



VACUUM SUCTION CUP WITH NIPPLE

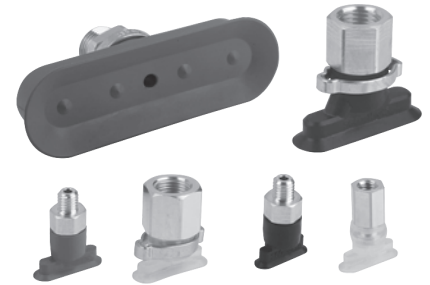
Series VS1OF

Cat No VS1OF - 01 - 01 - B

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 (cm³)		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
Tube 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 tube diameter is based on a tube length of approx. 2 m

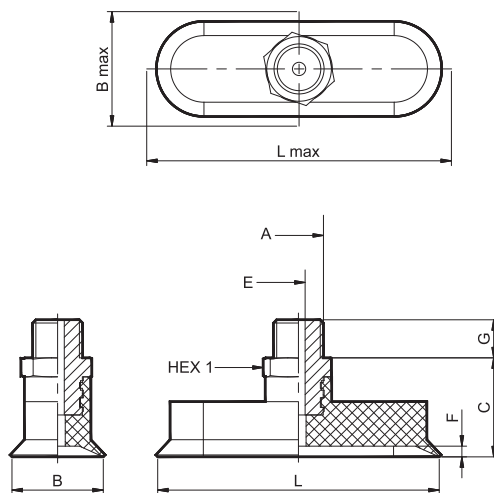
VACUUM SUCTION CUP WITH NIPPLE

Series VS10F

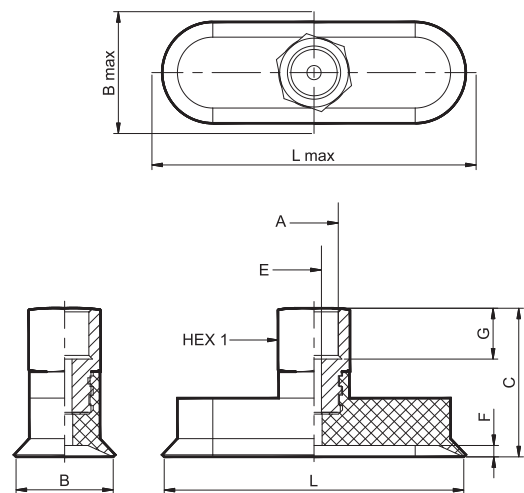
Cat No VS10F - 01 - 01 - B

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

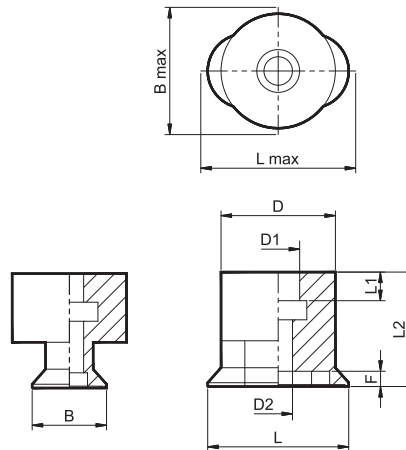
VACUUM SUCTION CUP WITH NIPPLE

Series VS10F

Cat No VS10F - 01 - 01 - B

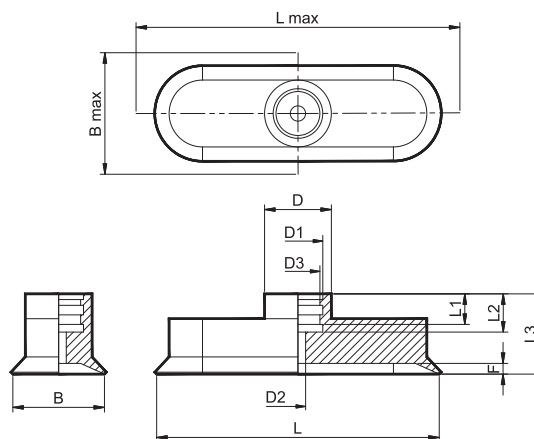
ACCESSORIES

Suction Cup - Size 4x2, 7x3.5 mm



Size: 4x2, 7x3.5 mm												
Size LxB	B max*	B	D	D1	D2	F	L max*	L	L1	L2	Ordering No.	
											NBR	SILICONE
4 x 2	2.5	2.2	2.2	1.2	1.2	0.5	4.5	4.2	1.5	3	VS10F-4x2-N1	VS10F-4x2-S2
7 x 3.5	4.5	3.5	6	1.5	1.5	0.8	7.5	7	1.5	6	VS10F-7x3.5-N1	VS10F-7x3.5-S2

Suction Cup - Size 15x5 to 90x30 mm



Size: 15x5 to 90x30 mm														
Size LxB	B max*	B	D	D1	D2	D3	F	L max*	L	L1	L2	L3	Ordering No.	
													NBR	SILICONE
15 x 5	5.5	4.6	8.5	6	1.2	4.5	0.7	15.5	14.6	3	5.5	12	VS10F-15x5-N1	VS10F-15x5-S2
18 x 6	7	5.6	8.5	6	1.5	4.5	0.8	18.5	17.6	3	5.5	12	VS10F-18x6-N1	VS10F-18x6-S2
30 x 10	11.5	9.4	11.5	7	2.5	5.5	1.5	30.5	29.4	3	5.5	12	VS10F-30x10-N1	VS10F-30x10-S2
45 x 15	16.5	14.4	15.5	13	3	11.5	2	46	44.4	8	10	21	VS10F-45x15-N1	VS10F-45x15-S2
60 x 20	22	19	15.5	13	4	11.5	2.5	61	59	8	10	21	VS10F-60x20-N1	VS10F-60x20-S2
75 x 25	27.5	24	17.5	13	4	11.5	2.8	77	74	8	10	21	VS10F-75x25-N1	VS10F-75x25-S2
90 x 30	33	29	17.5	13	4	11.5	3.5	92.5	89	8	10	21	VS10F-90x30-N1	VS10F-90x30-S2

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

VACUUM SUCTION CUP WITH NIPPLE

Series VS10F

Cat No VS10F - 01 - 01 - B

How to order

VS10F	—	15x5	—	S2	—	70	—	M
		Size LxB			Suction cup material	Nipple size		Thread
		4x2			N1	73		M
		4x2 mm			NBR	M3		Male thread
		7x3.5			S2	70		F
		7x3,5 mm			Silicone - HD	M5		Female thread
		15x5				60		
		15x5 mm				G1/8		
		18x6				61		
		18x6 mm				G1/4		
		30x10						
		30x10 mm						
		45x15						
		45x15 mm						
		60x20						
		60x20 mm						
		75x25						
		75x25 mm						
		90x30						
		90x30 mm						

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 :

VS10F-15x5-S2-70M