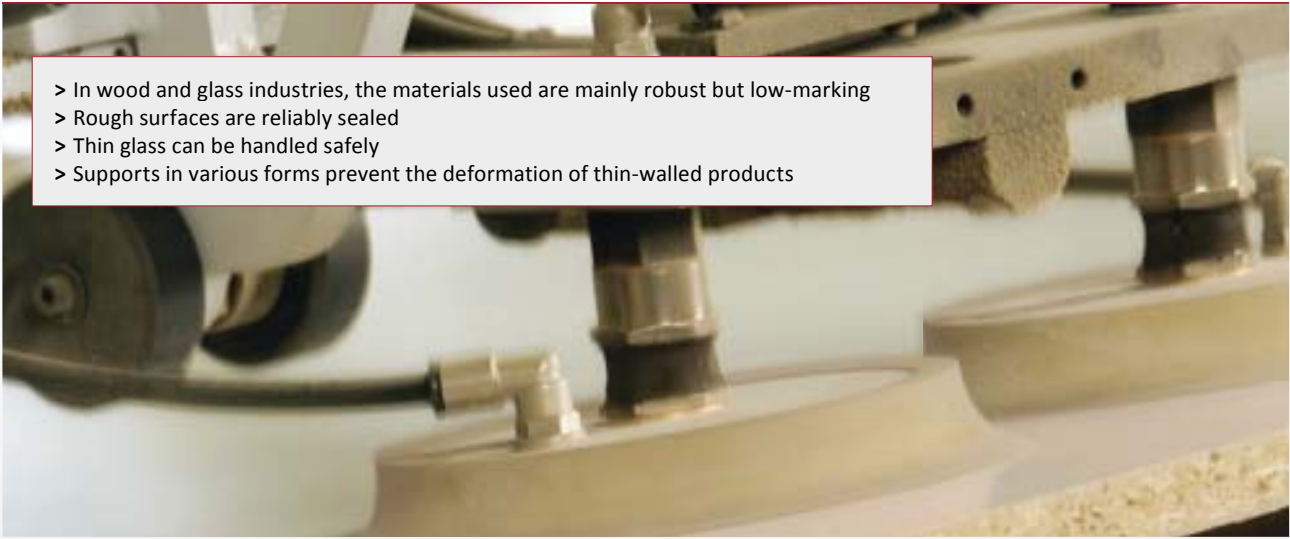




FIPA Vacuum cups for the wood and glass industries



- > In wood and glass industries, the materials used are mainly robust but low-marking
- > Rough surfaces are reliably sealed
- > Thin glass can be handled safely
- > Supports in various forms prevent the deformation of thin-walled products



Flat vacuum cups for textured surfaces - SFU-R

- > Optimal sealing of rough and uneven surfaces thanks to very fine sealing lips
- > Enhanced safety thanks to two-fold, internal safety sealing lip
- > Interlocking, clip-in retaining plate for quick and inexpensive replacement of the sealing lip
- > Diameter: 40 - 200 mm

> See page 66



Flat vacuum cups for porous products - SFU-RT

- > Separation of porous plate materials through simultaneous suction and punctual blow-off of the product
- > Enhanced safety thanks to two-fold, internal safety sealing lip
- > Diameter: 160 mm

> See page 67



Oval vacuum suction plates for textured surfaces - SOPL-R

- > Leak-free gripping of many problematic product surfaces thanks to very flexible, thinly tapered sealing lip
- > Increased security due to vulcanised carrier plate
- > Dimensions: 90x50 - 190x90 mm

> See page 158



Oval vacuum suction plates - SOPL-S and SOPL-A

- > High suction power with minimal space requirement
- > Rubberised support surfaces help prevent warping of the product
- > Available in the following materials: NBR (low-marking) and NR (wear-resistant)
- > Dimensions: 110x40 - 580x180 mm

> See page 160



FIPA Vacuum cups for the wood and glass industries



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

- > 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



Bellows vacuum suction plates Softgrip - SBPL-SG

- > Very gentle handling of sensitive products thanks to highly flexible fold walls
- > Combines the flexibility of bellows cups with the stability of flat vacuum suction plates
- > Central support block with safety sealing lip ensures a firm grip
- > Diameter: 150 - 210 mm

> See page 136



Short lift vacuum cups SFK

- > Minimal lift for flat, sensitive surfaces
- > Supports prevent deformation of the product and increase stability
- > Available in the following materials: NBR and SI
- > Particularly suited for use in clamping systems
- > Diameter: 65 - 150 mm

> See page 70



High temperature vacuum cups with felt pad - SX-F

- > Outstanding low-marking properties thanks to special felt coating
- > Highest temperature resistance (FKM briefly up to 300 °C; special silicone with an evaporated silicone lock made of aluminium briefly up to 500 °C)
- > Diameter: 25 - 160 mm

> See page 164



Series | Flat vacuum cups SF

Flat vacuum cups for textured surfaces - SFU-R

Flat vacuum cups for textured surfaces - SFU-R



Product Description

Flat vacuum cups with safety sealing lips to handle rough surfaces, as well as smooth but very uneven products.
Connection via an interlocking, snap-in aluminium plate

Advantage

- > Leak-free gripping of many difficult product surfaces thanks to extremely flexible, thinly tapered sealing lip
- > High stability under lateral forces
- > Optimum process reliability due to additional double lip seal
- > Cleats help prevent warping of the product
- > Cost-effective, tool-free changing of worn seals

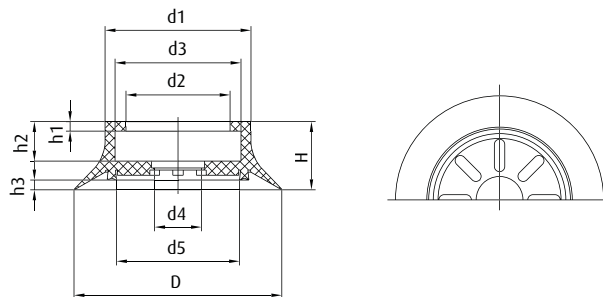
Technical data

Item no.	Model / Lip dimensions	↓	Material / Colour
102.040.357.*	SFU-R-40	3	SI (tr), NR (br)
102.070.234.*	SFU-R-70	6	NBR (gr), SBR (br), SI (tr), NR (bg), NR (br)
102.100.269.*	SFU-R-100	5	SBR (br), NBR (gr), NR (br)
102.200.350.*	SFU-R-200	5	NR (w)

Accessories

Item no.	Suitable fittings		
	G1/8-female	G1/4-female	G1/2-female
102.040.357.*	270.234 (p.438)	--	--
102.070.234.*	--	270.179 (p.438)	--
102.100.269.*	--	270.180 (p.438)	--
102.200.350.*	--	--	270.335 (p.438)

Dimensions



Item no.	∅ D [mm]	∅ d1 [mm]	∅ d2 [mm]	∅ d3 [mm]	∅ d4 [mm]	∅ d5 [mm]	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]
102.040.357.*	40	26	17.5	21	8	21	12.5	2.9	6	2.5
102.070.234.*	70	50	33	43	14	40	30	3.5	17	5.4
102.100.269.*	100	70	50	61	23	59	33	4.6	19	4.7
102.200.350.*	200	168	148	158	25	158	31	5	18.5	3.2



Flat vacuum cups for separating porous products - SFU-RT



Product Description

Patented flat vacuum cups for stacking of partially air-permeable plate material that air is drawn through. Separates uppermost plate layer from underlying plate layers. Soft sealing lip made of abrasion-resistant NR. Secure handling even of rough surfaces thanks to additional internal safety sealing lip. High stability under lateral forces. Cost-effective replacement of the wear part, as it comes in two parts.

Ordering notes

Elastomer seal and carrier plate 270.380 must be ordered separately

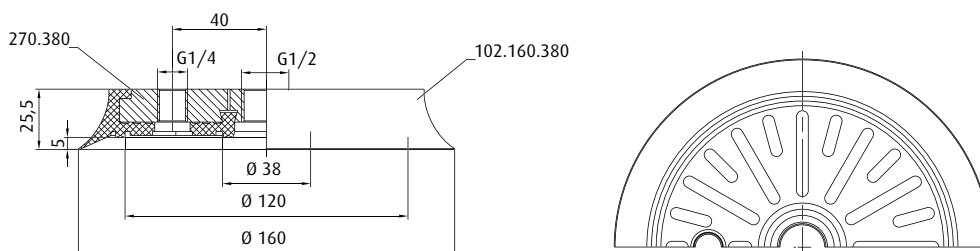
Technical data

Item no.	Model / Lip dimensions		Material / Colour	Suitable fittings
102.160.380.4	SFU-RT-160	6	NR (bg)	270.380

Functional principle

Task: Access the top layer of porous materials without carrying along the lower layers. Simultaneous intake (outer chamber) and selective blowing in a separate central chamber breaks adhesive forces between the layers. The unwanted take-up of lower layers is prevented. The air pressure level should be between 1 and 3 bar and is dependent on the nature of the product.

Dimensions



Gripping force [N] at vacuum level [%]

Item no.	20 % Vacuum	30 % Vacuum	40 % Vacuum	50 % Vacuum	60 % Vacuum	70 % Vacuum
102.160.380.4	83	137	186	230	280	324

* 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

Oval vacuum suction plates for textured surfaces - SOPL-R

Oval vacuum suction plates for textured surfaces - SOPL-R




Product Description

Oval vacuum cups for handling both rough surfaces and smooth, markedly uneven products.
Connection via vulcanised aluminium plate.

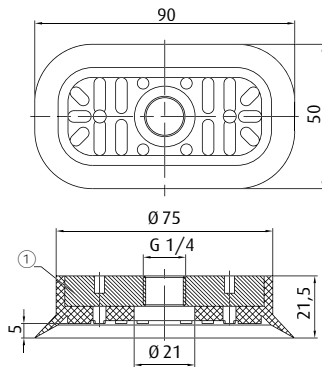
Advantage

- > Leak-free gripping of difficult product surfaces thanks to extremely flexible, thinly tapered sealing lip
- > Cleats help prevent warping of the product
- > Optimum process reliability due to vulcanised backing plate, as well as additional internal safety sealing lip (190x90 mm and 120x65 mm)

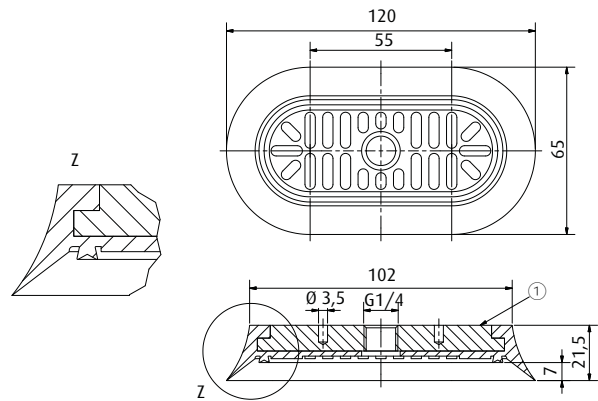
Technical data

Item no.	Model / Lip dimensions	Connection thread	Material / Colour		Weight [g]
130.90x50.113._*	SOPL-R-90x50	G1/4-female	NR (bg)	5	72
9.120x65.088._*	SOPL-R-120x65	G1/4-female	NR (bg)	7	131
9.190x90.061._*	SOPL-R-190x90	G1/4-female	NR (bg)	5.5	295

Dimensions



Drawing A



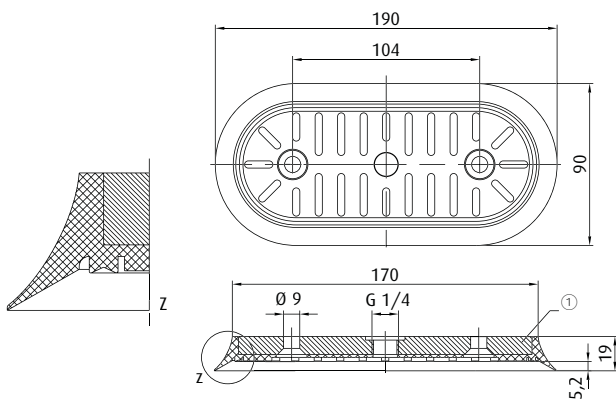
Drawing B

① = Aluminium

* 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 C

① = Aluminium

Item no.	Drawing
130.90x50.113._*	A
9.120x65.088._*	B
9.190x90.061._*	C

* 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

Oval vacuum suction plates - SOPL-S and SOPL-A

Oval vacuum suction plates - SOPL-S and SOPL-A



Product Description

Oval vacuum cups, vulcanised, on a carrier plate of steel/aluminium for the handling of long, narrow products such as strips, profiles or frames. Rubberised support surfaces prevent deformation of the product and increase lateral stability.

Advantage

- > High suction force on a small footprint
- > Low-marking
- > High process reliability due to vulcanised carrier plate
- > Individual machine connection possible

Ordering notes:

Customised drilling patterns available on request for Series SOPL-S

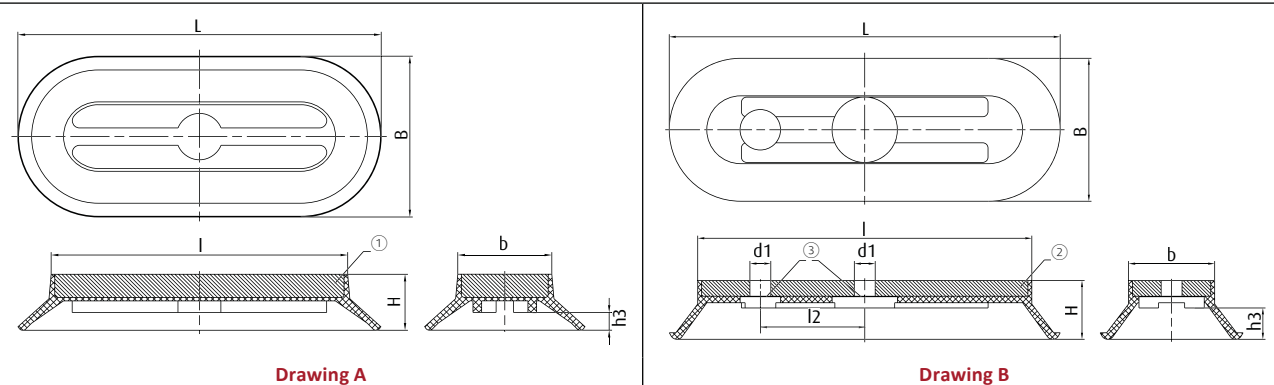
Technical data

Item no.	Model / Lip dimensions	Material / Colour		Weight [g]	Support surfaces
SOPL-S: NBR material, grey, with steel carrier plate					
9.200x40.010.*	SOPL-S-200x40	NBR (gr)	9	140	lengthwise
9.110x40.009.*	SOPL-S-110x40	NBR (gr)	9	122	lengthwise
9.125x55.012.*	SOPL-S-125x55	NBR (gr)	9	320	lengthwise
9.150x55.013.*	SOPL-S-150x55	NBR (gr)	7	255	lengthwise
9.200x55.014.*	SOPL-S-200x55	NBR (gr)	7	538	lengthwise
9.250x55.016.*	SOPL-S-250x55	NBR (gr)	8	770	lengthwise
9.300x55.019.*	SOPL-S-300x55	NBR (gr)	8	902	lengthwise
9.370x70.022.*	SOPL-S-370x70	NBR (gr)	10	1,895	lengthwise
9.200x100.015.*	SOPL-S-200x100	NBR (gr)	8	595	lengthwise
9.280x100.017.*	SOPL-S-280x100	NBR (gr)	10	1,880	lengthwise
9.450x130.025.*	SOPL-S-450x130	NBR (gr)	6	2,660	crosswise
9.430x180.024.*	SOPL-S-430x180	NBR (gr)	6	3,720	selective
9.580x180.029.*	SOPL-S-580x180	NBR (gr)	10	3,500	lengthwise
SOPL-A: NR material, orange, with aluminium carrier plate					
9.100x55.020.*	SOPL-A-100x55	NR (or)	8	65	lengthwise
9.150x55.083.*	SOPL-A-150x55	NR (or)	8	114	lengthwise
9.200x55.020.*	SOPL-A-200x55	NR (or)	8	159	lengthwise
9.300x55.046.*	SOPL-A-300x55	NR (or)	8	300	lengthwise

* 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



① = Steel ② = Aluminium ③ = Sealed with rubber

Item no.	Drawing	L [mm]	B [mm]	l [mm]	l2 [mm]	b [mm]	Ø d1 [mm]	H [mm]	h3 [mm]
SOPL-S: NBR material, grey, with steel carrier plate									
9.200x40.010.*	A	195	36	176	--	15	--	19	6
9.110x40.009.*	A	113	43	87	--	17	--	19	8.5
9.125x55.012.*	A	126	56	103	--	33	--	19	6
9.150x55.013.*	A	151	56	128	--	33	--	19	6
9.200x55.014.*	A	200	55	178	--	33	--	19	6.3
9.250x55.016.*	A	250	55	228	--	33	--	19	6
9.300x55.019.*	A	300	55	227	--	33	--	19	6
9.370x70.022.*	A	378	82	349	--	53	--	26	9
9.200x100.015.*	A	190	90	161	--	61	--	22	8.5
9.280x100.017.*	A	278	100	250	--	72	--	25	9
9.450x130.025.*	A	449	131	420	--	102	--	20	6.5
9.430x180.024.*	A	430	180	402	--	158	--	20	6
9.580x180.029.*	A	579	179	570	--	150	--	25	9
SOPL-A: NR material, orange, with aluminium carrier plate									
9.100x55.020.*	B	99	54	78	25	33	8	22.5	9
9.150x55.083.*	B	150	55	128	40	33	8	22.5	9
9.200x55.020.*	B	201	56	178	50	33	8	22.5	9
9.300x55.046.*	B	300	55	278	100	33	8	22.5	9

* 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



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

Model / Lip dimensions	Ø [mm]	Connection thread 1	Item no.	Connection thread 2	Item no.	Connection thread 3	Item no.	Usage temperature [°C]	Accessories	
									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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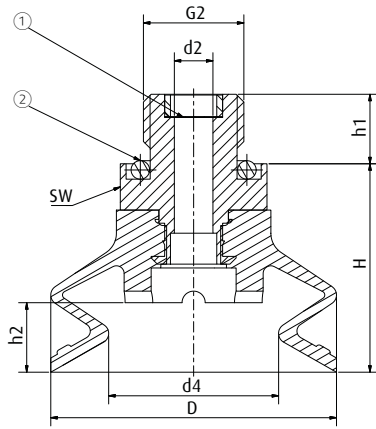
* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



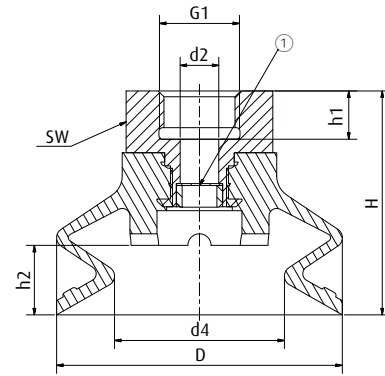
Series | Bellows vacuum cups SB

Varioflex® bellows cups, 1.5 folds - SP-BX1

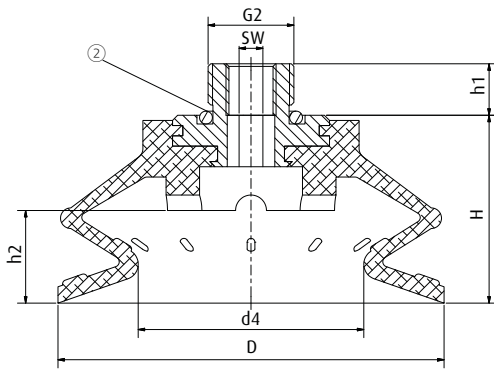
Dimensions



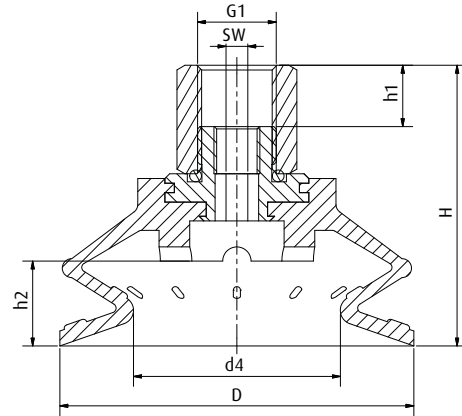
Drawing A



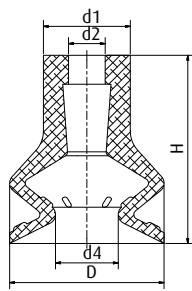
Drawing B



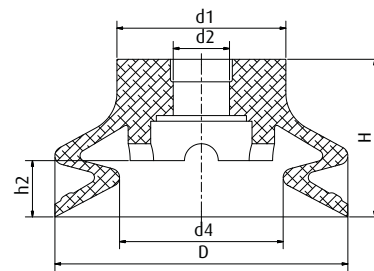
Drawing C



Drawing D



Drawing E



Drawing F

① = Filter screen ② = O-ring

* 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, 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

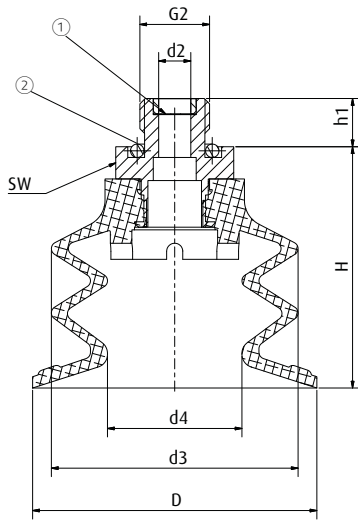
Technical data

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									
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									
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	--

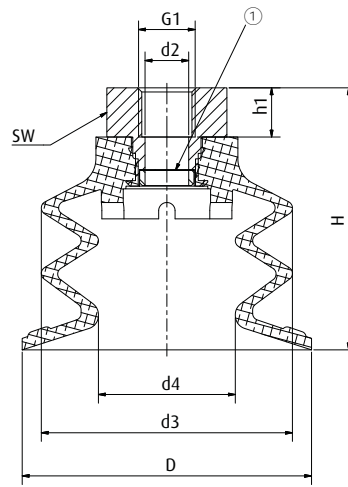
* When ordering please add the appropriate material code to item no. You will find it in the foldout.
Average holding forces for vacuum cups you will find on page 760



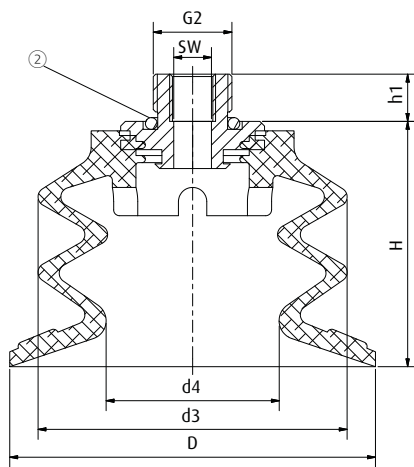
Dimensions



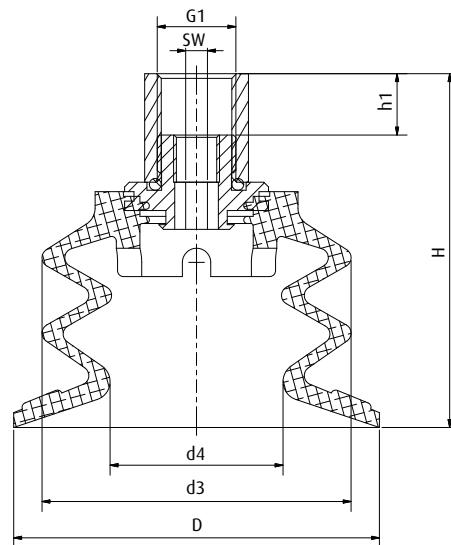
Drawing A



Drawing B



Drawing C



Drawing D

① = Filter screen ② = O-ring

Continued on the next page →

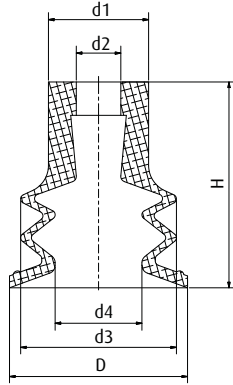
* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760



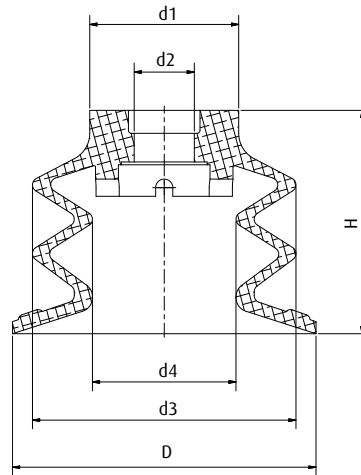
Series | Bellows vacuum cups SB

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 | Bellows vacuum cups SB

Bellows vacuum suction plates softgrip - SBPL-SG

Bellows vacuum suction plates softgrip - SBPL-SG




Product Description

Vacuum suction plate with 1.5 folds for gentle handling of heavy but sensitive products (e.g. glass plates). Divided support surfaces prevent deformation of the product and provide a firm grip. Additional safety sealing lip on the support block positions the product orthogonally to the ground.
Connection via an interlocking, snap-in aluminium plate.

Advantage

- > Very careful handling due to soft sealing lip and lightly compressing bellows
- > Cleats provide product support
- > Cost-effective replacement of worn seals

Technical data

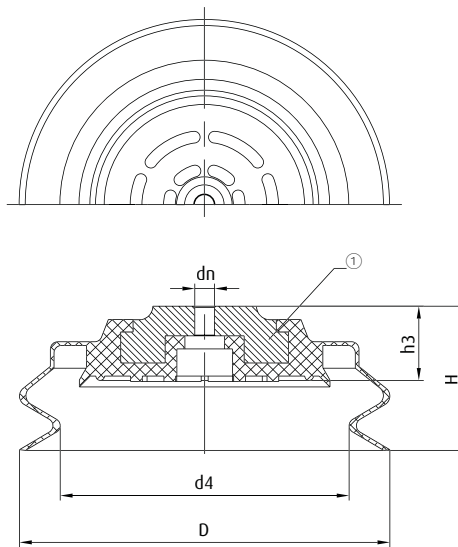
Item no.	Model / Lip dimensions		Weight [g]	Material / Colour	Number of folds
22.150.109.*	SBPL-SG-150	28	353	NBR (sw)	1.5
22.210.115.*	SBPL-SG-210	32	860	NBR (sw)	1.5

Accessories

Spare cup

23.150.090.1 (p.357)
23.210.009.1 (p.360)

Dimensions



① = Aluminium

Item no.	Ø D [mm]	Ø d4 [mm]	Ø dn [mm]	H [mm]	h3 [mm]
22.150.109.*	150	117	8	58	30
22.210.115.*	212	180	8	65	31

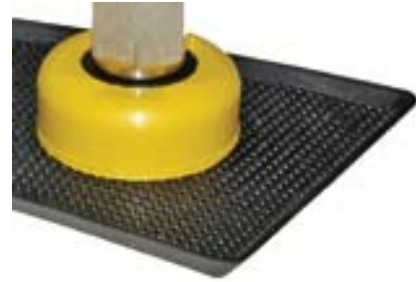
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Average holding forces for vacuum cups you will find on page 760



Series | Flat vacuum cups SF

Flat vacuum cups with a short lift - SFK

Flat vacuum cups with a short lift - SFK






Product Description

Flat vacuum cups with a minimum lift for flat surfaces. HNBR version especially suited for removing hot plastic parts from an injection moulding machine, as they are silicone-free and temperature-resistant up to 160 °C.
SFK-G series particularly suitable for clamping elements. Connection via a form-locking, snap-in aluminium plate.


Advantage

- > Great suction power thanks to the largest active vacuum suction surface possible
- > Minimised wear, as the suction lip does not slide over the product during suction
- > Low space requirement
- > Cost-effective replacement of worn seals

Technical data

Item no.	Model / Lip dimensions		Material / Colour
	SFK-K		
102.020.458._*	SFK-K-20	0.5	HNBR (ge), NR (br)
102.030.459._*	SFK-K-30	0.8	HNBR (ge), NR (br)
102.045.460._*	SFK-K-45	1.2	HNBR (ge), NR (br)
	SFK-G		
154.065.003._*	SFK-G-65	3	NBR (sw), SI (w), NR (sw)
154.110.014._*	SFK-G-110	1.5	NBR (sw), SI (w)
154.150.021._*	SFK-G-150	2	NBR (sw), SI (w)

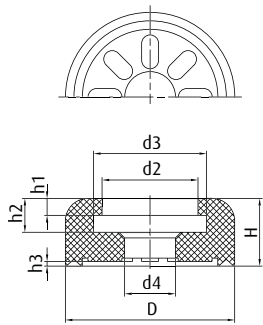
Accessories

Item no.	 Suitable fittings				
	M5-male	G1/8-female	G1/4-female	G3/8-female	G1/2-female
SFK-K					
102.020.458._*	270.521 (p.412)	--	--	--	--
102.030.459._*	--	270.234 (p.438)	--	--	--
102.045.460._*	--	270.235 (p.438)	--	--	--
SFK-G					
154.065.003._*	--	270.158 (p.438)	270.264 (p.438)	270.161 (p.438)	270.286 (p.438)
154.110.014._*	--	--	270.224 (p.438)	270.167 (p.438)	270.266 (p.438)
154.150.021._*	--	--	270.171 (p.438)	270.173 (p.438)	270.268 (p.438)

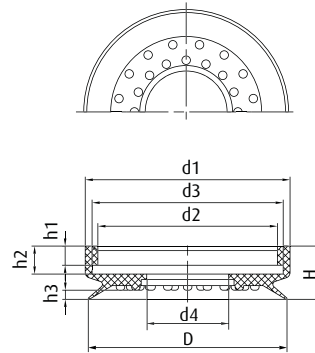
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Average holding forces for vacuum cups you will find on page 760



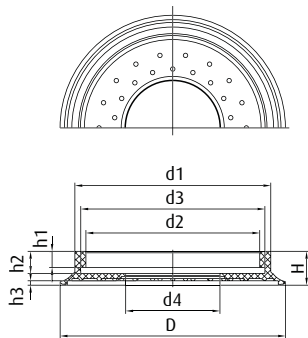
Dimensions



Drawing A



Drawing B



Drawing C

Item no.	Drawing	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]	Ø d3 [mm]	Ø d4 [mm]	H [mm]	h1 [mm]	h2 [mm]	h3 [mm]
SFK-K										
102.020.458._*	A	20	20	10	14	6.5	12	3	7	0.5
102.030.459._*	A	30	30	17	20	9	12	3	6	0.8
102.045.460._*	A	45	45	25	28	9	12	3.5	5.5	1.2
SFK-G										
154.065.003._*	B	65	67	59	63	27	17.5	6.3	9	3
154.110.014._*	C	114	96	88	91	53	17	8	11	1.2
154.150.021._*	C	153	133	118	125	64	23	11	15	3

* 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 | Special vacuum cups SX

High temperature vacuum cups with felt pad - SX-F

High temperature vacuum cups with felt pad - SX-F

**HEAT RESISTANT
& LOW MARKING**



Product Description

Almost mark-free special vacuum cup for high temperature requirements, e.g. in the glass industry. Special felt pad vulcanised to elastomer carrier. Migration of silicone particles is prevented by vapour-deposited aluminium layer. Connection up to \varnothing 70 mm by means of plug-in nipple, from \varnothing 90 mm with bolted bracket plate.

Advantage

- > Temperature-resistant up to 500 °C (SI)
- > Almost mark-free
- > Cost-effective replacement of worn seals

Notes:

There is a small leak at first use resulting from the texture of the special felt, but after a brief period of use this will be significantly reduced by the thickening of the felt layer.

Technical data

Item no.	Model / Lip dimensions	↓	Weight [g]	Max. operating temperature [°C]	Material / Colour	Number of bellows
26.025.009._*	SX-F-25	2	6	500	SI (tr/ge)	--
26.037.010._*	SX-F-40	3	10	500	SI (tr/ge)	--
26.070.011._*	SX-F-70	7	24	500	SI (tr/ge)	--
26.090.001._*	SX-F-90	17	80	500, 300	SI (tr/ge), FKM (sw/ge)	1.5
26.120.002._*	SX-F-120	18	140	300	FKM (sw/ge)	1.5
26.160.003._*	SX-F-160	18	205	300	FKM (sw/ge)	1.5

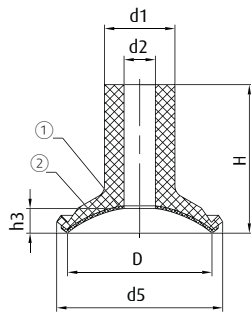
Accessories

Item no.	Suitable fittings				
	G1/8-male	G1/8-female	G1/4-male	G1/4-female	G3/8-female
26.025.009._*	270.132 (p.417)	270.114 (p.422)	270.208 (p.425)	270.178 (p.431)	--
26.037.010._*	270.132 (p.417)	270.114 (p.422)	270.208 (p.425)	270.178 (p.431)	--
26.070.011._*	270.132 (p.417)	270.114 (p.422)	270.208 (p.425)	270.178 (p.431)	--
26.090.001._*	--	--	--	--	270.400 (p.436)
26.120.002._*	--	--	--	--	270.402 (p.436)
26.160.003._*	--	--	--	--	270.404 (p.436)

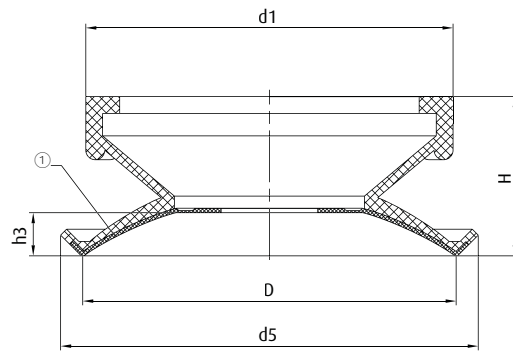
* When ordering please add the appropriate material code to item no. You will find it in the foldout. Average holding forces for vacuum cups you will find on page 760



Dimensions



Drawing A



Drawing B

① = Felt pads ② = For silicone vacuum cups: Silicone membrane by evaporated aluminium layer

Item no.	Drawing	Ø D [mm]	Ø d1 [mm]	Ø d2 [mm]	Ø d5 [mm]	H [mm]	h3 [mm]
26.025.009.*	A	24	16	8	29	36	3.3
26.037.010.*	A	37	18	8	42	38	6.5
26.070.011.*	A	67	21	8	71	36	8
26.090.001.*	B	89	87	--	99	38	10.5
26.120.002.*	B	120	108	--	129	45	17.5
26.160.003.*	B	150	130	--	161	48	16.5

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