Supplementary Catalogue 1 - 2024

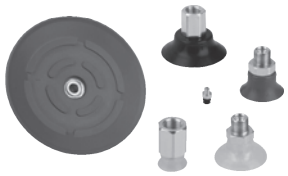
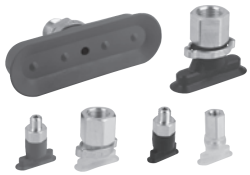
Version : SC1 - 01 / 05 - 2024

JANATICS GLOBAL SOLUTIONS PRIVATE LIMITED

Product Selection Guide

JANATICS

VACUUM PRODUCTS

Vacuum Suction Cup With Nipple (Round Type) Series VS1RF Sizes : Ø3.5 to Ø95 mm	**Vacuum Suction Cup With Nipple (Oval Type)** Series VS1OF Sizes : 4x2 to 90x30 mm	**Vacuum Suction Cup With Nipple (bellow Type - 1.5 Folds)** Series VS1RB1 Sizes : Ø4 to Ø53 mm	**Vacuum Suction Cup With Nipple (bellow Type - 2.5 Folds)** Series VS1RB2 Sizes : Ø7 to Ø52 mm
			
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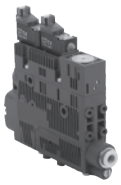
Spring Plunger Series ASP1 Stroke : 25, 50, 75 mm	**Basic Vacuum Ejector** Series VE11 Sizes : Ø1, 1.5, 2, 2.5 mm	**Electrical Vacuum Ejector** Series VE21 Sizes : Ø1, 1.5 mm	**Compact Vacuum Ejector** Series VE31 Sizes : Ø1.5 mm
			
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Electrical Vacuum Ejector - Mini Series VE41 Sizes : Ø1, 1.2 mm	**Compact Vacuum Ejector - Mini** Series VE51 Sizes : Ø1, 1.2 mm		
			
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JANATICS

VACUUM SUCTION CUP WITH NIPPLE

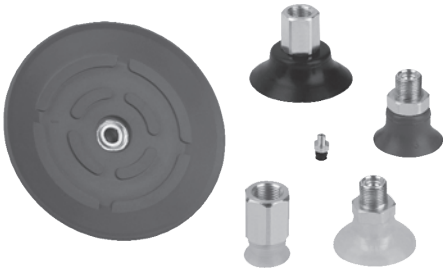
Series VS1RF

Cat No VS1RF - 01 - 01 - A

VACUUM SUCTION CUP WITH NIPPLE (ROUND TYPE) - Size (Ø3.5 to Ø95 mm)

Features

- ❑ High suction force
- ❑ Fastest cycle times
- ❑ Wide range of diameters
- ❑ Support surfaces on the bottom prevent permanent deformation of thin walled workpiece



Application

Round suction cups are used for handling flat workpieces with smooth or slightly rough surfaces.

Technical Specifications

Model		VS1RF - 3.5	VS1RF - 5	VS1RF - 8	VS1RF - 10		VS1RF - 15	VS1RF - 20	VS1RF - 30
Nipple size		M3	M5		M5	G1/8	G1/8		
Suction force *	(N)	0.42	0.75	2.3	4		9	15.5	34
Volume	(cm^3)	0.002	0.005	0.03	0.07		0.4	0.8	1.3
Workpiece radius minimum (convex)	(mm)	8	8	10	13		13	20	40
Hose diameter (OD) #	(mm)	4	4	4	4		6	6	6
Weight (g)	NBR (Male thread)	1	1.1	1.2	1.3	-	4.5	5.6	7.9
	Silicone (Male thread)								
	NBR (Female thread)	-	-	-	1.6	5.3	5.8	7.0	9.2
	Silicone (Female thread)								
Material of construction		Aluminium, Silicone, NBR							
Ambient temperature	(°C)	NBR: -10 to +70							
		Silicone: -20 to +180							

Model		VS1RF- 35	VS1RF- 40	VS1RF- 50	VS1RF- 60	VS1RF- 80	VS1RF- 95
Nipple size		G1/8			G1/4		
Suction force *	(N)	44	57.7	91	125	260	350
Volume	(cm^3)	2.7	3.8	7	10	25	35
Workpiece radius minimum (convex)	(mm)	50	50	75	100	150	200
Hose diameter (OD) #	(mm)	6	6	6	10	10	10
Weight (g)	NBR (Male thread)	10.6	12.2	15.3	34.2	62.5	102.2
	Silicone (Male thread)						
	NBR (Female thread)	11.9	13.5	17.3	36.9	65.2	104.9
	Silicone (Female thread)						
Material of construction		Aluminium, Silicone, NBR					
Ambient temperature	(°C)	NBR: -10 to +70					
		Silicone: -20 to +180					

* - Specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface (Do not include a safety factor)

\# - Recommended hose diameter is based on a hose length of approx. 2 m

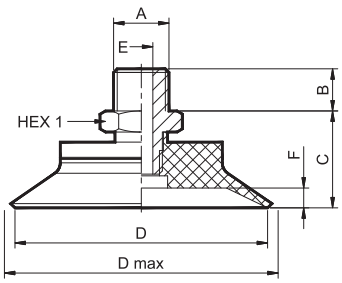
VACUUM SUCTION CUP WITH NIPPLE

Series VS1RF

Cat No VS1RF - 01 - 01 - A

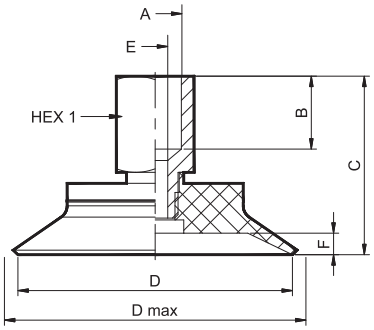
Basic dimensions

Male threaded nipple



Male thread - Size: Ø3.5 to 95 mm								
Size Ø	D max*	Nipple size A	B	C	D	E	F	HEX 1
3.5	4	M3-M	3	6	3.5	1	0.5	5
5	5.5	M5-M	4.5	11.5	5.0	1.5	0.9	8
8	9	M5-M	4.5	12	8.0	2	1.3	8
10	11.5	M5-M	4.5	12.5	10.0	2	1.4	8
15	17.5	G1/8-M	8	13	15.0	2	1.9	14
20	23	G1/8-M	8	15	20.0	2	2.2	14
30	31.5	G1/8-M	8	17	28.8	2.4	2	14
35	38	G1/8-M	8	19	35.0	2.4	3	14
40	43	G1/8-M	8	19	40.0	2.4	3.5	14
50	53.5	G1/8-M	8	20	50.0	2.4	4	14
60	64	G1/4-M	10	23	60.0	5.5	4.7	17
80	86	G1/4-M	10	25	80.0	5.5	6	17
95	102	G1/4-M	10	25.5	95.0	5.5	6	17

Female threaded nipple



Female thread - Size: Ø10 to 95 mm								
Size Ø	D max*	Nipple size A	B	C	D	E	F	HEX 1
10	11.5	M5-F	5.5	17.5	10.0	2	1.4	8
10	11.5	G1/8-F	9	23.5	10.0	2	1.4	14
15	17.5	G1/8-F	9	24	15.0	2	1.9	14
20	23	G1/8-F	9	26	20.0	2	2.2	14
30	31.5	G1/8-F	9	28	28.8	3.5	2	14
35	38	G1/8-F	9	30	35.0	3.5	3	14
40	43	G1/8-F	9	30	40.0	3.5	3.5	14
50	53.5	G1/8-F	9	31	50.0	3.5	4	14
60	64	G1/4-F	11	39	60.0	5.5	4.7	17
80	86	G1/4-F	11	41.5	80.0	5.5	6	17
95	102	G1/4-F	11	41.5	95.0	5.5	6	17

* External dimensions of the suction cup when it is pressed against the workpiece by the vacuum

How to order

VS1RF – 3.5 – S1 – 73 – M

Size Ø	
3.5	3.5 mm
5	5 mm
8	8 mm
10	10 mm
15	15 mm
20	20 mm
30	30 mm
35	35 mm
40	40 mm
50	50 mm
60	60 mm
80	80 mm
95	95 mm

Suction cup material	
N1	NBR
S1	Silicone

Nipple size	
73	M3
70	M5
60	G1/8
61	G1/4

Thread	
M	Male thread
F	Female thread

Note:
Available size and their corresponding Nipple / Thread variants

Ø3.5	-	M3 (Male)
Ø5, Ø8, Ø10	-	M5 (Male)
Ø10	-	M5, G1/8 (Female)
Ø15, Ø20, Ø30, Ø35, Ø40, Ø50	-	G1/8 (Male & Female)
Ø60, Ø80, Ø95	-	G1/4 (Male & Female)

Ordering example:

Ordering no. for Vacuum suction cup with nipple (Round type) Size - 3.5 mm, Silicone material, M3 Nipple with Male thread : **VS1RF-3.5-S1-73M**

Subject to change

VACUUM SUCTION CUP WITH NIPPLE

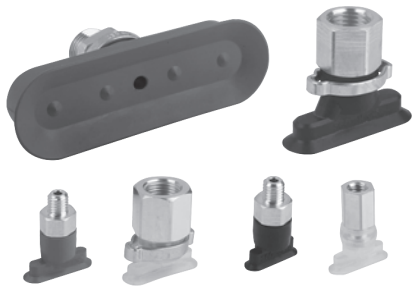
Series VS1OF

Cat No VS1OF - 01 - 01 - A

VACUUM SUCTION CUP WITH NIPPLE (OVAL TYPE) - Size (4x2 to 90x30 mm)

Features

- ❑ Flat suction cups in an oval design for long workpieces (profile, pipes) or flat workpieces with webs
- ❑ A two-ear clamp prevents unintentional twisting during use (from size 30x10)
- ❑ High suction force
- ❑ Support surfaces on the bottom prevent permanent deformation of thin walled workpieces



Applications

- ❑ Oval cups are used for handling elongated workpieces, including curved objects such as sections, pipes, and packaging materials
- ❑ Handling of frame elements such as doors and windows
- ❑ Considerably higher suction force than round suction cups when handling narrow workpieces

Technical Specifications

Model			VS1OF-4x2	VS1OF-7x3.5	VS1OF-15x5	VS1OF-18x6	VS1OF-30x10	VS1OF-45x15	VS1OF-60x20	VS1OF-75x25	VS1OF-90x30
Nipple size			M3		M5		G1/8	G1/4			
Suction force *		(N)	0.42	1	3.1	4.5	12.2	28.2	50.1	78.3	112.6
Volume		(cm^3)	0.018	0.029	0.175	0.205	0.516	2.306	3.611	5.860	9.473
Workpiece radius minimum (convex)		(mm)	1	3	4	4	8	10	20	30	35
Hose diameter (OD) #		(mm)	4	4	4	4	6	10	10	10	10
Weight (g)	NBR - Male thread		2	2	3.4	3.7	6.8	14.8	19	26.9	34.8
	Silicone - HD - Male thread										
	NBR - Female thread		-	-	3.5	3.8	7.5	14.3	18.5	26.4	35.3
	Silicone - HD - Female thread										
Material of construction			Aluminum, Silicone - HD, NBR								
Ambient temperature		(°C)	NBR: -10 to +70								
			Silicone - HD: -30 to +180								

* - Specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface (Do not include a safety factor)
\# - Recommended hose diameter is based on a hose length of approx. 2 m

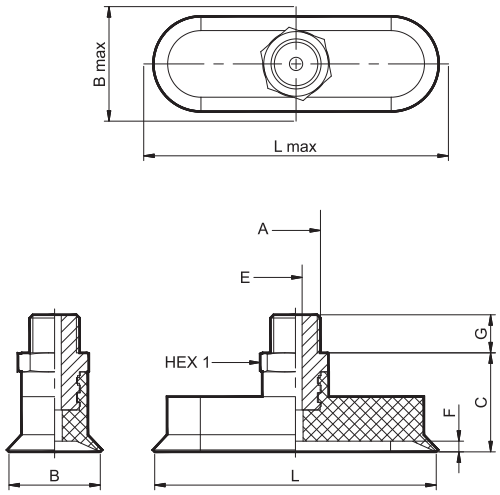
VACUUM SUCTION CUP WITH NIPPLE

Series VS1OF

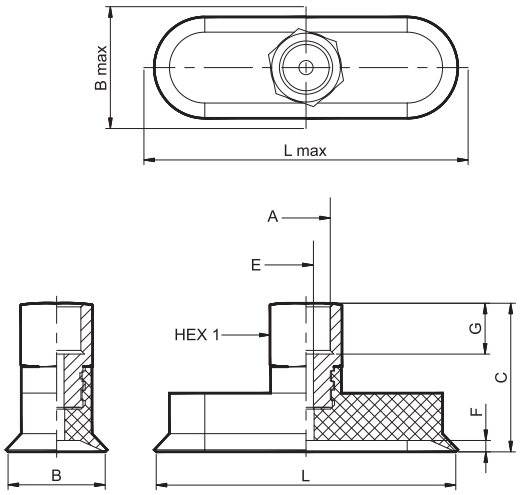
Cat No VS1OF - 01 - 01 - A

Basic dimensions

Male threaded nipple



Female threaded nipple



Male thread - Size: 4x2 to 90x30 mm										
Size LxB	B max*	B	E	Nipple size A	C	G	L max*	L	HEX 1	F
4 x 2	2.5	2	1	M3-M	8	3	4.5	4	5	0.5
7 x 3.5	4.5	3.5	1	M3-M	8	3	8	7	5	0.8
15 x 5	5.5	5	1.2	M5-M	17	5	15.5	15	8	0.7
18 x 6	7	6	1.5	M5-M	17	5	18.5	18	8	0.8
30 x 10	11.5	9.4	2.5	G1/8 - M	17	8	30.5	29.4	14	1.5
45 x 15	16.5	14.4	3	G1/4 - M	26	10	46	44.4	17	2
60 x 20	22	19	3.5	G1/4 - M	26	10	61	59	17	2.5
75 x 25	27.5	25	3.5	G1/4 - M	26	10	77	75	17	2.8
90 x 30	33	30	3.5	G1/4 - M	26	10	92.5	90	17	3.5

Female thread - Size: 15x5 to 90x30 mm										
Size LxB	B max*	B	E	Nipple size A	C	G	L max*	L	HEX 1	F
15 x 5	5.5	5	1.2	M5-F	22	5.5	15.5	15	8	0.7
18 x 6	7	6	1.5	M5-F	22	5.5	18.5	18	8	0.8
30 x 10	11.5	9.4	2.5	G1/8 - F	25	9	30.5	29.4	14	1.5
45 x 15	16.5	14.4	3	G1/4 - F	36	12	46	44.4	17	2
60 x 20	22	20	3.5	G1/4 - F	36	12	61	60	17	2.5
75 x 25	27.5	25	3.5	G1/4 - F	36	12	77	75	17	2.8
90 x 30	33	30	3.5	G1/4 - F	36	12	92.5	90	17	3.5

* External dimensions of the suction cup when it is pressed against the workpiece by the vacuum

VACUUM SUCTION CUP WITH NIPPLE

Series VS1OF

Cat No VS1OF - 01 - 01 - A

How to order

VS1OF – 15x5 – S2 – 70 – M

Size LxB	
4x2	4x2 mm
7x3.5	7x3.5 mm
15x5	15x5 mm
18x6	18x6 mm
30x10	30x10 mm
45x15	45x15 mm
60x20	60x20 mm
75x25	75x25 mm
90x30	90x30 mm

Suction cup material	
N1	NBR
S2	Silicone - HD

Nipple size	
73	M3
70	M5
60	G1/8
61	G1/4

Thread	
M	Male thread
F	Female thread

Note:
Available size and their corresponding Nipple / Thread variants

4x2, 7x3.5	- M3 (Male)
15x5, 18x6	- M5 (Male & Female)
30x10	- G1/8 (Male & Female)
45x15, 60x20, 75x25, 90x30	- G1/4 (Male & Female)

Ordering example:

Ordering no. for Vacuum suction cup with nipple (Oval type) Size - 15x5 mm, Silicone - HD material, M5 Nipple with Male thread :
VS1OF-15x5-S2-70M

VACUUM SUCTION CUP WITH NIPPLE

Series VS1RB1

Cat No VS1RB1 - 01 - 01 - A

VACUUM SUCTION CUP WITH NIPPLE (Bellow type - 1.5 Folds) - Size: (Ø4 to Ø53 mm)

Features

- ❑ Wide range of diameters and materials for the most varied workpieces
- ❑ The soft, tapered sealing lip adapts optimally to curved surfaces or uneven surfaces
- ❑ Effective damping of the workpieces during placement by 1.5 folds and support surfaces on the underside (from a diameter of 25 mm)
- ❑ The high stiffness of the upper fold provides stability under horizontal forces and high accelerations

Applications

- ❑ Round bellows suction cup with 1.5 folds for the handling of extremely sensitive workpieces (optimum damping effect due to folds)
- ❑ Handling of workpieces with uneven surfaces, such as pipes (folds permit optimal adaptation to concave and convex surfaces)

Technical Specifications

Model			VS1RB1 - 4	VS1RB1 - 6	VS1RB1 - 11		VS1RB1 - 14		VS1RB1 - 16	
Nipple size			M3	M5	M5	G1/8	M5	G1/8	M5	G1/8
Suction force *		(N)	0.29	0.4	0.95		1.2		2.3	
Pull-off force **		(N)	0.5	1.4	3.8		5		6.7	
Volume		(cm^3)	0.035	0.098	0.225		0.42		0.75	
Workpiece radius minimum (convex)		(mm)	2	4	10		15		20	
Hose diameter (OD) #		(mm)	6	6	6		6		6	
Weight (g)	NBR - Male thread		0.22	-	2.0	4.7	2.1	4.8	2.3	5.0
	Silicone - Male thread									
	NBR - Female thread		-	1.5	-	5.1	-	5.2	-	5.4
	Silicone - Female thread									
Material of construction			Aluminium, Silicone, NBR							
Ambient temperature		(°C)	NBR: -10 to +70							
			Silicone: -20 to +180							

Model			VS1RB1 - 20		VS1RB1 - 25	VS1RB1 - 33	VS1RB1 - 43	VS1RB1 - 53
Nipple size			M5	G1/8	G1/8	G1/4		
Suction force *		(N)	4.7		5.3	13.6	22.8	51.3
Pull-off force **		(N)	10.7		17.3	39.6	64.5	95
Volume		(cm^3)	1.15		2.944	4.75	9.25	26.488
Workpiece radius minimum (convex)		(mm)	20		25	40	60	100
Hose diameter (OD) #		(mm)	6		6	10	10	10
Weight (g)	NBR - Male thread		2.7	5.1	6.4	16	19	27
	Silicone - Male thread							
	NBR - Female thread		-	5.8	6.8	16	19	27
	Silicone - Female thread							
Material of construction			Aluminium, Silicone, NBR					
Ambient temperature		(°C)	NBR: -10 to +70					
			Silicone: -20 to +180					

* - Specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface (Do not include a safety factor)
** - The pull-off force of the versions made of natural rubber is reduced by about 40 %
# - Recommended hose diameter is based on a hose length of approx. 2 m

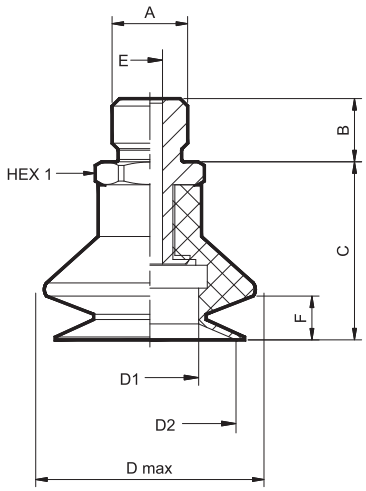
VACUUM SUCTION CUP WITH NIPPLE

Series VS1RB1

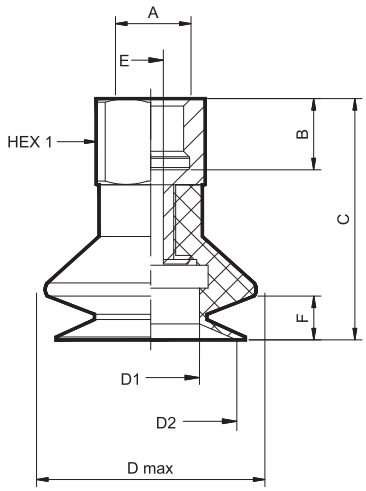
Cat No VS1RB1 - 01 - 01 - A

Basic dimensions

Male threaded nipple



Female threaded nipple



Male thread - Size: Ø4 to 53 mm									
Size Ø	D1	E	D max*	D2	Nipple size A	C	B	HEX 1	F
4	2.5	1	5	4	M3-M	7.5	3	5	2
11	5.1	2.5	13	10.4	M5-M	21	5	7	4
11	5.1	3.5	13	10.4	G1/8-M	22	7.5	14	4
14	5	2.5	14.5	12.5	M5-M	20.5	5	7	5
14	5	3.5	14.5	12.5	G1/8-M	21.5	7.5	14	5
16	8.4	2.5	18.5	15.6	M5-M	24.2	5	7	7
16	8.4	3.5	18.5	15.6	G1/8-M	25.2	7.5	14	7
20	11	2.5	21	18.1	M5-M	20.2	5	7	5
20	11	3.5	21	18.1	G1/8-M	21.2	7.5	14	5
25	9.9	3.5	26.5	22.5	G1/8-M	29	7.5	14	9
33	17	4.4	38	30	G1/4-M	31	11	17	9
43	21.9	4.4	47.5	38	G1/4-M	31.6	11	17	10
53	33	4.4	60	50	G1/4-M	38	11	17	15

Female thread - Size: Ø6 to 53 mm									
Size Ø	D1	E	D max*	D2	Nipple size A	C	B	HEX 1	F
6	3	2	8	5.7	M5-F	19	5.5	8	2
11	5.1	3.5	13	10.4	G1/8-F	28	8	14	4
14	5	3.5	14.5	12.5	G1/8-F	27.5	8	14	5
16	8.4	3.5	18.5	15.6	G1/8-F	31.2	8	14	7
20	11	3.5	21	18.1	G1/8-F	27.2	8	14	5
25	9.9	3.5	26.5	22.5	G1/8-F	35	8	14	9
33	17	4.4	38	30	G1/4-F	42	12	17	9
43	21.9	4.4	47.5	38	G1/4-F	42.6	12	17	10
53	33	4.4	60	50	G1/4-F	49	12	17	15

* External dimensions of the suction cup when it is pressed against the workpiece by the vacuum

VACUUM SUCTION CUP WITH NIPPLE

Series VS1RB1

Cat No VS1RB1 - 01 - 01 - A

How to order

VS1RB1 – 14 – N1 – 60 – M

Size Ø	
4	4 mm
6	6 mm
11	11 mm
14	14 mm
16	16 mm
20	20 mm
25	25 mm
33	33 mm
43	43 mm
53	53 mm

Suction cup material	
N1	NBR
S1	Silicone

Nipple size	
73	M3
70	M5
60	G1/8
61	G1/4

Thread	
M	Male thread
F	Female thread

Note:
Available size and their corresponding Nipple / Thread variants

Ø4	-	M3 (Male)
Ø6	-	M5 (Female)
Ø11, Ø14, Ø16, Ø20	-	M5 (Male) & G1/8 (Male & Female)
Ø25	-	G1/8 (Male & Female)
Ø33, Ø43, Ø53	-	G1/4 (Male & Female)

Ordering example:

Ordering no. for Vacuum suction cup with nipple (Bellow type - 1.5 Folds), Size - Ø14 mm, NBR material, G1/8 Nipple with Male thread :
VS1RB1-14-N1-60M

VACUUM SUCTION CUP WITH NIPPLE

Series VS1RB2

Cat No VS1RB2 - 01 - 01 - A

VACUUM SUCTION CUP WITH NIPPLE (Bellow type - 2.5 Folds) - Size: (Ø7 to Ø52 mm)

Features

- ❑ Wide range of diameters and materials for the most varied workpieces
- ❑ 2.5 folds ensure high suction force and effective damping of sensitive workpieces
- ❑ Very high suction cup stroke due to soft, flexible folds
- ❑ The Soft, tapered sealing lip adapts optimally to curved surfaces or uneven surfaces

Applications

- ❑ Round bellows suction cup with 2.5 folds for the handling of extremely sensitive workpieces (optimum damping effect due to folds)
- ❑ Handling of workpieces with uneven surfaces, such as pipes (optimal adaptation to concave and convex surfaces)
- ❑ The special design of the folds permits use in systems with very short cycle times

Technical Specifications

Model			VS1RB2 - 7		VS1RB2 - 9		VS1RB2 - 12		VS1RB2 - 14		VS1RB2 - 18	
Nipple size			M5	G1/8	M5	G1/8	M5	G1/8	M5	G1/8	M5	G1/8
Suction force *		(N)	0.2		0.8		1.2		1.4		3.1	
Pull-off force **		(N)	0.9		2.3		3.5		5.7		8.5	
Volume		(cm^3)	0.043		0.15		0.6		0.975		1.35	
Workpiece radius minimum (convex)		(mm)	8		10		13		15		20	
Hose diameter (OD) #		(mm)	6		6		6		6		6	
Weight (g)	NBR - Male thread		1.6	4.3	1.8	4.5	2.2	4.9	2.6	5.3	2.9	5.6
	Silicone - Male thread											
	NBR - Female thread		-	4.7	-	4.9	-	5.3	-	5.7	-	6
	Silicone - Female thread											
Material of construction			Aluminium, Silicone, NBR									
Ambient temperature		(°C)	NBR: -10 to +70									
			Silicone: -20 to +180									

Model			VS1RB2 - 20		VS1RB2 - 25	VS1RB2 - 32	VS1RB2 - 42	VS1RB2 - 52
Nipple size			M5	G1/8	G1/8	G1/4		
Suction force *		(N)	5.2		4.8	12.1	15	28.6
Pull-off force **		(N)	12.1		19	36.9	44	96
Volume		(cm^3)	2.298		5.4	10	19.786	37.587
Workpiece radius minimum (convex)		(mm)	30		30	35	75	75
Hose diameter (OD) #		(mm)	6		6	10	10	10
Weight (g)	NBR - Male thread		3.3	6	8	17	27	32
	Silicone - Male thread							
	NBR - Female thread		-	6.4	9	18	27	32
	Silicone - Female thread							
Material of construction			Aluminium, Silicone, NBR					
Ambient temperature		(°C)	NBR: -10 to +70					
			Silicone: -20 to +180					

* - Specified suction forces are theoretical values at a vacuum of -0.6 bar and with a smooth, dry workpiece surface (Do not include a safety factor)
** - The pull-off force of the versions made of natural rubber is reduced by about 40 %
# - Recommended hose diameter is based on a hose length of approx. 2 m

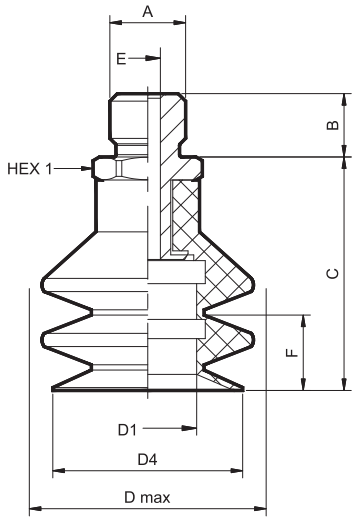
VACUUM SUCTION CUP WITH NIPPLE

Series VS1RB2

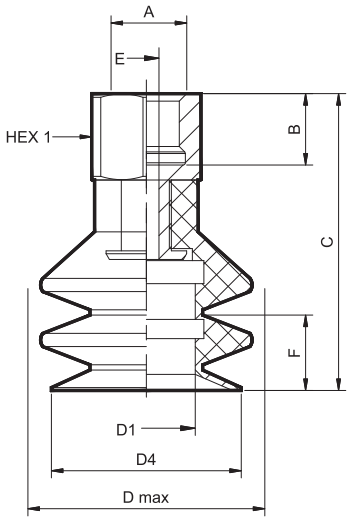
Cat No VS1RB2 - 01 - 01 - A

Basic dimensions

Male threaded nipple



Female threaded nipple



Male thread - Size: Ø7 to 52 mm									
Size Ø	D1	E	D max*	D4	Nipple size A	C	B	HEX 1	F
7	1.8	2.5	7	5.9	M5-M	19	5	7	3
7	1.8	3.5	7	5.9	G1/8-M	20	7.5	14	3
9	4.1	2.5	9.5	9	M5-M	20	5	7	3
9	4.1	3.5	9.5	9	G1/8-M	21	7.5	14	3
12	5	2.5	13	12	M5-M	26	5	7	7
12	5	3.5	13	12	G1/8-M	27	7.5	14	7
14	5.4	2.5	15.5	14.5	M5-M	27.8	5	7	9
14	5.4	3.5	15.5	14.5	G1/8-M	28.8	7.5	14	9
18	8	2.5	19	17.2	M5-M	27.6	5	7	9
18	8	3.5	19	17.2	G1/8-M	28.6	7.5	14	9
20	10.5	2.5	21	20	M5-M	27.1	5	7	9
20	10.5	3.5	21	20	G1/8-M	28.1	7.5	14	9
25	10	3.5	26	23	G1/8-M	40	7.5	14	18
32	16	4.4	33.5	32	G1/4-M	41.5	11	17	15
42	17.8	4.4	45	42.6	G1/4-M	50	11	17	20
52	24.6	4.4	55	52.5	G1/4-M	52.7	11	17	25

Female thread - Size: Ø7 to 52 mm									
Size Ø	D1	E	D max*	D4	Nipple size A	C	B	HEX 1	F
7	1.8	3.5	7	5.9	G1/8-F	26	8.5	14	3
9	4.1	3.5	9.5	9	G1/8-F	27	8.5	14	3
12	5	3.5	13	12	G1/8-F	33	8.5	14	7
14	5.4	3.5	15.5	14.5	G1/8-F	34.8	8.5	14	9
18	8	3.5	19	17.2	G1/8-F	34.6	8.5	14	9
20	10.5	3.5	21	20	G1/8-F	34.1	8.5	14	9
25	10	3.5	26	23	G1/8-F	46	8.5	14	18
32	16	4.4	33.5	32	G1/4-F	52.5	12	17	15
42	17.8	4.4	45	42.6	G1/4-F	61	12	17	20
52	24.6	4.4	55	52.5	G1/4-F	63.7	12	17	25

* External dimensions of the suction cup when it is pressed against the workpiece by the vacuum

VACUUM SUCTION CUP WITH NIPPLE

Series VS1RB2

Cat No VS1RB2 - 01 - 01 - A

How to order

VS1RB2 – 18 – S1 – 70 – M

Size Ø	
7	7 mm
9	9 mm
12	12 mm
14	14 mm
18	18 mm
20	20 mm
25	25 mm
32	32 mm
42	42 mm
52	52 mm

Suction cup material	
N1	NBR
S1	Silicone

Nipple size	
70	M5
60	G1/8
61	G1/4

Thread	
M	Male thread
F	Female thread

Note:
Available size and their corresponding Nipple / Thread variants
Ø7, Ø9, Ø12, Ø14, Ø18, Ø20 - M5 (Male)
Ø7, Ø9, Ø12, Ø14, Ø18, Ø20, Ø25 - G1/8 (Male & Female)
Ø32, Ø42, Ø52 - G1/4 (Male & Female)

Ordering example:

Ordering no. for Vacuum suction cup with nipple (Bellow type - 2.5 Folds) Size - Ø18 mm, Silicone material, M5 Nipple with Male thread :
VS1RB2-18-S1-70M

SPRING PLUNGER

Series ASP1

Cat No ASP1 - 01 - 01 - A

SPRING PLUNGER - Stroke 25, 50, 75 mm

Features

- With a lower damping spring optimized for sensitive workpieces, very good height compensation
- A large range of connection threads and lifting heights enables use for a wide variety of applications and suction cups

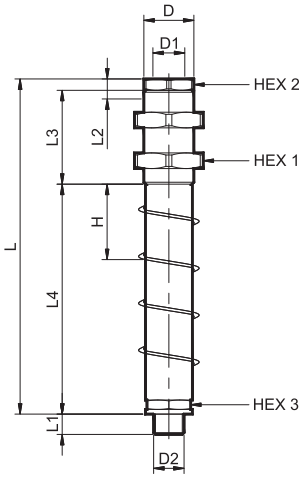
Applications

- Spring plunger for handling workpieces with differing heights, such as curved metal sheets, etc
- Handling of sensitive workpieces (such as sheets of glass) without additional control functions to prevent damage, since the plunger ensures soft placement

Technical Specifications

Ordering No		ASP125-61M60F	ASP150-61M60F	ASP175-61M60F	ASP125-60M60F	ASP150-60M60F
Spring rate	(N/mm)	0.711	0.452	0.262	0.143	0.097
Spring pretension	(N)	6.47	1.4	5.38	3.57	2.92
Spring force center *	(N)	15.36	12.7	15.2	5.36	5.34
Vertical load **	(N)	2400	2400	2400	3700	3700
Horizontal load #	(N)	747	466	340	283	173
Tightening torque (maximum)	(Nm)	40	40	40	40	40
Weight	(g)	145	175	190	90	110
Operating temperature	(°C)	0 to +80	0 to +80	0 to +80	0 to +80	0 to +80

* - Referred to 50% of operating stroke
** - Maximum static loading
# - The specification of the horizontal load refers to the lower edge of the plunger with extended spring. It is a maximum static stress, and it impairs the spring compression and extension in horizontal position



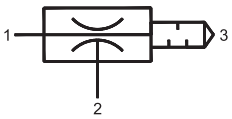
Ordering No	D	D1	D2	L	L1	L2	L3	L4	H	HEX 1	HEX 2	HEX 3
ASP125-61M60F	M20x1.5	G1/8 - F	G1/4 - M	86	8.5	13	40	40.5	25	24	17	17
ASP150-61M60F	M20x1.5	G1/8 - F	G1/4 - M	115.5	8.5	13	40	70	50	24	17	17
ASP175-61M60F	M20x1.5	G1/8 - F	G1/4 - M	145	8.5	13	40	99.5	75	24	17	17
ASP125-60M60F	M16x1	G1/8 - F	G1/8 - M	86.5	6.5	8	30	42.5	25	22	12	14
ASP150-60M60F	M16x1	G1/8 - F	G1/8 - M	117.5	6.5	8	30	73.5	50	22	12	14

M - Male Thread, **F** - Female Thread

How to order

While ordering spring plunger, mention the ordering number given in the corresponding tables.

Subject to change



BASIC VACUUM EJECTOR

Series VE11

Cat No VE11 - 01 - 01 - A

BASIC VACUUM EJECTOR (NOZZLE DIAMETER - Ø1, 1.5, 2, 2.5 mm)

Features

- ❑ Compact, lightweight plastic housing optimized for decentralized vacuum supply in highly dynamic processes
- ❑ Fine power gradation (six levels) for minimum air consumption
- ❑ Compact and easy to install
- ❑ Open, maintenance-friendly silencer

Application

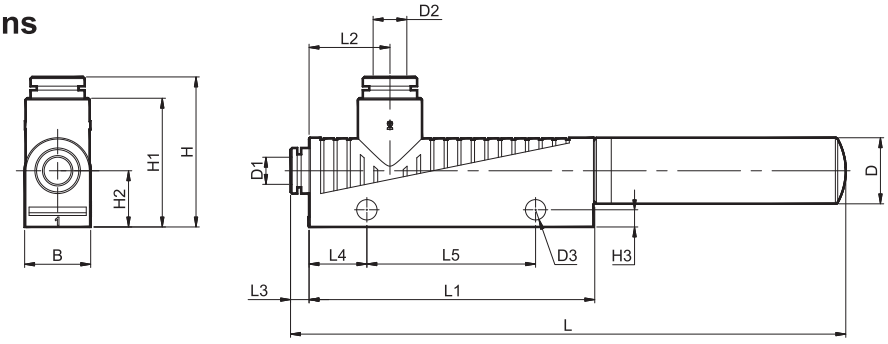
- ❑ A basic ejector with a main body made of plastic for use in handling systems
- ❑ Handling of electronic components
- ❑ Use in separation systems for plastic and sheet-metal machining

Technical Specifications

Model		VE11 - 4 - 10	VE11 - 4 - 15	VE11 - 4 - 20	VE11 - 4 - 25
Medium		Compressed air			
Working pressure range	(bar)	3 to 6			
Ambient temperature	(°C)	0 to +60			
Nozzle diameter	(mm)	1	1.5	2	2.5
Degree of evacuation	(%)	85	85	85	85
Suction rate (maximum)	(lts/min)	37.7	71	127	215
Air consumption suction*	(lts/min)	48	105	197	311
Sound level suction	(dB(A))	59	65	68	70
Sound level free	(dB(A))	65	72	77	78
Recommended external hose diameter, Compressed air #	(mm)	6	6	10	10
Recommended external hose diameter, Vacuum #	(mm)	10	10	10	10
Weight	(g)	22	22	50	50

* - At optimal operating pressure (4 bar) # - For maximum length 2 m

Basic dimensions



Model	B	D	D1	D2	D3	L	L1	L2	L3	L4	L5	H	H1	H2	H3
VE11- 4-10	15	14	6	8	4.2	97	51.5	22	5.5	12.5	20	40	34	14	5.2
VE11- 4-15	15	14	6	8	4.2	97	51.5	22	5.5	12.5	20	40	34	14	5.2
VE11- 4-20	20	20	8	10	4.2	168	86.5	24.5	5.5	12.5	20	45.5	39	17	5.2
VE11- 4-25	20	20	8	10	4.2	168	86.5	24.5	5.5	12.5	20	45.5	39	17	5.2

Caution

1. Do not extract harmful media such as dust, oil, mists, vapors, aerosols etc
2. Do not extract aggressive gases or media such as acids, acid fumes, bases, biocides, disinfectants or detergents
3. Do not extract liquids or bulk materials, e.g. Granulates

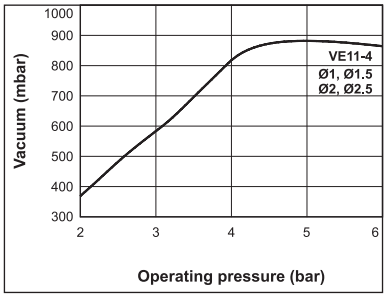
BASIC VACUUM EJECTOR

Series VE11

Cat No VE11 - 01 - 01 - A

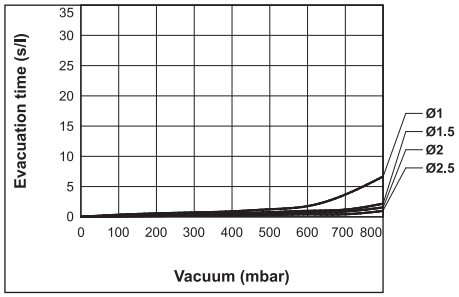
Performance Data

VE11 - series



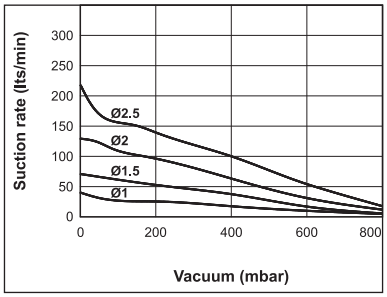
Achievable vacuum at various operating pressures (mbar)

Ø - Nozzle diameter



Evacuation times for various vacuum ranges (s/l)

Ø - Nozzle diameter



Suction capacity at various degrees of evacuation (lts/min)

Achievable vacuum at various operating pressures (mbar)

Model		Pressure (bar)				
		2	3	4	5	6
VE11-4	Vacuum (mbar)	360	580	800	875	850

Evacuation times for various vacuum ranges (s/l)

Model		Vacuum (mbar)								
		50	100	200	300	400	500	600	700	800
VE11-4-10	Evacuation Time (s/l)	0.06	0.14	0.3	0.52	0.82	1.3	1.98	3.26	6.56
VE11-4-15		0.05	0.08	0.16	0.26	0.4	0.6	0.86	1.3	2.54
VE11-4-20		0.03	0.05	0.09	0.16	0.24	0.34	0.49	0.8	1.74
VE11-4-25		0.03	0.04	0.07	0.09	0.14	0.2	0.28	0.42	0.99

Suction capacity at various degrees of evacuation (lts/min)

Model		Vacuum (mbar)									
		0	50	100	200	300	400	500	600	700	800
VE11-4-10	Suction rate (lts/min)	37.7	33.2	30.1	26.7	23	18.6	14.9	9.8	5.2	1.61
VE11-4-15		71	65	60.1	52	44	36.5	29	20.5	11.4	2.18
VE11-4-20		127	117.8	106	94.2	79.1	65.3	49.87	35.99	23	8.36
VE11-4-25		215	172	156.1	138.7	118.5	99.1	79.36	58.9	37.24	16.24

How to order

VE11 – 4 – 10 – 06 – 08

Control valve	
4	Normally open

Nozzle diameter		Sl. No. #
10	1 mm	1
15	1.5 mm	2
20	2 mm	3
25	2.5 mm	4

Airline OD	
06	6 mm
08	8 mm

Vacuum line OD	
08	8 mm
10	10 mm

Note: Sl. No. 1 & 2 applicable for Air line (OD) 6 mm and Vacuum line (OD) 8 mm.
Sl. No. 3 & 4 applicable for Air line (OD) 8 mm and Vacuum line (OD) 10 mm.

Ordering example:

Ordering no. for Basic vacuum ejector Normally open type, Nozzle diameter 1 mm, Air line OD 6mm, Vacuum line OD 8mm: **VE11-4-10-0608**

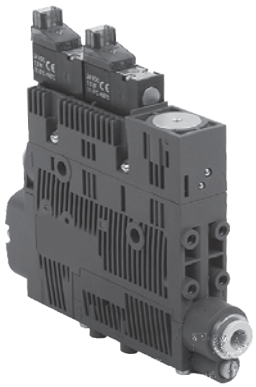
Subject to change

ELECTRICAL VACUUM EJECTOR

Series VE21

Cat No VE21 - 01 - 01 - A

ELECTRICAL VACUUM EJECTOR (NOZZLE DIAMETER - Ø1, 1.5 mm)



Features

- ❑ Eco-nozzle technology allows a high suction rate with minimized compressed air consumption
- ❑ Compact, extremely robust unit for mounting directly on the handling system
- ❑ Push-in connections save additional screw connections
- ❑ Suitable for panel mounting and DIN rail mounting

Application

- ❑ Handling of airtight and slightly porous workpieces
- ❑ Generation of vacuums in automated systems
- ❑ Use in robot handling and on linear axes
- ❑ For systems that require highly dynamic gripping of workpieces, where space is limited

Technical Specifications

Model		VE21 - 3 - 10	VE21 - 3 - 15
Medium		Compressed air	
Working pressure range	(bar)	3 to 6	
Ambient temperature	(°C)	0 to +50	
Nozzle diameter	(mm)	1	1.5
Degree of evacuation	(%)	85	85
Suction rate (maximum)	(lts/min)	36	65.5
Air consumption suction *	(lts/min)	46	98.5
Air consumption blow off	(m^3/h)	7.2	7.2
Maximum air consumption blow off	(lts/min)	120	120
Sound level suction	(dB(A))	61	65
Sound level free	(dB(A))	75	77
Recommended external hose diameter Compressed air #	(mm)	6	6
Recommended external hose diameter Vacuum #	(mm)	6	10
Supply voltage (DC)	(V)	24	
Weight	(g)	170	

* - At optimal operating pressure (4 bar)
\# - For maximum length 2 m

Caution

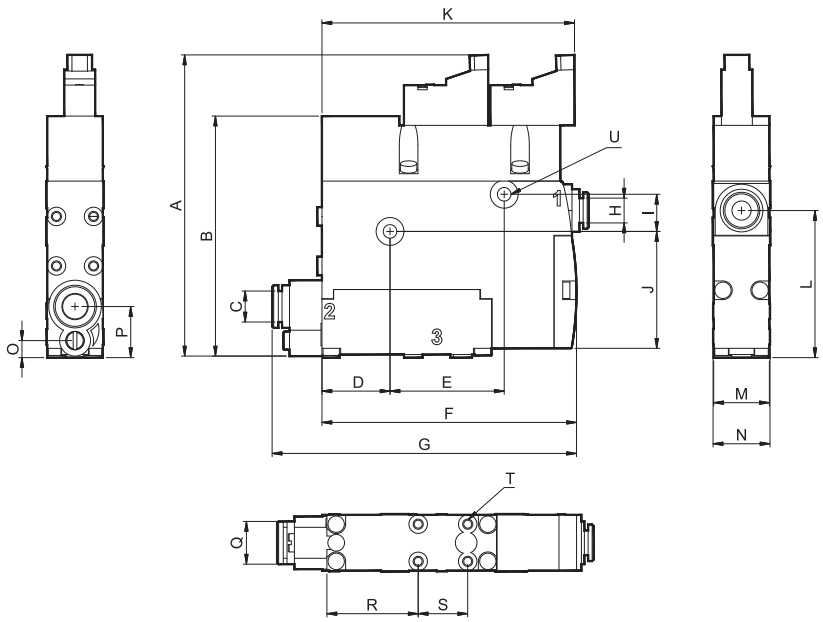
1. Do not extract harmful media such as dust, oil, mists, vapors, aerosols etc
2. Do not extract aggressive gases or media such as acids, acid fumes, bases, biocides, disinfectants or detergents
3. Do not extract liquids or bulk materials, e.g. Granulates

ELECTRICAL VACUUM EJECTOR

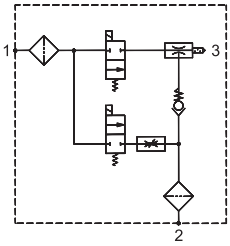
Series VE21

Cat No VE21 - 01 - 01 - A

Basic dimensions



Ejector symbol - Without air saving (Normally Closed)



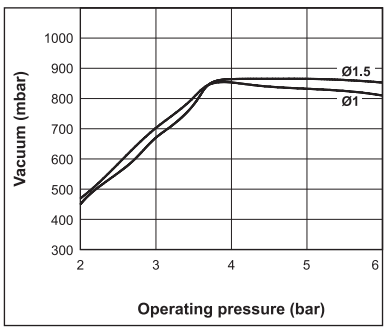
1 - Air line
2 - Vacuum line
3 - Exhaust

Model	A	B	C	D	E	F	G	H	I	J	K
VE21-3-10	97	77.5	6	22	36.9	87	102.5	6	12	40.8	81.4
VE21-3-15	97	77.5	8	22	36.9	87	102.5	6	12	40.8	81.4

Model	L	M	N	O	P	Q	R	S	T	U
VE21-3-10	47.5	18	18.6	5.5	16.5	12	29.5	16	2.6	4.4
VE21-3-15	47.5	18	18.6	5.5	16.5	12	29.5	16	2.6	4.4

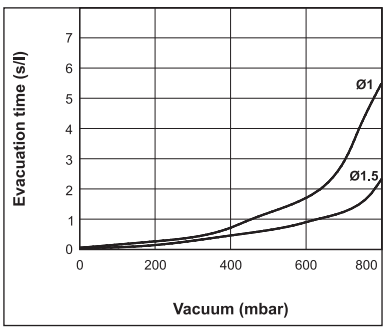
Performance Data

Ø - Nozzle diameter



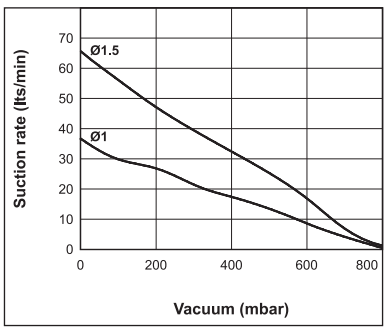
Achievable vacuum at various operating pressures (mbar)

Ø - Nozzle diameter



Evacuation times for various vacuum ranges (s/l)

Ø - Nozzle diameter



Suction capacity at various degrees of evacuation (lts/min)

ELECTRICAL VACUUM EJECTOR

Series VE21

Cat No VE21 - 01 - 01 - A

Achievable vacuum at various operating pressures (mbar)

Model		Pressure (bar)				
		2	3	4	5	6
VE21-3-10	Vacuum (mbar)	470	700	850	830	815
VE21-3-15		450	660	860	865	850

Evacuation times for various vacuum ranges (s/l)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE21-3-10	Evacuation Time (s/l)	0.05	0.15	0.3	0.5	0.8	1.2	1.75	2.8	5.5
VE21-3-15		0.05	0.07	0.15	0.25	0.4	0.6	0.9	1.3	2.3

Suction capacity at various degrees of evacuation (lts/min)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE21-3-10	Suction rate (lts/min)	36.1	29.5	25.7	20.8	16.9	13	8.1	3.4	0.5
VE21-3-15		65.5	57.1	47.4	39.3	32	25.3	17	8.8	1.5

How to order

VE21 – 3 – 10 – 06 – 06 – JC

Control valve	
3	Normally Closed

Nozzle diameter		Sl. No. #
10	1 mm	1
15	1.5 mm	2

Airline OD	
06	6 mm

Vacuum line OD	
06	6 mm
08	8 mm

Connector type	
JC	JPC connector

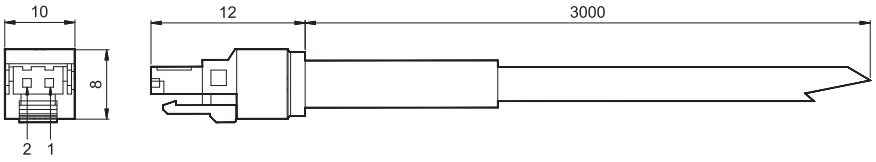
Note: Sl. No. 1 applicable for vacuum line (OD) is 06.
Sl. No. 2 applicable for vacuum line (OD) is 08.

Ordering example:

Ordering no. for Electrical vacuum ejector Normally Closed type, 1 mm - Nozzle diameter, Air line (OD) - 6mm, Vacuum line (OD) - 6mm with JPC Connector : **VE21-3-10-0606-JC**

Accessories: JPC Connector

Ordering no. **- AC100-R12S-PUR-3M**



Pin number	Corresponding wires	Function
1	Brown	24V power supply
2	White	0V power supply

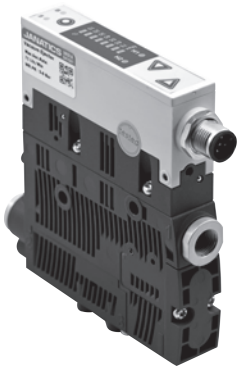
Subject to change

COMPACT VACUUM EJECTOR

Series VE31

Cat No VE31 - 01 - 01 - A

COMPACT VACUUM EJECTOR (NOZZLE DIAMETER - Ø1.5 mm)



Features

- Eco-nozzle technology allows for a high suction rate with minimized compressed air consumption
- The vacuum parameters on the LED bar display are very easy to read
- Integrated air-saving function reduces compressed air consumption by up to 80 %
- Integrated pneumatic valves for switching functions Normally open or Normally closed

Application

- Compact vacuum ejector for handling airtight and slightly porous workpieces
- Generation and monitoring of the vacuum in an automated systems
- Use in robot handling and on linear axes
- Pick and place applications with the shortest cycle times
- Typically for use in fully automated small parts handling applications

Technical Specifications

Model		VE31 - 3 - 15	VE31 - 4 - 15
Medium		Compressed air	
Working pressure range	(bar)	3 to 6	
Ambient temperature	(°C)	0 to +50	
Nozzle diameter	(mm)	1.5	1.5
Degree of evacuation	(%)	85	85
Suction rate (maximum)	(lts/min)	65.5	65.5
Air consumption suction *	(lts/min)	98	98
Air consumption blow off	(m^3/h)	7.2	7.2
Sound level suction	(dB(A))	65	65
Sound level free *	(dB(A))	77	77
Recommended external hose diameter Compressed air #	(mm)	6	6
Recommended external hose diameter Vacuum #	(mm)	10	10
Supply voltage (DC)	(V)	24	
Weight	(g)	212	195

* - At optimal operating pressure (4 bar)
\# - For maximum length 2 m

Caution

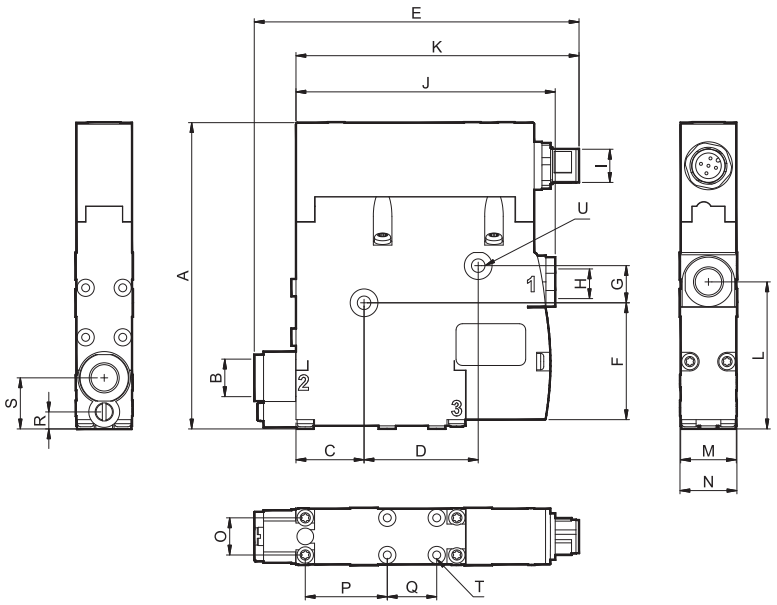
1. Do not extract harmful media such as dust, oil, mists, vapors, aerosols etc
2. Do not extract aggressive gases or media such as acids, acid fumes, bases, biocides, disinfectants or detergents
3. Do not extract liquids or bulk materials, e.g. Granulates

COMPACT VACUUM EJECTOR

Series VE31

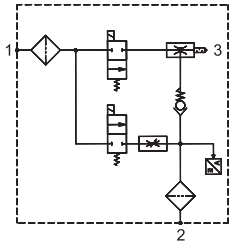
Cat No VE31 - 01 - 01 - A

Basic dimensions

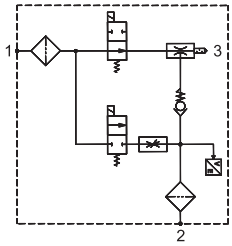


Ejector symbol

With air saving function (Normally Closed)



With air saving function (Normally Open)



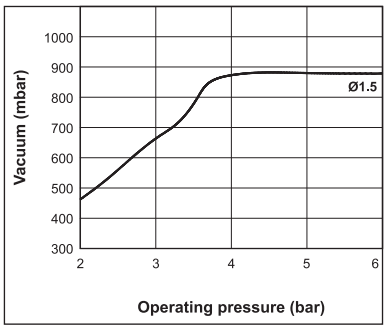
1 - Air line
2 - Vacuum line
3 - Exhaust

Model	A	B	C	D	E	F	G	H	I	J	K
VE31-3-15	99	G1/8 - F	22	36.9	105	40.8	12	G1/8 - F	M12x1 - M	84	91.5
VE31-4-15											

Model	L	M	N	O	P	Q	R	S	T	U
VE31-3-15	47.5	18	18.6	12	29.5	16	5.5	16.5	2.6	4.4
VE31-4-15										

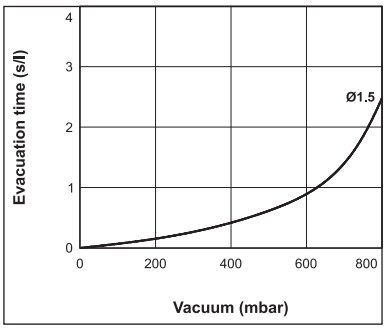
Performance Data

Ø - Nozzle diameter



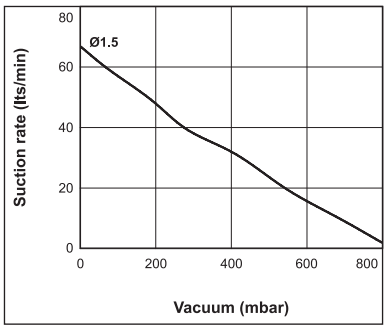
Achievable vacuum at various operating pressures (mbar)

Ø - Nozzle diameter



Evacuation times for various vacuum ranges (s/l)

Ø - Nozzle diameter



Suction capacity at various degrees of evacuation (lts/min)

COMPACT VACUUM EJECTOR

Series VE31

Cat No VE31 - 01 - 01 - A

Achievable vacuum at various operating pressures (mbar)

Model		Pressure (bar)				
		2	3	4	5	6
VE31-3-15	Vacuum (mbar)	450	660	870	880	865
VE31-4-15						

Evacuation times for various vacuum ranges (s/l)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE31-3-15	Evacuation Time (s/l)	-	0.07	0.15	0.25	0.4	0.6	0.9	1.3	2.3
VE31-4-15										

Suction capacity at various degrees of evacuation (lts/min)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE31-3-15	Suction rate (lts/min)	65.5	57.1	47.4	39.3	32	25.3	17	8.8	1.5
VE31-4-15										

How to order

VE31 – 3 – 15 – 60F 60F – QD

Control valve	
3	Normally Closed
4	Normally Open

Nozzle diameter	
15	1.5 mm

Airline OD	
60F	G1/8

Vacuum line OD	
60F	G1/8

Connector type	
QD	QD connector

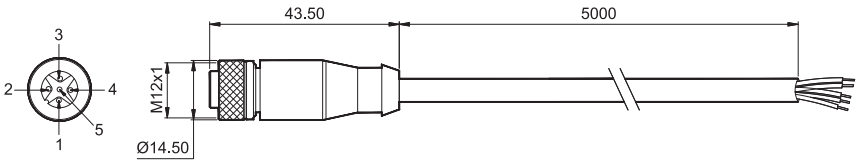
Note:
(60F) **F** - Female thread

Ordering example:

Ordering no. for Compact vacuum ejector with Normally Closed type, 1.5 mm - Nozzle diameter, Air line (OD) - G1/8, Vacuum line (OD) - G1/8, with QD Connector: **VE31-3-15-60F60F-QD**

Accessories: QD Connector

Ordering no. **- AC100-M125S-PUR-5M**



Pin number	Corresponding wires	Function
1	Brown	24V power supply
2	White	Suction signal input
3	Blue	0V power supply
4	Black	Parts control output
5	Gray	Blow off signal input

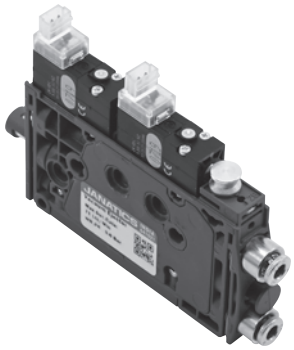
Subject to change

ELECTRICAL VACUUM EJECTOR - MINI

Series VE41

Cat No VE41 - 01 - 01 - A

ELECTRICAL VACUUM EJECTOR - MINI (NOZZLE DIAMETER - Ø1, 1.2 mm)



Features

- Maximized suction power in the smallest space
- Robust ejector with a low interference contour
- Center air supply and independent vacuum circuits allow pneumatic interlocking with up to 16 ejectors

Application

- Electrical vacuum ejector - Mini for handling airtight workpieces, such as display glass, plastic parts, printed-circuit boards (PCB), electronic parts or batteries
- For use in robotic handling applications and on linear axes as close to the suction cups as possible

Technical Specifications

Model		VE41 - 3 - 10	VE41 - 3 - 12
Medium		Compressed air	
Working pressure range	(bar)	3.5 to 6	
Ambient temperature	(°C)	0 to +50	
Nozzle diameter	(mm)	1	1.2
Degree of evacuation	(%)	87	92
Suction rate (maximum)	(lts/min)	28	30
Air consumption suction *	(lts/min)	45	51
Maximum air consumption blow off	(lts/min)	10	10
Sound level free *	(dB(A))	71	76
Sound level suction	(dB(A))	72	75
Recommended external hose diameter Compressed air #	(mm)	6	6
Recommended external hose diameter Vacuum #	(mm)	6	6
Supply voltage (DC)	(V)	24	
Weight	(g)	70	

* - At optimal operating pressure (4 bar)
\# - For maximum length 2 m

Caution

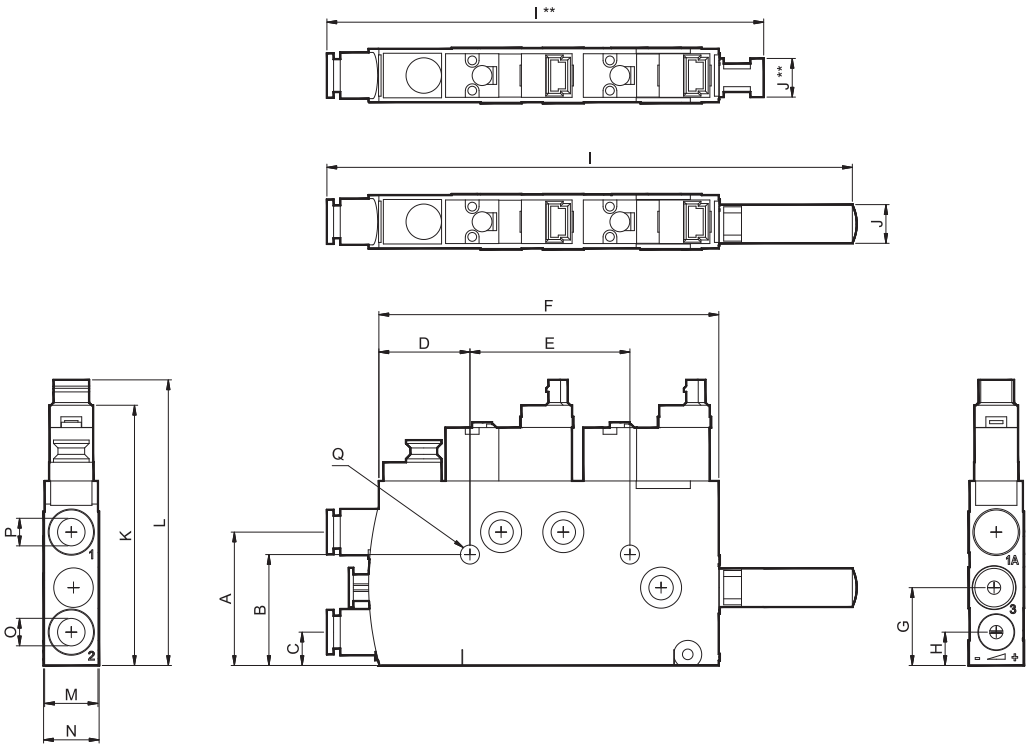
1. Do not extract harmful media such as dust, oil, mists, vapors, aerosols etc
2. Do not extract aggressive gases or media such as acids, acid fumes, bases, biocides, disinfectants or detergents
3. Do not extract liquids or bulk materials, e.g. Granulates

ELECTRICAL VACUUM EJECTOR - MINI

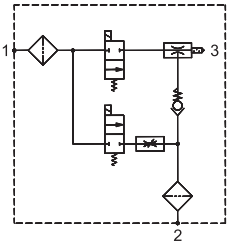
Series VE41

Cat No VE41 - 01 - 01 - A

Basic dimensions



Ejector symbol - Without air saving (Normally Closed)



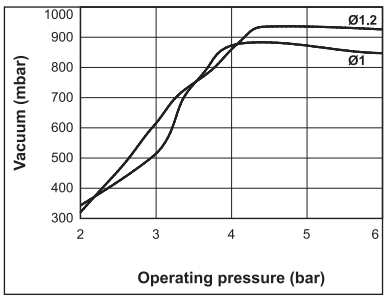
1 - Air line
2 - Vacuum line
3 - Exhaust

Model	A	B	C	D	E	F	G	H	I	
VE41-3-10	30	24.95	7.5	20.5	36	76.5	17.5	7.5	98.3 **	120.5
VE41-3-12										

Model	J		K	L	M	N	O	P	Q
VE41-3-10	9 **	10.5	41.5	64.2	12	12.5	6.2	6.2	4.3
VE41-3-12									

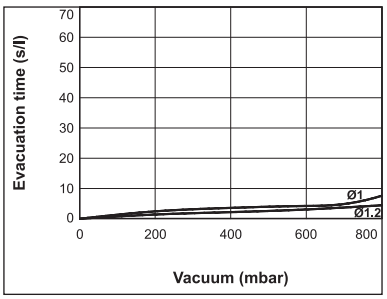
Performance Data

Ø - Nozzle diameter



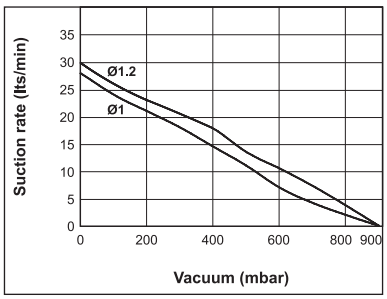
Achievable vacuum at various operating pressures (mbar)

Ø - Nozzle diameter



Evacuation times for various vacuum ranges (s/l)

Ø - Nozzle diameter



Suction capacity at various degrees of evacuation (lts/min)

ELECTRICAL VACUUM EJECTOR - MINI

Series VE41

Cat No VE41 - 01 - 01 - A

Achievable vacuum at various operating pressures (mbar)

Model		Pressure (bar)								
		2	2.5	3	3.5	4	4.5	5	5.5	6
VE41-3-10	Vacuum (mbar)	350	416	512	725	866	880	870	860	850
VE41-3-12		330	460	610	740	850	922	930	927	925

Evacuation times for various vacuum ranges (s/l)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE41-3-10	Evacuation Time (s/l)	0	0.2	0.4	0.7	1	1.4	2.3	4	8
VE41-3-12		0	0.18	0.38	0.6	0.9	1.1	2	3.1	4.4

Suction capacity at various degrees of evacuation (lts/min)

Model		Vacuum (mbar)									
		0	100	200	300	400	500	600	700	800	900
VE41-3-10	Suction rate (lts/min)	28	24	21	18	14.5	11	7	4.2	2	0
VE41-3-12		30	26	23	20.5	17.8	13.5	10.5	7.3	3.7	0

How to order

VE41 – 3 – 10 – 06 – 06 – JC

Control valve	
3	Normally Closed

Nozzle diameter	
10	1 mm
12	1.2 mm

Airline OD	
06	6 mm

Vacuum line OD	
06	6 mm

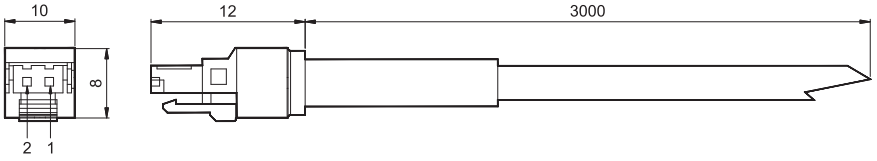
Connector type	
JC	JPC connector

Ordering example:

Ordering no. for Electrical vacuum ejector - mini Normally Closed type, 1 mm Nozzle diameter, Air line OD - 6 mm, Vacuum line OD - 6 mm with JPC connector: **VE41-3-10-0606-JC**

Accessories: JPC Connector

Ordering no.: **AC100-R12S-PUR-3M**



Pin number	Corresponding wires	Function
1	Brown	24V power supply
2	White	0V power supply

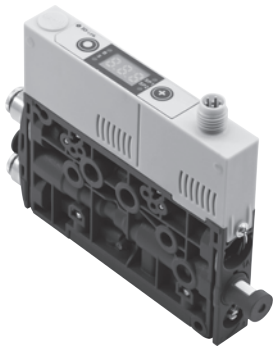
Subject to change

COMPACT VACUUM EJECTOR - MINI

Series VE51

Cat No VE51 - 01 - 01 - A

COMPACT VACUUM EJECTOR - MINI (NOZZLE DIAMETER - Ø1, 1.2 mm)



Features

- ❑ Maximized suction power in the smallest space
- ❑ Robust ejector with a low interference contour
- ❑ Center air supply and independent vacuum circuits allow pneumatic interlocking with up to 16 ejectors

Application

- ❑ Compact vacuum ejector - Mini for handling airtight workpieces, such as display glass, plastic parts, printed-circuit boards (PCB), electronic parts (or) batteries
- ❑ For use in robotic handling applications and on linear axes as close to the suction cups as possible

Technical Specifications

Model		VE51 - 3 - 10 / VE51 - 4 - 10	VE51 - 3 - 12 / VE51 - 4 - 12
Medium		Compressed air	
Working pressure range	(bar)	3.5 to 6	
Ambient temperature	(°C)	0 to +50	
Nozzle diameter	(mm)	1	1.2
Degree of evacuation	(%)	87	92
Suction rate (maximum)	(lts/min)	28	30
Air consumption suction *	(lts/min)	45	51
Maximum air consumption blow off	(lts/min)	10	10
Sound level free *	(dB(A))	71	76
Sound level suction	(dB(A))	72	75
Recommended external hose diameter Compressed air #	(mm)	6	6
Recommended external hose diameter Vacuum #	(mm)	6	6
Supply voltage (DC)	(V)	24	
Weight	(g)	70	

* - At optimal operating pressure (4 bar)
\# - For maximum length 2 m

Caution

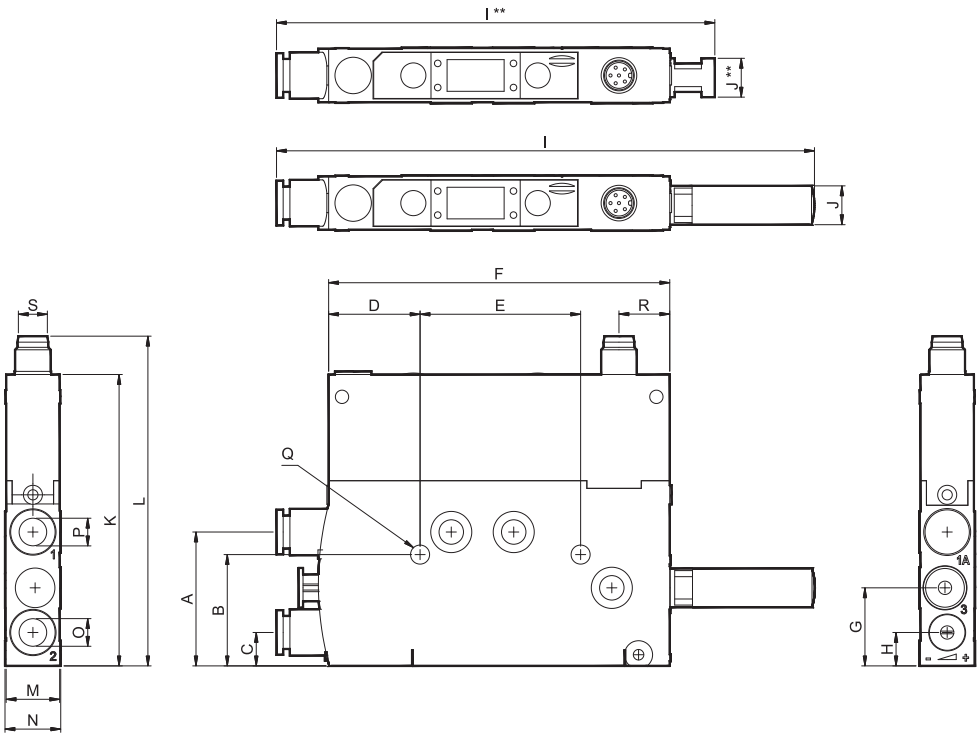
1. Do not extract harmful media such as dust, oil, mists, vapors, aerosols etc
2. Do not extract aggressive gases or media such as acids, acid fumes, bases, biocides, disinfectants or detergents
3. Do not extract liquids or bulk materials, e.g. Granulates

COMPACT VACUUM EJECTOR - MINI

Series VE51

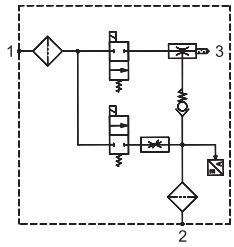
Cat No VE51 - 01 - 01 - A

Basic dimensions

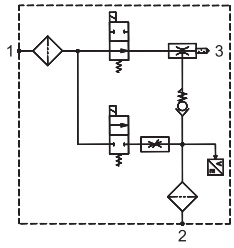


Ejector symbol

With air saving function (Normally Closed)



With air saving function (Normally Open)



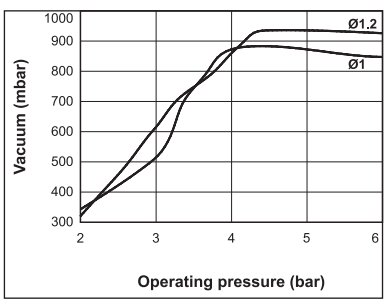
1 - Air line
2 - Vacuum line
3 - Exhaust

Model	A	B	C	D	E	F	G	H	I	
VE51-3-10	30	24.95	7.5	20.5	36	76.5	17.5	7.5	98.3 **	120.5
VE51-4-10										
VE51-3-12										
VE51-4-12										

Model	J		K	L	M	N	O	P	Q	R	S
VE51-3-10	9 **	10.5	65.3	73.9	12	12.5	6.2	6.2	4.3	11.4	M8x1 - M
VE51-4-10											
VE51-3-12											
VE51-4-12											

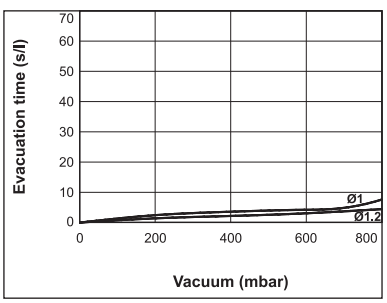
Performance Data

Ø - Nozzle diameter



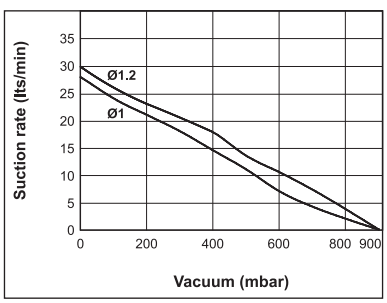
Achievable vacuum at various operating pressures (mbar)

Ø - Nozzle diameter



Evacuation times for various vacuum ranges (s/l)

Ø - Nozzle diameter



Suction capacity at various degrees of evacuation (lts/min)

COMPACT VACUUM EJECTOR - MINI

Series VE51

Cat No VE51 - 01 - 01 - A

Achievable vacuum at various operating pressures (mbar)

Model		Pressure (bar)								
		2	2.5	3	3.5	4	4.5	5	5.5	6
VE51-3-10	Vacuum (mbar)	350	416	512	725	866	880	870	860	850
VE51-4-10										
VE51-3-12		330	460	610	740	850	922	930	927	925
VE51-4-12										

Evacuation times for various vacuum ranges (s/l)

Model		Vacuum (mbar)								
		0	100	200	300	400	500	600	700	800
VE51-3-10	Evacuation Time (s/l)	0	0.2	0.4	0.7	1	1.4	2.3	4	8
VE51-4-10										
VE51-3-12		0	0.18	0.38	0.6	0.9	1.1	2	3.1	4.4
VE51-4-12										

Suction capacity at various degrees of evacuation (lts/min)

Model		Vacuum (mbar)									
		0	100	200	300	400	500	600	700	800	900
VE51-3-10	Suction rate (lts/min)	28	24	21	18	14.5	11	7	4.2	2	0
VE51-4-10											
VE51-3-12		30	26	23	20.5	17.8	13.5	10.5	7.3	3.7	0
VE51-4-12											

How to order

VE51 — 4 — 12 — 06 — 06 — QD

Control valve	
3	Normally Closed
4	Normally Open

Nozzle diameter	
10	1 mm
12	1.2 mm

Airline OD	
06	6 mm

Vacuum line OD	
06	6 mm

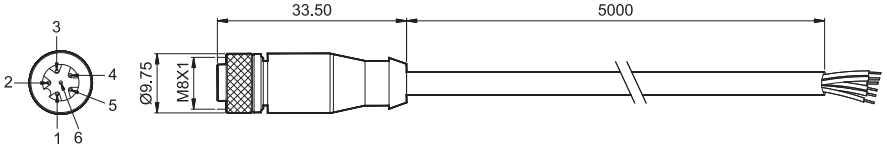
Connector type	
QD	QD connector

Ordering example:

Ordering no. for Compact vacuum ejector - Mini Normally Open type, 1.2 mm Nozzle diameter, Air line OD - 6 mm, Vacuum line OD - 6 mm, with QD connector: **VE51-4-12-0606-QD**

Accessories: QD Connector

Ordering no. **- AC100-M86S-PUR-5M**



Pin number	Corresponding wires	Function
1	Brown	24V power supply
2	White	Suction signal input
3	Blue	0V power supply
4	Black	Parts control output
5	Gray	Blow off signal input
6	Pink	Not used

Subject to change

Safety Instructions

Compressed Air Safety

Following Safety instructions should be strictly followed. Failure to do so may result in accidents, equipment malfunctioning, serious personal injury and / or loss of life.

Compressed air is a source of considerable energy. When handling products dealing with compressed air, the following precautions must be taken to prevent accidents.

1. Human hands or any parts of a human body should not block compressed air. Compressed air should not be allowed to impinge on any portion of the human body.
2. Before connecting any pneumatic equipment to the compressed air supply, all mounted fittings, piping assemblies and electrical connections should be checked for security. All plastic plugs in the equipment used for protection during shipping should be removed.
3. No piping alterations, removal of fittings, repairing of equipment etc. should be attempted with air supplies connected. Air and electrical supplies must be disconnected before beginning any adjustment, maintenance or dismantling of equipment.
4. The maximum allowable operating pressures, temperature, flows etc. must be strictly observed. Failure to do so might result in catastrophic failure of equipment, and result in serious personal injury and / or death. Refer to individual catalogs for this information, and any other operating or application limitations.

Compressed Air Safety for Pneumatic Equipment :

Warning

1. Compatibility of pneumatic equipment

Ensuring the compatibility of the procured FRL equipment is the responsibility of the person who designs the Pneumatic system and / or System specifications. This should be based on specifications or after analysis and / or tests to meet specific requirements.

2. Repair & Maintenance

Assembly, handling, or repair of pneumatic systems should be performed by only trained and experienced operators.

3. Safety First

Do not service machinery / equipment or attempt to remove any component until safety is confirmed.

- Inspection and maintenance of machinery / equipment should only be performed after confirmation that both compressed air and electrical supply have been positively disconnected and all residual compressed air in the system has been completely exhausted to the atmosphere.

4. Contact Janatics if equipment is to be used in any of the following conditions :

1. Equipment is to be used in conditions beyond the given specifications, or if equipment is to be used outdoors.
2. Equipment is to be used in conjunction with atomic energy, railroad, air navigation, automobiles or related vehicles, medical equipment or safety equipment.
3. In applications that adversely effect humans, animals, or property requiring special safety analysis.

Product Selection

Warning

Standard Filters, Regulators, Lubricators and Filter - Regulator Combination units should be used in accordance with the specifications mentioned in the catalogs / specification sheets. While installing and using this equipment, please also follow the respective specification & instruction manual available for each product.

Wherever this symbol  *is shown, it indicates* ***Caution!*** *and / or* ***Warning!***

It indicates that operator error can lead to damage and malfunctioning of the pneumatic equipment and can lead to serious personal injury or loss of life.

1. Air Filter and Lubricator

Standard Filters and Lubricators incorporate polycarbonate bowls and / or observation windows. Do not use filters & lubricators in an environment that will expose the above components to synthetic fluids, organic solvents, corrosive chemicals, cutting lubricants, thread sealant or similar materials.

Make sure that the condensate in periodically drained when using manual drain valves on Filters.

2. Regulator

a. Safety devices shall be placed to prevent secondary (output) pressure from rising past the set pressure. This will ensure that damage to the components on the secondary side will be minimized in the event of a malfunction.

b. In a standard regulator, when the supply pressure is removed or disconnected, either of the following may happen :

1. The residual pressure will remain on the secondary side of the regulator.
2. The pressure on the secondary side of the regulator will exhaust.

The designer should add components to the circuit to compensate for any of the above conditions.

c. Regulator operation may be affected when used in Balanced or Secondary sealed circuits. Please consult Janatics regarding these applications.

3. Lubricators

Ensure proper function of the Lubricator. Minimum airflow rate should be ensured for effective lubrication.

4. Automatic Drains - Normally Open

Ensure minimum working pressure for proper functioning of the Auto drain. The Filter unit must be periodically checked for condensate that would not be drained in case of any drain malfunction.

Compressed Air Safety - Valves

1. Check security of fittings, pipes, valve installation and electrical connections before use.
2. All electrical connections are to be completed be a person qualified to undertake electrical work.
3. Ensure that all air supplies and electrical connections are isolated before dismantling valves from sub plates, or removing fittings, cables or solenoids from valves
4. During prolonged or frequent energisation, valve solenoids can become hot. Ensure that this will not affect surrounding material and components, and that adequate ventilation is provided.
5. The spool and sleeve assemblies of metal seal valves incorporate sharp edges. Protective gloves should be worn for dismantling and maintenance operations.
6. When selecting valves for applications, the design method of actuation and fundamental operating principles of differing valve models and ranges must be considered.
7. Machinery designated as Annex 4 by the EC Directive of Machinery, Which includes pneumatically controlled power presses, have special requirements for control valves and preclude the use of other than specialized equipment.

Warranty

Janatics products are warranted to be free of defects in design, material or workmanship under proper use, installation, application & maintenance in accordance with Janatics written specifications and Safety Instructions for a period of 12 months from the date of shipment from the factory. Janatics warrants that all the Products are suitable for their intended purposes only. Janatics obligation under this warranty is limited to repair or replacement of the product at the discretion of Janatics and provided such product is returned to Janatics freight prepaid and upon examination by Janatics such is found to be defective.

This is the only authorised Janatics Warranty and is in Lieu of all other expressed or implied warranties or representation including any implied warranties of merchantability or fitness or any other obligations on the part of Janatics

In no event will Janatics be liable for business interruptions, loss of profits, personal injury, cost of delay or for any other special indirect, incidental or consequential losses, cost or damages.

Not covered under Janatics warranty :

- Normal wear or deterioration of components and product
- Product(s) not used or installed as designed or intended
- Product is not installed or maintained as described and directed in the product installation and operations manual
- Product contains non-original OEM parts, or was previously repaired or serviced by an unauthorised distributor or repair facility

General: Due to continuous product improvement, all specifications are subject to change.

Instructions for
Product Disposal & End of Life treatment

Ordinary industrial waste (recyclable and non-recyclable) is generated by industrial or commercial activities, but is similar to household waste by its nature and composition. It is not toxic or hazardous and thus requires no special treatment. These non-hazardous wastes can be either recycled & reused or treated & disposed, safeguarding the environment, in compliance with the statutory and regulatory requirements for quality, environment and Occupational Health & Safety (OHS).

Internally every Janatics personal is well informed on disposal categorization of components through the Bill of materials.

Disposal method :

The main parts of the Janatics product are metals & can be recycled to preserve natural resources and energy.

1. Dismantle the product and detach each component separately and dispose according to the legislation of the country
2. Generally all metals such as Steel, Aluminum, Copper and its Alloys, and Precious metals can be recycled again as raw materials according to local regulations.
3. Also some plastics like PET, HDPE, PVC, PA, PoM, & packing materials like PU foam & PE film can be recycled with the aid of local regulations.
4. Other plastics like PP and LDPE are difficult to recycle which requires special processes to avoid adverse environmental impact.
5. Rubber parts can be disposed by land fill or incineration following international and national regulations
6. Electrical & Electronic components like Printed circuit boards and reed switches need selective treatment and IEC 62635 guidelines can be referred.
7. To aid recycling and disposal approach deposition either by own or through the authorized agency to sustain the environment.
8. Remove all organic coatings, paint, and lacquered scrap by thermal decoating treatment prior to melting so as to avoid gaseous emissions and decomposition.
9. Follow national & international regulations for End of Life treatment of all components and consumables.