



FIPA Vacuum cups for the packaging industry

> The packaging industry uses primarily wear-resistant vacuum cup materials which are resilient and flexible enough for complex applications (e.g. erection of boxes, handling of flexible goods, goods packaged in foil, palletising, etc.)



Vinyl bellows cups, 1.5 and 2.5 folds - SBV

- > Wear-resistant material - long service life
- > Good adaptation to curved or flexible product surfaces

1.5 folds - SBV 1

- > Diameter: 5 - 70 mm

> See page 113



2.5 folds - SBV 2

- > Diameter: 4 - 50 mm

> See page 116



Vinyl oval bellows cups - SO-BV

- > Compensates for height differences and enables gentle set down on the workpiece
- > Good adaptation to curved or flexible product surfaces
- > Wear-resistant material - long service life
- > Dimensions: 35x28 - 100x55 mm

> See page 149



Bellows vacuum cups 1.5 and 2.5 folds with special connection for standard packaging machines - SV-SB

- > Smooth suspension for gentle product handling
- > Available in NR and silicone (FDA-approved)
- > Diameter: 16 - 40 mm

> See page 130

Vacuum cups specially optimised for handling foils and foil-packaged goods can be found on p. 20



FIPA Vacuum cups for the packaging industry



Varioflex® bellows cups, 1.5 and 2.5 folds - SP-BX

- > Excellent service life and superior retention force
- > Special polyurethane in two degrees of hardness (60° Shore A black, 30° Shore A red)
- > Soft lip for optimal sealing
- > Long service life and low wear
- > Short cycle times and high process reliability
- > Low marking

1.5 folds - SP-BX1

- > Good adaptation to uneven product surfaces
- > Supports (∅ 20 - 75 mm) stabilise the product
- > Diameter: 15 - 75 mm

> See page 107



2.5 folds - SP-BX2

- > Good adaptation to uneven product surfaces
- > Large range of height and angle adjustment
- > Diameter: 15 - 75 mm

> See page 110



Silicone flat cups (FDA-approved) for use with tubes - SV-T

- > With straight or conical opening
- > Direct machine connection through pipe mounting
- > Handling of cans or tubes
- > Diameter: 11 - 46 mm

> See page 60



Silicone rectangular bellows cups, 2.5 and 3.5 folds - SV-RB

- > Handling of flexible parts and workpieces with uneven surfaces or products with flexible outer packaging
- > FDA-approved vacuum cup material
- > Dimensions: 52x25 - 80x50 mm

> See page 150

Vacuum cups specially optimised for handling foils and foil-packaged goods can be found on p. 20



Vinyl bellows cups, 1.5 folds - SBV 1




Product Description


Durable bellows vacuum cups with 1.5 folds from snug-fitting, wear-resistant material. Very well suited for handling abrasive products such as cardboard. Flexible material enables low-leakage gripping of highly flexible products such as foil-packaged goods. Connection via plug-in nipple.

Advantage

- > Bellows compensate differences in height and enable good adaptation to curved or uneven product surfaces
- > Flexible, soft lips
- > Long life cycle
- > Cost-effective replacement of worn seals

Technical data

Item no.	Model / Lip dimensions		Number of folds	Material / Colour
23.005.095.*	SBV 1-5	2	1.5	Vinyl (bl)
23.007.112.*	SBV 1-7	2	1.5	Vinyl (bl)
23.013.097.*	SBV 1-13	5	1.5	Vinyl (bl)
23.015.098.*	SBV 1-15	5	1.5	Vinyl (bl)
23.019.109.*	SBV 1-19	8	1.5	Vinyl (bl)
23.020.114.*	SBV 1-20	6	1.5	Vinyl (bl)
23.022.028.*	SBV 1-22	8	1.5	Vinyl (bl)
23.028.113.*	SBV 1-28	9	1.5	Vinyl (bl)
23.030.107.*	SBV 1-30	10.5	1.5	Vinyl (bl)
23.031.192.*	SBV 1-31	6	1.5	Vinyl (bl)
23.035.111.*	SBV 1-35	12	1.5	Vinyl (bl)
23.052.116.*	SBV 1-52	6	1.5	Vinyl (bl)
23.070.060.*	SBV 1-70	20	1.5	Vinyl (bl)

Continued on the next page 

* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760



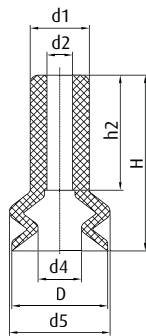
Series | Bellows vacuum cups SB

Vinyl bellows cups, 1.5 folds - SBV 1

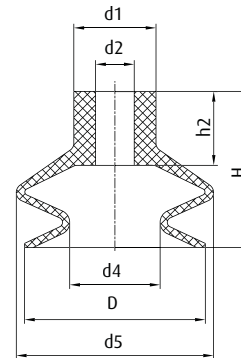
Accessories

Item no.	Suitable fittings					
	M5-male	M6-male	G1/8-male	G1/8-female	G1/4-male	G1/4-female
23.005.095.*	270.195 (p.409)	--	--	--	--	--
23.007.112.*	270.001 (p.409)	--	--	--	--	--
23.013.097.*	270.013 (p.410)	270.103 (p.413)	270.003 (p.416)	270.015 (p.421)	--	--
23.015.098.*	270.134 (p.409)	270.104 (p.413)	270.033 (p.416)	270.478 (p.421)	--	--
23.019.109.*	--	--	270.030 (p.419)	270.019 (p.423)	270.274 (p.427)	270.275 (p.432)
23.020.114.*	270.134 (p.409)	270.104 (p.413)	270.033 (p.416)	270.478 (p.421)	--	--
23.022.028.*	270.013 (p.410)	270.103 (p.413)	270.003 (p.416)	270.015 (p.421)	270.194 (p.425)	--
23.028.113.*	270.134 (p.409)	270.104 (p.413)	270.033 (p.416)	270.478 (p.421)	--	--
23.030.107.*	--	270.312/19 (p.414)	270.030 (p.419)	270.019 (p.423)	270.274 (p.427)	270.275 (p.432)
23.031.192.*	--	270.312/19 (p.414)	270.030 (p.419)	270.019 (p.423)	270.274 (p.427)	270.275 (p.432)
23.035.111.*	270.443 (p.410)	--	270.238 (p.417)	270.110 (p.422)	270.534 (p.425)	--
23.052.116.*	--	--	270.132 (p.417)	--	270.208 (p.425)	270.452 (p.431)
23.070.060.*	--	--	--	--	270.184 (p.431)	--

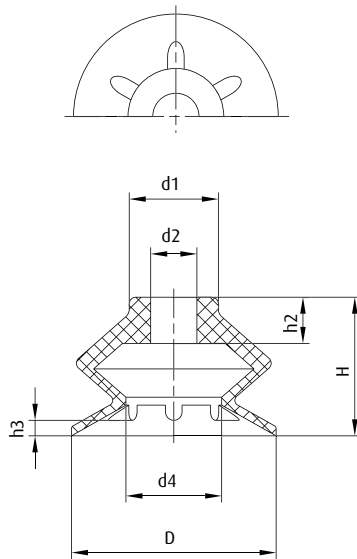
Dimensions



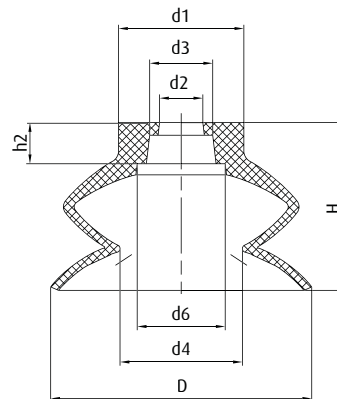
Drawing A



Drawing B



Drawing C



Drawing D

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760

Series | Bellows vacuum cups SB

Vinyl bellows cups, 1.5 folds - SBV 1



Item no.	Drawing	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]	Ø d3 [mm]	Ø d4 [mm]	Ø d5 [mm]	Ø d6 [mm]	H [mm]	h2 [mm]	h3 [mm]
23.005.095._*	A	4.5	3	1.5	--	2.5	4	--	12.5	10	--
23.007.112._*	A	6	3.7	1.6	--	2.5	6.5	--	11	7	--
23.013.097._*	B	13	7.5	3.5	--	7.5	12.5	--	14.5	6.5	--
23.015.098._*	B	15.5	9	3.4	--	8.5	17	--	20.5	11.5	--
23.019.109._*	B	19	13	7	--	12	19	--	18	7.5	--
23.020.114._*	B	20	9.5	3.5	--	11	19	--	20	9.5	--
23.022.028._*	A	22	10	4.5	--	11	24	--	19	9	--
23.028.113._*	B	28	12.5	3.5	--	13	26	--	21	9	--
23.030.107._*	B	30	13	7	--	15	29.5	--	22	7	--
23.031.192._*	C	31	13.5	7	--	14.5	--	--	21	7	2.4
23.035.111._*	B	35	17	6	--	20	33	--	30	16	--
23.052.116._*	B	51	18.5	9.5	--	30	50	--	41	21	--
23.070.060._*	D	70	34	11.5	17	33	--	24	45	11	--

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Average holding forces for vacuum cups you will find on page 760



Series | Bellows vacuum cups SB

Vinyl bellows cups, 2.5 folds - SBV 2

Vinyl bellows cups, 2.5 folds - SBV 2




Product Description

Durable bellows vacuum cups with a long lift, made of snug-fitting, wear-resistant material. Very well suited for handling abrasive products such as cardboard. Flexible material enables low-leakage gripping of highly flexible products such as foil-packaged goods. Connection via plug-in nipple.


Advantage

- > Long vacuum cup lift and good adaptation to curved or uneven product surfaces
- > Flexible, soft lips
- > Long life cycle
- > Cost-effective replacement of worn seals

Technical data

Item no.	Model / Lip dimensions		Number of folds	Material / Colour
21.004.142.*	SBV 2-4	1.3	2.5	Vinyl (bl)
21.006.001.*	SBV 2-6	3.5	2.5	Vinyl (bl)
21.010.070.*	SBV 2-10	5	2.5	Vinyl (bl)
21.018.068.*	SBV 2-18	11	2.5	Vinyl (bl)
21.023.066.*	SBV 2-23	9	2.5	Vinyl (bl)
21.029.069.*	SBV 2-29	10	2.5	Vinyl (bl)
21.032.082.*	SBV 2-32	14	2.5	Vinyl (bl)
21.040.027.*	SBV 2-40	16	2.5	Vinyl (bl)
21.050.084.*	SBV 2-50	20	2.5	Vinyl (bl)

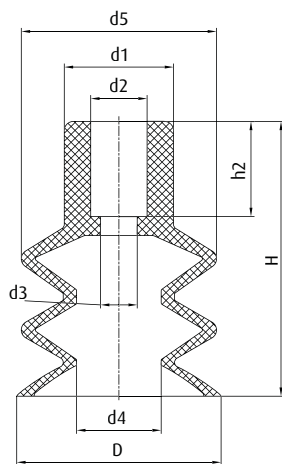
Accessories

Item no.	 Suitable fittings						
	M5-male	M6-male	M10-male	G1/8-male	G1/8-female	G1/4-male	G1/4-female
21.004.142.*	270.195 (p.409)	--	--	--	--	--	--
21.006.001.*	270.013 (p.410)	270.103 (p.413)	--	270.003 (p.416)	270.015 (p.421)	--	--
21.010.070.*	270.013 (p.410)	270.103 (p.413)	--	270.003 (p.416)	270.015 (p.421)	--	--
21.018.068.*	270.013 (p.410)	270.103 (p.413)	--	270.003 (p.416)	270.015 (p.421)	270.194 (p.425)	--
21.023.066.*	--	--	270.177 (p.416)	--	--	270.451 (p.426)	270.452 (p.431)
21.029.069.*	--	--	--	270.132 (p.417)	270.114 (p.422)	270.043 (p.425)	270.178 (p.431)
21.032.082.*	--	--	270.177 (p.416)	--	--	270.451 (p.426)	270.452 (p.431)
21.040.027.*	--	--	270.177 (p.416)	--	--	270.451 (p.426)	270.452 (p.431)
21.050.084.*	--	--	270.177 (p.416)	--	--	270.451 (p.426)	270.452 (p.431)

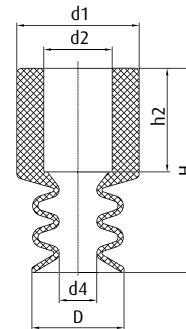
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Dimensions



Drawing A



Drawing B

Item no.	Drawing	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]	Ø d3 [mm]	Ø d4 [mm]	Ø d5 [mm]	H [mm]	h2 [mm]
21.004.142._*	A	3.5	3	1.5	1.5	2	4.5	12.5	9
21.006.001._*	B	6.5	8.5	5	--	2.5	--	14	7
21.010.070._*	B	10	10	5	--	5	--	15.5	7.5
21.018.068._*	A	19	10	5	5	9	19	24	9
21.023.066._*	A	23	17	11	11	13.5	23	26	12
21.029.069._*	A	29	15.5	8	5	12	28	39	13.5
21.032.082._*	A	32	17	11	11	19.5	32	35	14
21.040.027._*	A	40	20	10.5	8	18.5	40	53	13.5
21.050.084._*	A	50	19.5	10.5	6.5	30	50	49	13.5

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Average holding forces for vacuum cups you will find on page 760



Vinyl oval bellows cups - SO-BV



Product Description

Durable oval vacuum cup with height adjustment made of snug-fitting, wear-resistant material. Very well suited for handling abrasive products such as cardboard. Flexible material enables low-leakage gripping of highly flexible products such as foil-packaged goods. Connection via plug-in nipple or vulcanised carrier plate.

Advantage

- > Significantly increased suction force compared to round vacuum cups of the same width
- > Bellows compensates for differences in height and enables good adaptation to curved or uneven product surfaces
- > Flexible, soft lips
- > Long life cycle

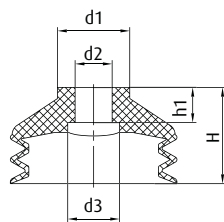
Technical data

Item no.	Model / Lip dimensions		Number of folds	Material / Colour
138.35x28.001.*	SO-BV-35x28	9	2.5	Vinyl (bl)
138.45x28.013.*	SO-BV-45x28	9	2.5	Vinyl (bl)
130.97x55.126.*	SO-BV-100x55	11	1.5	Vinyl (bl)

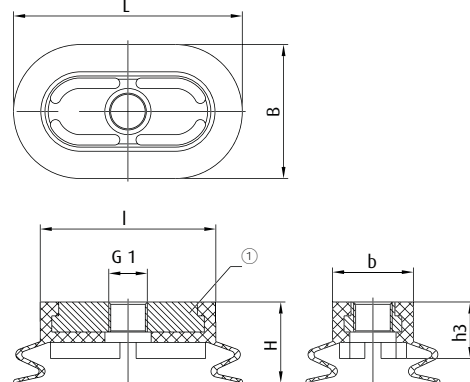
Accessories

Item no.	Suitable fittings		
	M10-male	G1/4-male	G1/4-female
138.35x28.001.*	270.177 (p.416)	270.451 (p.426)	270.452 (p.431)
138.45x28.013.*	270.177 (p.416)	270.451 (p.426)	270.452 (p.431)
130.97x55.126.*	--	--	--

Dimensions



Drawing A



Drawing B

① = Aluminium

Item no.	Drawing	L [mm]	B [mm]	l [mm]	b [mm]	Ø d1 [mm]	Ø d2 [mm]	Ø d3 [mm]	G1	H [mm]	h1 [mm]	h3 [mm]
138.35x28.001.*	A	35	28	--	--	19.5	10	14	--	24	8.5	--
138.45x28.013.*	A	45	28	--	--	19.5	10	14	--	26	9.5	--
130.97x55.126.*	B	99	58	76	35	--	--	--	G3/8	35	--	25



Series | Bellows vacuum cups SB

Bellows vacuum cups, 1.5 and 2.5 folds - SV-SB

Bellows vacuum cups, 1.5 and 2.5 folds - SV-SB




Product Description

Bellows vacuum cups, 1.5 and 2.5 folds, for standard packaging machines. Soft, flexible sealing lip for smooth contact. FDA-compliant materials (SI).


Advantage

> Gentle handling of sensitive products

Technical data

Item no.	Model / Lip dimensions		Number of folds	Material / Colour
Bellows vacuum cups 1.5 folds - SV-SB1				
23.016.232._*	SV-SB1-16	6	1.5	SI (tr)
23.030.230._*	SV-SB1-30	7	1.5	NR (gr)
Bellows vacuum cups 2.5 folds - SV-SB2				
21.030.030._*	SV-SB2-30	13	2.5	SI (tr), NR (bl)
21.040.132._*	SV-SB2-40	11	2.5	SI (tr), SI (bl)

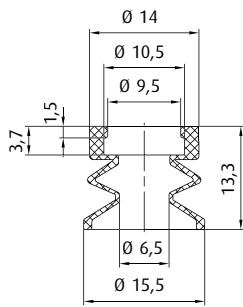
Accessories

Item no.	 Suitable fittings				
	M5-male	M6-male	M10-male	G1/4-male	G1/4-female
Bellows vacuum cups 1.5 folds - SV-SB1					
23.016.232._*	270.311 (p.411)	270.312/19 (p.414)	--	--	--
23.030.230._*	--	--	270.177 (p.416)	270.451 (p.426)	270.452 (p.431)
Bellows vacuum cups 2.5 folds - SV-SB2					
21.030.030._*	--	--	270.177 (p.416)	270.451 (p.426)	270.452 (p.431)
21.040.132._*	--	--	--	--	--

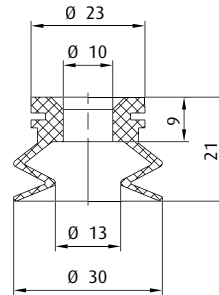
* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760



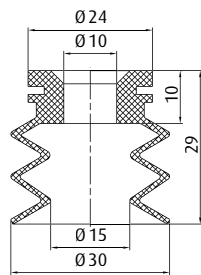
Dimensions



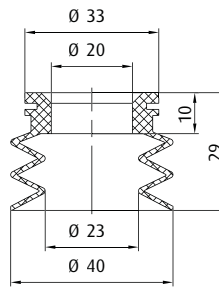
Drawing A



Drawing B



Drawing C



Drawing D

Item no.	Drawing
Bellows vacuum cups 1.5 folds - SV-SB1	
23.016.232._*	A
23.030.230._*	B
Bellows vacuum cups 2.5 folds - SV-SB2	
21.030.030._*	C
21.040.132._*	D

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Average holding forces for vacuum cups you will find on page 760



Varioflex® bellows cups, 1.5 folds - SP-BX1

NEW



COMPOSITE MATERIAL 60°/30°

Product Description

Bellows vacuum cups with 1.5 folds made of an extremely wear-resistant polymer.
Soft, flexible sealing lip in 30° Shore A (red).
Stable body in 60° Shore A (black).
Cleats stabilise the product.

Advantage

- > Long life cycle reduces machine downtimes
- > Perfect sealing performance on rough or uneven surface
- > High stability and fast reset
- > Oil and Ozone resistant
- > Extremely low-marking
- > Bellows compensate for height differences
- > Cleats allow for fast acceleration




Notes:

Explanation of the type description:

- > SP-BX1 = series name of the bellows vacuum cup with 1.5 folds
- > -xx = nominal diameter
- > Example: SP-BX1-15 = bellows vacuum cup with 1.5 folds and a nominal diameter of 15 mm

Technical data

Accessories

Model / Lip dimensions	Ø [mm]	Connection thread 1	Item no.	Connection thread 2	Item no.	Connection thread 3	Item no.		Usage temperature [°C]	Spare cup
Bellows vacuum cups 1.5 folds - SP-BX1 fully assembled with fitting										
										
SP-BX1-15	16	M5-male	22.016.253.16	M6-male	22.016.254.16	--	--	4.5	10 - 50	23.016.263.16
SP-BX1-20	21	G1/8-male	22.021.255.16	--	--	--	--	5	10 - 50	23.021.264.16
SP-BX1-25	26	G1/8-male	22.026.256.16	--	--	--	--	5	10 - 50	23.026.265.16
SP-BX1-35	37	G1/8-female	22.037.257.16	G1/4-male	22.037.258.16	--	--	9	10 - 50	23.037.266.16
SP-BX1-50	53	G1/8-female	22.053.259.16	G1/4-male	22.053.260.16	G3/8-male	22.053.261.16	10	10 - 50	23.053.267.16
SP-BX1-75	75	G3/8-male	22.075.262.16	G3/8-female	22.075.263.16	--	--	18	10 - 50	--

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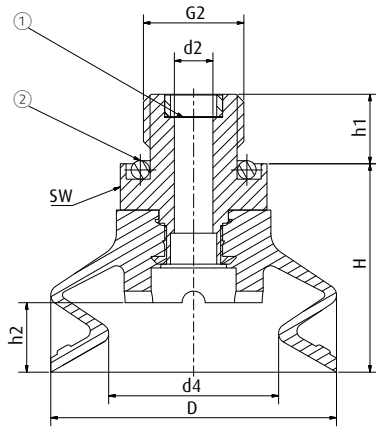
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Average holding forces for vacuum cups you will find on page 760



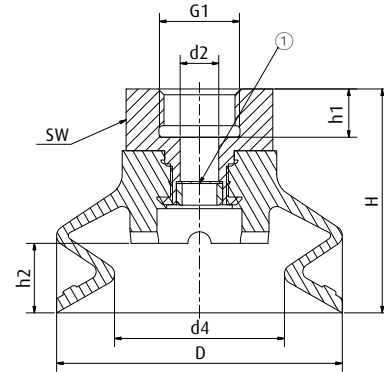
Series | Bellows vacuum cups SB

Varioflex® bellows cups, 1.5 folds - SP-BX1

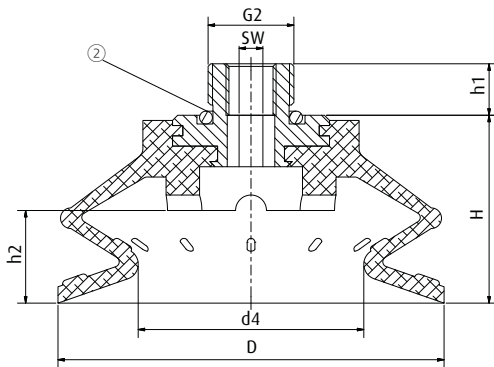
Dimensions



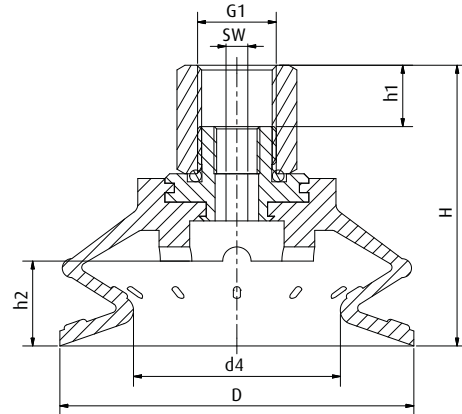
Drawing A



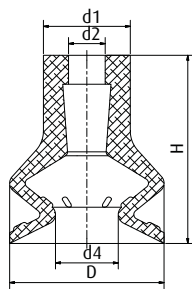
Drawing B



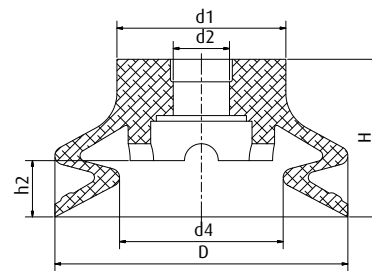
Drawing C



Drawing D



Drawing E



Drawing F

① = Filter screen ② = O-ring

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Average holding forces for vacuum cups you will find on page 760

Series | Bellows vacuum cups SB

Varioflex® bellows cups, 1.5 folds - SP-BX1



Item no.	Drawing	∅ D [mm]	∅ d1 [mm]	∅ d2 [mm]	∅ d4 [mm]	G1 (female)	G2 (male)	H	h1 [mm]	h2 [mm]	SW
Bellows vacuum cups 1.5 folds - SP-BX1 fully assembled with fitting											
22.016.253.*	A	16	--	2.5	6.5	--	M5	25	3.6	--	8
22.016.254.*	A	16	--	2.5	6.5	--	M6	24	6	--	13
22.021.255.*	A	21	--	4	12	--	G1/8	19	7	5	13
22.026.256.*	A	26	--	4	14.5	--	G1/8	19	7	5	13
22.037.257.*	B	37	--	5	22	G1/8	--	29	6.3	9	19
22.037.258.*	A	37	--	5	22	--	G1/4	27	9	9	19
22.053.259.*	B	53	--	8	32.5	G1/8	--	35	9	10	22
22.053.260.*	A	53	--	6	32.5	--	G1/4	32	9	10	22
22.053.261.*	A	53	--	6	32.5	--	G3/8	32	10	10	22
22.075.262.*	C	75	--	--	44	--	G3/8	36.5	10	18	8
22.075.263.*	D	75	--	--	44	G3/8	--	55	13	18	8
Spare cups											
23.016.263.*	E	16	9	4	6.5	--	--	19.5	--	--	--
23.021.264.*	F	21	11	5	12	--	--	14	--	5	--
23.026.265.*	F	26	15	5	14.5	--	--	14	--	5	--
23.037.266.*	F	37	20	7	22	--	--	21	--	9	--
23.053.267.*	F	53	26	10.5	32.5	--	--	26	--	10	--

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



Series | Bellows vacuum cups SB

Varioflex® bellows cups, 2.5 folds - SP-BX2

Varioflex® bellows cups, 2.5 folds - SP-BX2

NEW



COMPOSITE MATERIAL 60°/30°



Product Description

Bellows vacuum cups with 2.5 folds made of an extremely wear-resistant polymer.
Soft, flexible sealing lip in 30° Shore A (red).
Stable body in 60° Shore A (black).

Advantage





- > Long life cycle reduces machine downtimes
- > Perfect sealing performance on rough or uneven surface
- > High stability and fast reset
- > Oil and Ozone resistant
- > Extremely low-marking
- > Excellent height and angle compensation
- > Optional: Filter disc from Ø 26 mm installed between the bellows

Notes:

Explanation of the type description:

- > SP-BX2 = series name of the bellows vacuum cup with 2.5 folds
- > -xx = nominal diameter
- > Example: SP-BX2-15 = bellows vacuum cup with 2.5 folds and a nominal diameter of 15 mm

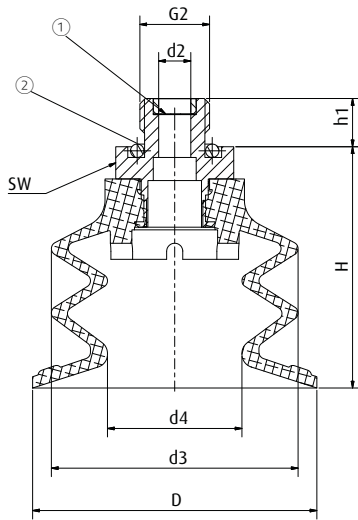
Technical data

Model / Lip dimensions	Ø [mm]	Connection thread 1	Item no.	Connection thread 2	Item no.	Connection thread 3	Item no.	Usage temp. [°C]	Accessories
Bellows vacuum cups 2.5 folds - SP-BX2 fully assembled with fitting									Spare cup
									
SP-BX2-15	16	M5-male	20.016.145.16	M6-male	20.016.146.16	--	--	5.5 10 - 50	21.016.175.16
SP-BX2-20	21	G1/8-male	20.021.147.16	--	--	--	--	6.5 10 - 50	21.021.176.16
SP-BX2-25	26	G1/8-male	20.026.148.16	--	--	--	--	8 10 - 50	21.026.177.16
SP-BX2-35	37	G1/8-female	20.037.149.16	G1/4-male	20.037.150.16	--	--	14 10 - 50	21.037.177.16
SP-BX2-50	53	G1/8-female	20.053.151.16	G1/4-male	20.053.152.16	G3/8-male	20.053.153.16	19 10 - 50	21.053.178.16
SP-BX2-75	77	G3/8-male	20.077.154.16	G3/8-female	20.077.155.16	--	--	25 10 - 50	--
Bellows vacuum cups 2.5 folds - SP-BX2 fully assembled with fitting and filter									Spare cup
									
SP-BX2-25	26	G1/8-male	20.026.148.16-FI	--	--	--	--	8 10 - 50	21.026.177.16-FI
SP-BX2-35	37	G1/8-female	20.037.149.16-FI	G1/4-male	20.037.150.16-FI	--	--	14 10 - 50	21.037.177.16-FI
SP-BX2-50	53	G1/8-female	20.053.151.16-FI	G1/4-male	20.053.152.16-FI	G3/8-male	20.053.153.16-FI	19 10 - 50	21.053.178.16-FI
SP-BX2-75	77	G3/8-male	20.077.154.16-FI	G3/8-female	20.077.155.16-FI	--	--	25 10 - 50	--

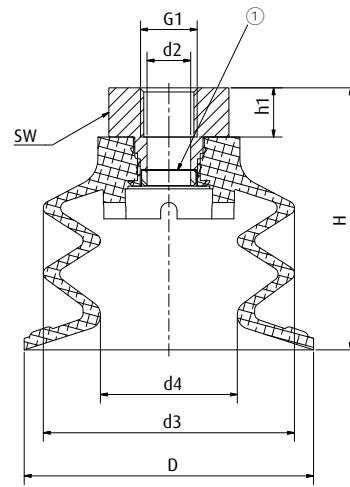
* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



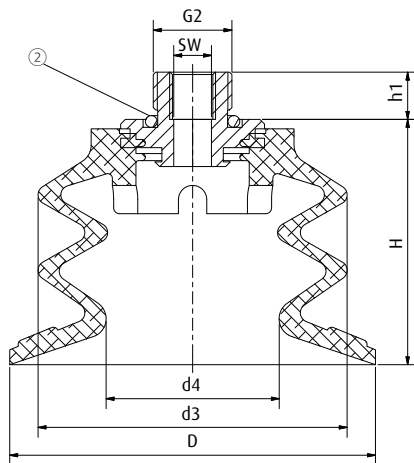
Dimensions



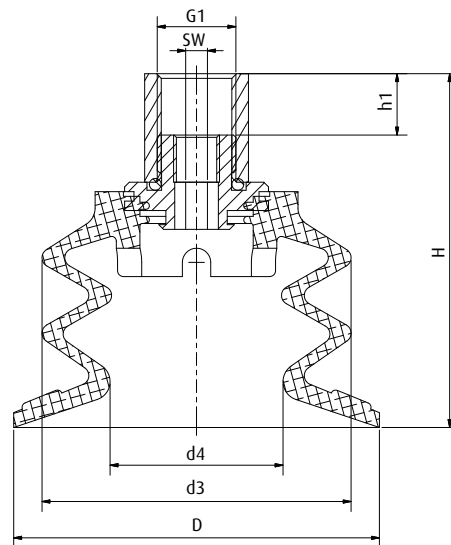
Drawing A



Drawing B



Drawing C



Drawing D

① = Filter screen ② = O-ring

Continued on the next page →

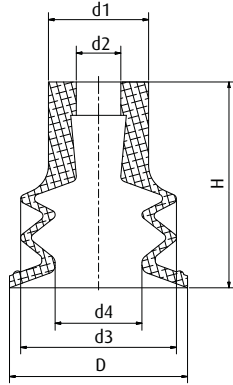
* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760



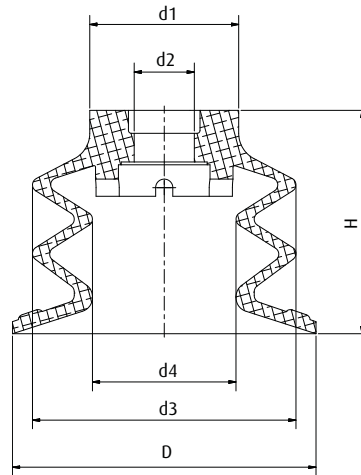
Series | Bellows vacuum cups SB

Varioflex® bellows cups, 2.5 folds - SP-BX2

Dimensions



Drawing E



Drawing F

① = Filter screen ② = O-ring

Item no.	Drawing	∅ D [mm]	∅ d1 [mm]	∅ d2 [mm]	∅ d3 [mm]	∅ d4 [mm]	G1 (female)	G2 (male)	H	h1 [mm]	SW
Bellows vacuum cups 2.5 folds - SP-BX2 fully assembled with fitting											
20.016.145.*	A	16	--	2.8	14	9	--	M5	24	4	8
20.016.146.*	A	16	--	2.5	14	9	--	M6	23	6	13
20.021.147.*	A	21	--	4	20	12	--	G1/8	20.2	7	13
20.026.148.*	A	26	--	4	23	12	--	G1/8	24	7	13
20.037.149.*	B	37	--	5	31	18	G1/8	--	34.8	6.3	19
20.037.150.*	A	37	--	5	31	18	--	G1/4	32.8	9	19
20.053.151.*	B	53	--	8	46	25	G1/8	--	48	9	22
20.053.152.*	A	53	--	6	46	25	--	G1/4	45	9	22
20.053.153.*	A	53	--	6	46	25	--	G3/8	45	10	22
20.077.154.*	C	77.5	--	--	65.5	37	--	G3/8	52	10	8
20.077.155.*	D	77.5	--	--	65.5	37	G3/8	--	75	13	8
Spare cups											
21.016.175.*	E	16	9	4	14	9	--	--	18.5	--	--
21.021.176.*	F	21	11	5	20	12	--	--	15.2	--	--
21.026.177.*	F	26	15	5	23	12	--	--	19	--	--
21.037.177.*	F	37	20	7	31	18	--	--	27	--	--
21.053.178.*	F	53	26	10.5	46	25	--	--	39	--	--

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



Series | Flat vacuum cups SF

Vacuum cups for handling tubes - SV-T

Vacuum cups for handling tubes - SV-T



Product Description

Special FDA-compliant seals for pipe mounting

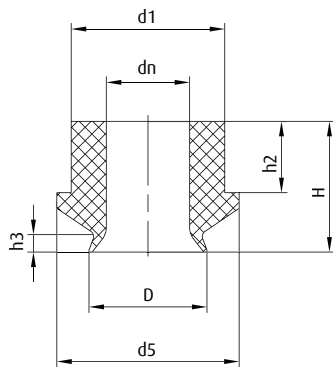
Technical data

Item no.	Model / Lip dimensions	Material / Colour
With straight passage - SV-TG		
107.019.076.*	SV-TG-19	SI (tr)
107.019.112.*	SV-TG-20	SI (tr)
107.022.107.*	SV-TG-22	SI (tr)
107.025.109.*	SV-TG-25	SI (tr)
107.026.111.*	SV-TG-26	SI (tr)
107.028.108.*	SV-TG-28	SI (tr)
107.032.113.*	SV-TG-32	SI (tr)
107.037.114.*	SV-TG-37	SI (tr)
107.045.115.*	SV-TG-46	SI (tr)
With conical passage - SV-TK		
107.011.103.*	SV-TK-11	SI (tr)
107.012.106.*	SV-TK-12	SI (tr)
107.013.101.*	SV-TK-13	SI (tr)
107.013.105.*	SV-TK-13A	SI (tr)
107.015.102.*	SV-TK-15	SI (tr)
107.017.066.*	SV-TK-17	SI (tr)
107.018.104.*	SV-TK-18	SI (tr)

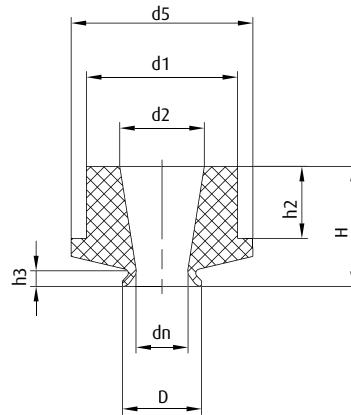
* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



Dimensions



Drawing A



Drawing B

Item no.	Drawing	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]	Ø d5 [mm]	Ø dn [mm]	H [mm]	h2 [mm]	h3 [mm]
With straight passage - SV-TG									
107.019.076.*	A	18.5	25	--	30	14	21	12	2.2
107.019.112.*	A	19.5	25	--	30	14	22	12	2.9
107.022.107.*	A	22	25	--	30	17	21.5	12	2.5
107.025.109.*	A	25	25	--	31	17	22	12	2.6
107.026.111.*	A	26	25	--	30	17	23	12	5.5
107.028.108.*	A	28	25	--	30	19	24	12	5.5
107.032.113.*	A	32	32	--	40	25	25	13	2.3
107.037.114.*	A	37	45	--	53	29	31	17.5	2.7
107.045.115.*	A	46	45	--	54	37	32	17.5	--
With conical passage - SV-TK									
107.011.103.*	B	11	25	13.5	31	7.5	21	12	1.2
107.012.106.*	B	12.5	25	14	30	10.5	21	12	1.9
107.013.101.*	B	13	25	14	30	10.5	20	12	1.1
107.013.105.*	B	13	25	14	30	8.5	20	12	2.6
107.015.102.*	B	15	25	16	30	10.5	20	12	3
107.017.066.*	B	17.5	25	17	31	12.5	20	12	2.7
107.018.104.*	B	18	25	18	30	14	21	12	2.4

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



Series | Oval vacuum cups SO

Rectangular bellows vacuum cups - SV-RB

Rectangular bellows vacuum cups - SV-RB



Product Description

Bellows vacuum cups in rectangular design made of FDA-compliant material (SI). Particularly suitable for film-packaged products and filled pouches. Also available with wire stiffening. Connection via an interlocking snap-in carrier plate.

Advantage

- > Large suction surface due to rectangular design
- > Bellows compensate differences in height and enable good adaptation to curved or uneven product surfaces
- > Gentle attachment to the product
- > Good fit for irregularities and folds thanks to soft sealing lip

Ordering notes:

Optional: Wire strap reinforcement available.
When ordering, please add "-VERS" to item number

Technical data

Item no.	Model / Lip dimensions	Number of folds	Material / Colour	Accessories Wire strap reinforcement
Bellows vacuum cups, 2.5 folds, for cylindrical products				
201.79x29.002.*	SV-RB-79x29	16	SI (tr)	X 0020
Bellows vacuum cups, 2.5 folds, with flat sealing lip				
209.52x25.006.*	SV-RB-52x25	13	SI (tr)	X 0022
209.60x29.001.*	SV-RB-60x29	13	NBR (sw), SI (tr)	X 0024
Bellows vacuum cups, 3.5 folds, with thinly tapering, flexible sealing lip				
209.80x30.003.*	SV-RB-80x30	20	SI (tr)	X 0020
209.80x40.004.*	SV-RB-80x40	20	SI (tr)	X 0023
209.80x50.005.*	SV-RB-80x50	20	SI (tr)	X 0041

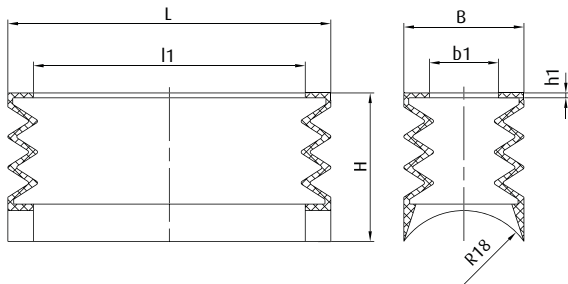
Accessories

Item no.	Suitable fittings	
	G1/8-female	G1/4-female
Bellows vacuum cups, 2.5 folds, for cylindrical products		
201.79x29.002.*	--	270.392 (p.439)
Bellows vacuum cups, 2.5 folds, with flat sealing lip		
209.52x25.006.*	270.508 (p.439)	--
209.60x29.001.*	--	270.509 (p.439)
Bellows vacuum cups, 3.5 folds, with thinly tapering, flexible sealing lip		
209.80x30.003.*	--	270.392 (p.439)
209.80x40.004.*	--	270.510 (p.439)
209.80x50.005.*	--	270.511 (p.439)

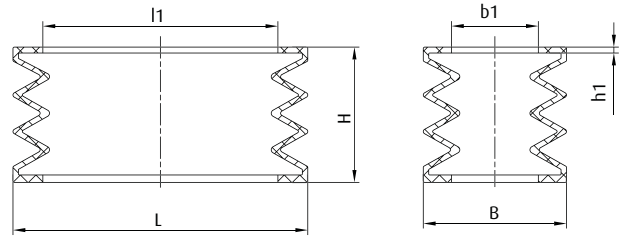
* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



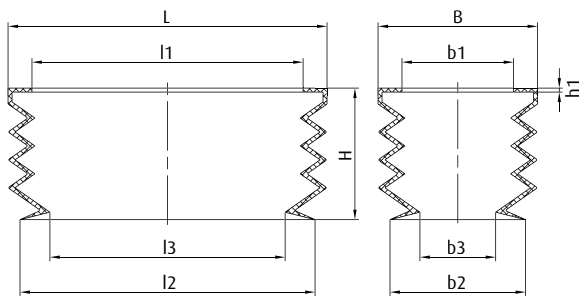
Dimensions



Drawing A



Drawing B



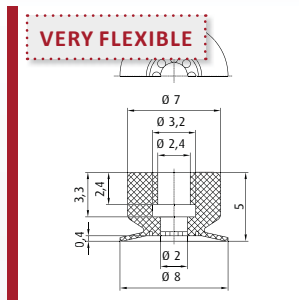
Drawing C

Item no.	Drawing	L [mm]	B [mm]	l1 [mm]	l2 [mm]	l3 [mm]	b1 [mm]	b2 [mm]	b3 [mm]	H [mm]	h1 [mm]
Bellows vacuum cups, 2.5 folds, for cylindrical products											
201.79x29.002.*	A	80	30	67	--	--	17	--	--	37	1.2
Bellows vacuum cups, 2.5 folds, with flat sealing lip											
209.52x25.006.*	B	53	26	40	--	--	13	--	--	28	1.2
209.60x29.001.*	B	60	29	48	--	--	17.5	--	--	27	1.2
Bellows vacuum cups, 3.5 folds, with thinly tapering, flexible sealing lip											
209.80x30.003.*	C	81	31	69	75	60	18	25	9	34	--
209.80x40.004.*	C	80	40	68	74	59	28	34	19	33	--
209.80x50.005.*	C	80	50	67	74	57	37	44	27	33	--

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



Flat vacuum cups with cleats for Films & Paper - SD-FA

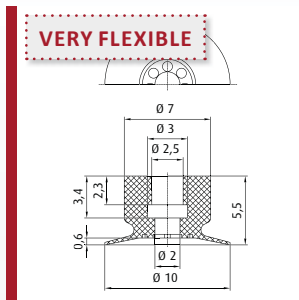


VERY FLEXIBLE

Item no. 104.008.070. *

Material
NBR (sw), SI-FS (r) 0.5 mm

Details see page 181

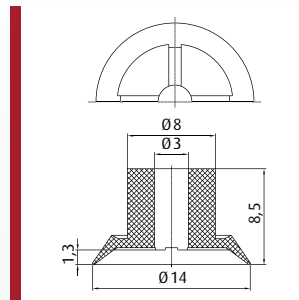


VERY FLEXIBLE

Item no. 104.010.071. *

Material
NBR (sw), SI-FS (r) 0.7 mm

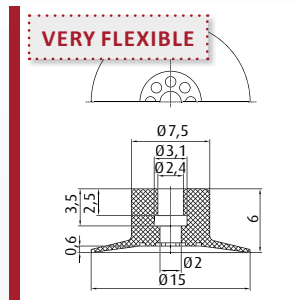
Details see page 184



Item no. 102.014.089. *

Material
NBR (sw) 1.5 mm

Details see page 188

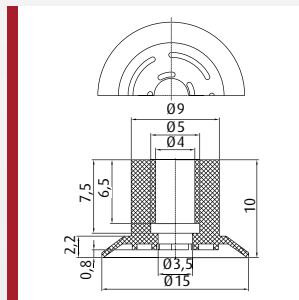


VERY FLEXIBLE

Item no. 104.015.072. *

Material
NBR (sw), SI-FS (r) 1.1 mm

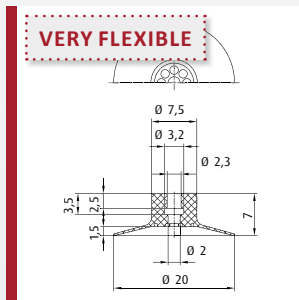
Details see page 190



Item no. 102.015.431. *

Material
SI (tr), NR (bg) 0.5 mm

Details see page 190

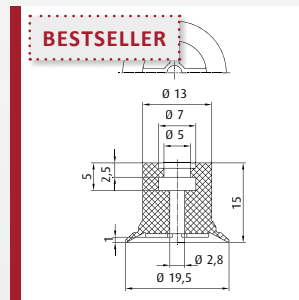


VERY FLEXIBLE

Item no. 104.020.073. *

Material
NBR (sw), SI-FS (r) 1.6 mm

Details see page 201

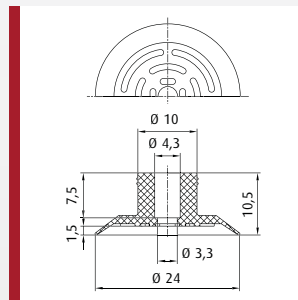


BESTSELLER

Item no. 102.020.083. *

Material
NBR (sw), SI (tr), SI (r) 1 mm

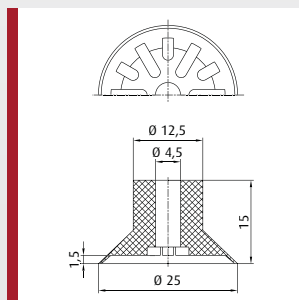
Details see page 198



Item no. 102.024.457. *

Material
SI (tr), NR (bg) 1.8 mm

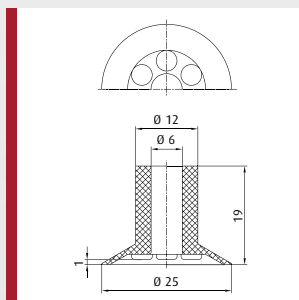
Details see page 207



Item no. 104.025.043. *

Material
Vinyl (bl) 1.5 mm

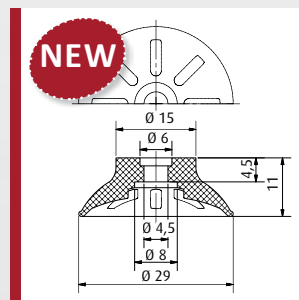
Details see page 211



Item no. 104.025.094. *

Material
NR (br) 1 mm

Details see page 211



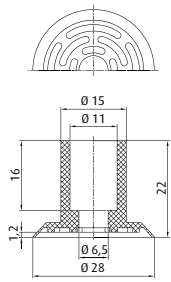
NEW

Item no. 102.029.509. *

Material
NR (br) 4 mm

Details see page 217

* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760

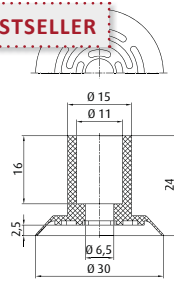


Item no. 104.029.093._*

Material
NR (sw) 1 mm

Details see page 216

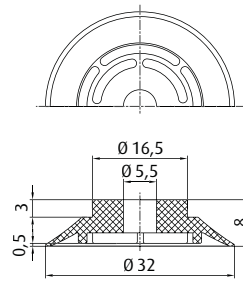
BESTSELLER



Item no. 104.030.009._*

Material
NBR (sw), SI (w),
SI (tr), NR (sw) 3 mm

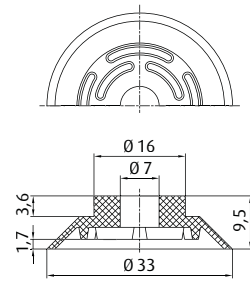
Details see page 221



Item no. 102.032.104._*

Material
NR (bg) 1.8 mm

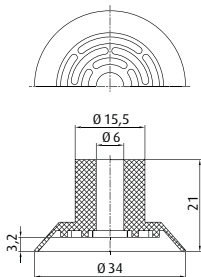
Details see page 224



Item no. 102.033.398._*

Material
Vinyl (bl) 2 mm

Details see page 224

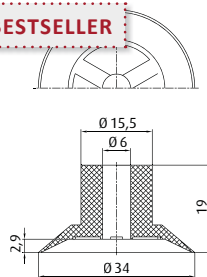


Item no. 104.034.036._*

Material
NR (bg) 3 mm

Details see page 225

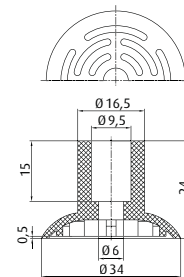
BESTSELLER



Item no. 104.034.054._*

Material
Vinyl (bl) 3 mm

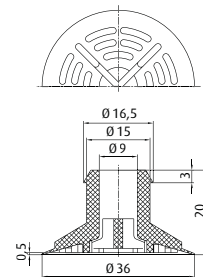
Details see page 226



Item no. 116.034.001._*

Material
NR (sw), NR (bg) 0.5 mm

Details see page 226

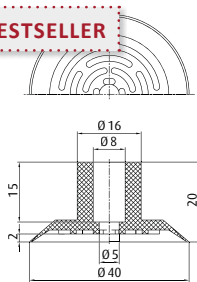


Item no. 102.036.342._*

Material
SI (tr) 0.5 mm

Details see page 229

BESTSELLER



Item no. 104.040.018._*

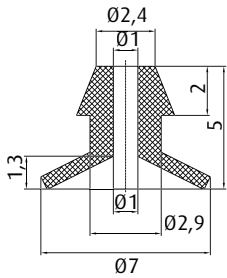
Material
SI (tr), NR (sw),
NR (br) 2 mm

Details see page 233

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



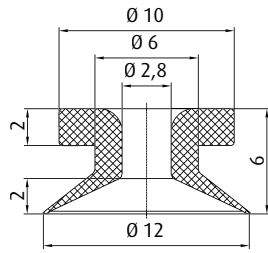
Flat vacuum cups for Film & Paper - SD-F



Item no. 102.007.266. *_

Material SI (tr) 1.5 mm

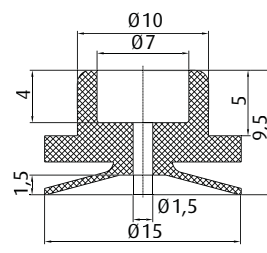
Details see page 179



Item no. 102.012.267. *_

Material NR (bg) 2.5 mm

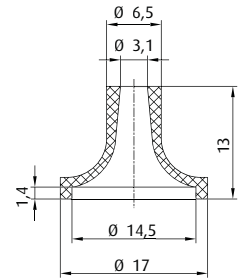
Details see page 186



Item no. 102.015.339. *_

Material Vinyl (bl) 1.5 mm

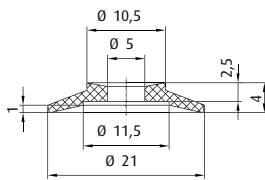
Details see page 189



Item no. 102.017.276. *_

Material NR (br) 3 mm

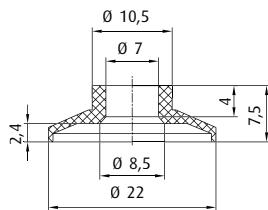
Details see page 195



Item no. 102.021.063. *_

Material NR (sw) 1 mm

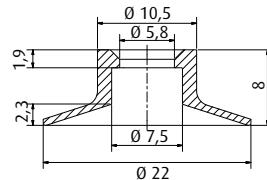
Details see page 204



Item no. 102.022.185. *_

Material NR (gr) 0.5 mm

Details see page 204



Item no. 102.022.526. *_

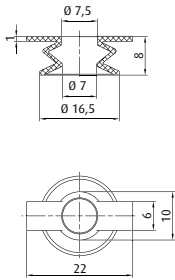
Material NR (bl) 2 mm

Details see page 204

* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760



Bellows vacuum cups for Films & Paper - SD-B

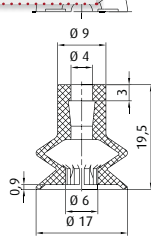


Item no. 23.017.102. *

Material
NR (sw) 5.5 mm

Details see page 300

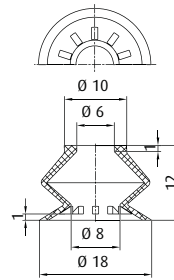
BESTSELLER



Item no. 23.018.175. *

Material
SI (tr), NR (bl) 5.5 mm

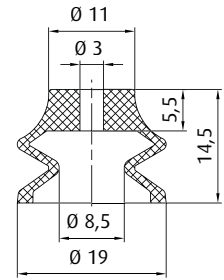
Details see page 300



Item no. 23.018.082. *

Material
SI (tr), NR (bl),
CR (sw) 5.5 mm

Details see page 301

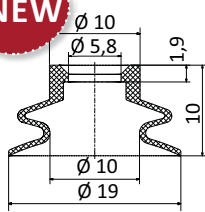


Item no. 23.019.168. *

Material
NR (bl), NR (br) 5.5 mm

Details see page 304

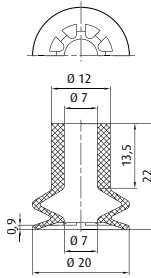
NEW



Item no. 23.019.254. *

Material
SI (tr) 3.5 mm

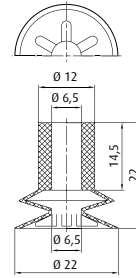
Details see page 304



Item no. 23.020.133. *

Material
NBR (sw), SI (tr) 4 mm

Details see page 305

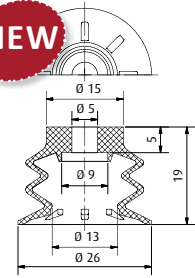


Item no. 23.023.099. *

Material
NR (br) 5 mm

Details see page 310

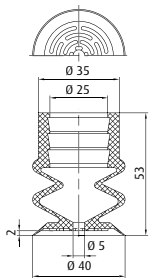
NEW



Item no. 21.026.162. *

Material
NR (br) 9 mm

Details see page 314



Item no. 21.040.141. *

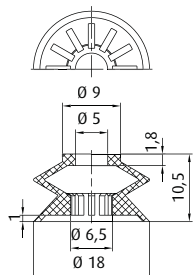
Material
NR (bg) 18 mm

Details see page 328

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



Bellows vacuum cups - SD-MM



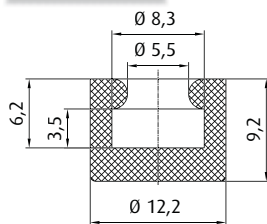
Item no. 23.018.183._*

Material NR (or)  5.5 mm

Details see page 300

Accessories - SD-MM

RUBBER CAP



Item no. 77.101

Material NR (r)

* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760