



Ring Blow Type Vacuum Generator

VSRL-□ Series

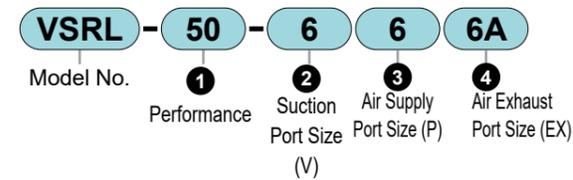
Ring blow type vacuum generator with Push-in fitting for transferring small and irregularly shaped workpieces

●Port size: ø6 to ø12, R1/8 to R1/2



Model No. Notation

●Ring Blow Type Vacuum Generator



1 Performance

Code	Suction Flow Rate
50	50 L/min (ANR)
100	100 L/min (ANR)
200	200 L/min (ANR)
300	300 L/min (ANR)

2 Suction Port Size (V)

Code	Content
6	ø6 Push-in fitting
8	ø8 Push-in fitting
10	ø10 Push-in fitting
12	ø12 Push-in fitting
6A	R1/8
8A	R1/4
10A	R3/8
15A	R1/2

*1: When 1 Performance is 50, options 6, 8, and 6A can be selected for 2.
 *2: When 1 Performance is 100, options 10, 12, and 8A can be selected for 2.
 *3: When 1 Performance is 200 or 300, options 12, 10A, and 15A can be selected for 2.

3 Air Supply Port Size (P)

Code	Content
6	ø6 Push-in fitting
8	ø8 Push-in fitting
10	ø10 Push-in fitting
6A	R1/8
8A	R1/4

*1: When 1 Performance is 50, options 6, 8, and 6A can be selected for 3.
 *2: When 1 Performance is 100, options 8, 10, and 8A can be selected for 3.
 *3: When 1 Performance is 200 or 300, options 10 and 8A can be selected for 3.

4 Air Exhaust Port Size (EX)

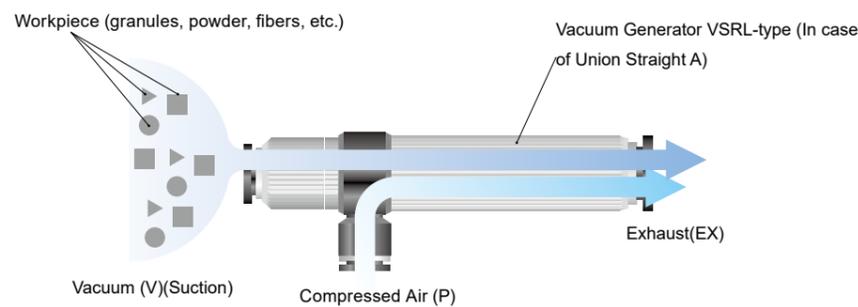
Code	Content
8	ø8 Push-in fitting
12	ø12 Push-in fitting
6A	R1/8
8A	R1/4
15A	R1/2

*1: When 1 Performance is 50, options 8 and 6A can be selected for 4.
 *2: When 1 Performance is 100, options 12 and 8A can be selected for 4.
 *3: When 1 Performance is 200 or 300, 15A can be selected for 4.

High flow rate vacuum generator capable of suction → transfer of granules, powder, fibers, etc.

Intake port and exhaust port are aligned, enabling workpiece transport

Workpiece is sucked from the intake port, passes through the vacuum generator interior, and is discharged from the exhaust port, allowing workpiece transport through tubing.



Model selection possible based on size and quantity of transported workpiece

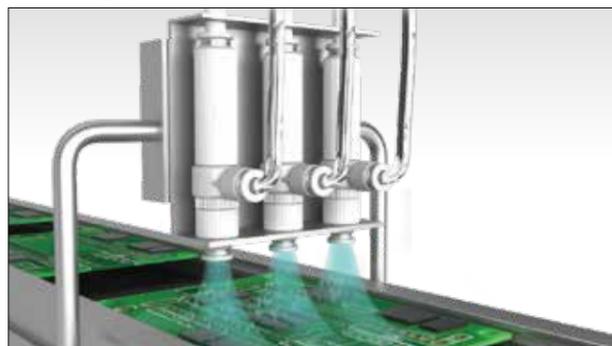
Suction Flow Rate (L/min (ANR))	50	100	200	300
Minimum Flow Path Diameter (mm)	ø2.8	ø4.1	ø6	ø7.5

Also ideal for suction transport of breathable lightweight workpieces

Solution Examples

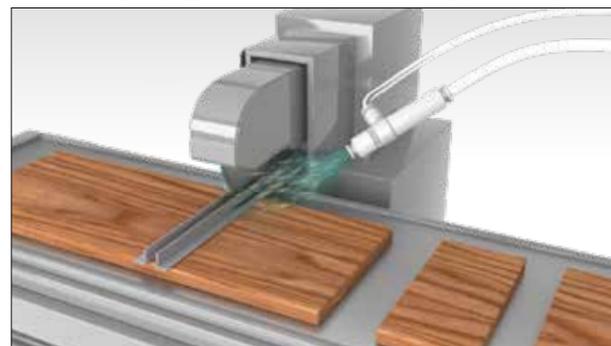
Semiconductor production line

For sucking up dust on semiconductor substrates



Wood manufacturing site

For collecting chips generated during board cutting process



Specifications

Item	VSRL	
Operating Fluid	Air	
Operating Pressure	MPa	0 to 0.9
Operating Temperature	°C	0 to 60 (However, no freezing)

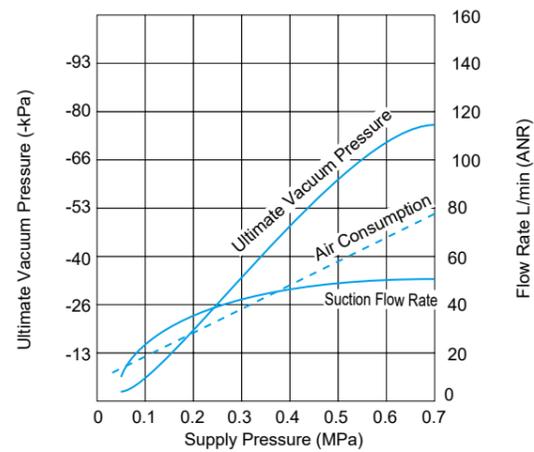
Performance

Model No.	Rated Supply Pressure (MPa)	Suction Flow Rate (L/min (ANR))	Ultimate Vacuum Pressure (-kPa)	Minimum Flow Path Diameter (mm)
VSRL-50	0.5	50	53	ø2.8
VSRL-100		100		ø4.1
VSRL-200		200		ø6
VSRL-300		300		ø7.5

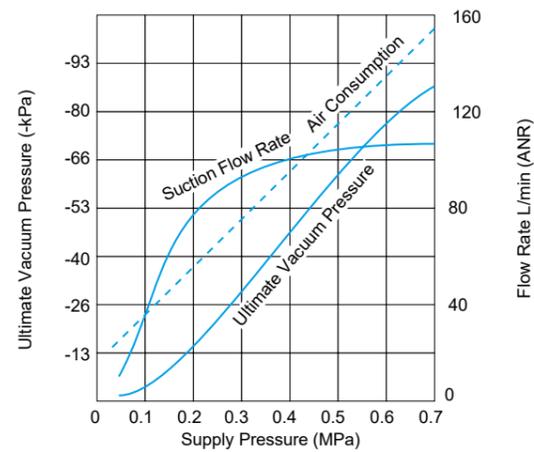
Vacuum Characteristics

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

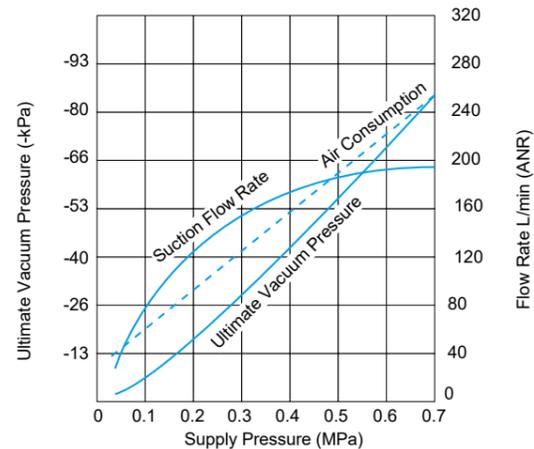
●VSRL-50



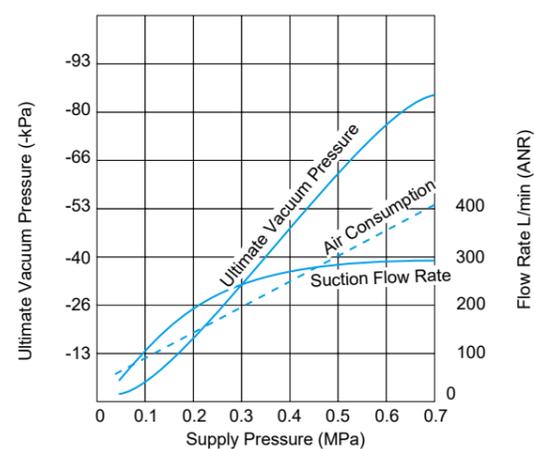
●VSRL-100



●VSRL-200



●VSRL-300



*The above data are actual measured values and not guaranteed values. Also, these are values measured under conditions with zero piping resistance; performance will slightly decrease if there is piping resistance on the exhaust side.

MEMO

Vacuum Components
Vacuum Related Components

VSRL

VSECV

VSRRV

VRA2000

VSLF

VSF, VSFU, VSFJ

FSL

VFA

VSUS

VST

Ending

Vacuum Components
Vacuum Related Components

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VSRRV

VRA2000

VSLF

VSF, VSFU, VSFJ

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VFA

VSUS

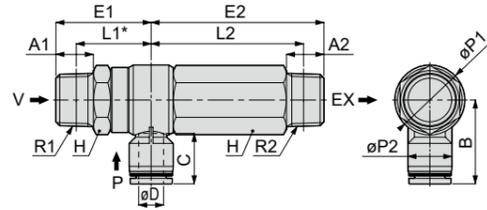
VST

Ending

External Dimension Drawings

● Connection Port Size

- V Port (Male Thread) - P Port (Push-in fitting) - EX Port (Male Thread)

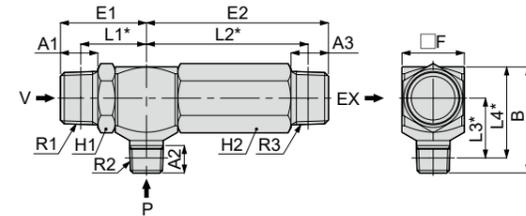


Unit: mm

Model No.	Tube O.D. øD	R1	R2	A1	A2	B	E1	E2	L1	L2	øP1	øP2	C	Width across flats H1	Width across flats H2	Weight (g)
VSRL-50-6A66A	6	R1/8	R1/8	8	8	25.7	22.8	36.2	18.8	32.2	12.6	18.4	17.2	14	14	41
VSRL-50-6A86A	8					28.4	21.8	37.2	17.8	33.2	14.4		18.1			43
VSRL-100-8A88A	8	R1/4	R1/4	11	11	28.9	29.5	52.5	23.5	46.5	14.5	22	18.1	17	17	81
VSRL-100-8A108A	10					31.2	28.2	53.8	23.2	47.8	17.6		20.2			84
VSRL-200-10A1015A	10	R3/8	R1/2	12	15	33.6	35.2	69.3	28.9	61.1	17.6	28	20.2	24	24	190
VSRL-200-15A1015A		R1/2		15			38.2		30				204			
VSRL-300-10A1015A	10	R3/8	R1/2	12	15	33.6	35.2	69.3	28.9	61.1	17.6	28	20.2	24	24	179
VSRL-300-15A1015A		R1/2		15			38.2		30				193			

*L1, L2 dimensions are reference dimensions after screw tightening.

- V Port (Male Thread) - P Port (Male Thread) - EX Port (Male Thread)

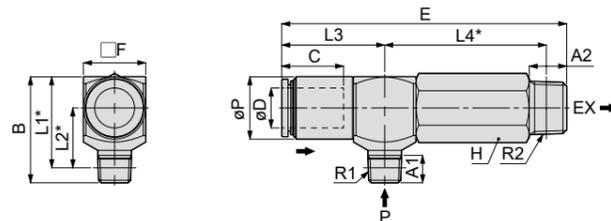


Unit: mm

Model No.	R1	R2	R3	A1	A2	A3	B	L1	L2	L3	L4	E1	E2	Width across flats H1	Width across flats H2	□ F	Weight (g)
VSRL-50-6A6A6A	R1/8	R1/8	R1/8	8	8	8	28	24	16	17	34	21	38	14	14	16	37
VSRL-100-8A8A8A	R1/4	R1/4	R1/4	11	11	11	35	29	19	21	49	27	55	17	17	20	79
VSRL-200-10A8A15A	R3/8	R1/4	R1/2	12	11	15	42.5	36.5	24	25.2	64.8	31.5	73	22	24	25	180
VSRL-200-15A8A15A				R1/2						15		26.3					34.5
VSRL-300-10A8A15A	R3/8	R1/4	R1/2	12	11	15	42.5	36.5	24	25.2	64.8	31.5	73	22	24	25	170
VSRL-300-15A8A15A				R1/2						15		26.3					34.5

*L1, L2, L3, L4 dimensions are reference dimensions after screw tightening.

- V Port (Push-in fitting) - P Port (Male Thread) - EX Port (Male Thread)



Unit: mm

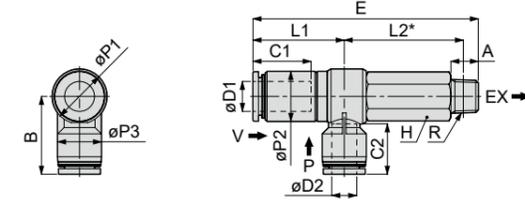
Model No.	Tube O.D. øD	R1	R2	A1	A2	B	L1	L2	L3	L4	E	øP	C	Width across flats H1	□ F	Weight (g)
VSRL-50-66A6A	6	R1/8	R1/8	8	8	28	24	16	27.8	34	65.6	16	17.2	14	16	34
VSRL-50-86A6A	8															
VSRL-100-108A8A	10	R1/4	R1/4	11	11	35	29	19	32.8	49	87.8	20	18.1	17	20	75
VSRL-100-128A8A	12								35.4							
VSRL-200-128A15A	12	R1/4	R1/2	11	15	42.5	36.5	24	39.9	64.8	112.9	25	20.2	24	25	172
VSRL-300-128A15A	12	R1/4	R1/2	11	15	42.5	36.5	24	39.9	64.8	114.3	25	20.2	24	25	162

*L1, L2, L4 dimensions are reference dimensions after screw tightening.

External Dimension Drawings

● Connection Port Size

- V Port (Push-in fitting) - P Port (Push-in fitting) - EX Port (Male Thread)

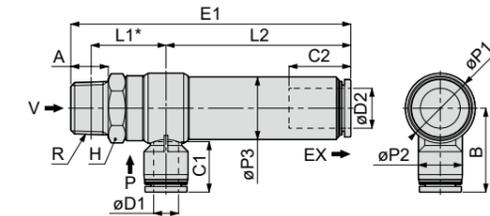


Unit: mm

Model No.	Tube O.D. øD1	Tube O.D. øD2	R	A	B	E	L1	L2	øP1	øP2	øP3	C1	C2	Width across flats H	Weight (g)
VSRL-50-666A	6	6	R1/8	8	25.5	65.8	29.4	32.2	16	12.4	18.4	17.2	17.2	14	38
VSRL-50-866A	8				25.5	65.9	29.7					18.2			
VSRL-50-686A	6	8	R1/8	8	28.4	65.8	28.4	33.2	14.4	14.4	22	17.2	18.1	17	39
VSRL-50-886A	8											18.2			
VSRL-100-1088A	10	8	R1/4	11	28.9	87.8	35.3	46.5	14.5	22	20.2	20.7	18.1	17	77
VSRL-100-1288A	12											23.3			
VSRL-100-10108A	10	10	R1/4	11	31.2	87.8	34	47.8	17.6	22	20.2	20.7	20.2	17	80
VSRL-100-12108A	12											23.3			
VSRL-200-121015A	12	10	R3/8	15	33.6	112.9	43.6	61.1	26	17.6	28	20.2	20.2	24	182
VSRL-300-121015A	12	10	R3/8	15	33.6	112.9	43.6	61.1	26	17.6	28	20.2	20.2	24	172

*L2 dimension is a reference dimension after screw tightening.

- V Port (Male Thread) - P Port (Push-in fitting) - EX Port (Push-in fitting)



Unit: mm

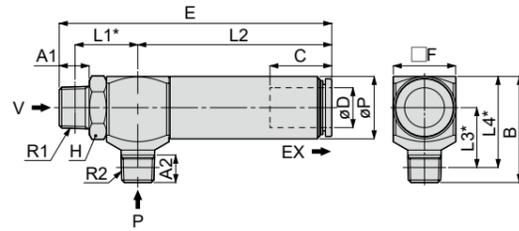
Model No.	Tube O.D. øD1	Tube O.D. øD2	R	A	B	E	L1	L2	øP1	øP2	øP3	C1	C2	Width across flats H	Weight (g)
VSRL-50-6A68	6	8	R1/8	8	25.5	78.1	18.8	55.1	12.4	16	18.4	17.2	18.2	14	52
VSRL-50-6A88	8				17.8		56.1	14.4	18.1			54			
VSRL-100-8A812	6	12	R1/4	10	28.9	105.4	23.5	75.9	14.5	20	22	18.1	23.3	17	105
VSRL-100-8A1012	8				22.2		77.2	17.6	20.2			108			

*L1 dimension is a reference dimension after screw tightening.

External Dimension Drawings

● Connection Port Size

- V Port (Male Thread) - P Port (Male Thread) - EX Port (Push-in fitting)

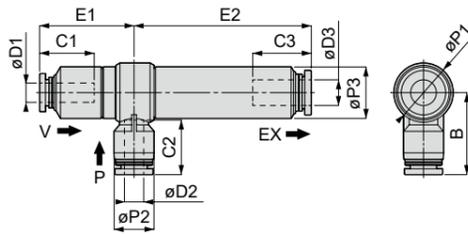


Unit: mm

Model No.	Tube O.D. $\phi D1$	R1	R2	A1	A2	B	L1	L2	L3	L4	E	C	ϕP	Width across flats H	$\square F$	Weight (g)
VSRL-50-6A6A8	8	R1/8	R1/8	8	8	28	24	16	17	56.9	77.9	18.2	16	14	16	49
VSRL-100-8A8A12	12	R1/4	R1/4	11	11	35	29	19	21	78.4	105.4	23.3	20	17	20	103

*L1, L2, L3 dimensions are reference dimensions after screw tightening.

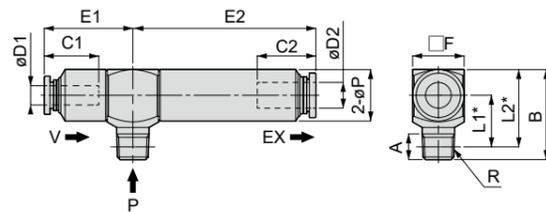
- V Port (Push-in fitting) - P Port (Push-in fitting) - EX Port (Push-in fitting)



Unit: mm

Model No.	Tube O.D. $\phi D1$	Tube O.D. $\phi D2$	Tube O.D. $\phi D3$	B	$\phi P1$	$\phi P2$	$\phi P3$	C1	C2	C3	E1	E2	Weight (g)
VSRL-50-668	6	6	8	25.7	16	18.4	12.4	17.2	17.2	18.2	29.6	55.1	49
VSRL-50-688		8		28.6							14.4	18.1	28.6
VSRL-50-868	8	6	8	25.5	16	18.4	12.4	18.2	17.2	18.2	29.7	55.1	49
VSRL-50-888		8		28.4							14.4	18.1	28.7
VSRL-100-10812	10	8	12	28.9	20	22	14.5	20.7	18.1	23.3	35.3	75.9	102
VSRL-100-12812	12			23.3							37.9	103	
VSRL-100-101012	10	10	12	31.2	20	22	17.6	20.7	20.2	23.3	34	77.2	105
VSRL-100-121012	12										23.3		36.6

- V Port (Push-in fitting) - P Port (Male Thread) - EX Port (Push-in fitting)



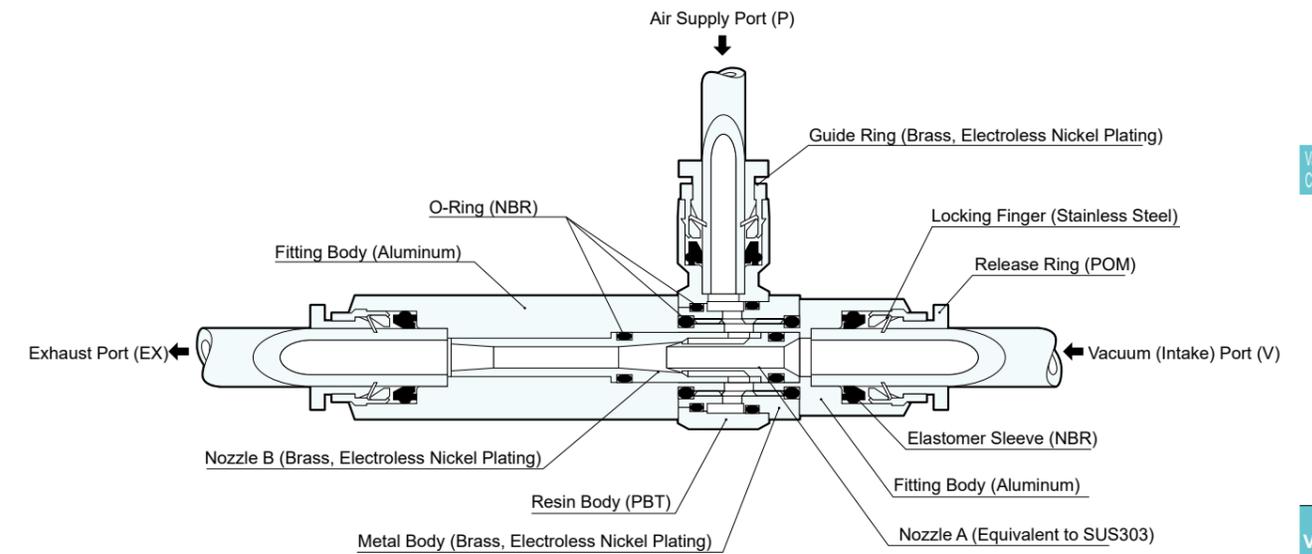
Unit: mm

Model No.	Tube O.D. $\phi D1$	Tube O.D. $\phi D2$	R	A	B	L1	L2	ϕP	C1	C2	E1	E2	$\square F$	Weight (g)
VSRL-50-66A8	6	8	R1/8	8	28	20	16	16	17.2	18.2	27.6	56.9	16	45
VSRL-50-86A8	8								18.2		27.9			
VSRL-100-108A12	10	12	R1/4	11	35	25	19	20	20.7	23.3	32.8	78.4	20	99
VSRL-100-128A12	12								23.3		35.4			106

*L1, L2 dimensions are reference dimensions after screw tightening.

Internal Structure Diagram

- In case of V Port (Push-in fitting) - P Port (Push-in fitting) - EX Port (Push-in fitting)



Vacuum Components

Vacuum Related Components

VSRL

VSECV

VSRVV

VRA2000

VSLF

VSFB, VSFU, VSFJ

FSL

VFA

VSUS

VST

Vacuum Components

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VSRVV

VRA2000

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FSL

VFA

VSUS

VST



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: Ring Blow Type Vacuum Generator VSRL Series

Design / Selection



Warning

- When transporting particles, powder or fibers with the vacuum generator VSRL, the product may not be usable depending on conditions. Contact the nearest CKD Sales Office.

MEMO

Vacuum Components

Vacuum Related Components

VSRL

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