

Suction cup with connection VAS, VASB

FESTO



Characteristics

At a glance

- Sturdy and reliable
- Suction cups with fixed connecting thread
- 3 materials
- 11 diameters of suction cup with connector available
- 2 suction cup shapes: round (VAS), protective bellows (VASB)
- Vacuum port on top, on the side
- Screw-in thread

Product segmentation



Festo Core Range

Solves the majority of your automation tasks

With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery. the Core Range offers you the best value with the expected high Festo quality.

- Quickest delivery, worldwide – wherever, whenever
- Expected high Festo quality
- Easy and fast to select

Engineering tools Link [smart-vacuum](#)



Save time with engineering tools: Smart engineering for the optimal solution. Our goal is to increase your productivity. Our engineering tools play an integral part in achieving this goal. They help you size your system correctly, tap into unimagined productivity reserves and generate additional productivity along the entire value chain. In every phase of your project, from the initial contact to the modernisation of your machine, you will come across a number of different tools that will be of use to you.

The vacuum engineering tool provides you with a product recommendation based on your vacuum application requirements. After entering a number of parameters, the vacuum calculator recommends the Festo products required for an optimum solution.

Diagrams Link [vas](#)



The diagrams shown in this document are also available online. These can be used to display precise values.

Material

[PUR]	Polyurethane	[NBR]	Nitrile rubber
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- Long service life
 - Gentle treatment thanks to soft material
- For universal use

[SI]	Silicone
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- High temperature resistance
- Suitable for use in the food industry

Characteristics

Application example



A large application area for vacuum technology is flexible automation:

- Lifting
- Equipping
- Moving
- Inserting
- Conveying
- Gripping
- Holding
- Stacking
- Clamping
- Transporting
- Repositioning
- Turning

Suction cup with connection VAS, VASB

Type code

001	Series	
VAS	Suction cup complete	
VASB	Suction cup complete	

002	Suction cup size	
2	2 mm diameter	
5	5 mm diameter	
8	8 mm diameter	
10	10 mm diameter	
15	15 mm diameter	
30	30 mm diameter	
40	40 mm diameter	
55	55 mm diameter	
75	75 mm diameter	
100	100 mm diameter	
125	125 mm diameter	

003	Vacuum port	
G14	G1/4	
G18	G1/8	
G38	G3/8	
M3	M3	
M5	M5	

004	Connection position	
	Top	
S	On the side	

005	Material	
PUR	Polyurethane	
NBR	Nitrile rubber	
SI	Silicone	

006	Generation	
	Standard	
B	B-series	

Datasheet

Technical data – Suction cup with connection VAS-...-S-PUR-B, vacuum connection on the side

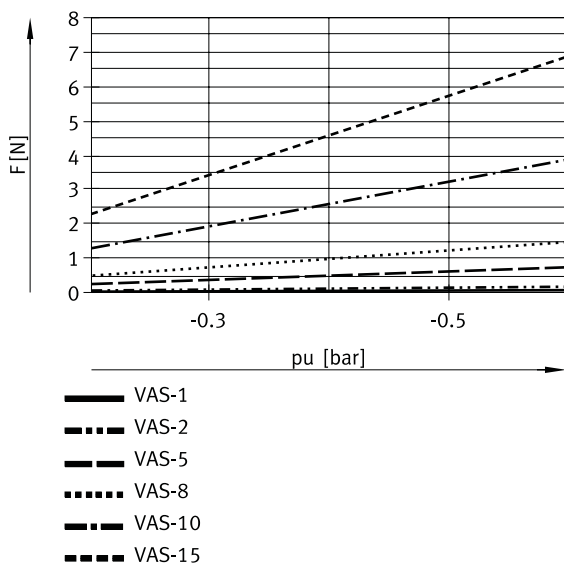
Suction cup diameter	8 mm
Vacuum connection	M5
Position of connection	From the side
Nominal size	2 mm
Suction cup shape	Round, flat
Type of mounting	Via vacuum port
Mounting position	optional
Nominal operating pressure	-0.7 bar
Effective suction diameter	7.1 mm
Suction cup volume	0.095 cm ³
Height compensator for suction cup	0.9 mm
Operating pressure	-0.95 ... 0 bar
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:-]
Ambient temperature	-20 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress
Shore hardness	60 +/- 5
Material suction cup	TPE-U(PU)
Material screwed plug	Brass
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-A1-L

1) More information: www.festo.com/x/topic/crc**Technical data – Suction cup with connection VAS-...-NBR**

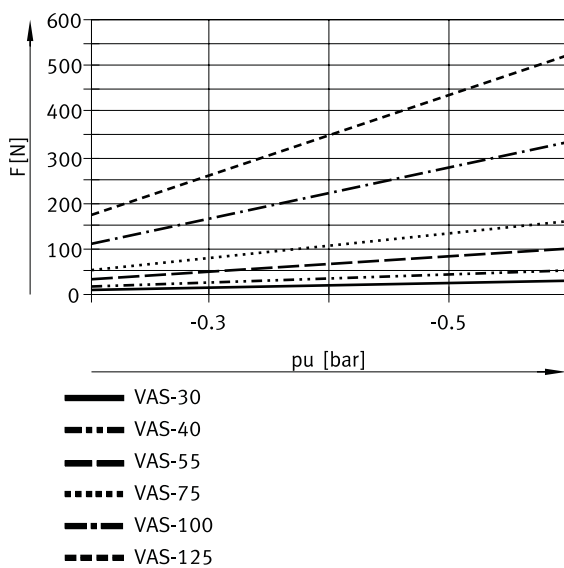
Suction cup diameter	2 mm	5 mm	8 mm	10 mm	15 mm	30 mm	40 mm	55 mm	75 mm	100 mm	125 mm
Vacuum connection	M3	M5	G1/8			G1/4			G3/8		
Position of connection	Top										
Nominal size	1 mm	1.5 mm	2 mm	3 mm			4 mm			7 mm	
Suction cup shape	Round, flat										
Holding force at nominal operating pressure	0.14 N	0.9 N	1.6 N	4.5 N	7.9 N	34 N	56 N	106 N	197 N	397 N	606 N
Effective suction diameter	1.6 mm	4 mm	5.5 mm	9 mm	12 mm	25 mm	32 mm	44 mm	60 mm	85 mm	105 mm
Operating pressure	-0.95 ... 0 bar										
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:-]										
Ambient temperature	-20 ... 80°C										
Shore hardness	55 +/- 5		60 +/- 5			70 +/- 5					
Material suction cup	NBR										
Material screwed plug	High-alloy steel	Wrought aluminium alloy	Brass	Wrought aluminium alloy	Brass			Die-cast zinc			
Note on materials	RoHS-compliant										
LABS (PWIS) conformity	VDMA24364-A1-L										

Datasheet

Theoretical suction force F as a function of vacuum pu - VAS-1 ... 15

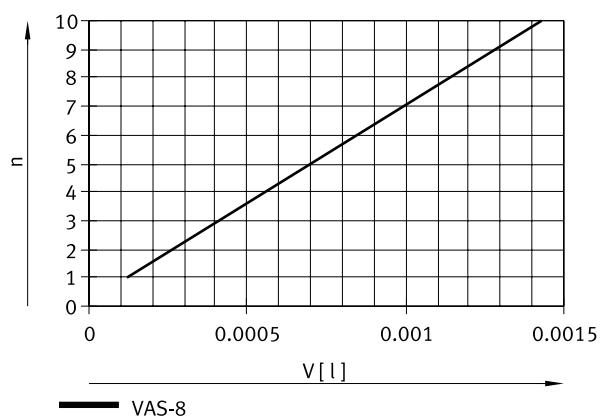


Theoretical suction force F as a function of vacuum pu - VAS-30 ... 125

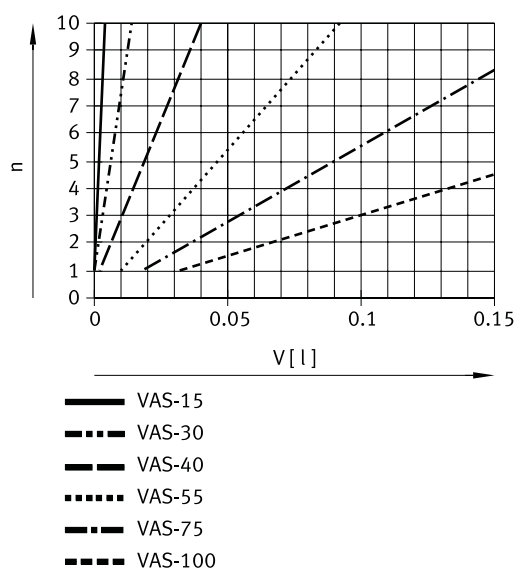


Datasheet

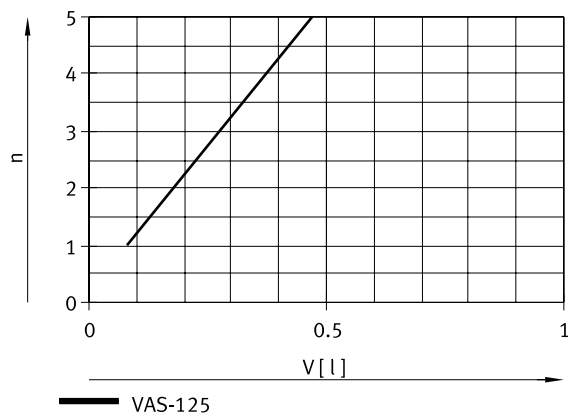
Suction cup volume – VAS-8



Suction cup volume – VAS-15 ... 100



Suction cup volume – VAS-125



Datasheet

General technical data – Suction cup with connection VAS-...-SI-B/PUR-B

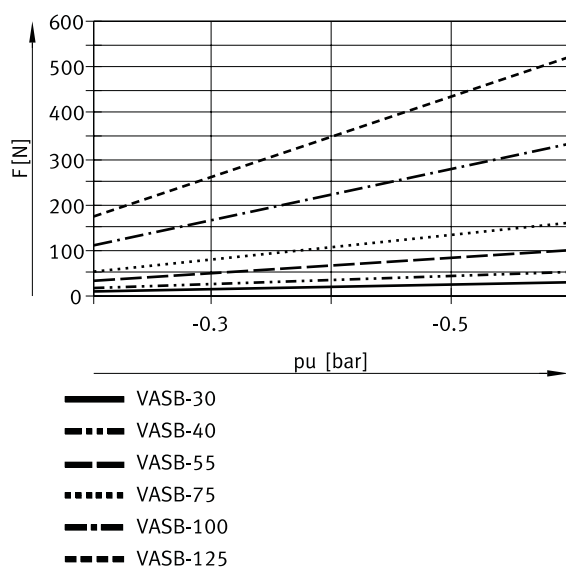
Suction cup diameter	8 mm	10 mm	15 mm	30 mm	40 mm	55 mm	75 mm	100 mm	125 mm
Vacuum connection	M5		G1/8		G1/4				G3/8
Position of connection	Top								
Nominal size	2 mm		3 mm		4 mm				7 mm
Suction cup shape	Round, flat								
Type of mounting	Via vacuum port								
Mounting position	optional								
Nominal operating pressure	-0.7 bar								
Holding force at nominal operating pressure	2.6 N	3.7 N	8.5 N	31 N	58 N	110 N	245 N	464 N	700 N
Suction cup volume	0.095 cm ³	0.12 cm ³	0.328 cm ³	1.29 cm ³	3.47 cm ³	8.01 cm ³	18.3 cm ³	33.5 cm ³	79.1 cm ³
Height compensator for suction cup	0.9 mm	1.1 mm	1.2 mm	1.9 mm	3 mm	3.5 mm			6 mm
Operating pressure	-0.95 ... 0 bar								
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:-]								
Ambient temperature	-40 ... 200°C								
Suitable for use with food	See supplementary material information								
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress								
Shore hardness	60 +/- 5								
Material suction cup	VMQ (silicone)								
Material screwed plug	Wrought aluminium alloy								
Note on materials	RoHS-compliant								
LABS (PWIS) conformity	VDMA24364 zone III								

1) More information: www.festo.com/x/topic/crc

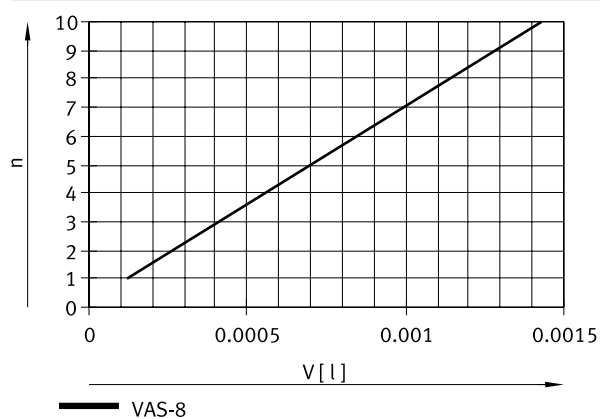
Technical data – Suction cup with connection VASB-...-NBR, protective bellows

Suction cup diameter	8 mm	15 mm	30 mm	40 mm	55 mm	75 mm	100 mm	125 mm
Vacuum connection	M5	G1/8		G1/4				G3/8
Position of connection	Top							
Nominal size	2 mm	3 mm		4 mm				7 mm
Suction cup shape	Round bellows 1.5 convolutions							
Holding force at nominal operating pressure	1.6 N	7.9 N	34 N	56 N	106 N	197 N	397 N	606 N
Effective suction diameter	5.5 mm	12 mm	25 mm	32 mm	44 mm	60 mm	85 mm	105 mm
Operating pressure	-0.95 ... 0 bar						–	-0.95 ... 0 bar
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:-]							
Ambient temperature	-20 ... 80°C							
Shore hardness	60 +/- 5							
Material suction cup	NBR							
Material screwed plug	Brass			Die-cast zinc				
Note on materials	RoHS-compliant							
LABS (PWIS) conformity	VDMA24364-A1-L						VDMA24364-B1/B2-L	VDMA24364-A1-L

Datasheet

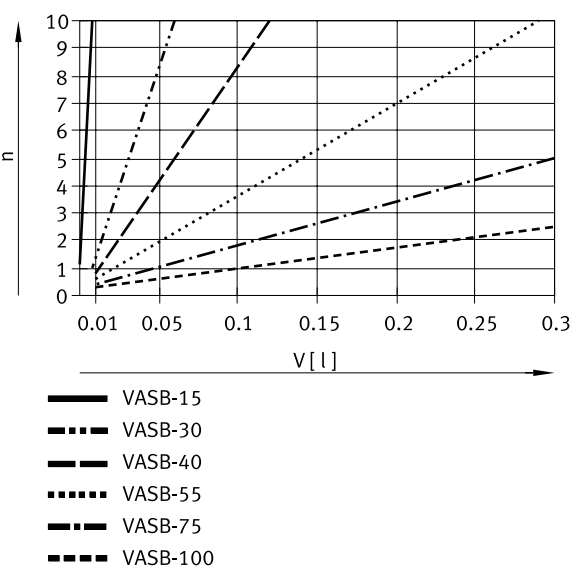
Theoretical suction force F as a function of vacuum p_u – VASB-30 ... 125

Suction cup volume – VASB-8

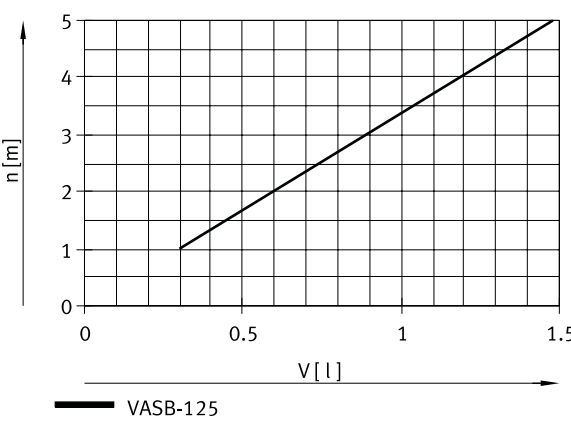


Datasheet

Suction cup volume – VASB-15 ... 100



Suction cup volume – VASB-125



Datasheet

Technical data – Suction cup with connection VASB-...-SI-B, protective bellows

Suction cup diameter	8 mm	15 mm	30 mm	40 mm	55 mm	75 mm	100 mm	125 mm
Vacuum connection	M5	G1/8		G1/4				G3/8
Position of connection	Top							
Nominal size	2 mm	3 mm		4 mm				7 mm
Suction cup shape	Round bellows 1.5 convolutions							
Type of mounting	Via vacuum port							
Mounting position	optional							
Nominal operating pressure	-0.7 bar							
Holding force at nominal operating pressure	2.6 N	8.5 N	25 N	58 N	110 N	228 N	395 N	610 N
Suction cup volume	0.163 cm ³	0.83 cm ³	6.18 cm ³	11.11 cm ³	30.4 cm ³	65.5 cm ³	128 cm ³	307 cm ³
Height compensator for suction cup	3.3 mm	5.6 mm	13.9 mm	13.7 mm	20 mm	15.5 mm		25 mm
Operating pressure	-0.95 ... 0 bar							
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:-]							
Ambient temperature	-40 ... 200°C							
Suitable for use with food	See supplementary material information							
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress							
Shore hardness	60 +/- 5							
Material suction cup	VMQ (silicone)							
Material screwed plug	Wrought aluminium alloy							
Note on materials	RoHS-compliant							
LABS (PWIS) conformity	VDMA24364 zone III							

1) More information: www.festo.com/x/topic/crc

Technical data – Suction cup with connection VASB-...-PUR-B, protective bellows

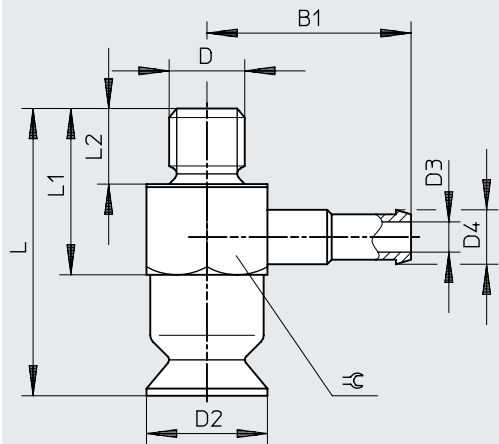
Technical data Suction cup with connection VASB ... FOR B, protective bellows								
Suction cup diameter	8 mm	15 mm	30 mm	40 mm	55 mm	75 mm	100 mm	125 mm
Vacuum connection	M5	G1/8	G1/4				G3/8	
Position of connection	Top							
Nominal size	2 mm	3 mm	4 mm				7 mm	
Suction cup shape	Round bellows 1.5 convolutions							
Type of mounting	Via vacuum port							
Mounting position	optional							
Nominal operating pressure	-0.7 bar							
Holding force at nominal operating pressure	2.8 N	8.5 N	34 N	60 N	110 N	250 N	450 N	570 N
Suction cup volume	0.163 cm³	0.83 cm³	6.18 cm³	11.11 cm³	30.4 cm³	65.5 cm³	128 cm³	307 cm³
Height compensator for suction cup	3.3 mm	5.6 mm	13.9 mm	13.7 mm	20 mm	15.5 mm	25 mm	
Operating pressure	-0.95 ... 0 bar							
Operating medium	Atmospheric air based on ISO 8573-1:2010 [7:-:-]							
Ambient temperature	-20 ... 60°C							
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress							
Shore hardness	60 +/- 5							
Material suction cup	PUR							
Material screwed plug	Brass			Die-cast zinc				
Note on materials	RoHS-compliant							
LABS (PWIS) conformity	VDMA24364-A1-L							

1) More information: www.festo.com/x/topic/crc

Dimensions

Dimensions – Dimensions – Suction cup with connector VAS-...-S-PUR-B, vacuum connection on the side

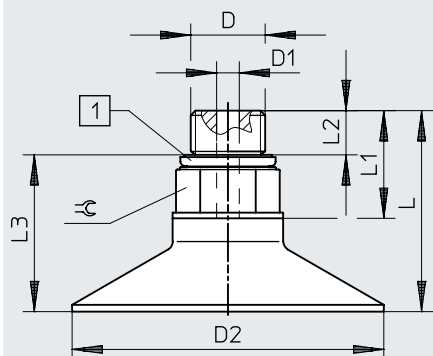
Download CAD data www.festo.com



	B1	D	D2 Ø	D3 Ø	D4 Ø	L	L1	L2 -0,1	☐
VAS-8-...-S-PUR-B	13,5	M5	8	2	3,6	19	11,5	5	8

Dimensions

Dimensions – Dimensions – Suction cup with connector VAS-...-NBR

[Download CAD data](http://www.festo.com)


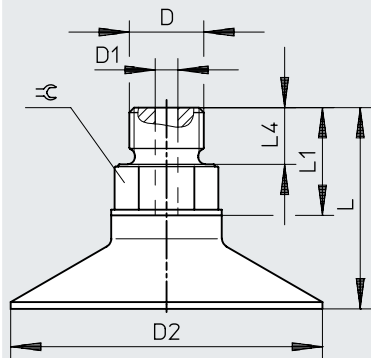
[2] VAS-5/10: sealing ring OK; VAS-8/15 ... 125: sealing ring OL

	D	D1 ø	D2 ø	L	L1	L2	L3	≈
VAS-2-...-NBR ¹⁾	M3	1	2	9,4	5,4	3,3	6,1	4,5
VAS-5-...-NBR	M5	2	5	16,5	10	3,8	12,7	8
VAS-8-...-NBR	M5	2	8	19	11,3	2,85	16,15	8
VAS-10-...-NBR	M5	2	10	19,2	11,5	3,8	15,4	8
VAS-15-...-NBR	G1/8	3	15	20,2	12	4,7	15,5	13
VAS-30-...-NBR	G1/8	3	30	21,5	12	4,7	16,8	13
VAS-40-...-NBR	G1/4	4	40	30,9	17,4	5,8	25,1	17
VAS-55-...-NBR	G1/4	4	55	33,9	17,4	5,8	28,1	17
VAS-75-...-NBR	G1/4	4	75	28	17	5,8	22,2	17
VAS-100-...-NBR	G1/4	4	100	28	17	5,8	22,2	17
VAS-125-...-NBR	G3/8	7	125	36	20	6,05	29,95	19

1) Sealing ring is not included in the scope of delivery.

Dimensions

Dimensions – Dimensions – Suction cup VAS-...-SI-B [Download CAD data](#) www.festo.com

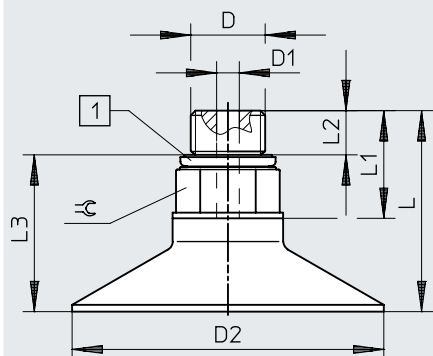


	D	D1 Ø	D2 Ø	L	L1	L4	⌀
VAS-8-...-SI-B	M5	2	8	19,2	11,5	4,3	8
VAS-10-...-SI-B	M5	2	10	19,2	11,5	4,3	8
VAS-15-...-SI-B	G1/8	3	15	20	12	6,5	13
VAS-30-...-SI-B	G1/8	3	30	21,5	12	6,5	13
VAS-40-...-SI-B	G1/4	4	40	30,5	17	8	17
VAS-55-...-SI-B	G1/4	4	55	33,5	17	8	17
VAS-75-...-SI-B	G1/4	4	75	28,2	17	8	17
VAS-100-...-SI-B	G1/4	4	100	28	17	8	17
VAS-125-...-SI-B	G3/8	7	125	36	20	12	19

Dimensions

Dimensions – Dimensions – Suction cup with connector VAS-...-PUR-B

Download CAD data www.festo.com



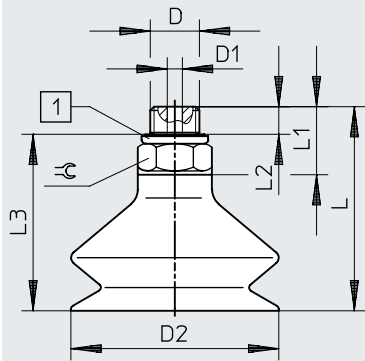
[1] Sealing ring

	D	D1 Ø	D2 Ø	L	L1	L2	L3	≙
VAS-8-...-PUR-B	M5	2	8	19	11,3	2,85	16,15	8
VAS-10-...-PUR-B	M5	2	10	19,2	11,5	2,85	16,35	8
VAS-15-...-PUR-B	G1/8	3	15	20	12	4,7	15,3	13
VAS-30-...-PUR-B	G1/8	3	30	21,5	12	4,7	16,8	13
VAS-40-...-PUR-B	G1/4	4	40	29,5	17	5,8	23,7	17
VAS-55-...-PUR-B	G1/4	4	55	32,5	17	5,8	26,7	17
VAS-75-...-PUR-B	G1/4	4	75	28	17	5,8	22,2	17
VAS-100-...-PUR-B	G1/4	4	100	28	17	5,8	22,2	17
VAS-125-...-PUR-B	G3/8	7	125	36	20	6,45	29,55	19

Dimensions

Dimensions – Dimensions – Suction cup with connector VASB-...-NBR, protective bellows

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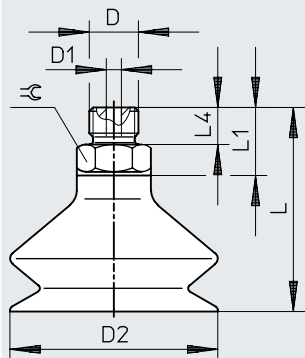
[1] Sealing ring OL

	D	D1 Ø	D2 Ø	L	L1	L2	L3	≈
VASB-8-...-NBR	M5	2	8	22,5	11,3	2,85	19,65	8
VASB-15-...-NBR	G1/8	3	15	25,2	12	4,7	20,5	13
VASB-30-...-NBR	G1/8	3	30	34,3	12	4,7	29,6	13
VASB-40-...-NBR	G1/4	4	40	43,4	17,4	5,8	37,6	17
VASB-55-...-NBR	G1/4	4	55	52,4	17,4	5,8	46,6	17
VASB-75-...-NBR	G1/4	4	75	43,5	17	5,8	37,7	17
VASB-100-...-NBR	G1/4	4	100	44	17	5,8	38,2	17
VASB-125-...-NBR	G3/8	7	125	60	20	6	54	19

Dimensions

Dimensions – Dimensions – Suction cup VASB-...-SI-B, protective bellows

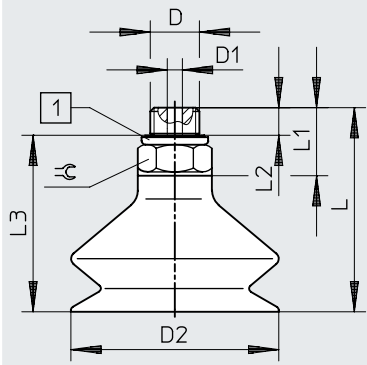
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	D	D1 Ø	D2 Ø	L	L1	L4	≅
VASB-8-...-SI-B	M5	2	8	22,5	11,5	4,3	8
VASB-15-...-SI-B	G1/8	3	15	25,5	12	6,5	13
VASB-30-...-SI-B	G1/8	3	30	34	12	6,5	13
VASB-40-...-SI-B	G1/4	4	40	43	17	8	17
VASB-55-...-SI-B	G1/4	4	55	52	17	8	17
VASB-75-...-SI-B	G1/4	4	75	43,7	14,2	8	17
VASB-100-...-SI-B	G1/4	4	100	43,7	14,2	8	17
VASB-125-...-SI-B	G3/8	7	125	60	16,4	9	19

Dimensions

Dimensions – Dimensions – Vacuum cup VASB-...PUR-B, bellows Download CAD data www.festo.com



	D	D1 Ø	D2 Ø	L	L1	L2	L3	≈
VASB-8-...-PUR-B	M5	2	8	22,5	11,5	3,55	18,95	8
VASB-15-...-PUR-B	G1/8	3	15	25,5	12	4,7	20,8	13
VASB-30-...-PUR-B	G1/8	3	30	34	12	4,7	29,3	13
VASB-40-...-PUR-B	G1/4	4	40	43	17	5,8	37,2	17
VASB-55-...-PUR-B	G1/4	4	55	52	17	5,8	46,2	17
VASB-75-...-PUR-B	G1/4	4	75	43,5	17	5,8	37,7	17
VASB-100-...-PUR-B	G1/4	4	100	43,5	17	5,8	37,7	17
VASB-125-...-PUR-B	G3/8	7	125	60	20	6	54	19

Ordering data

Ordering data – Suction cup with connector VAS-...-S-PUR-B, vacuum connection on the side				
Suction cup diameter	Vacuum connection	Product weight	Part no.	Type
8 mm	M5	4 g	8025969	VAS-8-M5-S-PUR-B

Ordering data – Suction cup with connector VAS-...-NBR					
	Suction cup diameter	Vacuum connection	Product weight	Part no.	Type
	2 mm	M3	1 g	173438	VAS-2-M3-NBR
	5 mm	M5	2 g	173439	VAS-5-M5-NBR
	8 mm		4 g	34588	VAS-8-M5-NBR
	10 mm		3 g	173440	VAS-10-M5-NBR
	15 mm	G1/8	11 g	36142	VAS-15-1/8-NBR
	30 mm		13 g	34587	VAS-30-1/8-NBR
	40 mm	G1/4	26 g	36143	VAS-40-1/4-NBR
	55 mm		32 g	36144	VAS-55-1/4-NBR
	75 mm		76 g	36145	VAS-75-1/4-NBR
	100 mm		138 g	34586	VAS-100-1/4-NBR
	125 mm	G3/8	152 g	152605	VAS-125-3/8-NBR

Ordering data – Suction cup with connector VAS-...-SI-B/PUR-B					
	Suction cup diameter	Vacuum connection	Product weight	Part no.	Type
	8 mm	M5	2 g	1377781	VAS-8-M5-SI-B
	10 mm			1385610	VAS-10-M5-SI-B
	15 mm	G1/8	4 g	1376604	VAS-15-1/8-SI-B
	30 mm		5 g	1377752	VAS-30-1/8-SI-B
	40 mm	G1/4	14 g	1379454	VAS-40-1/4-SI-B
	55 mm		19 g	1379348	VAS-55-1/4-SI-B
	75 mm		62 g	1382165	VAS-75-1/4-SI-B
	100 mm		116 g	1386376	VAS-100-1/4-SI-B
	125 mm	G3/8	214 g	1415120	VAS-125-3/8-SI-B

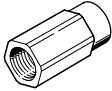
Ordering data – Suction cup with connector VASB-...-NBR, protective bellows					
	Suction cup diameter	Vacuum connection	Product weight	Part no.	Type
	8 mm	M5	4 g	35410	VASB-8-M5-NBR
	15 mm	G1/8	11 g	35411	VASB-15-1/8-NBR
	30 mm		15 g	35412	VASB-30-1/8-NBR
	40 mm	G1/4	30 g	35413	VASB-40-1/4-NBR
	55 mm		42 g	35414	VASB-55-1/4-NBR
	75 mm		95 g	35415	VASB-75-1/4-NBR
	100 mm			35416	VASB-100-1/4-NBR
	125 mm	G3/8	207 g	152609	VASB-125-3/8-NBR

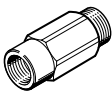
Ordering data – Suction cup with connector VASB-...-SI-B/PUR-B, protective bellows					
	Suction cup diameter	Vacuum connection	Product weight	Part no.	Type
	8 mm	M5	4 g	1395637	VASB-8-M5-PUR-B
				1394696	VASB-8-M5-SI-B
	15 mm	G1/8		1377689	VASB-15-1/8-SI-B
			11 g	1395671	VASB-15-1/8-PUR-B
	30 mm		7 g	1377637	VASB-30-1/8-SI-B
			14 g	1395690	VASB-30-1/8-PUR-B
	40 mm	G1/4	18 g	1372910	VASB-40-1/4-SI-B
			30 g	1395691	VASB-40-1/4-PUR-B
	55 mm		29 g	1373812	VASB-55-1/4-SI-B

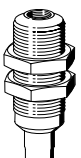
Ordering data

Ordering data – Suction cup with connector VASB -...-SI-B/PUR-B, protective bellows					
	Suction cup diameter	Vacuum connection	Product weight	Part no.	Type
	55 mm	G1/4	39 g	1396063	VASB-55-1/4-PUR-B
	75 mm		78 g	1378427	VASB-75-1/4-SI-B
			90 g	1396064	VASB-75-1/4-PUR-B
	100 mm		132 g	1382277	VASB-100-1/4-SI-B
			155 g	1396066	VASB-100-1/4-PUR-B
	125 mm	G3/8	247 g	1387375	VASB-125-3/8-SI-B
			294 g	1396067	VASB-125-3/8-PUR-B

Accessories

Adapter AD			
	Short type code	Part no.	Type
	AD	160256	AD-M12X1,25-1/4
		157334	AD-M10X1,25-1/4

Vacuum security valve ISV			
	Short type code	Part no.	Type
	ISV	33970	ISV-1/4

Length compensator VAL			
	Design	Part no.	Type
	Vacuum port on top	151211	VAL-1/4-20