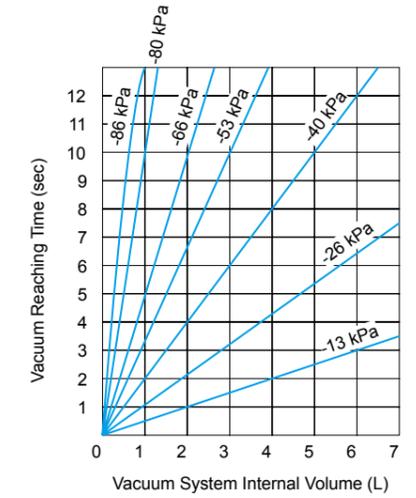
●VSH-H05



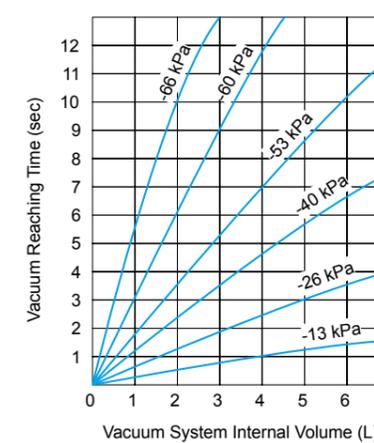
●VSH-L05



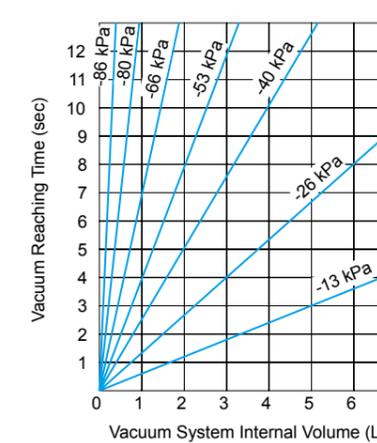
●VSH-H07



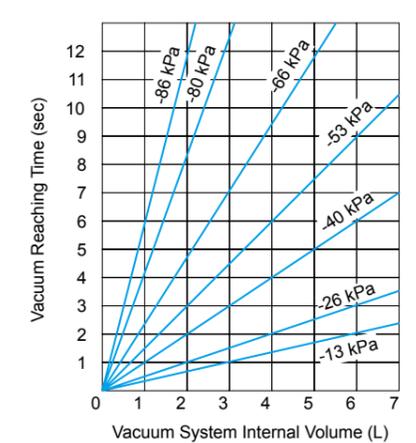
●VSH-L07



●VSH-E07

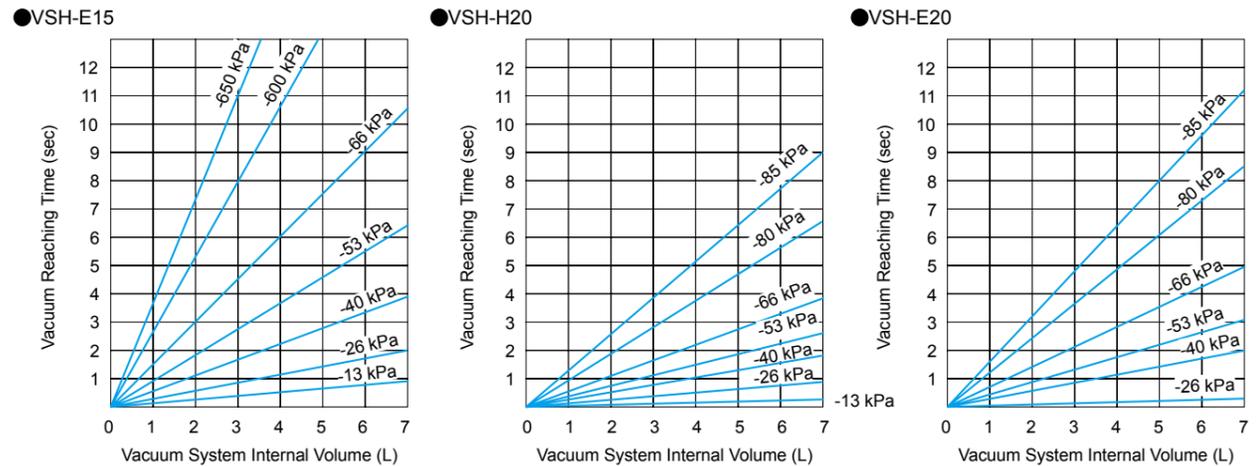
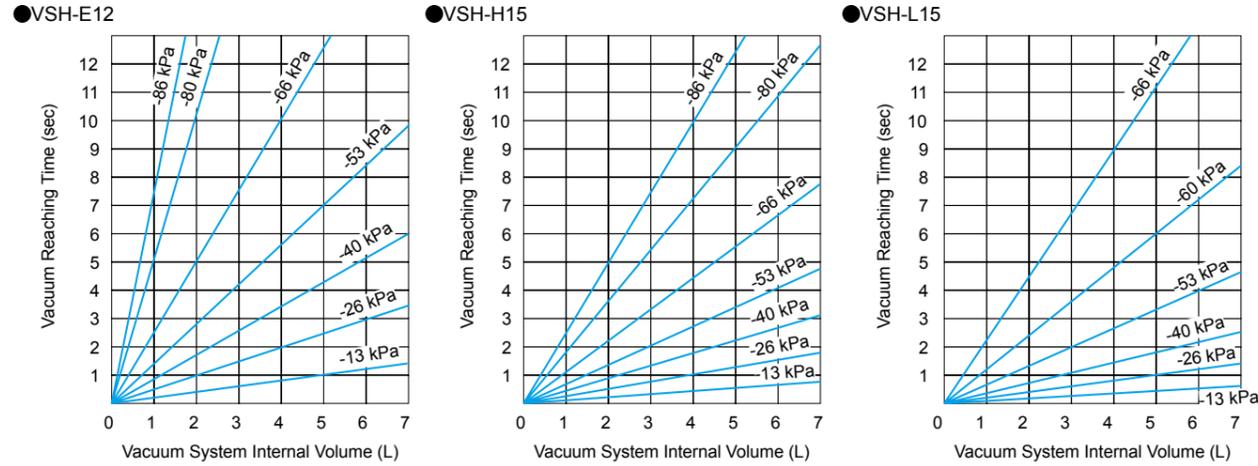
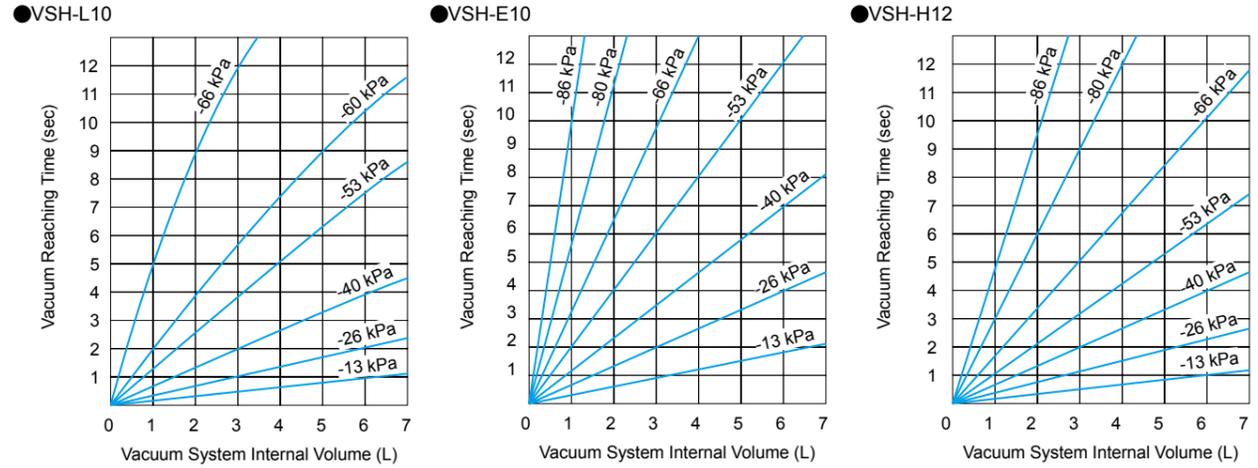


●VSH-H10



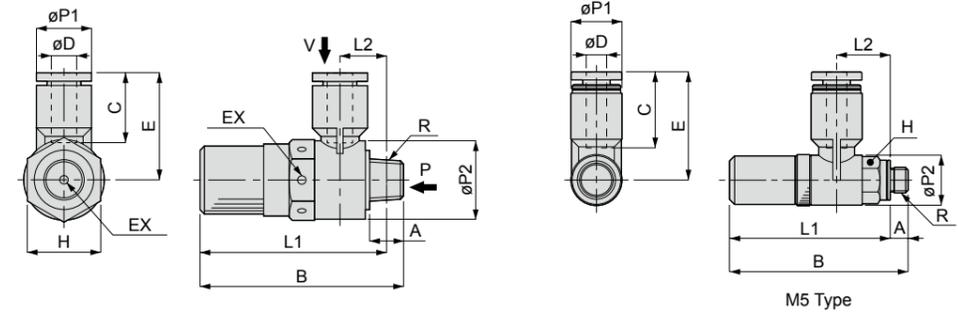
Vacuum Characteristics

(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)  
\*Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.



External Dimension Drawings

●VSH-□-□S (Atmospheric release with silencer)



Unit : mm

Model No.	Bore size øD	R	A	B	L1	L2	øP1	øP2	C	E	Width across flats H	Nozzle Diameter (mm)	Operating Pressure (MPa)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)		
VSH-H05-4M5S	4	M5×0.8	3	34.5	31.5	10.5	10	9.8	14.9	21.2	8	0.5	0.5	90	7	11.5	13		
VSH-H05-66AS	6	R1/8	8	48	44	11.4	12.4	18.4	17	25.5	17	0.7	0.5	90	13	23	37		
VSH-H07-66AS															28	46			
VSH-H10-66AS															38	70			
VSH-H12-66AS															28	46			
VSH-H10-86AS	8	R1/8	8	48	44	12.4	14.5	18.1	18.1	28.4	17	1.2	0.5	90	38	70	38		
VSH-H12-86AS															38	70			
VSH-H15-88AS	10	R1/4	11	71.5	65.5	13.5	17.6	22	20.2	31.2	22	1.5	0.5	93	63	100	77		
VSH-H15-108AS															99.6	93.5		16.8	
VSH-H20-108AS															100.6	94.2		17.5	
VSH-H20-1010AS	12	R3/8	12	100.6	94.2	17.5	21	28	23.4	36.4	24	2.0	0.5	93	104	200	116		
VSH-H20-128AS															99.6	93.5		16.8	
VSH-H20-1210AS	100.6	94.2	17.5	116															
VSH-L05-4M5S	4	M5×0.8	3	34.5	31.5	10.5	10	9.8	14.9	21.2	8	0.5	0.5	66	12	11.5	13		
VSH-L05-66AS	6	R1/8	8	48	44	11.4	12.4	18.4	17	25.5	17	0.7	0.5	66	26	23	37		
VSH-L07-66AS															42	46			
VSH-L10-66AS															26	23			
VSH-L07-86AS															42	46			
VSH-L10-86AS	8	R1/8	8	48	44	12.4	14.5	18.1	18.1	28.4	17	1	0.5	66	26	23	39		
VSH-L15-88AS															42	46			
VSH-L15-108AS	10	R1/4	11	71.5	65.5	13.5	17.6	22	20.2	31.2	22	1.5	0.5	66	95	100	75		
VSH-L15-128AS															16.5	21		23.4	36.9
VSH-L20-108AS															99.6	93.5		16.8	78
VSH-L20-1010AS	12	R3/8	12	100.6	94.2	17.5	21	28	23.4	36.4	24	2.0	0.5	66	174	200	116		
VSH-L20-128AS															99.6	93.5		16.8	116
VSH-L20-1210AS	100.6	94.2	17.5	126															
VSH-E07-66AS	6	R1/8	8	48	44	11.4	12.4	18.4	17	25.5	17	0.7	0.35	92	10.5	17	37		
VSH-E10-66AS															21	34			
VSH-E12-66AS															27	47			
VSH-E10-86AS															21	34			
VSH-E12-86AS	8	R1/8	8	48	44	12.4	14.5	18.1	18.1	28.4	17	1.2	0.35	92	27	47	38		
VSH-E15-88AS															27	47			
VSH-E15-108AS	10	R1/4	11	71.5	65.5	13.5	17.6	22	20.2	31.2	22	1.5	0.35	92	42	70	80		
VSH-E20-108AS															99.6	93.5		16.8	
VSH-E20-1010AS															100.6	94.2		17.5	
VSH-E20-128AS	12	R1/4	11	99.6	93.5	16.8	21	28	23.4	36.4	24	2.0	0.35	92	82	150	116		
VSH-E20-1210AS															100.6	94.2		17.5	126

Note) L1 and L2 dimensions for tapered thread types are reference dimensions after screw tightening.

Vacuum Components  
Ejector System

VSJ

VSH

VSU

VSB

VSC

VSG

VSK/  
VSKM

VSJ/  
VSJM

VSN/  
VSNM

VSX/  
VSXM

VSQ

VSZM

Ending

Vacuum Components  
Ejector System

VSJ

VSH

VSU

VSB

VSC

VSG

VSK/  
VSKM

VSJ/  
VSJM

VSN/  
VSNM

VSX/  
VSXM

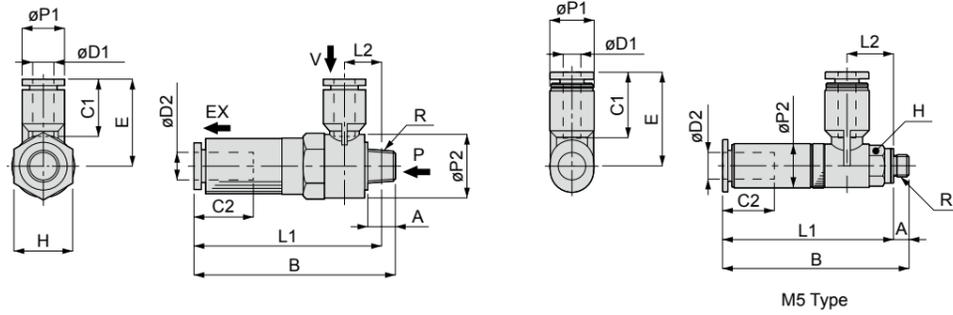
VSQ

VSZM

Ending

External Dimension Drawings

●VSH-□-□J (common exhaust)



Unit: mm

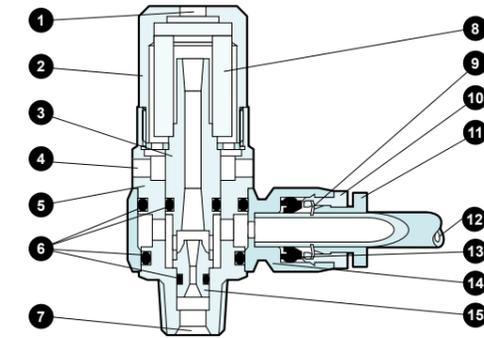
Model No.	Bore size øD1	Bore size øD2	R	A	B	L1	L2	øP1	øP2	C1	C2	E	Width across flats H	Nozzle Diameter (mm)	Operating Pressure (MPa)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSH-H05-4M5J	4	6	M5×0.8	3	41.8	38.8	10.5	10	10	14.9	11.9	21.2	8	0.5	0.5	90	7	11.5	18
VSH-H05-66AJ	6	8	R1/8	8	58.4	54.4	11.4	12.4	18.4	17	18.2	25.5	17	0.7	0.5	90	13	23	46
VSH-H07-66AJ																	28	46	45
VSH-H10-66AJ																	38	70	44
VSH-H12-66AJ	8	12	R1/4	11	76.9	70.9	13.5	17.6	22	20.2	23.3	28.9	22	1.2	0.5	93	28	46	46
VSH-H10-86AJ																	28	46	46
VSH-H12-86AJ																	38	70	46
VSH-H15-88AJ	10	12	R1/4	11	89.4	83.3	16.8	21	28	23.4	23.3	36.4	24	2.0	0.5	93	63	100	92
VSH-H15-108AJ																	31.2	100	95
VSH-H20-108AJ																	104	200	128
VSH-H20-1010AJ	12	12	R3/8	12	90.4	84	17.5	21	28	23.4	23.3	36.4	24	2.0	0.5	93	104	200	138
VSH-H20-128AJ																	104	200	128
VSH-H20-1210AJ																	104	200	138
VSH-L05-4M5J	4	6	M5×0.8	3	41.8	38.8	10.5	10	10	14.9	11.9	21.2	8	0.5	0.5	66	12	11.5	18
VSH-L05-66AJ	6	8	R1/8	8	58.4	54.4	11.4	12.4	18.4	17	18.2	25.5	17	0.7	0.5	66	26	23	45
VSH-L07-66AJ																	42	46	44
VSH-L10-66AJ																	26	23	46
VSH-L07-86AJ	8	12	R1/4	11	76.9	70.9	13.5	17.6	22	20.2	23.3	28.9	22	1.5	0.5	66	42	46	45
VSH-L10-86AJ																	26	23	46
VSH-L15-88AJ																	42	46	45
VSH-L15-108AJ	10	12	R1/4	11	89.4	83.3	16.8	21	28	23.4	23.3	36.4	24	2.0	0.5	66	95	100	93
VSH-L15-128AJ																	36.9	100	97
VSH-L20-108AJ																	174	200	128
VSH-L20-1010AJ	12	12	R3/8	12	90.4	84	17.5	21	28	23.4	23.3	36.4	24	2.0	0.5	66	174	200	138
VSH-L20-128AJ																	174	200	128
VSH-L20-1210AJ																	174	200	138
VSH-E07-66AJ	6	8	R1/8	8	58.4	54.4	11.4	12.4	18.4	17	18.2	25.5	17	0.7	0.35	92	10.5	17	45
VSH-E10-66AJ																	21	34	47
VSH-E12-66AJ																	27	47	46
VSH-E10-86AJ	8	12	R1/4	11	76.9	70.9	13.5	17.6	22	20.2	23.3	28.9	22	1.5	0.35	92	21	34	47
VSH-E12-86AJ																	27	47	46
VSH-E15-88AJ																	42	70	92
VSH-E15-108AJ	10	12	R1/4	11	89.4	83.3	16.8	21	28	23.4	23.3	36.4	24	2.0	0.35	92	42	70	96
VSH-E20-108AJ																	82	150	128
VSH-E20-1010AJ																	82	150	128
VSH-E20-128AJ	12	12	R3/8	12	90.4	84	17.5	21	28	23.4	23.3	36.4	24	2.0	0.35	92	82	150	128
VSH-E20-1210AJ																	82	150	138

Note) L1 and L2 dimensions for tapered thread types are reference dimensions after screw tightening.

Internal Structure Diagram/Materials/Maintenance Parts

Internal Structure Diagram/Materials

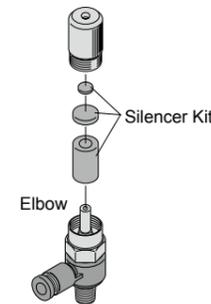
●VSH Series



Part No.	Part Name	Material	Remarks
1	Exhaust Port (EX)		
2	Cap	Aluminum alloy	
3	Diffuser	Brass	Electroless nickel plating
4	Exhaust Port (EX)		
5	Metal Body	Brass	Electroless nickel plating
6	O-ring	Nitrile rubber	
7	Air Supply Port (P)		
8	Silencer Element	Polyvinyl formal	
9	Locking Finger	Stainless steel	
10	Guide Ring	Brass	Electroless nickel plating
11	Release Ring	Acetal Resin	
12	Vacuum Port (V)		
13	Elastomer Sleeve	Nitrile rubber	
14	Resin Body	Polybutylene terephthalate resin	
15	Nozzle	Brass	Electroless nickel plating

Maintenance Parts

●Silencer Kit



Silencer Kit Model No.	Vacuum Ejector Model No.
VSH-M5-SK	VSH-□□-□M5S
VSH-6A-SK	VSH-□□-□6AS
VSH-8A-SK	VSH-□□-□8AS

Note) VSH-□20-□□□ uses VSC-20-SK (Silencer Kit for VSC-20).



Single Unit Ejector (Tubular Type)

# VSU Series



# VSU Series

Model No. Notation

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

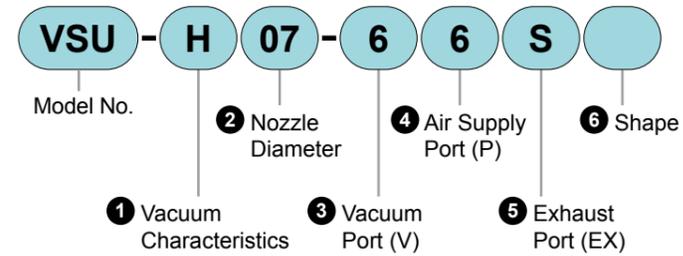
• Structure usable in rechargeable battery manufacturing processes

VSU - ..... - P4□

\* Please inquire for details.

Model No. Notation

● Discrete ejector (tubular)



## 1 Vacuum Characteristics

Code	Content
H	High Vacuum/Medium Flow Type
L	Medium Vacuum/High Flow Type
E	High Vacuum/Low Flow Type

## 2 Nozzle Diameter

Code	Content
03	ø0.3
04	ø0.4
05	ø0.5
07	ø0.7

## 3 Vacuum Port (V)

Code	Content
2	ø1.8 Push-in fitting
4	ø4 Push-in fitting
6	ø6 Push-in fitting
M3	M3×0.5
M5	M5×0.8
6A	R1/8

Note1) "2" and "M3" in item 3 can only be selected when the shape in item 6 is "M".

Note2) "6" and "6A" in item 3 can only be selected when the shape in item 6 is "Blank".

Note3) When the combination for items 1, 2 is "L05", "2" in item 3 cannot be selected.

## 4 Air Supply Port (P)

Code	Content
4	ø4 Push-in fitting
6	ø6 Push-in fitting

Note) For shape "M" in item 6, only "4" can be selected for item 4.

## 5 Exhaust Port (EX)

Code	Content
Blank	
S	Atmospheric Release
J	Centralized Exhaust

Note) For shape "M" in item 6, only "Blank" can be selected for item 5.

## 6 Shape

Code	Content
Blank	Standard
M	Compact

Note1) For "03" and "04" in item 2, only shape "M" can be selected for item 6.

Note2) For "07" in item 2, only shape "Blank" can be selected for item 6.

Note3) When the combination for 1 and 2 is "E05", only shape "M" can be selected for item 6.

## Simple vacuum ejector that converts compressed air to vacuum

### Vacuum Characteristic Variations

Nozzle Diameter	Suction Flow Rate (L/min (ANR))			Air Consumption (L/min (ANR))			Ultimate Vacuum Pressure (-kPa)		
	H	L	E	H	L	E	H	L	E
0.3 mm	2	3	1	4.5	3.5	90	66	88	
0.4 mm	4	7	2	8	6.5	90	66	90	
0.5 mm	7	12	3	11.5	8	90	66	90	
0.7 mm	12.5	22	10	23	17	92	66	90	

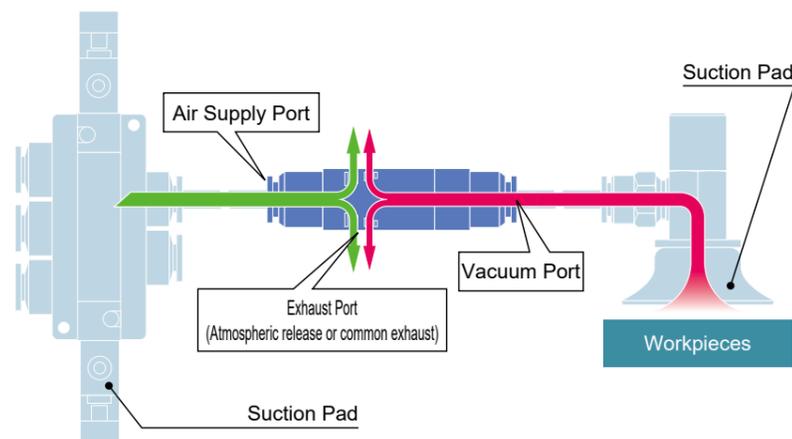
\* Rated supply pressure; H, L⇒0.5 MPa, E⇒0.35 MPa

## Conversion from compressed air to vacuum possible in a single line

## Small diameter nozzles available for low consumption flow rate needs: ø0.3, ø0.4 mm

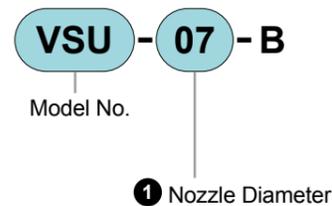
## Easy mounting/removal with dedicated fixing bracket (sold separately)

### Piping Example



Maintenance Part Model No. \* For details on the maintenance parts, refer to P. 137.

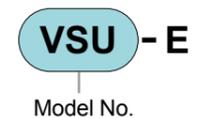
● Bracket for VSU



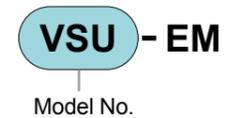
## 1 Nozzle Diameter

Code	Content
04	ø0.3, ø0.4 common (for VSU-□M)
05	ø0.5
07	ø0.7

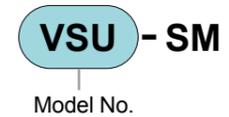
● Filter element for VSU



● VSU - □ Filter element for M (compact)



● VSU - □ Filter spacer for M (compact)



Common Specifications

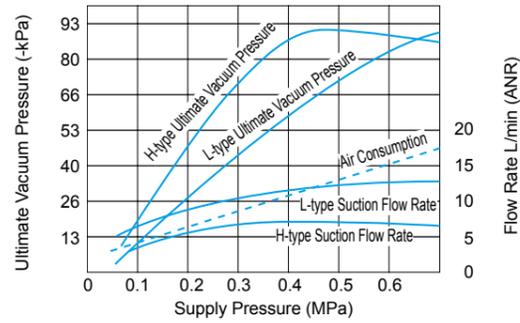
Item	VSU
Operating Fluid	Air
Operating Pressure MPa	0.15 to 0.7
Ambient/Fluid Temperatures °C	0 to 60

Vacuum Characteristics, Flow Characteristics

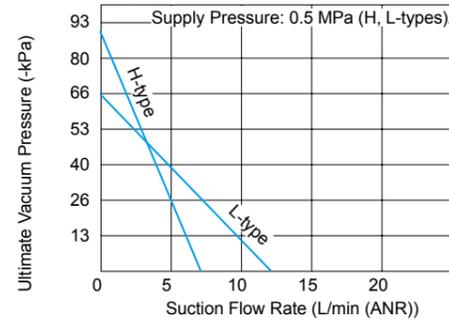
Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption

●VSU-H05

Vacuum Characteristics

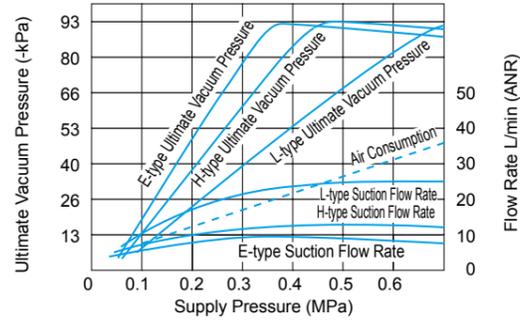


Flow Characteristics

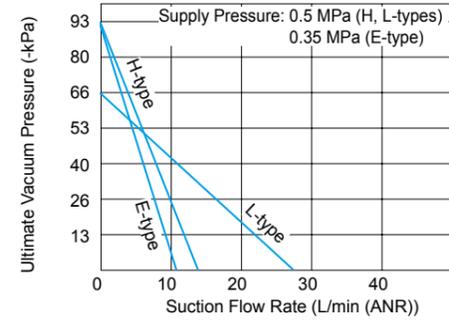


●VSU-Q07

Vacuum Characteristics



Flow Characteristics

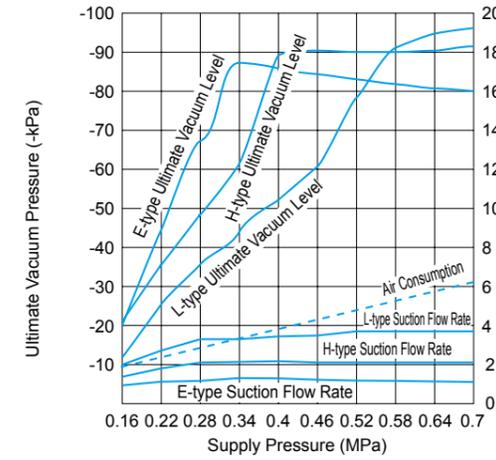


Vacuum Characteristics, Flow Characteristics

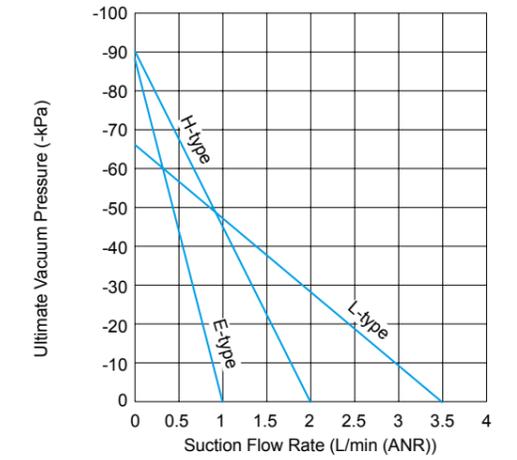
Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption

●VSU-Q03QM

Vacuum Characteristics

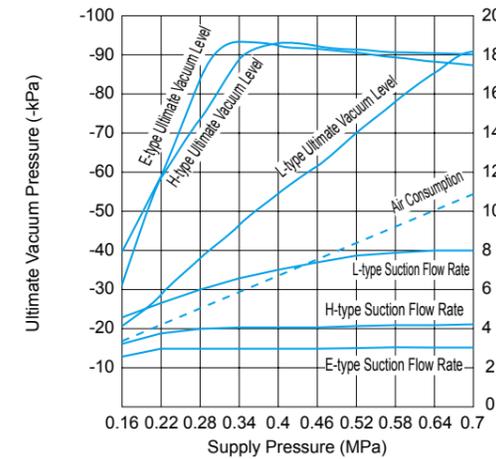


Flow Characteristics

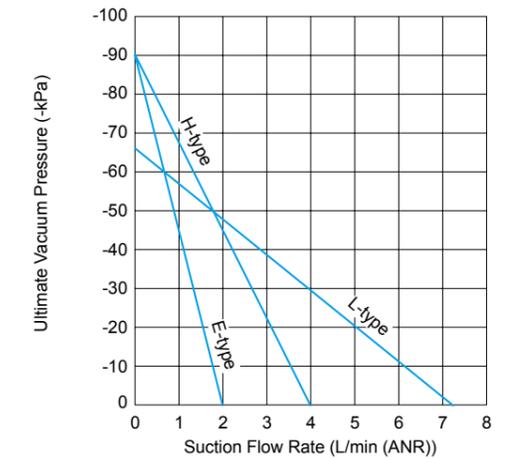


●VSU-Q04QM

Vacuum Characteristics

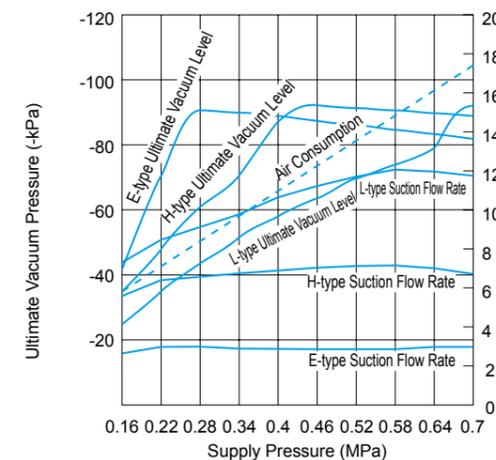


Flow Characteristics

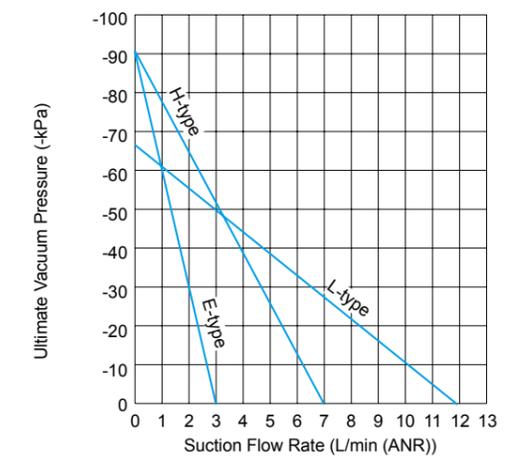


●VSU-Q05QM

Vacuum Characteristics



Flow Characteristics



Vacuum Components

Ejector System

VSU

VSH

VSY

VSK/VSKM

VSN/VSNM

VSG

VSK/VSKM

VSN/VSNM

VSQ

VSZM

Ending

Vacuum Components

Ejector System

VSU

VSH

VSY

VSK/VSKM

VSN/VSNM

VSG

VSK/VSKM

VSN/VSNM

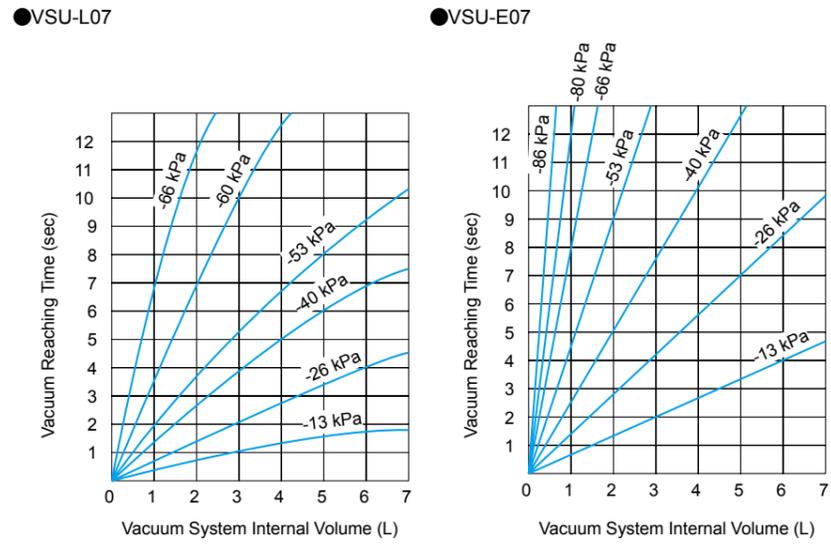
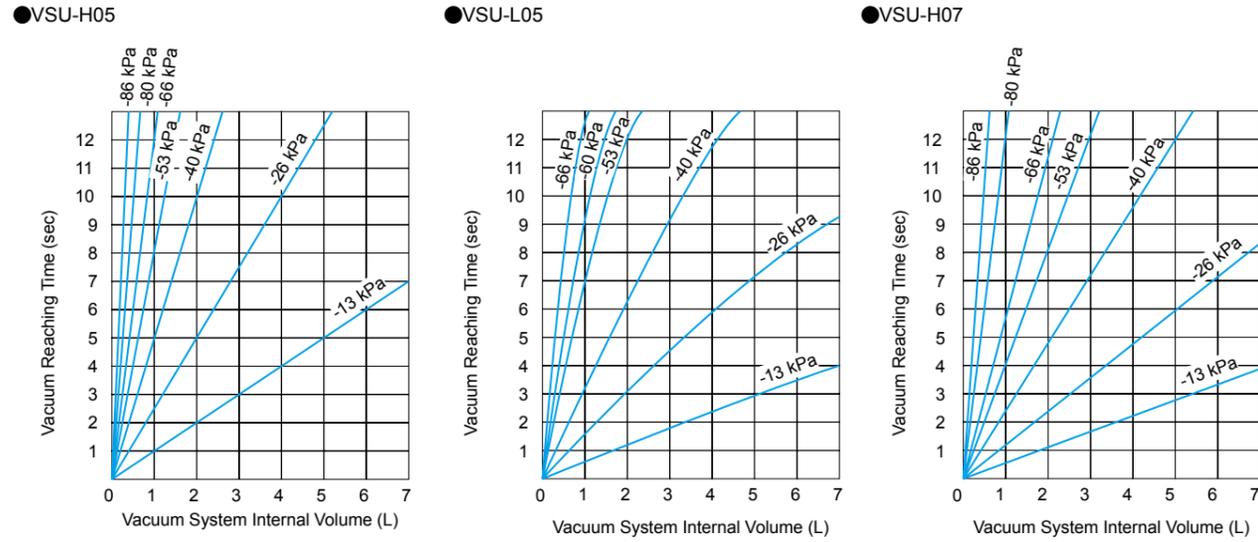
VSQ

VSZM

Ending

Vacuum Characteristics

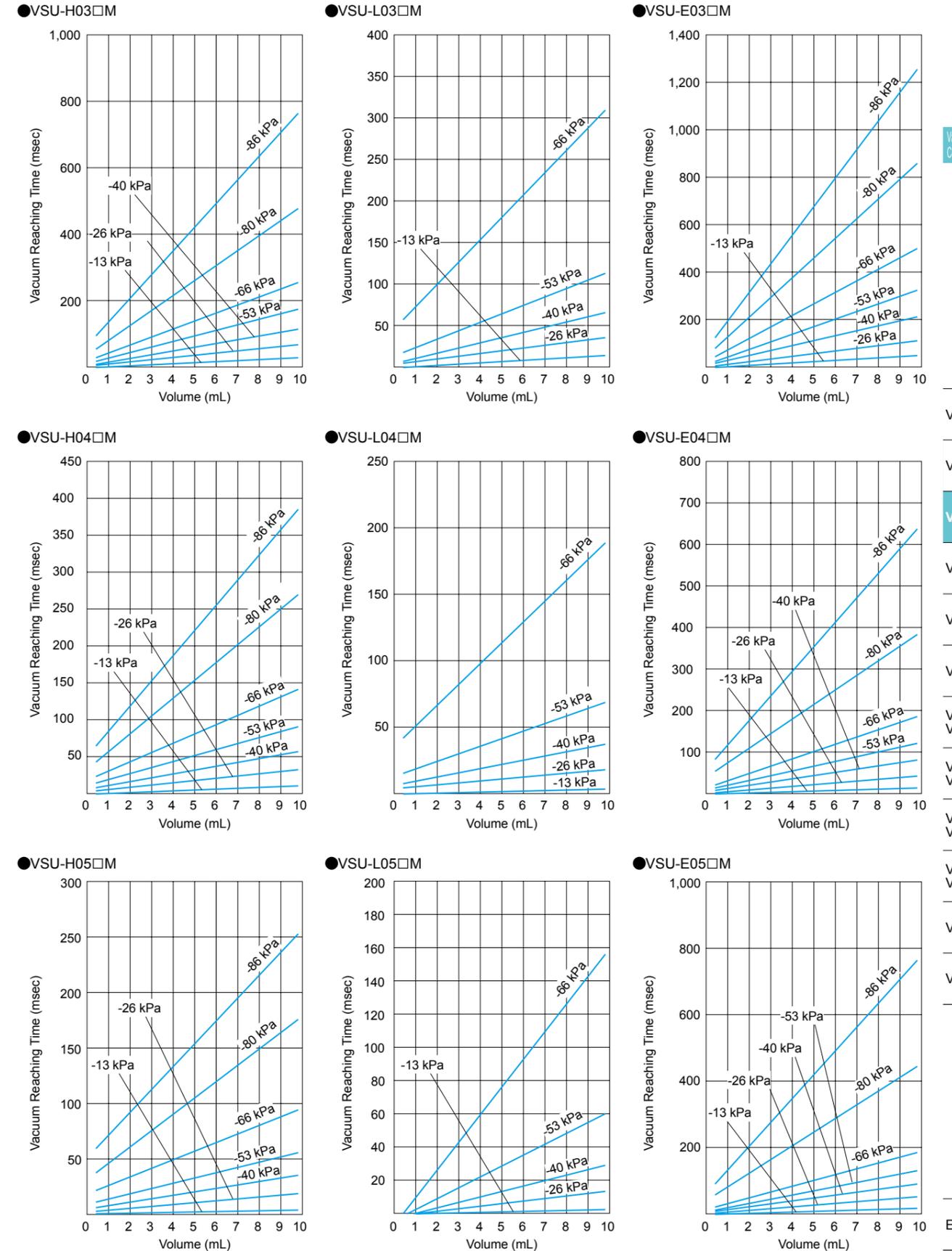
(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)  
 \*Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.



- The supply pressure in the characteristics above is during vacuum generation.
- Abnormal noise (gurgling sound) may occur at a supply pressure slightly below the peak ultimate vacuum pressure in the characteristics above. In this state with abnormal noise, characteristics are unstable and noise level increases. Also, it may affect sensors, etc., causing trouble, so reset the supply pressure.  
 (Ex. 1: For an H-type vacuum ejector with source pressure 0.5 MPa, during ejector operation, the supply pressure drops to 0.43 MPa due to pressure drop, causing abnormal noise.) → Reset the supply pressure during ejector operation to 0.5 MPa.)
- Select piping or equipment using an effective cross-sectional area approximately 3 times the nozzle diameter cross-sectional area as a guideline. If sufficient supply air flow rate is not secured, satisfactory vacuum characteristics cannot be obtained.  
 (Gurgling sound occurs even at the set pressure. Insufficient suction flow rate, failure to reach ultimate vacuum pressure, etc.)  
 (Ex. 2: For an H-type vacuum ejector, abnormal noise occurs even though the pressure during ejector operation is 0.5 MPa.) → Insufficient supply air flow rate. (Supply air flow rate is restricted before the vacuum ejector due to piping resistance, etc., preventing the supply air flow rate required for satisfactory characteristics from being obtained.) → Select a pipe components that can secure the required effective cross-sectional area.)  
 (Ex. 3: For a vacuum ejector with a 1.0 mm nozzle diameter, cross-sectional area  $0.5^2 \times \pi = 0.785 \text{ mm}^2 \times 3 = 2.35 \text{ mm}^2$ . Therefore, select piping and equipment to secure an effective cross-sectional area of 2.3 mm<sup>2</sup> or more.)

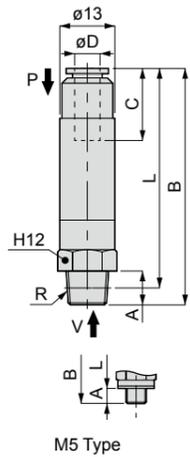
Vacuum Characteristics

(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)  
 \*Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.



External Dimension Drawings

●VSU-□-□S (atmospheric release)

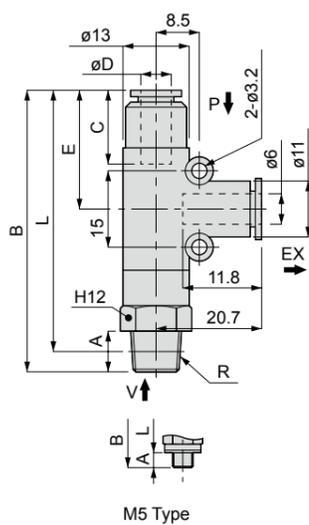


Unit: mm

Model No.	Bore size øD	R	A	B	L	C	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSU-H05-M54S	4	M5×0.8	3	50.3	47.3	10.9	0.5	90	7	11.5	18
VSU-H05-M56S	6	M5×0.8	3	51.3	48.3	11.7					17
VSU-H05-6A4S	4	R1/8	8	54.3	50.3	10.9					20
VSU-H05-6A6S	6	R1/8	8	55.3	51.3	11.7	0.7	92	12.5	23	19
VSU-H07-M54S	4	M5×0.8	3	57.1	54.1	10.9					18
VSU-H07-M56S	6	M5×0.8	3	57.8	54.8	11.7					21
VSU-H07-6A4S	4	R1/8	8	61.1	57.1	10.9	0.5	66	12	11.5	19
VSU-H07-6A6S	6	R1/8	8	61.8	57.8	11.7					18
VSU-L05-M54S	4	M5×0.8	3	50.3	47.3	10.9					20
VSU-L05-M56S	6	M5×0.8	3	51.3	48.3	11.7	0.7	66	20	23	19
VSU-L05-6A4S	4	R1/8	8	54.3	50.3	10.9					18
VSU-L05-6A6S	6	R1/8	8	55.3	51.3	11.7					21
VSU-L07-M54S	4	M5×0.8	3	57.1	54.1	10.9	0.5	90	10	17	19
VSU-L07-M56S	6	M5×0.8	3	57.8	54.8	11.7					22
VSU-L07-6A4S	4	R1/8	8	61.1	57.1	10.9					17
VSU-L07-6A6S	6	R1/8	8	61.8	57.8	11.7	0.7	90	10	17	22
VSU-E07-M54S	4	M5×0.8	3	57.1	54.1	10.9					21
VSU-E07-M56S	6	M5×0.8	3	57.8	54.8	11.7					20
VSU-E07-6A4S	4	R1/8	8	61.1	57.1	10.9	0.7	90	10	17	19
VSU-E07-6A6S	6	R1/8	8	61.8	57.8	11.7					21

Note1) The L dimension for tapered thread types is a reference dimension after screw tightening.  
 Note2) For M5 threads, the width across flats section is knurled. Also, H12 is for 6A (R1/8) threads.

●VSU-□-□J (common exhaust)



Unit: mm

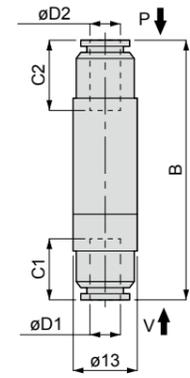
Model No.	Bore size øD	R	A	B	L	C	E	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSU-H05-M54J	4	M5×0.8	3	50.3	47.3	11.2	22.3	0.5	90	7	11.5	20
VSU-H05-M56J	6	M5×0.8	3	51.3	48.3	11.9	23.3					23
VSU-H05-6A4J	4	R1/8	8	54.3	50.3	11.2	22.3					22
VSU-H05-6A6J	6	R1/8	8	55.3	51.3	11.9	23.3	0.7	92	12.5	23	21
VSU-H07-M54J	4	M5×0.8	3	57.1	54.1	11.2	29.1					24
VSU-H07-M56J	6	M5×0.8	3	57.8	54.8	11.9	29.8					23
VSU-H07-6A4J	4	R1/8	8	61.1	57.1	11.2	29.1	0.5	66	12	11.5	20
VSU-H07-6A6J	6	R1/8	8	61.8	57.8	11.9	29.8					22
VSU-L05-M54J	4	M5×0.8	3	50.3	47.3	11.2	22.3					20
VSU-L05-M56J	6	M5×0.8	3	51.3	48.3	11.9	23.3	0.7	66	20	23	20
VSU-L05-6A4J	4	R1/8	8	54.3	50.3	11.2	22.3					23
VSU-L05-6A6J	6	R1/8	8	55.3	51.3	11.9	23.3					21
VSU-L07-M54J	4	M5×0.8	3	57.1	54.1	11.2	29.1	0.5	90	10	17	22
VSU-L07-M56J	6	M5×0.8	3	57.8	54.8	11.9	29.8					21
VSU-L07-6A4J	4	R1/8	8	61.1	57.1	11.2	29.1					24
VSU-L07-6A6J	6	R1/8	8	61.8	57.8	11.9	29.8	0.7	90	10	17	23
VSU-E07-M54J	4	M5×0.8	3	57.1	54.1	11.2	29.1					22
VSU-E07-M56J	6	M5×0.8	3	57.8	54.8	11.9	29.8					21
VSU-E07-6A4J	4	R1/8	8	61.1	57.1	11.2	29.1	0.7	90	10	17	24
VSU-E07-6A6J	6	R1/8	8	61.8	57.8	11.9	29.8					23

Note1) The L dimension for tapered thread types is a reference dimension after screw tightening.  
 Note2) For M5 threads, the width across flats section is knurled. Also, H12 is for 6A (R1/8) threads.

External Dimension Drawings

External Dimension Drawings

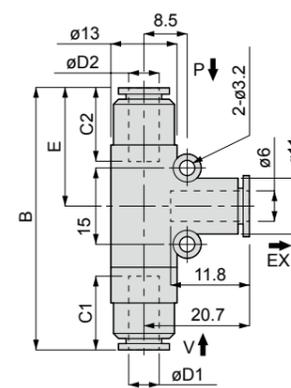
●VSU-□-□S (union, atmospheric release)



Unit: mm

Model No.	Bore size øD1	Bore size øD2	B	C1	C2	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)	
VSU-H05-44S	4	4	49.9	11.2	11.2	0.5	90	7	11.5	19	
VSU-H05-46S		6	50.9		11.9						
VSU-H05-64S	6	4	50.6	11.9	11.2						0.7
VSU-H05-66S		6	51.6	11.9	11.9						
VSU-H07-44S	4	4	56.7	11.2	11.2	0.7	92	12.5	23	20	
VSU-H07-46S		6	57.4		11.9						
VSU-H07-64S	6	4	57.4	11.9	11.2						0.7
VSU-H07-66S		6	58.1	11.9	11.9						
VSU-L05-44S	4	4	49.9	11.2	11.2	0.5	66	12	11.5	19	
VSU-L05-46S		6	50.9		11.9						11.2
VSU-L05-64S	6	4	50.6	11.9	11.2						0.7
VSU-L05-66S		6	51.6	11.9	11.9	19					
VSU-L07-44S	4	4	56.7	11.2	11.2		0.7	66	20	23	
VSU-L07-46S		6	57.4		11.9						11.2
VSU-L07-64S	6	4	57.4	11.9	11.2	0.7					66
VSU-L07-66S		6	58.1	11.9	11.9		21				
VSU-E07-44S	4	4	56.7	11.2	11.2			0.7	90	10	
VSU-E07-46S		6	57.4		11.9	11.9					19
VSU-E07-64S	6	4	57.4	11.9	11.2	0.7	90				
VSU-E07-66S		6	58.1	11.9	11.9			19			

●VSU-□-□J (union, common exhaust)



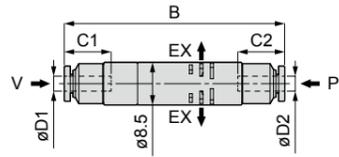
Unit: mm

Model No.	Bore size øD1	Bore size øD2	B	C1	C2	E	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)	
VSU-H05-44J	4	4	49.9	11.2	11.2	22.3	0.5	90	7	11.5	21	
VSU-H05-46J		6	50.9		23.3	23.3						20
VSU-H05-64J	6	4	50.6	11.9	11.2	22.3						
VSU-H05-66J		6	51.6	11.9	11.9	23.3	21					
VSU-H07-44J	4	4	56.7	11.2	11.2	29.1		0.7	92	12.5	23	22
VSU-H07-46J		6	57.4		11.9	11.9						
VSU-H07-64J	6	4	57.4	11.9	11.2	29.1	0.5					
VSU-H07-66J		6	58.1	11.9	11.9	29.8		20				
VSU-L05-44J	4	4	49.9	11.2	11.2	22.3			0.7	66	20	23
VSU-L05-46J		6	50.9		11.9	11.9	23.3					
VSU-L05-64J	6	4	50.6	11.9	11.2	22.3	0.5	66				
VSU-L05-66J		6	51.6	11.9	11.9	23.3			21			
VSU-L07-44J	4	4	56.7	11.2	11.2	29.1				0.7	66	20
VSU-L07-46J		6	57.4		11.9	11.9	29.8	21				
VSU-L07-64J	6	4	57.4	11.9	11.2	29.1	0.7		66			
VSU-L07-66J		6	58.1	11.9	11.9	29.8				22		
VSU-E07-44J	4	4	56.7	11.2	11.2	29.1		0.7			90	10
VSU-E07-46J		6	57.4		11.9	11.9	29.8		21			
VSU-E07-64J	6	4	57.4	11.9	11.2	29.1	0.7			90		
VSU-E07-66J		6	58.1	11.9	11.9	29.8		21				

External Dimension Drawings

●VSU-□-□M (compact, union, atmospheric release)

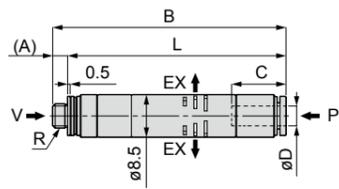
Unit: mm



Model No.	Bore size øD1	Bore size øD2	B	C1	C2	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSU-H03-24M	2	4	45	8.4	11.2	0.3	90	2	4.5	6.5
VSU-H03-44M	4		47.8	11.2				4	8	6.8
VSU-H04-24M	2		45	8.4				7	11.5	6.5
VSU-H04-44M	4		47.8	11.2				7	11.5	6.8
VSU-H05-24M	2	4	45	8.4	11.2	0.4	66	3	4.5	6.5
VSU-L03-24M	2		45	8.4				7	8	6.5
VSU-L03-44M	4		47.8	11.2				12	11.5	6.8
VSU-L04-24M	2		45	8.4				11.2	0.5	88
VSU-L04-44M	4	47.8	11.2	2	6.5	6.8				
VSU-L05-44M	4	47.8	11.2	3	8	6.5				
VSU-E03-24M	2	45	8.4	11.2	0.5	90	2			
VSU-E03-44M	4	47.8	11.2				3	8	6.5	
VSU-E04-24M	2	45	8.4				4	8	6.5	
VSU-E04-44M	4	47.8	11.2				4	8	6.8	
VSU-E05-24M	2	5	45	8.4	11.2	0.5	90	2	6.5	6.8
VSU-E05-44M	4		47.8	11.2				3	8	6.5

●VSU-□-□M (compact, atmospheric release)

Unit: mm



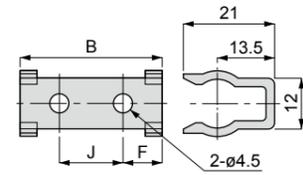
Model No.	Bore size øD	M	A	C	L	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSU-H03-M34M	4	M3×0.5	2.5	11.2	44.1	0.3	90	2	4.5	6.5
VSU-H03-M54M		M5×0.8	3					4	8	6.8
VSU-H04-M34M		M3×0.5	2.5					7	11.5	6.5
VSU-H04-M54M		M5×0.8	3					7	11.5	6.8
VSU-H05-M34M	4	M3×0.5	2.5	11.2	44.1	0.4	66	3	4.5	6.5
VSU-L03-M34M		M3×0.5	2.5					7	8	6.5
VSU-L03-M54M		M5×0.8	3					12	11.5	6.8
VSU-L04-M34M		M3×0.5	2.5					11.2	44.1	0.5
VSU-L04-M54M	M5×0.8	3	2	6.5	6.8					
VSU-L05-M34M	M3×0.5	2.5	3	8	6.5					
VSU-L05-M54M	M5×0.8	3	3	8	6.8					
VSU-E03-M34M	4	M3×0.5	2.5	11.2	44.1	0.5	90	2	6.5	6.5
VSU-E03-M54M		M5×0.8	3					3	8	6.8
VSU-E04-M34M		M3×0.5	2.5					3	8	6.5
VSU-E04-M54M		M5×0.8	3					3	8	6.8
VSU-E05-M34M	4	M3×0.5	2.5	11.2	44.1	0.5	90	2	6.5	6.5
VSU-E05-M54M		M5×0.8	3					3	8	6.8

External Dimension Drawings

External Dimension Drawings

●Bracket for VSU

Unit: mm

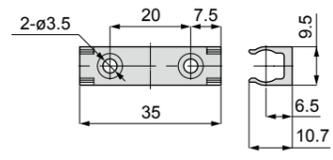


Model No.	B	F	J	Weight (g)
VSU-05-B	33.2	9	15	2
VSU-07-B	39.2	10	20	2

Note) VSU-05-B is for 0.5 mm nozzle dia. / VSU-07-B is for 0.7 mm nozzle dia.

●VSU-□M (compact) bracket

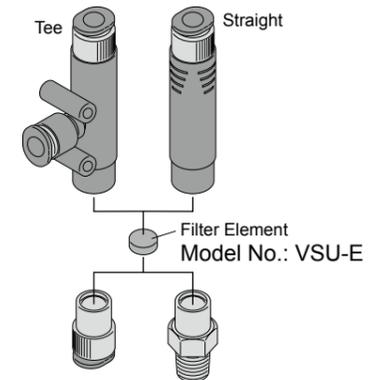
Model No.: VSU-04-B



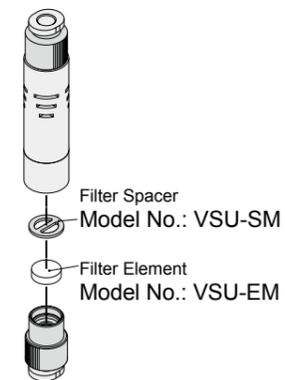
Weight: 1.1 g

Maintenance Parts

●VSU (Standard)



●VSU-□M (compact)





# 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: Single Unit Ejector (Tubular Type) VSU Series

### Design / Selection

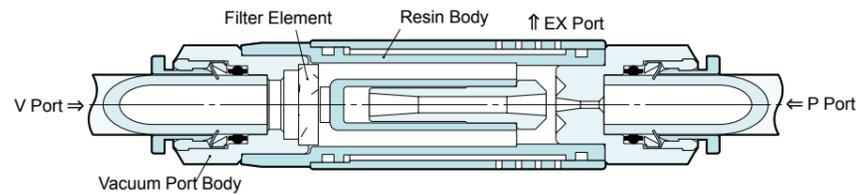
#### Warning

- For the VSU type, do not apply load to the body in the tension direction. Tensile load may cause the metal body to detach from the resin body.
- Avoid use of the VSU type in which excessive internal pressure is applied to the ejector. The metal body may detach from the resin body.

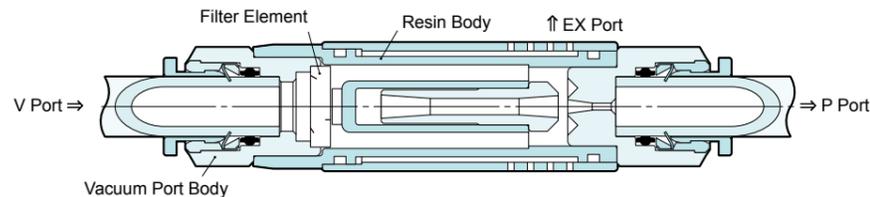
#### Caution

- The VSU type and VSU-□M (compact) type may not exhibit satisfactory performance if, during filter element maintenance, appropriate parts are not installed in the correct positions (no gap between the resin body and vacuum port body) as shown in the structural diagram below.

- VSU structural diagram



- VSU-□M (compact) structure diagram



- For the VSU-□M (compact), assemble the filter element after maintenance and make sure that the plug is installed in the specified position as shown in the structure diagram above. Then assemble the spacer and filter element. Note that the plug does not need to be removed during maintenance.

For precautions regarding mounting, installation, adjustment, operation, and maintenance, please refer to the CKD Equipment Product Site (<https://www.ckd.co.jp/kiki/en/>) → 'model No.' → [Instruction Manual](#)



Single Unit Ejector (Square-type)

# VSB Series



Simple vacuum ejector that converts compressed air to vacuum

## Abundant vacuum characteristic variations

Nozzle Diameter	Suction Flow Rate (L/min (ANR))			Air Consumption (L/min (ANR))			Ultimate Vacuum Pressure (-kPa)		
	H	L	E	H	L	E	H	L	E
0.5 mm	7	12		11.5			90	66	
0.7 mm	13	26	10.5	23	17		93	66	92
1.0 mm	28	42	21	46	34		93	66	92
1.2 mm	38		27	70		47	93		92

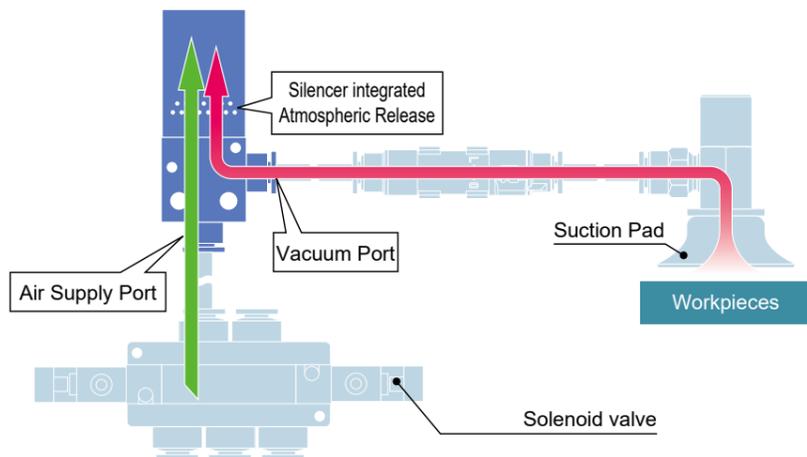
\* Rated supply pressure; H, L→0.5 MPa, E→0.35 MPa

Can be installed mid-piping between solenoid valve and suction pad

Square-type with built-in silencer, allowing main body mounting and fixing

Type integrated with mechanical vacuum switch also available

## Piping Example



## Model No. Notation

● Discrete ejector (square)



- 1 Vacuum Characteristics
- 2 Nozzle Diameter
- 3 Vacuum Port (V) - Air Supply Port (P)
- 4 Mechanical Vacuum Pressure Switch

### 1 Vacuum Characteristics

Code	Content
H	High Vacuum/Medium Flow Type
L	Medium Vacuum/High Flow Type
E	High Vacuum/Low Flow Type

Note) For 1, 2, the combination of "E05" and "L12" cannot be selected.

### 2 Nozzle Diameter

Code	Content
05	ø0.5
07	ø0.7
10	ø1.0
12	ø1.2

Note) For 1, 2, the combination of "E05" and "L12" cannot be selected.

### 3 Vacuum Port (V) - Air Supply Port (P)

Code	Content
44	ø4 Push-in fitting - ø4 Push-in fitting
66	ø6 Push-in fitting - ø6 Push-in fitting

### 4 Mechanical Vacuum Pressure Switch

Code	Content
Blank	Without Pressure Switch
V	With Mechanical Vacuum Pressure Switch

● Mechanical vacuum switch Discrete



- 1 Input Port

### 1 Input Port

Code	Content
4	ø4 Push-in fitting
6	ø6 Push-in fitting

## Model No./Port Combination Table

Vacuum Port (V) Air Supply Port (P)	44	66
Model No.		
VSB-H05	●	
VSB-H07		●
VSB-H10		●
VSB-H12		●
VSB-L05	●	
VSB-L07		●
VSB-L10		●
VSB-E07		●
VSB-E10		●
VSB-E12		●

## Maintenance Part Model No.

\* For details on the maintenance parts, refer to P. 144.

● Silencer Element A



Model No.

● Silencer Element B



Model No.

Vacuum Components

Ejector System

VSY

VSH

VSU

VSB

VSC

VSG

VSK/  
VSKM

VSJ/  
VSJM

VSN/  
VSNM

VSX/  
VSXM

VSQ

VSZM

Ending

Vacuum Components

Ejector System

VSY

VSH

VSU

VSB

VSC

VSG

VSK/  
VSKM

VSJ/  
VSJM

VSN/  
VSNM

VSX/  
VSXM

VSQ

VSZM

Ending

Common Specifications

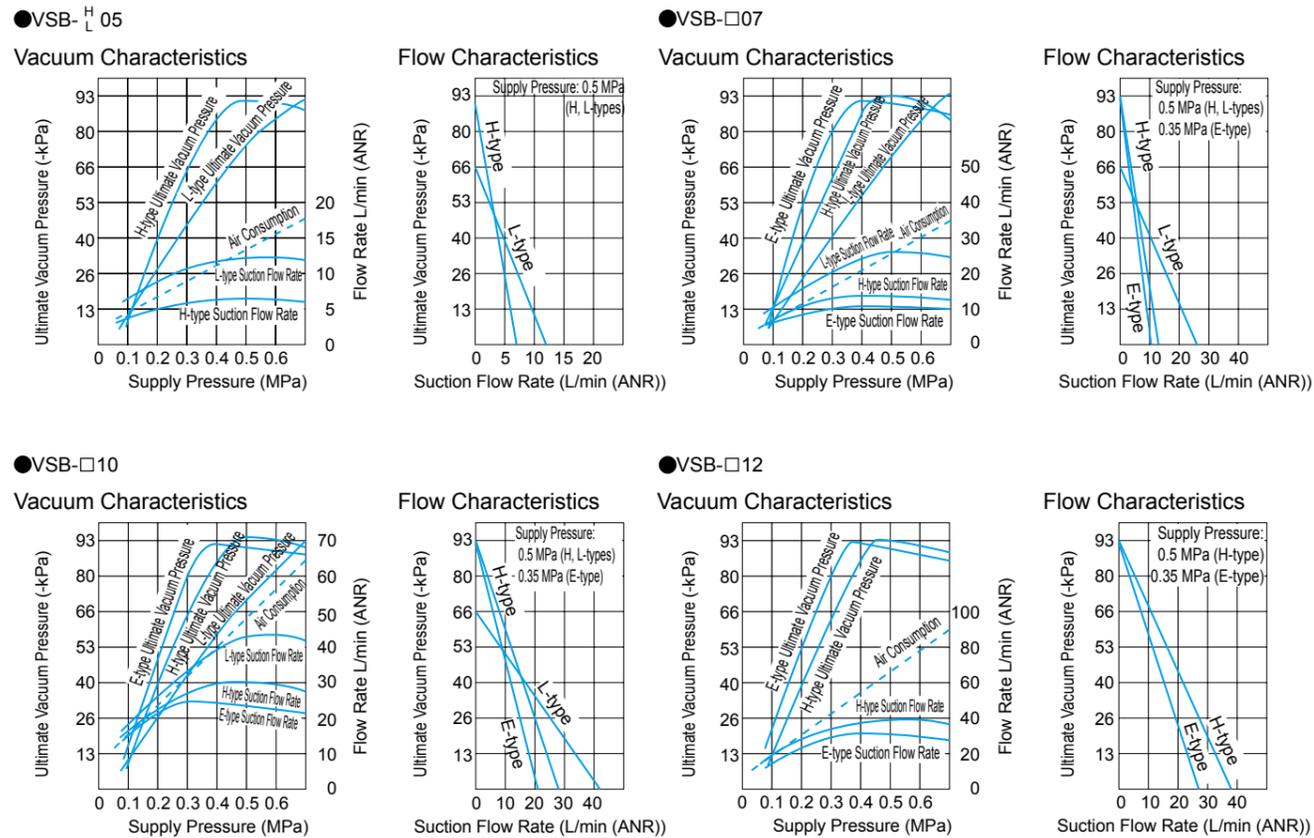
Item	VSB
Operating Fluid	Air
Operating Pressure MPa	0.15 to 0.7
Ambient Temperature/Fluid Temperature °C	0 to 60

Square-type with Vacuum Pressure Switch Mounted (VSB)/  
Mechanical Vacuum Pressure Switch Specifications

Item	Mechanical Vacuum Pressure Switch
Pressure Detection Method	Diaphragm - Microswitch
Operating Fluid	Air
Operating Temperature °C	0 to 60 (However, no freezing)
Electrical Capacity	3A 250V
Set Pressure kPa	-66 to -20
Repeatability kPa	±5
Differential kPa	≤ 22
Factory Set Pressure kPa	Approx. -50

Vacuum Characteristics, Flow Characteristics

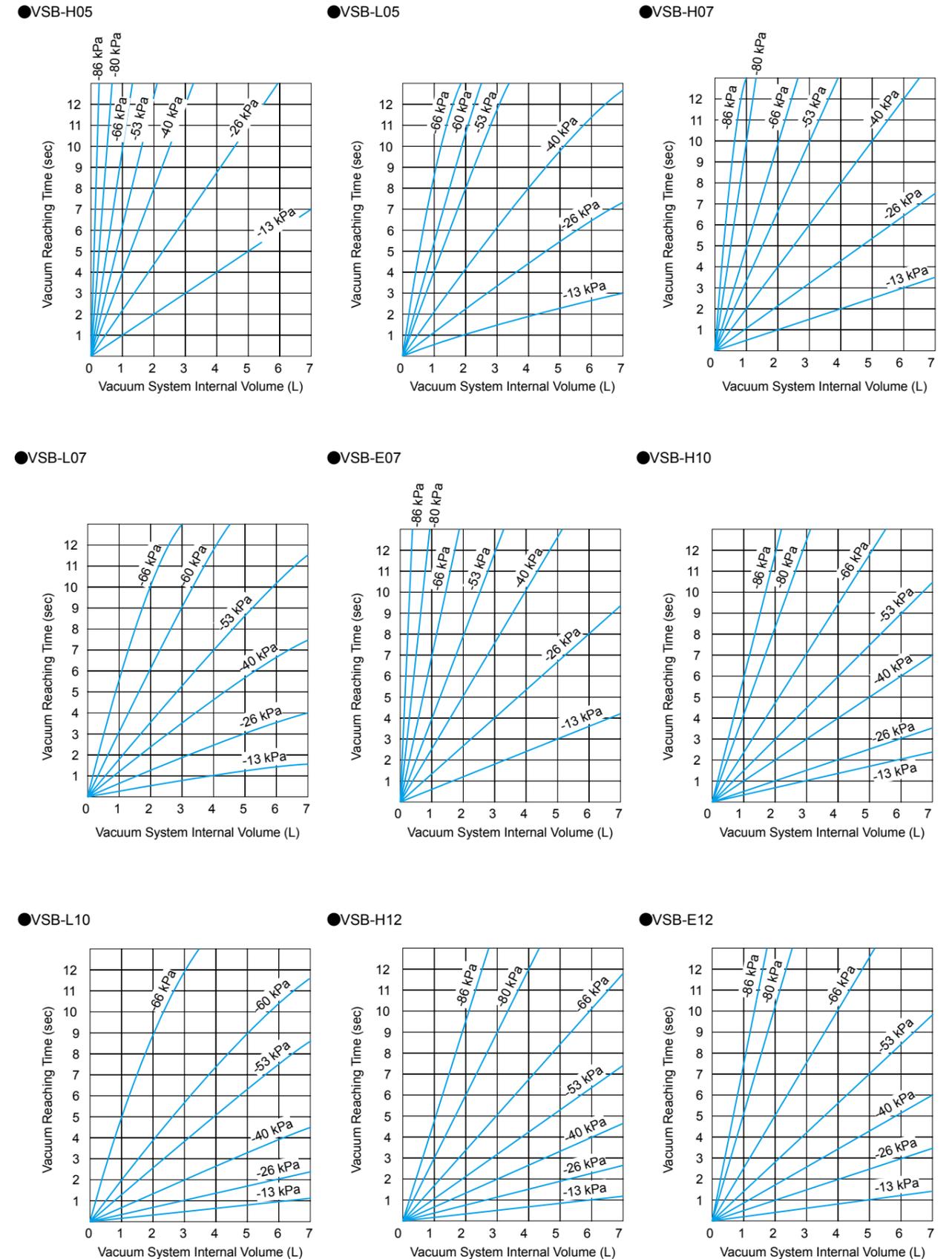
Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption



- The supply pressure in the characteristics above is during vacuum generation.
- Abnormal noise (gurgling sound) may occur at a supply pressure slightly below the peak ultimate vacuum pressure in the characteristics above. In this state with abnormal noise, characteristics are unstable and noise level increases. Also, it may affect sensors, etc., causing trouble, so reset the supply pressure.  
(Ex. 1: For an H-type vacuum ejector with source pressure 0.5 MPa, during ejector operation, the supply pressure drops to 0.43 MPa due to pressure drop, causing abnormal noise.) → Reset the supply pressure during ejector operation to 0.5 MPa.)
- Select piping or equipment using an effective cross-sectional area approximately 3 times the nozzle diameter cross-sectional area as a guideline. If sufficient supply air flow rate is not secured, satisfactory vacuum characteristics cannot be obtained.  
(Gurgling sound occurs even at the set pressure. Insufficient suction flow rate, failure to reach ultimate vacuum pressure, etc.)  
(Ex. 2: For an H-type vacuum ejector, abnormal noise occurs even though the pressure during ejector operation is 0.5 MPa.) → Insufficient supply air flow rate. (Supply air flow rate is restricted before the vacuum ejector due to piping resistance, etc., preventing the supply air flow rate required for satisfactory characteristics from being obtained.) → Select a pipe components that can secure the required effective cross-sectional area.)  
(Ex. 3: For a vacuum ejector with a 1.0 mm nozzle diameter, cross-sectional area  $0.5^2 \times \pi = 0.785 \text{ mm}^2 \times 3 = 2.35 \text{ mm}^2$ . Therefore, select piping and equipment to secure an effective cross-sectional area of 2.3 mm<sup>2</sup> or more.)

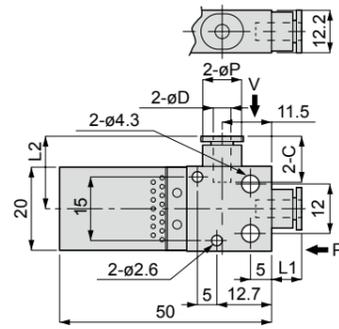
Vacuum Characteristics

(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)  
\* Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.



External Dimension Drawings

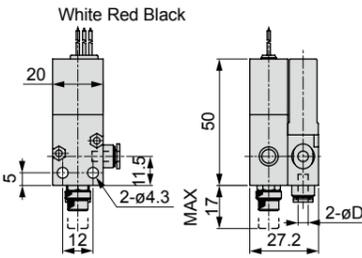
●VSB-□-□(atmospheric release)



Unit: mm

Model No.	Bore size øD	øP	C	L1	L2	Nozzle Diameter (mm)	Operating Pressure (MPa)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSB-H05-44	4	9	11.3	6.9	16.9	0.5	0.5	90	7	11.5	18
VSB-H07-66	6	10.6	11.8	7.2	17.2	0.7	0.5	93	13	23	19
VSB-H10-66						1			28	46	
VSB-H12-66						1.2			38	70	
VSB-L05-44	4	9	11.3	6.9	16.9	0.5	0.45	66	12	11.5	18
VSB-L07-66	6	10.6	11.8	7.2	17.2	0.7			26	23	19
VSB-L10-66						1			42	46	18
VSB-E07-66	6	10.6	11.8	7.2	17.2	0.7	0.4	92	10.5	17	19
VSB-E10-66						1			21	34	
VSB-E12-66						1.2			27	47	

●VSB-□-□V (with vacuum switch)

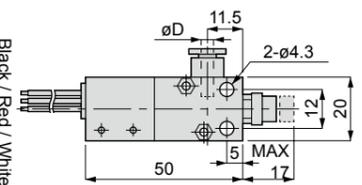


Unit: mm

Model No.	Bore size øD	Nozzle Diameter (mm)	Operating Pressure (MPa)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSB-H05-44V	4	0.5	0.5	90	7	11.5	47
VSB-H07-66V	6	0.7	0.5	93	13	23	46
VSB-H10-66V		1			28	46	47
VSB-H12-66V		1.2			38	70	48
VSB-L05-44V	4	0.5	0.45	66	12	11.5	47
VSB-L07-66V	6	0.7			26	23	48
VSB-L10-66V		1			42	46	47
VSB-E07-66V	6	0.7	0.4	92	10.5	17	49
VSB-E10-66V		1			21	34	
VSB-E12-66V		1.2			27	47	

Note) Lead Wire White : COMMON  
Red : N.C.  
Black : N.O.

●VSB-VUSM-□ Mechanical vacuum switch, single unit



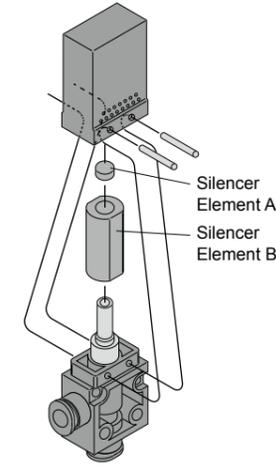
Unit: mm

Model No.	Bore size øD	Weight (g)
VSB-VUSM-4	4	29
VSB-VUSM-6	6	29

Note) Lead Wire Length approx. 300 mm (AWG#24)  
White: COMMON  
Red: N.C.  
Black: N.O.

Maintenance Parts

●Silencer Element



Element A Model No.	Element B Model No.
VSB-EA	VSB-EB

Note) Common part for VSB, VSG, VSJ

Note) Common part for VSB, VSG



Single Unit Ejector (Pad Direct Mount Type)

# VSC Series



# VSC Series

Model No. Notation

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

●Design compatible with rechargeable battery manufacturing process

VSC - ..... - 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.

VSC - ..... - FP□

Model No. Notation

●Discrete ejector (pad direct mounting)

VSC - H 15 - 10A 10L J

Model No.

2 Nozzle Diameter

4 Air Supply Port (P)

5 Exhaust Port (EX)

1 Vacuum Characteristics

3 Vacuum Port (V)

### 1 Vacuum Characteristics

Code	Content
H	High Vacuum/Medium Flow Type
L	Medium Vacuum/High Flow Type
E	High Vacuum/Low Flow Type

Note) For 1, 2, the combinations "E03", "E04", "E05", "L12" cannot be selected.

### 2 Nozzle Diameter

Code	Content
03	ø0.3
04	ø0.4
05	ø0.5
07	ø0.7
10	ø1.0
12	ø1.2
15	ø1.5
20	ø2.0

Note) For 1, 2, the combinations "E03", "E04", "E05", "L12" cannot be selected.

### 3 Vacuum Port (V)

Code	Content
M5	M5 × 0.8 *1
6A	R1/8
8A	R1/4
10A	R3/8

Note1) When 3 is "M5", 5 exhaust port (EX) "J" cannot be selected.

### 4 Air Supply Port (P)

Code	Content
4	ø4 Push-in fitting
6	ø6 Push-in fitting
6L	ø6 Push-in fitting elbow
8	ø8 Push-in fitting
8L	ø8 Push-in fitting elbow
10	ø10 Push-in fitting
10L	ø10 Push-in fitting elbow

### 5 Exhaust Port (EX)

Code	Content
S	Atmospheric Release with Silencer
J	Centralized Exhaust *1

Note1) For 5, when the vacuum port (V) is "M5", 5 "J" cannot be selected.

## Simple vacuum ejector that converts compressed air to vacuum

### Abundant vacuum characteristic variations

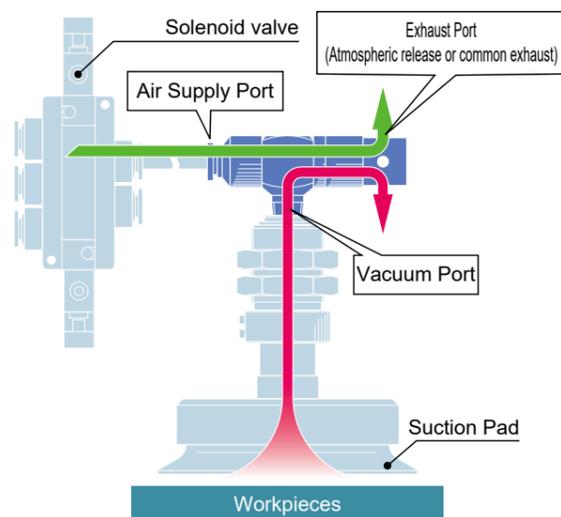
Nozzle Diameter	Suction Flow Rate (L/min (ANR))			Air Consumption (L/min (ANR))			Ultimate Vacuum Pressure (-kPa)		
	H	L	E	H	L	E	H	L	E
0.3 mm	2	4			4.5		90	66	
0.4 mm	4	7.5			8		90	66	
0.5 mm	7	12			11.5		90	66	
0.7 mm	13	26	10.5		23	17	93	66	92
1.0 mm	28	42	21		46	34	93	66	92
1.2 mm	38		27	70		47	93		92
1.5 mm	63	95	42		100	70	93	66	92
2.0 mm	110	180	84		200	150	93	66	92

\* Rated supply pressure; H, L⇒0.5 MPa, E⇒0.35 MPa

### Abundant lineup of types with different performance and shapes, compatible with various conditions

### Direct mounting possible on suction pad holders, etc.

### Piping Example



Maintenance Part Model No.

\* For details on the maintenance parts, P. 157.

●Silencer element (for VSC-□M5)

VSC - M5 - SE

Model No.

●Silencer Kit

VSC - 12 - SK

Model No.

1 Nozzle Diameter

### 1 Nozzle Diameter

Code	Content
12	ø1.2 (Common for ø0.7, ø1.0)
15	ø1.5
20	ø2.0

### Model No./Port Combination Table

\* M Thread Type

Vacuum Port (V)	M5
Air Supply Port (P)	4
Model No.	
VSC-H03	●
VSC-H04	●
VSC-H05	●
VSC-L03	●
VSC-L04	●
VSC-L05	●

\* R Thread Type

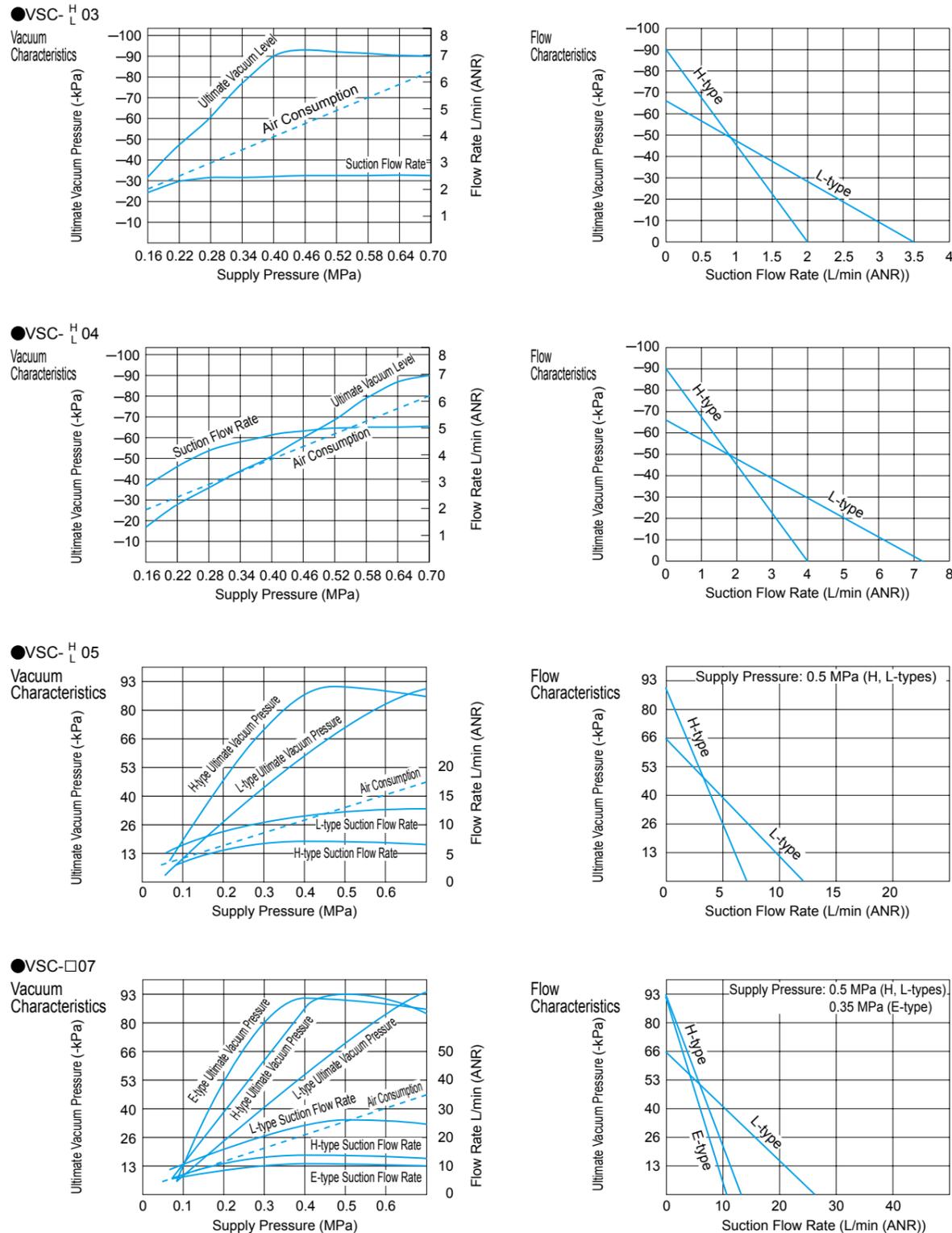
Vacuum Port (V)	6A	8A	10A
Air Supply Port (P)	6*	8*	8* 10*
Model No.			
VSC-H07	●	●	
VSC-H10	●	●	
VSC-H12	●	●	
VSC-H15			● ● ● ●
VSC-H20			● ● ● ●
VSC-L07	●	●	
VSC-L10	●	●	
VSC-L15			● ● ● ●
VSC-L20			● ● ● ●
VSC-E07	●	●	
VSC-E10	●	●	
VSC-E12	●	●	
VSC-E15			● ● ● ●
VSC-E20			● ● ● ●

Common Specifications

Item	VSC
Operating Fluid	Air
Operating Pressure MPa	0.15 to 0.7
Ambient /Fluid Temperatures °C	0 to 60

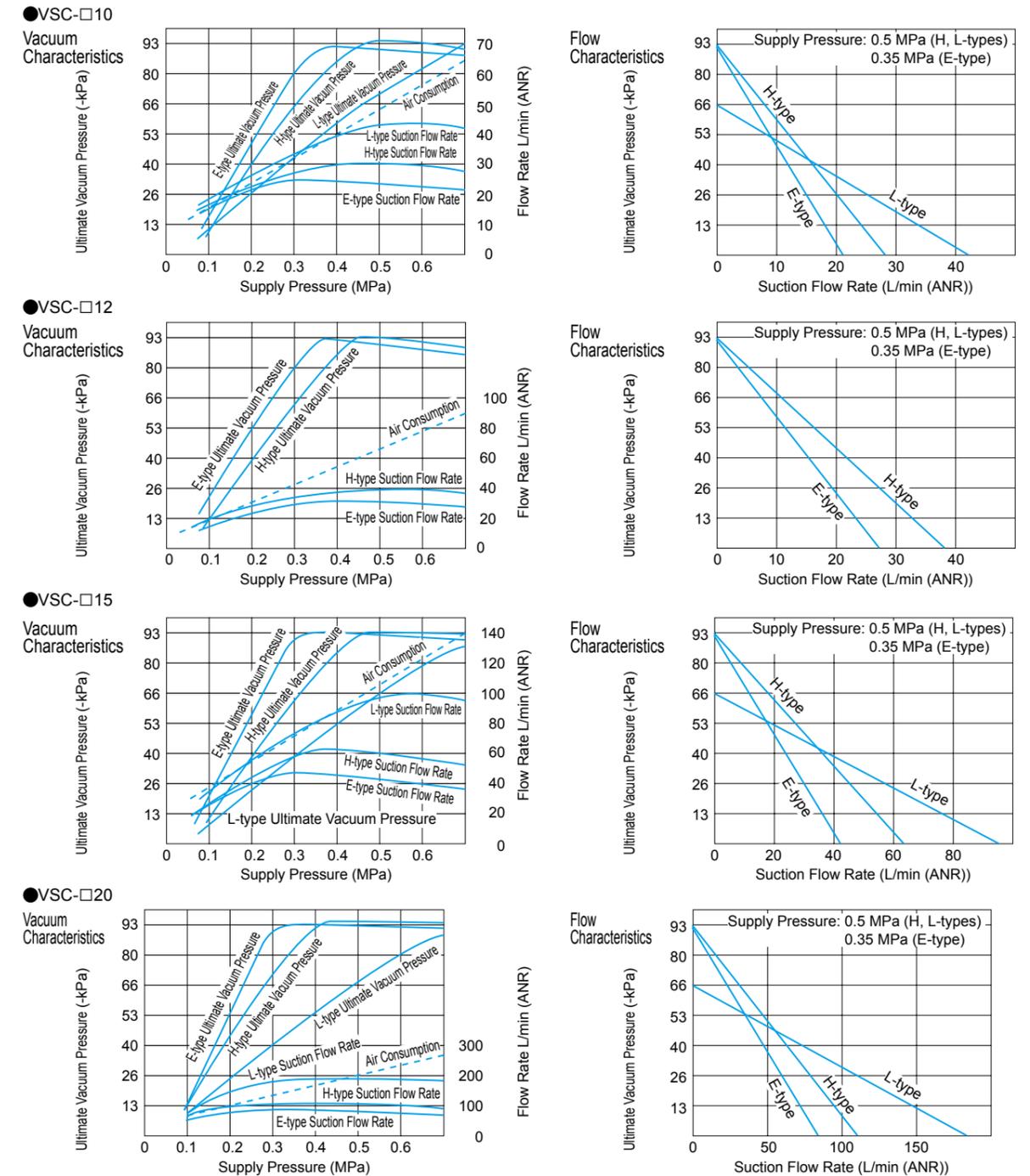
Vacuum Characteristics, Flow Characteristics

Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption



Vacuum Characteristics, Flow Characteristics

Supply Pressure - Ultimate Vacuum Pressure, Suction Flow Rate, Air Consumption

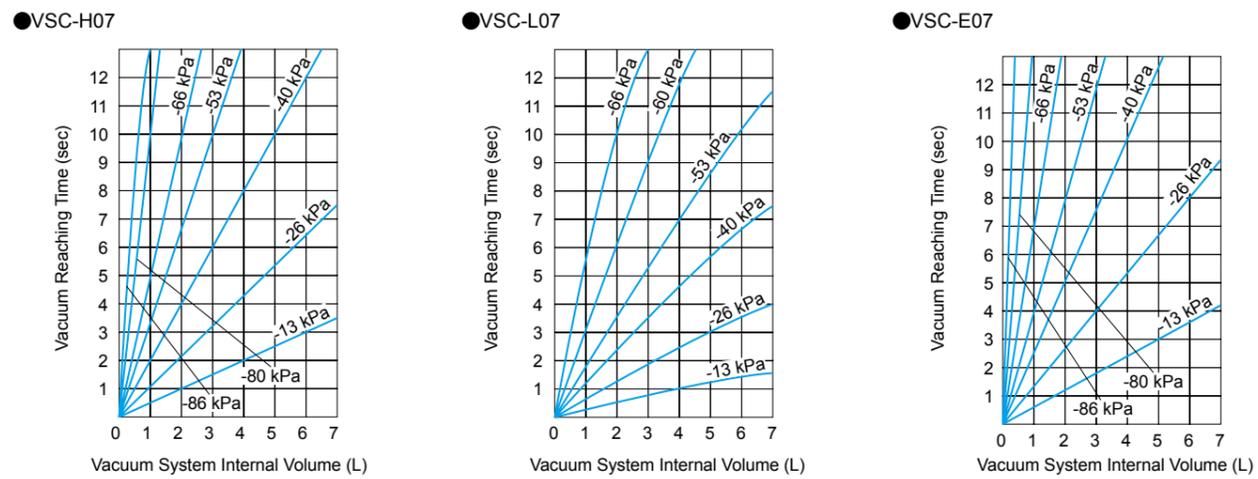
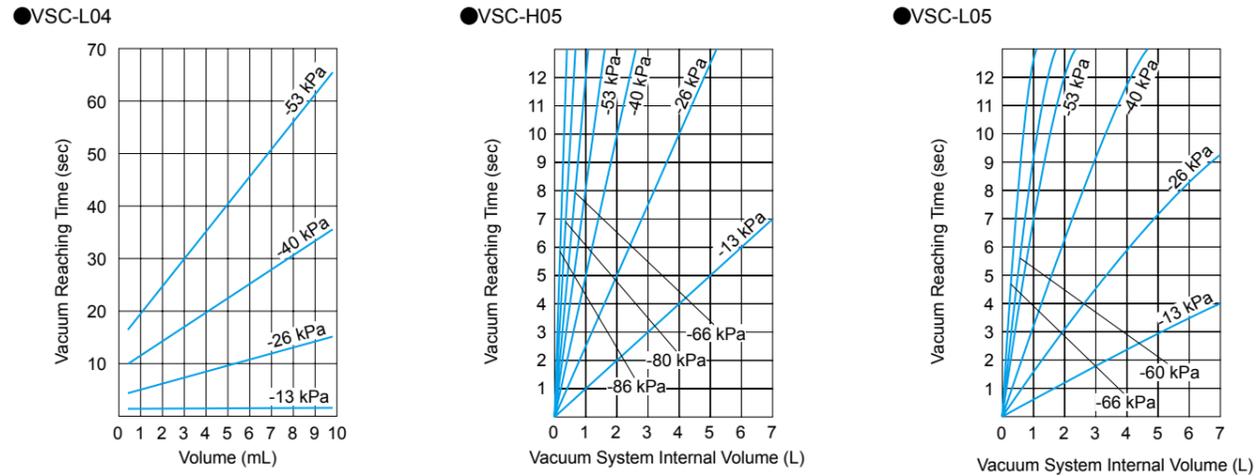
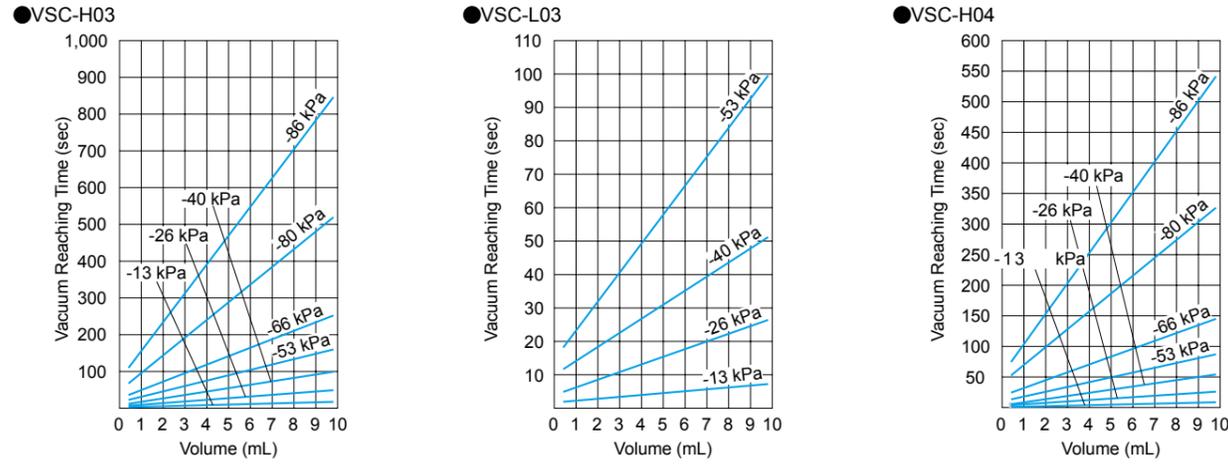


- The supply pressure in the characteristics above is during vacuum generation.
- Abnormal noise (gurgling sound) may occur at a supply pressure slightly below the peak ultimate vacuum pressure in the characteristics above. In this state with abnormal noise, characteristics are unstable and noise level increases. Also, it may affect sensors, etc., causing trouble, so reset the supply pressure. (Ex. 1: For an H-type vacuum ejector with source pressure 0.5 MPa, during ejector operation, the supply pressure drops to 0.43 MPa due to pressure drop, causing abnormal noise.) → Reset the supply pressure during ejector operation to 0.5 MPa.)
- Select piping or equipment using an effective cross-sectional area approximately 3 times the nozzle diameter cross-sectional area as a guideline. If sufficient supply air flow rate is not secured, satisfactory vacuum characteristics cannot be obtained. (Gurgling sound occurs even at the set pressure. Insufficient suction flow rate, failure to reach ultimate vacuum pressure, etc.) (Ex. 2: For an H-type vacuum ejector, abnormal noise occurs even though the pressure during ejector operation is 0.5 MPa.) → Insufficient supply air flow rate. (Supply air flow rate is restricted before the vacuum ejector due to piping resistance, etc., preventing the supply air flow rate required for satisfactory characteristics from being obtained.) → Select a pipe components that can secure the required effective cross-sectional area.) (Ex. 3: For a vacuum ejector with a 1.0 mm nozzle diameter, cross-sectional area  $0.5^2 \times \pi = 0.785 \text{ mm}^2 \times 3 = 2.35 \text{ mm}^2$ . Therefore, select piping and equipment to secure an effective cross-sectional area of 2.3 mm<sup>2</sup> or more.)

Vacuum Characteristics

(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)

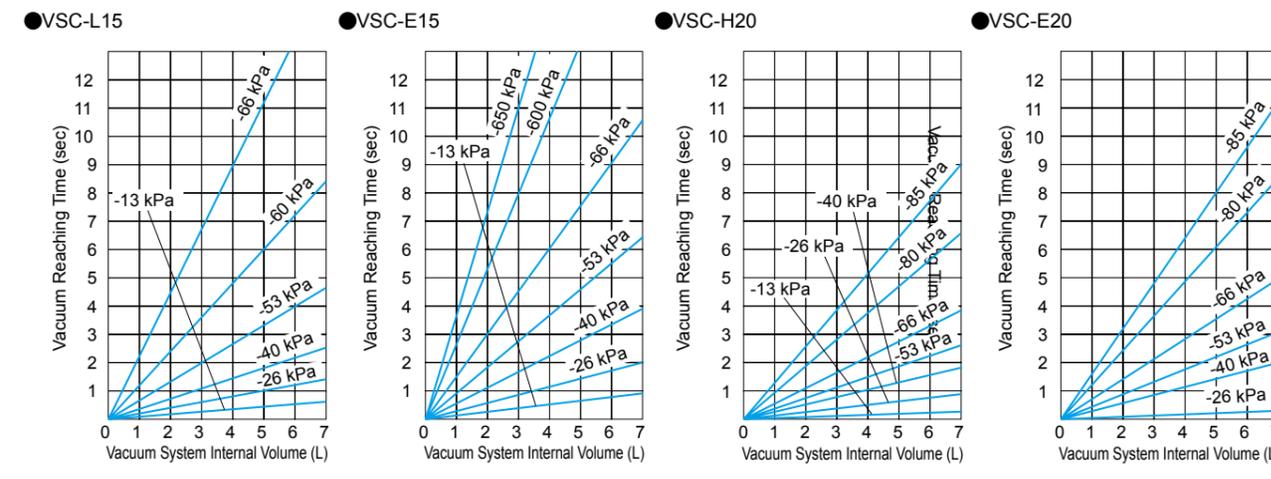
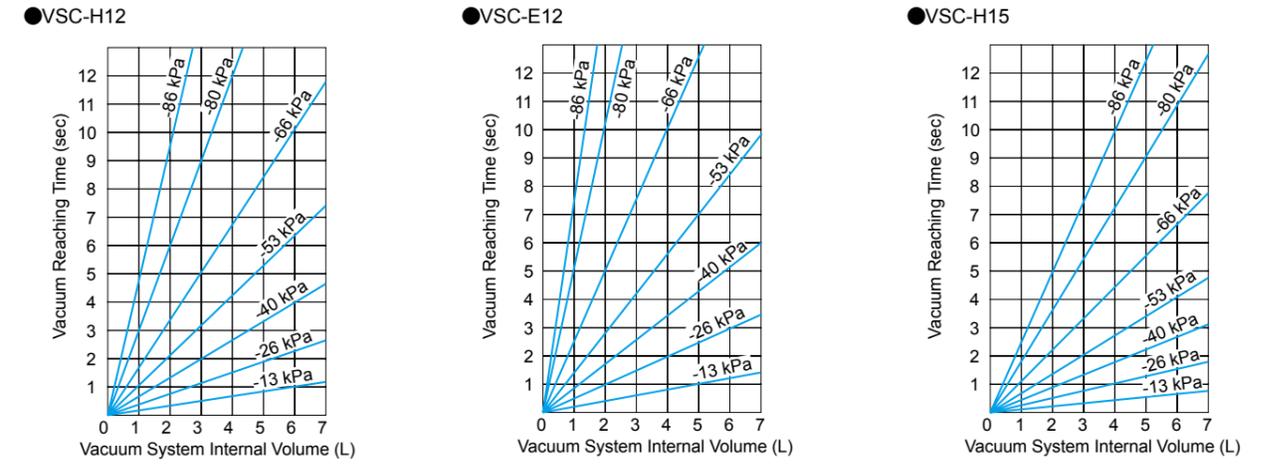
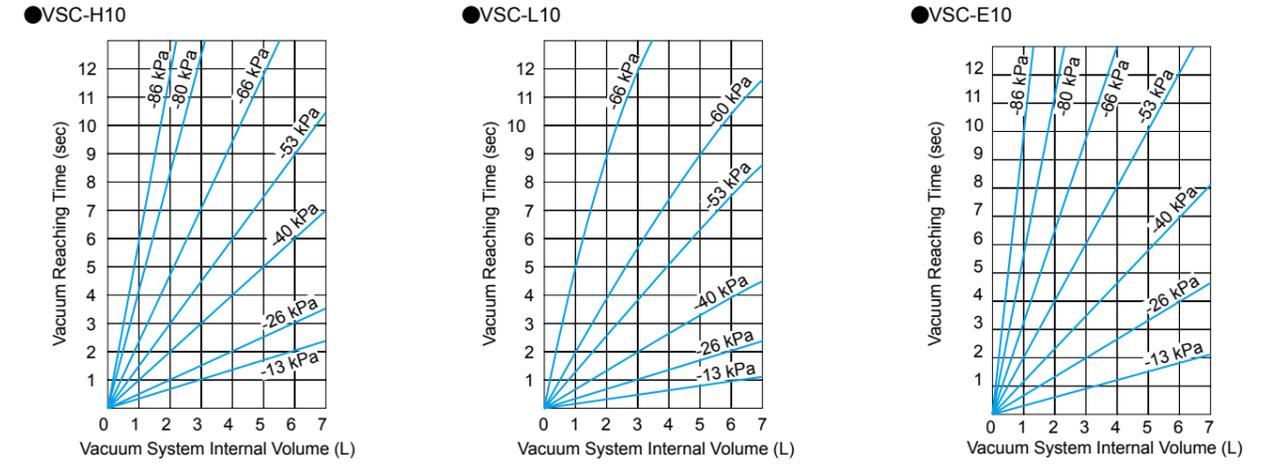
\*Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.



Vacuum Characteristics

(Reference) Vacuum achievement time (supply pressure H-type: 0.5 MPa, L-type: 0.5 MPa, E-type: 0.3 to 0.5 MPa)

\*Values vary depending on the vacuum system piping configuration, etc., so please use these as a guideline.



Vacuum Components  
Ejector System

VSY  
VSH  
VSU  
VSB  
VSC  
VSG  
VSK/  
VSKM  
VSJ/  
VSJM  
VSN/  
VSNM  
VSX/  
VSXM

Ending

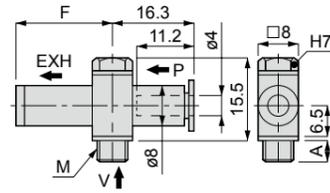
Vacuum Components  
Ejector System

VSY  
VSH  
VSU  
VSB  
VSC  
VSG  
VSK/  
VSKM  
VSJ/  
VSJM  
VSN/  
VSNM  
VSX/  
VSXM

Ending

External Dimension Drawings

●VSC-□-□S (straight, atmospheric release with silencer)



Unit: mm

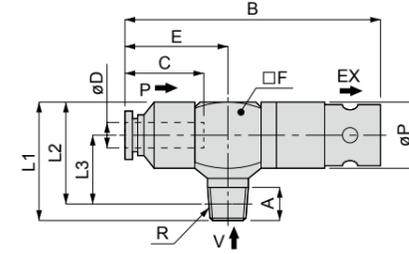
Model No.	M	A	F	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSC-H03-M54S	M5×0.8	3.5	15	0.3	90	2	4.5	13
VSC-H04-M54S			17	0.4		4	8	14
VSC-H05-M54S			19	0.5		11.5	11.5	15
VSC-L03-M54S	M5×0.8	3.5	18.2	0.3	66	4	4.5	14
VSC-L04-M54S			19	0.4		8	8	14
VSC-L05-M54S			19	0.5		11	11.5	17

Note) Please note that the piping direction cannot be changed after mounting this product.

External Dimension Drawings

External Dimension Drawings

●VSC-□-□S (Atmospheric release with silencer)



Unit: mm

Model No.	Bore size øD	R	A	L1	L2	L3	øP	B	E	C	□F	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)											
VSC-H07-6A6S	6	R1/8	8	28	24	16	16	62.5	24.5	17	16	0.7	93	13	23	32											
VSC-H07-6A8S	8							65.2	27.2	18.2																	
VSC-H10-6A6S	6							62.5	24.5	17																	
VSC-H10-6A8S	8							65.2	27.2	18.2																	
VSC-H12-6A6S	6	R1/8	8	28	24	16	16	62.5	24.5	17	16	1.2	93	38	70	32											
VSC-H12-6A8S	8							65.2	27.2	18.2																	
VSC-H15-8A8S	8							R1/4	11	39							33	21	24	104.2	29.2	18.2	22	1.5	63	100	87
VSC-H15-10A8S	8							R3/8	12								32.7	20.7									
VSC-H15-8A10S	10	R1/4	11	33	21																						
VSC-H15-10A10S	10	R3/8	12	32.7	20.7																						
VSC-H20-8A8S	8	R1/4	11	39	24	16	16	104.2	29.2	18.2	22	2	110	200	91	92											
VSC-H20-10A8S	8	R3/8	12														32.7	20.7									
VSC-H20-8A10S	10	R1/4	11														33	21									
VSC-H20-10A10S	10	R3/8	12														32.7	20.7									
VSC-L07-6A6S	6	R1/8	8	28	24	16	16	62.5	24.5	17	16	0.7	66	26	23	32											
VSC-L07-6A8S	8							65.2	27.2	18.2																	
VSC-L10-6A6S	6							62.5	24.5	17																	
VSC-L10-6A8S	8							65.2	27.2	18.2																	
VSC-L15-8A8S	8	R1/4	11	39	24	16	16	104.2	29.2	18.2	22	1.5	66	95	100	85											
VSC-L15-10A8S	8	R3/8	12														32.7	20.7									
VSC-L15-8A10S	10	R1/4	11														33	21									
VSC-L15-10A10S	10	R3/8	12														32.7	20.7									
VSC-L20-8A8S	8	R1/4	11	39	24	16	16	104.2	29.2	18.2	22	2	180	200	87	88											
VSC-L20-10A8S	8	R3/8	12														32.7	20.7									
VSC-L20-8A10S	10	R1/4	11														33	21									
VSC-L20-10A10S	10	R3/8	12														32.7	20.7									
VSC-E07-6A6S	6	R1/8	8	28	24	16	16	62.5	24.5	17	16	0.7	92	10.5	17	32											
VSC-E07-6A8S	8							65.2	27.2	18.2																	
VSC-E10-6A6S	6							62.5	24.5	17																	
VSC-E10-6A8S	8							65.2	27.2	18.2																	
VSC-E12-6A6S	6	R1/8	8	28	24	16	16	62.5	24.5	17	16	1.2	92	27	47	32											
VSC-E12-6A8S	8							65.2	27.2	18.2																	
VSC-E15-8A8S	8							R1/4	11	39							24	16	16	104.2	29.2	18.2	22	1.5	42	70	88
VSC-E15-10A8S	8							R3/8	12																		
VSC-E15-8A10S	10	R1/4	11	33	21																						
VSC-E15-10A10S	10	R3/8	12	32.7	20.7																						
VSC-E20-8A8S	8	R1/4	11	39	24	16	16	104.2	29.2	18.2	22	2	84	150	93	94											
VSC-E20-10A8S	8	R3/8	12														32.7	20.7									
VSC-E20-8A10S	10	R1/4	11														33	21									
VSC-E20-10A10S	10	R3/8	12														32.7	20.7									

Note) L1, L2, L3 dimensions are reference dimensions after screw tightening.

Vacuum Components

Ejector System

VSU

VSH

VSB

VSC

VSG

VSK/VSKM

VSJ/VSJM

VSN/VSNM

VSX/VSXM

VSQ

VSZM

Ending

Vacuum Components

Ejector System

VSU

VSH

VSB

VSC

VSG

VSK/VSKM

VSJ/VSJM

VSN/VSNM

VSX/VSXM

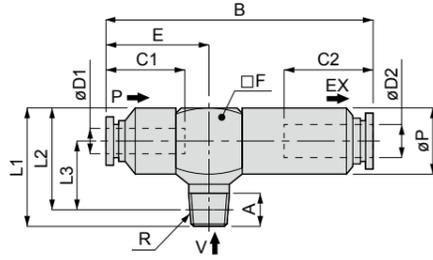
VSQ

VSZM

Ending

External Dimension Drawings

●VSC-□-□J (common exhaust)



Unit: mm

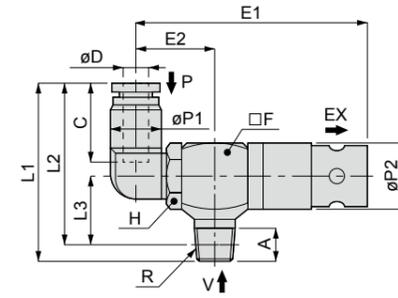
Model No.	Bore size øD1	Bore size øD2	R	A	L1	L2	L3	øP	B	E	C1	C2	□F	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSC-H07-6A6J	6								64.7	24.5	17			0.7		13	23	
VSC-H07-6A8J	8								67.4	27.2	18.2			1		28	46	37
VSC-H10-6A6J	6	8	R1/8	8	28	24	16	16	64.7	24.5	17	18.2	16	1		28	46	37
VSC-H10-6A8J	8								67.4	27.2	18.2			1.2		38	70	
VSC-H12-6A6J	6								64.7	24.5	17			1.2		38	70	
VSC-H12-6A8J	8								67.4	27.2	18.2			1.2		38	70	
VSC-H15-8A8J	8		R1/4	11		32	21		94	29.2	18.2			1.5	93	63	100	99
VSC-H15-10A8J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			1.5	93	63	100	100
VSC-H15-8A10J	8	12	R1/4	11		32	21		94	29.2	18.2			1.5	93	63	100	100
VSC-H15-10A10J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			1.5	93	63	100	101
VSC-H20-8A8J	8		R1/4	11	38	32	21	22	94	29.2	18.2	23.3	22	2		110	200	103
VSC-H20-10A8J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			2		110	200	104
VSC-H20-8A10J	8	12	R1/4	11		32	21		94	29.2	18.2			2		110	200	104
VSC-H20-10A10J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			2		110	200	105
VSC-L07-6A6J	6								64.7	24.5	17			0.7		26	23	
VSC-L07-6A8J	8								67.4	27.2	18.2			1		42	46	37
VSC-L10-6A6J	6	8	R1/8	8	28	24	16	16	64.7	24.5	17	18.2	16	1		42	46	37
VSC-L10-6A8J	8								67.4	27.2	18.2			1		42	46	37
VSC-L15-8A8J	8		R1/4	11		32	21		94	29.2	18.2			1.5	66	95	100	97
VSC-L15-10A8J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			1.5	66	95	100	98
VSC-L15-8A10J	8	12	R1/4	11		32	21		94	29.2	18.2			1.5	66	95	100	98
VSC-L15-10A10J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			1.5	66	95	100	99
VSC-L20-8A8J	8		R1/4	11	38	32	21	22	94	29.2	18.2	23.3	22	2		180	200	100
VSC-L20-10A8J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			2		180	200	100
VSC-L20-8A10J	8	12	R1/4	11		32	21		94	29.2	18.2			2		180	200	100
VSC-L20-10A10J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			2		180	200	101
VSC-E07-6A6J	6								64.7	24.5	17			0.7		10.5	17	
VSC-E07-6A8J	8								67.4	27.2	18.2			1		21	34	37
VSC-E10-6A6J	6	8	R1/8	8	28	24	16	16	64.7	24.5	17	18.2	16	1		21	34	37
VSC-E10-6A8J	8								67.4	27.2	18.2			1.2		27	47	
VSC-E12-6A6J	6								64.7	24.5	17			1.2		27	47	
VSC-E12-6A8J	8								67.4	27.2	18.2			1.2		27	47	
VSC-E15-8A8J	8		R1/4	11		32	21		94	29.2	18.2			1.5	92	42	70	100
VSC-E15-10A8J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			1.5	92	42	70	101
VSC-E15-8A10J	8	12	R1/4	11		32	21		94	29.2	18.2			1.5	92	42	70	101
VSC-E15-10A10J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			1.5	92	42	70	102
VSC-E20-8A8J	8		R1/4	11	38	32	21	22	94	29.2	18.2	23.3	22	2		84	150	105
VSC-E20-10A8J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			2		84	150	106
VSC-E20-8A10J	8	12	R1/4	11		32	21		94	29.2	18.2			2		84	150	106
VSC-E20-10A10J	10		R3/8	12		31.7	20.7		95.7	30.9	20.7			2		84	150	107

Note) L1, L2, L3 dimensions are reference dimensions after screw tightening.

External Dimension Drawings

External Dimension Drawings

●VSC-□-□LS (Air supply port elbow, atmospheric release with silencer)

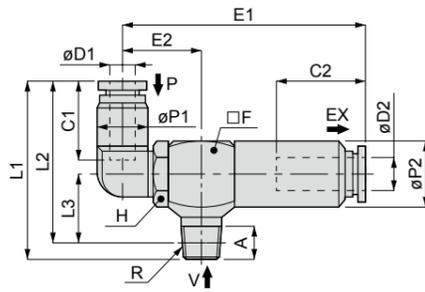


Unit: mm

Model No.	Bore size øD1	R	A	L1	L2	L3	E1	E2	øP1	øP2	C	Width across flats H	□F	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSC-H07-6A6LS	6			42.8	38.8		57.3	19.3	12.5		17			0.7		13	23	32
VSC-H07-6A8LS	8			45.7	41.7		58.3	20.3	14.5		18.1			1		28	46	34
VSC-H10-6A6LS	6	R1/8	8	42.8	38.8	16	57.3	19.3	12.5	16	17	14	16	1		28	46	32
VSC-H10-6A8LS	8			45.7	41.7		58.3	20.3	14.5		18.1			1.2		38	70	34
VSC-H12-6A6LS	6			42.8	38.8		57.3	19.3	12.5		17			1.2		38	70	32
VSC-H12-6A8LS	8			45.7	41.7		58.3	20.3			17			1.2		38	70	34
VSC-H15-8A8LS	8	R1/4	11	52.7	46.7	21	98.3	23.3	14.5		18.1			1.5	93	63	100	86
VSC-H15-10A8LS	10	R3/8	12	52.7	46.4	20.7	98.3	23.3	14.5		18.1			1.5	93	63	100	87
VSC-H15-8A10LS	8	R1/4	11	56.5	50.5	21	100.8	25.8	17.5	24	20.2	19	22	1.5	93	63	100	91
VSC-H15-10A10LS	10	R3/8	12	56.5	50.2	20.7	100.8	25.8	17.5	24	20.2	19	22	1.5	93	63	100	92
VSC-H20-8A8LS	8	R1/4	11	52.7	46.7	21	98.3	23.3	14.5		18.1			2		110	200	90
VSC-H20-10A8LS	10	R3/8	12	52.7	46.4	20.7	98.3	23.3	14.5		18.1			2		110	200	91
VSC-H20-8A10LS	8	R1/4	11	56.5	50.5	21	100.8	25.8	17.5	24	20.2	19	22	2		110	200	95
VSC-H20-10A10LS	10	R3/8	12	56.5	50.2	20.7	100.8	25.8	17.5	24	20.2	19	22	2		110	200	96
VSC-L07-6A6LS	6			42.8	38.8		57.3	19.3	12.5		17			0.7		26	23	32
VSC-L07-6A8LS	8			45.7	41.7		58.3	20.3	14.5		18.1			1		42	46	34
VSC-L10-6A6LS	6	R1/8	8	42.8	38.8	16	57.3	19.3	12.5	16	17	14	16	1		42	46	32
VSC-L10-6A8LS	8			45.7	41.7		58.3	20.3			17			1		42	46	34
VSC-L15-8A8LS	8	R1/4	11	52.7	46.7	21	98.3	23.3	14.5		18.1			1.5	66	95	100	84
VSC-L15-10A8LS	10	R3/8	12	52.7	46.4	20.7	98.3	23.3	14.5		18.1			1.5	66	95	100	85
VSC-L15-8A10LS	8	R1/4	11	56.5	50.5	21	100.8	25.8	17.5	24	20.2	19	22	1.5	66	95	100	89
VSC-L15-10A10LS	10	R3/8	12	56.5	50.2	20.7	100.8	25.8	17.5	24	20.2	19	22	1.5	66	95	100	90
VSC-L20-8A8LS	8	R1/4	11	52.7	46.7	21	98.3	23.3	14.5		18.1			2		180	200	86
VSC-L20-10A8LS	10	R3/8	12	52.7	46.4	20.7	98.3	23.3	14.5		18.1			2		180	200	87
VSC-L20-8A10LS	8	R1/4	11	56.5	50.5	21	100.8	25.8	17.5	24	20.2	19	22	2		180	200	91
VSC-L20-10A10LS	10	R3/8	12	56.5	50.2	20.7	100.8	25.8	17.5	24	20.2	19	22	2		180	200	92
VSC-E07-6A6LS	6			42.8	38.8		57.3	19.3	12.5		17			0.7		10.5	17	32
VSC-E07-6A8LS	8			45.7	41.7		58.3	20.3	14.5		18.1			1		21	34	34
VSC-E10-6A6LS	6	R1/8	8	42.8	38.8	16	57.3	19.3	12.5	16	17	14	16	1		21	34	32
VSC-E10-6A8LS	8			45.7	41.7		58.3	20.3	14.5		18.1			1.2		27	47	34
VSC-E12-6A6LS	6			42.8	38.8		57.3	19.3	12.5		17			1.2		27	47	32
VSC-E12-6A8LS	8			45.7	41.7		58.3	20.3			17			1.2		27	47	34
VSC-E15-8A8LS	8	R1/4	11	52.7	46.7	21	98.3	23.3	14.5		18.1			1.5	92	42	70	87
VSC-E15-10A8LS	10	R3/8	12	52.7	46.4	20.7	98.3	23.3	14.5		18.1			1.5	92	42	70	88
VSC-E15-8A10LS	8	R1/4	11	56.5	50.5	21	100.8	25.8	17.5	24	20.2	19	22	1.5	92	42	70	92
VSC-E15-10A10LS	10	R3/8	12	56.5	50.2	20.7	100.8	25.8	17.5	24	20.2	19	22	1.5	92	42	70	93
VSC-E20-8A8LS	8	R1/4	11	52.7	46.7	21	98.3	23.3	14.5		18.1			2		84	150	92
VSC-E20-10A8LS	10	R3/8	12	52.7	46.4	20.7	98.3	23.3	14.5		18.1			2		84	150	93
VSC-E20-8A10LS	8	R1/4	11	56.5	50.5	21	100.8	25.8	17.5	24	20.2	19	22	2		84	150	97
VSC-E20-10A10LS	10	R3/8	12	56.5	50.2	20.7	100.8	25.8	17.5	24	20.2	19	22	2		84	150	98

External Dimension Drawings

●VSC-□-□LJ (air supply port elbow, common exhaust)



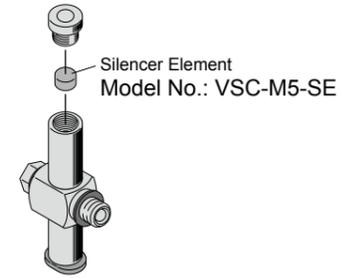
Unit: mm

Model No.	Bore size øD1	Bore size øD2	R	A	L1	L2	L3	E1	E2	øP1	øP2	C1	C2	Width across flats H	□F	Nozzle Diameter (mm)	Ultimate Vacuum Pressure (-kPa)	Suction Flow Rate (L/min (ANR))	Air Consumption (L/min (ANR))	Weight (g)
VSC-H07-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	0.7	93	13	23	36
VSC-H07-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						28	46	38
VSC-H10-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	0.7	93	28	46	36
VSC-H10-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						38	70	38
VSC-H12-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	0.7	93	38	70	36
VSC-H12-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						38	70	38
VSC-H15-8A8LJ	8	12	R1/4	11	52.7	46.7	21	88.1	23.3	14.5	22	18.2	23.3	19	22	1.5	93	63	100	98
VSC-H15-10A8LJ	8		R3/8	12	52.7	46.4	20.7	88.1	23.3	14.5		18.2						99		
VSC-H15-8A10LJ	10	12	R1/4	11	56.5	50.5	21	90.6	25.8	17.5	22	20.2	23.3	19	22	1.5	93	95	100	102
VSC-H15-10A10LJ	10		R3/8	12	56.5	50.2	20.7	90.6	25.8	17.5		20.2						103		
VSC-H20-8A8LJ	8	12	R1/4	11	52.7	46.7	21	88.1	23.3	14.5	22	18.2	23.3	19	22	2	93	110	200	102
VSC-H20-10A8LJ	8		R3/8	12	52.7	46.4	20.7	88.1	23.3	14.5		18.2						103		
VSC-H20-8A10LJ	10	12	R1/4	11	56.5	50.5	21	90.6	25.8	17.5	22	20.2	23.3	19	22	2	93	110	200	107
VSC-H20-10A10LJ	10		R3/8	12	56.5	50.2	20.7	90.6	25.8	17.5		20.2						108		
VSC-L07-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	0.7	93	26	23	36
VSC-L07-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						42	46	38
VSC-L10-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	0.7	93	42	46	36
VSC-L10-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						42	46	38
VSC-L15-8A8LJ	8	12	R1/4	11	52.7	46.7	21	88.1	23.3	14.5	22	18.2	23.3	19	22	1.5	93	95	100	96
VSC-L15-10A8LJ	8		R3/8	12	52.7	46.4	20.7	88.1	23.3	14.5		18.2						97		
VSC-L15-8A10LJ	10	12	R1/4	11	56.5	50.5	21	90.6	25.8	17.5	22	20.2	23.3	19	22	1.5	93	95	100	101
VSC-L15-10A10LJ	10		R3/8	12	56.5	50.2	20.7	90.6	25.8	17.5		20.2						102		
VSC-L20-8A8LJ	8	12	R1/4	11	52.7	46.7	21	88.1	23.3	14.5	22	18.2	23.3	19	22	2	93	180	200	97
VSC-L20-10A8LJ	8		R3/8	12	52.7	46.4	20.7	88.1	23.3	14.5		18.2						98		
VSC-L20-8A10LJ	10	12	R1/4	11	56.5	50.5	21	90.6	25.8	17.5	22	20.2	23.3	19	22	2	93	180	200	102
VSC-L20-10A10LJ	10		R3/8	12	56.5	50.2	20.7	90.6	25.8	17.5		20.2						103		
VSC-E07-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	0.7	92	10.5	17	36
VSC-E07-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						21	34	38
VSC-E10-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	1	92	21	34	36
VSC-E10-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						27	47	38
VSC-E12-6A6LJ	6	8	R1/8	8	42.8	38.8	16	59.5	19.3	12.5	16	17	18.2	14	16	1.2	92	27	47	36
VSC-E12-6A8LJ	8				45.7	41.7		60.5	20.3	14.5		18.2						27	47	38
VSC-E15-8A8LJ	8	12	R1/4	11	52.7	46.7	21	88.1	23.3	14.5	22	18.2	23.3	19	22	1.5	92	42	70	98
VSC-E15-10A8LJ	8		R3/8	12	52.7	46.4	20.7	88.1	23.3	14.5		18.2						99		
VSC-E15-8A10LJ	10	12	R1/4	11	56.5	50.5	21	90.6	25.8	17.5	22	20.2	23.3	19	22	1.5	92	42	70	103
VSC-E15-10A10LJ	10		R3/8	12	56.5	50.2	20.7	90.6	25.8	17.5		20.2						104		
VSC-E20-8A8LJ	8	12	R1/4	11	52.7	46.7	21	88.1	23.3	14.5	22	18.2	23.3	19	22	2	92	84	150	103
VSC-E20-10A8LJ	8		R3/8	12	52.7	46.4	20.7	88.1	23.3	14.5		18.2						104		
VSC-E20-8A10LJ	10	12	R1/4	11	56.5	50.5	21	90.6	25.8	17.5	22	20.2	23.3	19	22	2	92	84	150	108
VSC-E20-10A10LJ	10		R3/8	12	56.5	50.2	20.7	90.6	25.8	17.5		20.2						109		

Note) L1, L2, L3 dimensions are reference dimensions after screw tightening.

Maintenance Parts

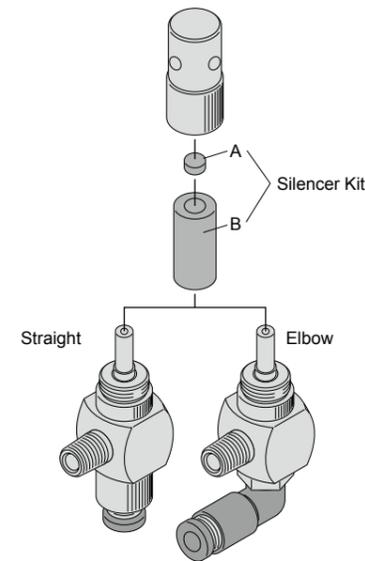
●Silencer Element



Silencer Element Model No.	Vacuum Ejector Model No.
VSC-M5-SE	VSC-□03-M5□
	VSC-□04-M5□
	VSC-□05-M5□

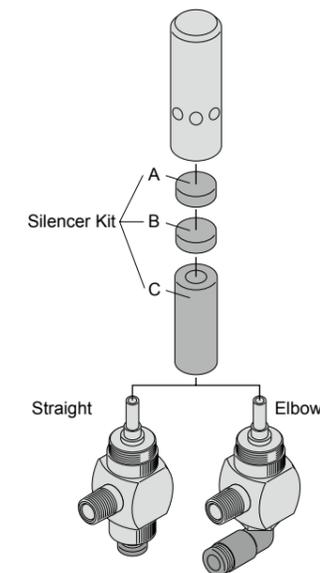
●Silencer Kit

•VSC-□07, 10, 12



Silencer Kit Model No.	Vacuum Ejector Model No.
VSC-12-SK	VSC-□07-6A□(L)S
	VSC-□10-6A□(L)S
	VSC-□12-6A□(L)S

•VSC-□15, 20



Silencer Kit Model No.	Vacuum Ejector Model No.
VSC-15-SK	VSC-□15-8A8□(L)S
	VSC-□15-10A8□(L)S
	VSC-□15-8A10□(L)S
	VSC-□15-10A10□(L)S
VSC-20-SK	VSC-□20-8A8□(L)S
	VSC-□20-10A8□(L)S
	VSC-□20-8A10□(L)S
	VSC-□20-10A10□(L)S

Vacuum Components

Ejector System

VSJ

VSH

VSN

VSK

VSC

VSG

VSK/VSKM

VSJ/VSJM

VSN/VSNM

VSK/VSKM

VSQ

VSM

Ending

Vacuum Components

Ejector System

VSJ

VSH

VSN

VSK

VSC

VSG

VSK/VSKM

VSJ/VSJM

VSN/VSNM

VSK/VSKM

VSQ

VSM

Ending