

The background is a solid blue color with two large, thin white curved lines that sweep across the page from the top left towards the bottom right, creating a sense of movement and framing the central text.

C Vacuum Suction Cups

Suction cups

Products overview



Suction cups

145 SZ Series

Standard Suction Cup

- ◇ Diameter: 2-50mm
- ◇ Material: N WS CN CS HP



176 SOFA Series

Oval Flat Suction Cup

- ◇ Size: 6×18mm
- ◇ Material: N WS



153 SP3 Series

Suction Cup

- ◇ Diameter: 1.5-16mm
- ◇ Material: N WS CN CS HP



177 STP Series

Ultra-thin Flower-Shaped Suction Cup

- ◇ Diameter: 35-60mm
- ◇ Material: S WS



167 SUF Series

Small Flat Suction Cup

- ◇ Diameter: 3.5-5.5mm
- ◇ Material: N S



179 SFT Series

Flat Suction Cup Special for Plastic Film and Paper

- ◇ Diameter: 15-40mm
- ◇ Material: WS HD NR



168 SAN Series

Nozzle Type Suction Cup

- ◇ Diameter: 0.8-1.1mm
- ◇ Material: N WS CN CS



182 SFA Series

Flat Ultra-thin Lip Suction Cup

- ◇ Diameter: 20-50mm
- ◇ Material: S



169 SAO Series

Oval Flat Suction Cup

- ◇ Size: 3.5×7-8×30mm
- ◇ Material: N WS CN CS



185 SBL Series

4.5 Bellows Suction Cup

- ◇ Diameter: 15-50mm
- ◇ Material: N S WS



Suction cups

Products overview



Suction cups

188 SBLP Series

Multiple Bellows Suction Cup Special for Soft Packing Bags

- ◇ Diameter: 30-50mm
- ◇ Material: S



203 SGP Series

PU Bellows Suction Cup

- ◇ Diameter: 25-55mm
- ◇ Material: U UD



190 SBS Series

Suction Cup Special for Spherical Objects

- ◇ Diameter: 30-35mm
- ◇ Material: S WS WSA



206 SBOF Series

2.5 Bellows Oval Suction Cup

- ◇ Size: 35×28 45×28mm
- ◇ Material: V



192 SFP Series

PU Flat Suction Cup

- ◇ Diameter: 20-40mm
- ◇ Material: U UY



209 STC Series

1.5 Bellows Suction Cup Special for Metal Sheet

- ◇ Diameter: 22-125mm
- ◇ Material: N



195 SBP Series

PU Bellows Suction Cup

- ◇ Diameter: 10-70mm
- ◇ Material: U UY UD



213 SFF Series

Flat Suction Cup Special for Metal Sheet

- ◇ Diameter: 30-125mm
- ◇ Material: N NG



199 SXP Series

PU Bellows Suction Cup

- ◇ Diameter: 20-70mm
- ◇ Material: U UG UD



217 SOB Series

Oval Bellows Suction Cup Special for Metal Sheet

- ◇ Size: 30×60-70×140mm
- ◇ Material: N



Suction cups

Products overview



Suction cups

220 SOF Series

Oval Flat Suction Cup Special for Metal Sheet

◇ Size: 16×50-70×140mm

◇ Material: N NG



METAL SHEET LONG AND NARROW OBJECT SLIPPING RESISTANCE OILY SURFACE



237 SDM Series

Flat Suction Cup Special for Metal Sheet

◇ Diameter: 100mm

◇ Material: U



METAL SHEET SLIPPING RESISTANCE OILY SURFACE

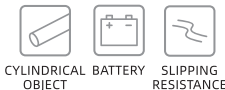


224 SOG Series

Oval Flat Suction Cup Special for Cylindrical Objects

◇ Size: 15×40mm 35×100mm

◇ Material: N



CYLINDRICAL OBJECT BATTERY SLIPPING RESISTANCE



239 SFU Series

Big Flat Suction Cup

◇ Diameter: 100-400mm

◇ Material: N WS



METAL SHEET WOOD HEAVY LOAD



227 SFM Series

Flat Suction Cup Special for Oily Metal Sheet

◇ Diameter: 30-120mm

◇ Material: U



METAL SHEET SLIPPING RESISTANCE OILY SURFACE CURVED SURFACE

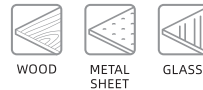


243 SFK Series

Flat Suction Cup Special for Rough Surface Objects

◇ Diameter: 110-250mm

◇ Material: E



WOOD METAL SHEET GLASS



231 SOM Series

Oval Flat Suction Cup Special for Long and Narrow Objects

◇ Size: 20×60-40×100mm

◇ Material: U



METAL SHEET SLIPPING RESISTANCE OILY SURFACE CURVED SURFACE

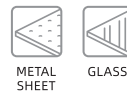


246 SHT Series

High Temperature Suction Cup

◇ Diameter: 35-90mm

◇ Material: --



METAL SHEET GLASS



234 SBF Series

1.5 Bellows Suction Cup Special for Metal Sheet

◇ Diameter: 30-100mm

◇ Material: U



METAL SHEET SLIPPING RESISTANCE OILY SURFACE LONG LIFETIME



248 SDL Series

Annular Suction Cup

◇ Diameter: 100mm

◇ Material: N



METAL SHEET



Suction cups

Products overview



Suction cups

249 SFG Series

Flat Suction Cup for Glass Industry

- ◇ Diameter: 125-400mm
- ◇ Material: E HD



270 SU Series

Universal Flat Suction Cup

- ◇ Diameter: 6-80mm
- ◇ Material: N S WS CS



252 SFD Series

Flat Suction Cup for Wood Industry

- ◇ Diameter: 40-70mm
- ◇ Material: N WS NR



283 SPA Series

Thin Lip Flat Suction Cup

- ◇ Diameter: 10-50mm
- ◇ Material: N WS CN CS



254 SB Series

Universal Bellows Suction Cup

- ◇ Diameter: 5-150mm
- ◇ Material: N S WS CS



295 SPF Series

Flat Suction Cup

- ◇ Diameter: 2-200mm
- ◇ Material: N WS CN CS



259 SBA Series

1.5 Bellows Suction Cup

- ◇ Diameter: 6-78mm
- ◇ Material: N WS HD NR



301 SPC Series

Bellows Suction Cup

- ◇ Diameter: 3-90mm
- ◇ Material: N WS CN CS



264 SF Series

Universal Flat Suction Cup

- ◇ Diameter: 15-300mm
- ◇ Material: N S WS CS



317 SPJ Series

Bellows Suction Cup

- ◇ Diameter: 4-80mm
- ◇ Material: N WS CN CS HP



Suction cups

Products overview



Suction cups

310 SPU Series

Swivel Flat Suction Cup

◇ Diameter: 10-100mm

◇ Material: N WS



327 SBB Series

1.5 Bellows Big Suction Cup

◇ Diameter: 200-300mm

◇ Material: N



HEAVY LOAD



313 SH Series

Heavy Load Flat Suction Cup

◇ Diameter: 40-125mm

◇ Material: N WS



METAL SHEET

WOOD

HEAVY LOAD



329 SOP Series

Circular Foam Rubber Cup

◇ Diameter: 40-220mm

◇ Material: NF OF



STONE



ROUGH SURFACE



320 SHB Series

Heavy Load Bellows Suction Cup

◇ Diameter: 40-125mm

◇ Material: N WS



METAL SHEET

WOOD

HEAVY LOAD

CURVED SURFACE



331 SNP Series

Rectangular Foam Rubber Cup

◇ Size: 50×135-140×290mm

◇ Material: NF OF



STONE



ROUGH SURFACE



SZ Series

Standard Suction Cup

AIRBEST



ELECTRONICS



Features

- ◇ Available in various shapes: U type, C type, B type and D type
- ◇ Simple structure
- ◇ Conductive material available
- ◇ Available in various sizes

Advantages

- ◇ Small size and light weight
- ◇ Suitable for workpieces of various sizes and shapes



B-Bellows type

D-Deep type

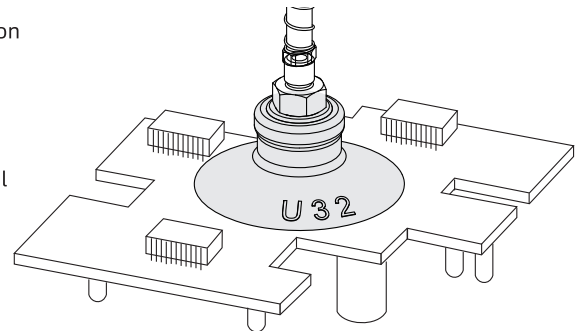


U-Flat type

C-Flat type with ribs

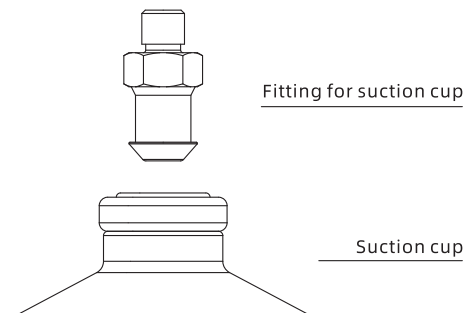
Applications

- ◇ U type suitable for workpieces with even surface and without deformation
- ◇ C type suitable for easily deformed workpieces
- ◇ B type suitable for workpieces with inclined surface
- ◇ D type suitable for spherical objects
- ◇ Suitable for handling of paper box, small sized semiconductor, spherical objects and food, ect.
- ◇ Conductive material suitable for 3C industry



Structure

- ◇ Split structure for easy replacement of wearing parts



SZ Series

Standard Suction Cup

How to order

SZ B 10 N
 ① ② ③ ④

① Series	② Suction cup type	③ Diameter		④ Material & Hardness	
SZ	U - Flat	2 - φ2mm	16 - φ16mm	N - NBR	50
	C - Flat with ribs	4 - φ4mm	20 - φ20mm	WS - White silicone	45
	B - 1.5 bellows	6 - φ6mm	25 - φ25mm	CN - Conductive NBR	55
	D - Deep	8 - φ8mm	32 - φ32mm	CS - Conductive silicone	55
			10 - φ10mm	40 - φ40mm	HP - Mark free rubber
		13 - φ13mm	50 - φ50mm		

◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Diameter of suction cup	Suction cup type U - Flat	C - Flat with ribs	B - 1.5 Bellows	D - Deep
φ2	SZU2□	-	-	-
φ4	SZU4□	-	-	-
φ6	SZU6□	-	SZB6□	-
φ8	SZU8□	-	SZB8□	-
φ10	SZU10□	SZC10□	SZB10□	SZD10□
φ13	SZU13□	SZC13□	SZB13□	-
φ16	SZU16□	SZC16□	SZB16□	SZD16□
φ20	SZU20□	SZC20□	SZB20□	-
φ25	SZU25□	SZC25□	SZB25□	SZD25□
φ32	SZU32□	SZC32□	SZB32□	-
φ40	SZU40□	SZC40□	SZB40□	SZD40□
φ50	SZU50□	SZC50□	SZB50□	-

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SZ Series

Standard Suction Cup

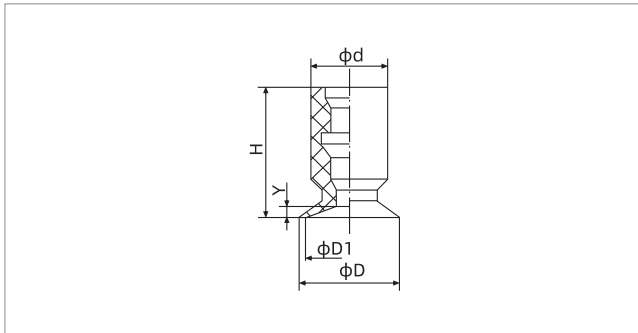


Technical parameters

Diameter of suction cup	Pull-out force N	Inner volume(cm ³)				Recommended hose dia. mm	MPQ pcs
		SZU	SZC	SZB	SZD		
φ2	0.15	< 0.1	-	-	-	4	10
φ4	0.6	< 0.1	-	-	-	4	10
φ6	1.2	< 0.1	-	< 0.1	-	4	10
φ8	2.2	< 0.1	-	< 0.1	-	4	10
φ10	3.5	0.15	0.15	0.3	0.3	6	10
φ13	6	0.2	0.2	0.9	-	6	10
φ16	9.6	0.3	0.3	1.3	0.6	6	10
φ20	15	0.6	0.6	2.2	-	6	5
φ25	24	0.9	0.9	3.3	1.5	6	5
φ32	38	1.6	1.6	7.2	-	6	5
φ40	60	3.5	3.5	15	9	6	1
φ50	92	6	6	25	-	6	1

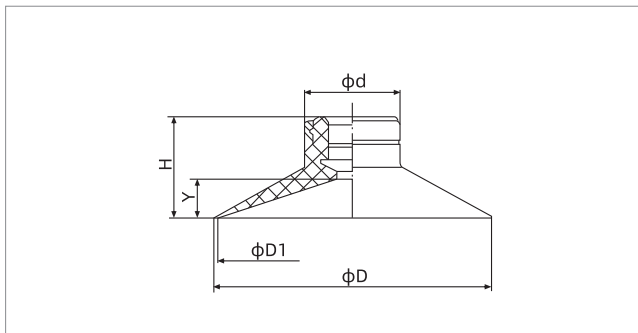
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SZU2-8

Model/Size	D	D1	H	d	Y	Weight g
SZU2□	2.6	2	12	7	0.5	0.3
SZU4□	4.8	4	12	7	0.8	0.3
SZU6□	7	6	12	7	0.8	0.4
SZU8□	9	8	12	7	1	0.4



SZU10-50

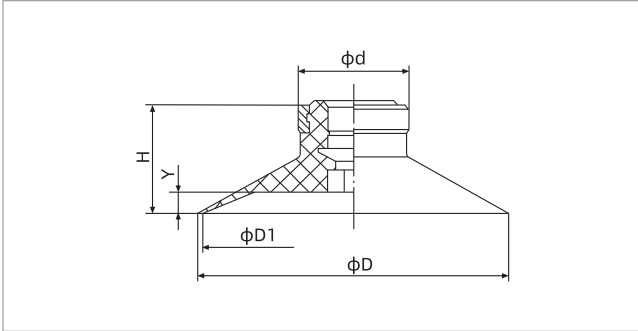
Model/Size	D	D1	H	d	Y	Weight g
SZU10□	12	10	12	13	3	0.8
SZU13□	15	13	12	13	3	0.8
SZU16□	18	16	12.5	13	3.5	0.9
SZU20□	23	20	14	15	4	1.6
SZU25□	28	25	14	15	4	1.8
SZU32□	35	32	14.5	15	4.5	2.3
SZU40□	43	40	18.5	18	6.5	5.5
SZU50□	53	50	19.5	18	7.5	6.9

SZ Series

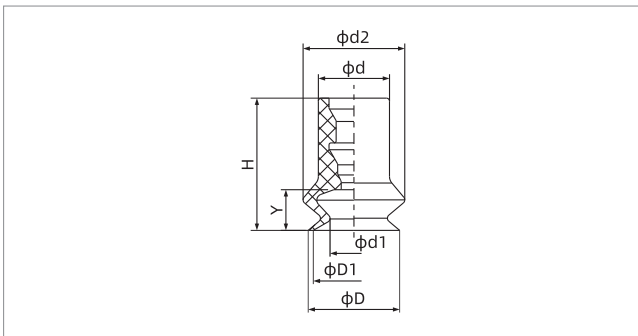
Standard Suction Cup



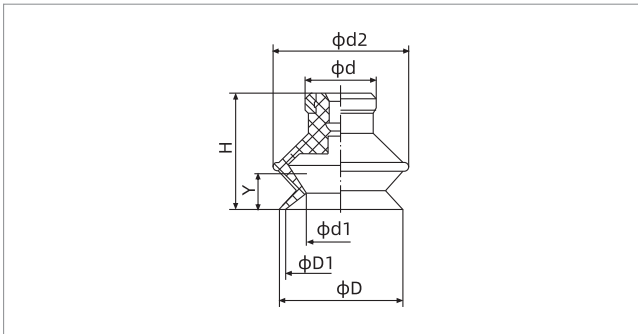
Dimensions(mm)



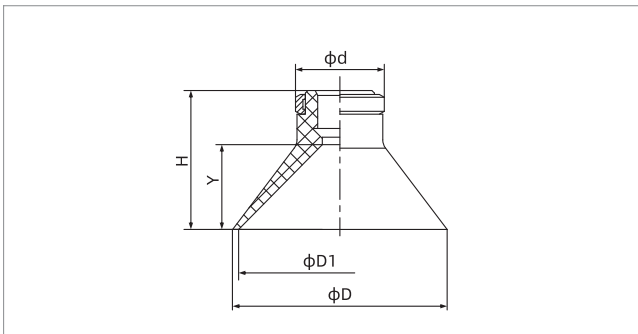
SZC10-50



SZB6-8



SZB10-50



SZD10-40

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	D1	H	d	Y	Weight g
SZC10□	12	10	12	13	1.7	0.8
SZC13□	15	13	12	13	1.8	1.0
SZC16□	18	16	12.5	13	1.2	0.9
SZC20□	23	20	14	15	1.7	1.6
SZC25□	28	25	14	15	1.8	2.1
SZC32□	35	32	14.5	15	2.3	2.4
SZC40□	43	40	18.5	18	3.3	5.5
SZC50□	53	50	19.5	18	3.8	7.3

Model/Size	D	D1	H	d	d1	d2	Y	Weight g
SZB6□	7	6	13	7	3.3	9.1	4	0.4
SZB8□	9	8	13	7	4.7	10.1	4	0.4

Model/Size	D	D1	H	d	d1	d2	Y	Weight g
SZB10□	12	10	16	13	5.5	13.8	4	1.1
SZB13□	15	13	18.5	13	8.7	19	4	1.7
SZB16□	18	16	20	13	9.9	21	4	2.1
SZB20□	22	20	23.5	15	12.4	25	4	2.9
SZB25□	27	25	24	15	15.6	28	4	3.9
SZB32□	34	32	29	15	18.9	37	4	6.7
SZB40□	43	40	34	18	24.4	48	4	13.3
SZB50□	53	50	38	18	32.4	57	4	18.8

Model/Size	D	D1	H	d	Y	Weight g
SZD10□	12	10	15	13	6	1.0
SZD16□	18	16	16	13	7	1.2
SZD25□	28	25	20	15	10	1.8
SZD40□	43.5	40	28	18	17	5.9

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

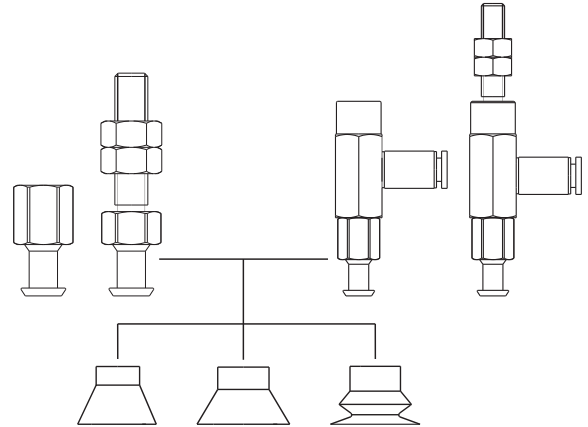
SZ Series

Suction Cup with Locking Fitting

Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port, male and female thread for mounting
- ◇ Lateral vacuum port, male and female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SZU10N - LA6 - M5M

① ② ③

① Model	② Vacuum port direction	③ Mounting thread
SZU10N	Nil - Vertical	M5M - M5×0.8 male thread
SZC	LA4 - Lateral, one-touch fitting φ4 hose	M6M - M6×1 male thread
SZB	LA6 - Lateral, one-touch fitting φ6 hose	M8M - M8×1 male thread
SZD		M5F - M5×0.8 female thread
		M8F - M8×1.25 female thread

◇ Please refer to page 146 for suction cup selection

Selection

Diameter of suction cup	Vacuum port direction			Mounting thread				
	Nil	LA4	LA6	M5M	M6M	M8M	M5F	M8F
2-8	●	●	●	●	-	-	●	-
10-16	●	●	●	●	-	-	●	-
20-32	●	●	●	-	●	-	●	-
40-50	●	-	●	-	-	●	-	●

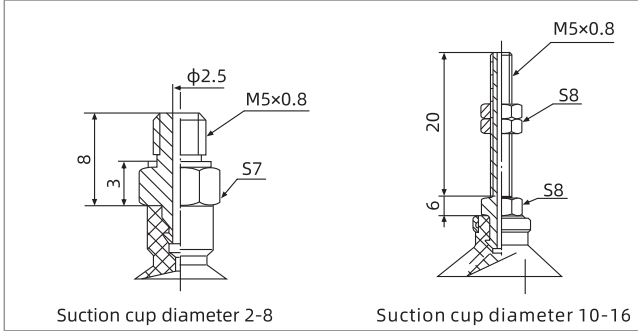
◇ Note: "●" default, in stock, "-" unavailable

SZ Series

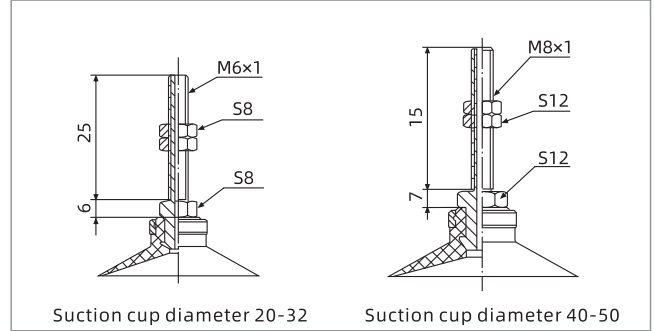
Suction Cup with Locking Fitting



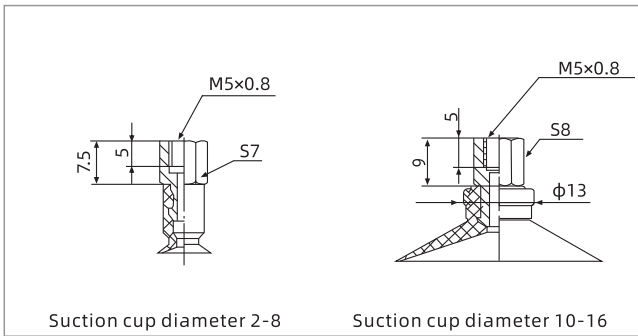
Dimensions(mm)



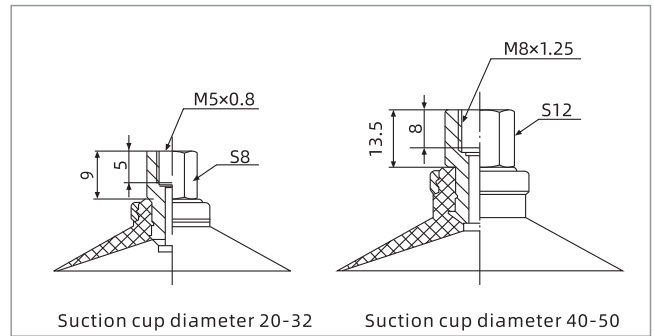
Vertical-Male thread connection



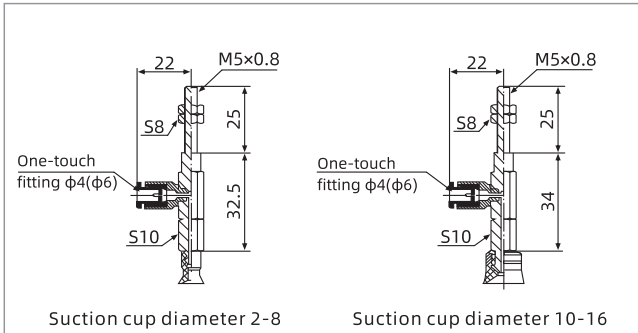
Vertical-Male thread connection



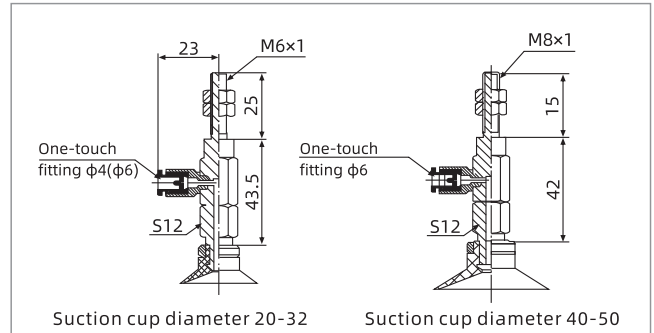
Vertical-Female thread connection



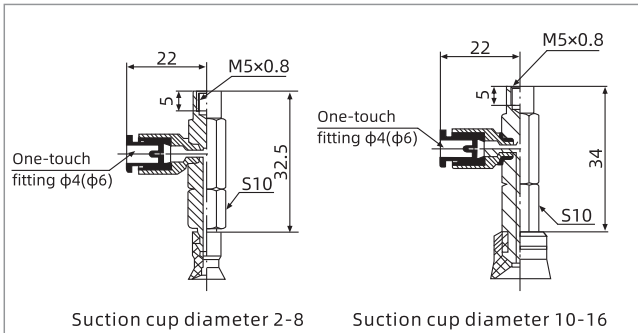
Vertical-Female thread connection



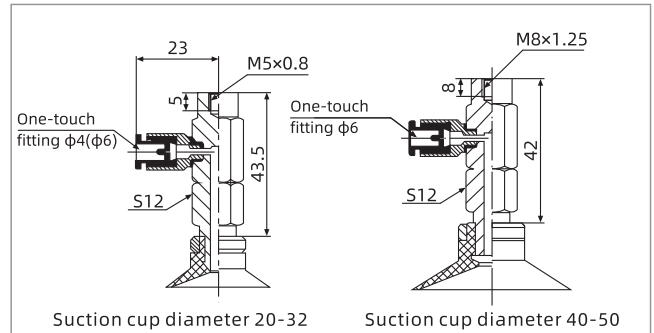
Lateral-Male thread connection



Lateral-Male thread connection



Lateral-Female thread connection



Lateral-Female thread connection

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

XP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SZ Series

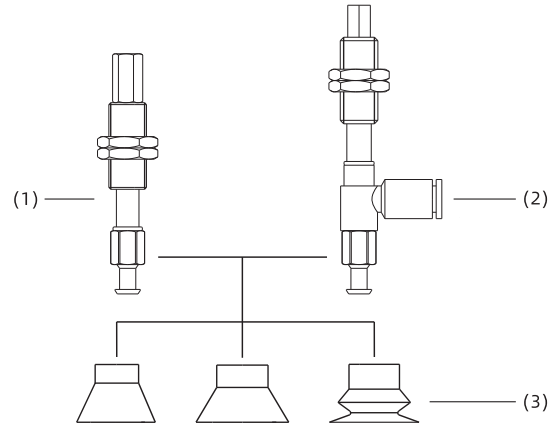


Suction Cup with Level Compensator

Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SZU10N - E I 10 R A6 - M10

① ② ③ ④ ⑤ ⑥ ⑦

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Rotary type	⑥ Vacuum port connection	⑦ Mounting thread
SZU10N	E - PSPE Series	I - Internal spring	6 20	Nil - Vertical rotating	Nil - M5×0.8 female thread	M8 - M8×1
SZC			10 30	R - Vertical non-rotating	A4 - one-touch fitting φ4 hose	M10 - M10×1
SZB			15 40	L - Lateral rotating	A6 - one-touch fitting φ6 hose	M14 - M14×1
SZD			25 50	B - Lateral non-rotating	B4 - Pagoda fitting φ4 hose B6 - Pagoda fitting φ6 hose	

◇ Please refer to page 146 for suction cup selection

Selection

Diameter of suction cup	Buffer stroke	Rotary type				Vacuum port connection					Mounting thread
		Nil	R	L	B	Nil	A4	A6	B4	B6	
2-8	6, 10, 15, 25	●	●	●	●	●	●	●	●	-	M8
10-32	10, 20, 30, 40, 50	●	●	●	●	●	●	●	-	●	M10
40-50	10, 20, 30, 50	●	-	-	-	●	-	-	-	-	M14

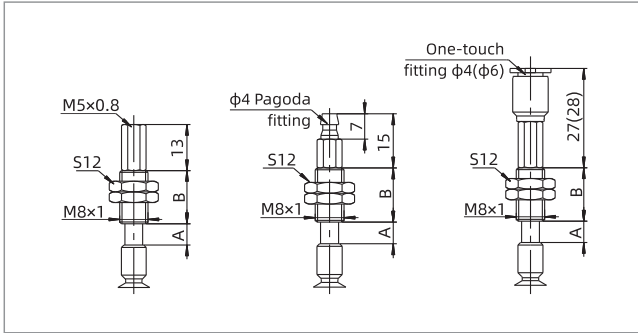
◇ Note: "●" default, in stock, "-" unavailable

SZ Series

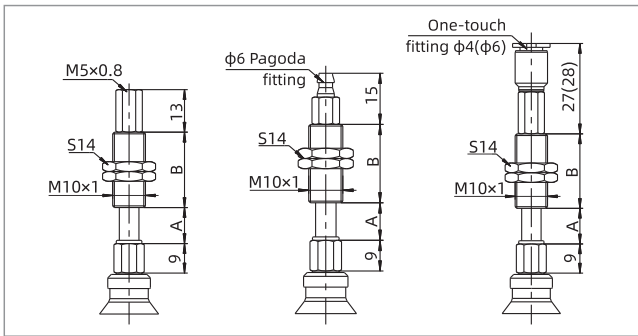
Suction Cup with Level Compensator



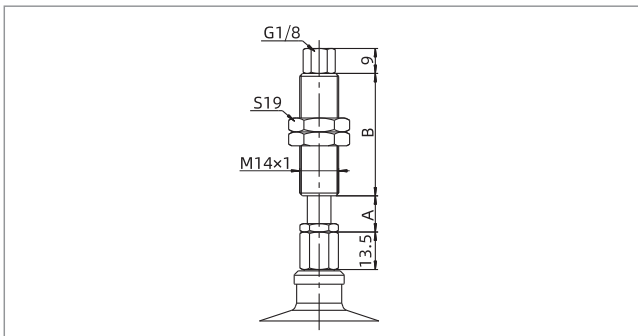
Dimensions(mm)



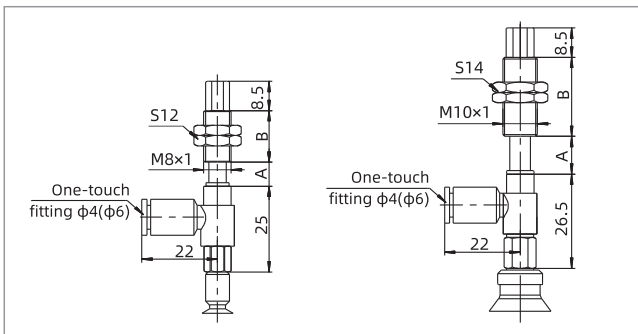
Vertical direction Suction cup diameter 2-8



Vertical direction Suction cup diameter 10-32



Vertical direction Suction cup diameter 40-50



Lateral direction Suction cup diameter 2-8 Suction cup diameter 10-32

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
2-8	6	15	6	0.8	1.2
	11	43	10	0.8	1.2
	16	43	15	0.8	1.2
	26	43	25	0.8	1.2

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
10-32	11.5	23	10	1.0	3.0
	21.5	51	20	1.0	3.0
	31.5	51	30	1.0	3.0
	41.5	77	40	1.0	3.0
	51.5	77	50	1.0	3.0

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
40-50	13	44	10	2.0	5.5
	23	44	20	2.0	5.5
	33	44	30	2.0	5.5
	53	75	50	2.0	5.5

Suction cup dia./ Size	A	B	Buffer stroke	F1 (N)	F2 (N)
2-8	8	15	6	0.8	1.2
	11	43	10	0.8	1.2
	16	43	15	0.8	1.2
	26	43	25	0.8	1.2
10-32	11	23	10	1.0	3.0
	21	51	20	1.0	3.0
	31	51	30	1.0	3.0
	41	77	40	1.0	3.0
	51	77	50	1.0	3.0

◇ Note: "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SP3 Series

Suction Cup



ELECTRONICS



Features

- ◇ Suction cups of same diameter among U/C/B types use same fitting
- ◇ Small size, short height
- ◇ Available in conductive material

Advantages

- ◇ Used in various occasions, suction cups are interchangeable
- ◇ Suitable for occasions with limited space
- ◇ Discharge static electricity gently to protect workpieces from damage



U-Flat



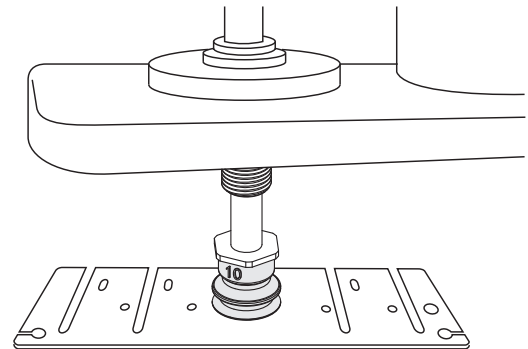
C-Flat with ribs



B-1.5 bellows

Applications

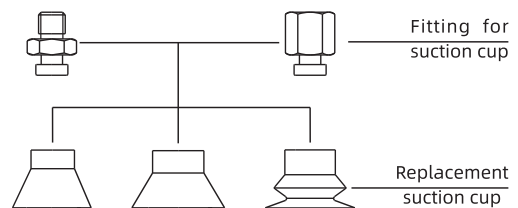
- ◇ U type suitable for workpieces with even surface and without deformation
- ◇ C type suitable for easily deformed workpieces
- ◇ B type suitable for workpieces with inclined surface
- ◇ Suitable for handling of workpieces with small size and light weight
- ◇ Conductive material suitable for 3C industry



Structure

- ◇ Split structure for easy replacement of wearing parts

In the same series, replacement suction cup and locking fitting can be combined as required



SP3 Series

Suction Cup

How to order

SP3 B 10 N - M5M

① ② ③ ④ ⑤

① Series	② Suction cup type	③ Diameter		④ Material & Hardness		⑤ Connection thread
SP3	U - Flat	1.5 - ϕ 1.5mm	2 - ϕ 2mm	N - NBR	55	Nil - Suction cup only
	C - Flat with ribs	3.5 - ϕ 3.5mm	4 - ϕ 4mm	WS - White silicone	50	M3F - M3x0.5 female thread
	B - 1.5 Bellows	10 - ϕ 10mm	6 - ϕ 6mm	CN - Conductive NBR	55	M5F - M5x0.8 female thread
		13 - ϕ 13mm	8 - ϕ 8mm	CS - Conductive silicone	55	M3M - M3x0.5 male thread
		16 - ϕ 16mm		HP - Mark free rubber	55	M5M - M5x0.8 male thread

◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Diameter of suction cup	Suction cup type			Connection thread				MPQ pcs
	U	C	B	M3F	M3M	M5F	M5M	
ϕ 1.5	●	-	-	●	●	-	-	10
ϕ 2	●	-	-	●	●	-	-	10
ϕ 3.5	●	-	-	●	●	-	-	10
ϕ 4	-	●	●	-	-	●	●	10
ϕ 6	-	●	●	-	-	●	●	10
ϕ 8	-	●	●	-	-	●	●	10
ϕ 10	-	●	●	-	-	●	●	10
ϕ 13	-	●	●	-	-	●	●	10
ϕ 16	-	●	●	-	-	●	●	10

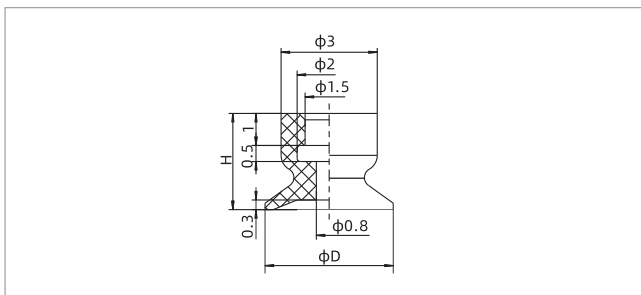
◇ Note: "●" default, in stock, "-" unavailable

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SWP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SP3 Series

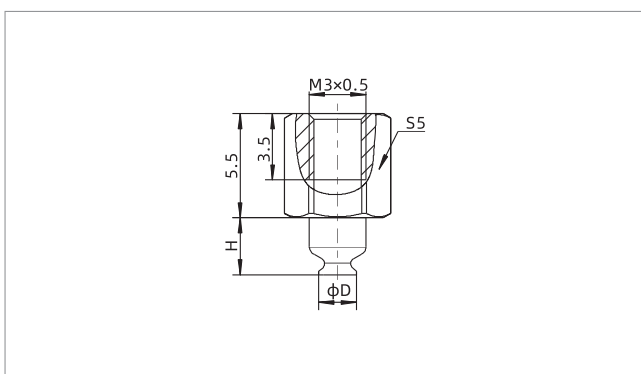
Suction Cup

Dimensions(mm) - U type



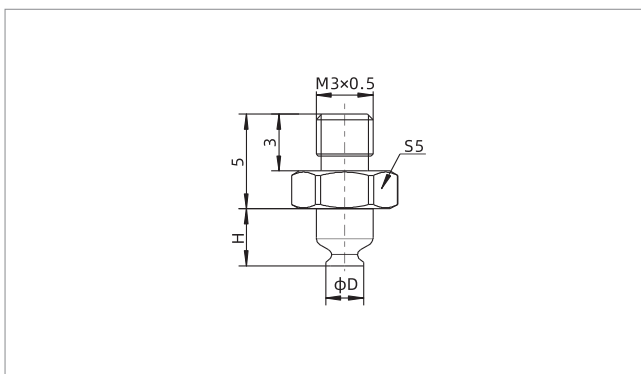
SP3U1.5-3.5

Model/Size	D	H	Weight g
SP3U1.5□	2.0	3.0	0.1
SP3U2□	2.5	3.0	0.1
SP3U3.5□	4.0	3.0	0.1



SP3U1.5-3.5 F - Female thread connection

Model/Size	D	H	Weight g
SP3U1.5□-M3F	2.0	3.0	0.9
SP3U2□-M3F	2.5	3.0	0.9
SP3U3.5□-M3F	4.0	3.0	0.9



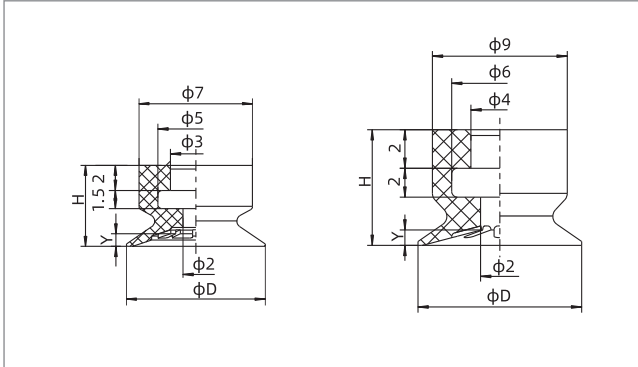
SP3U1.5-3.5 M - Male thread connection

Model/Size	D	H	Weight g
SP3U1.5□-M3M	2.0	3.0	0.6
SP3U2□-M3M	2.5	3.0	0.6
SP3U3.5□-M3M	4.0	3.0	0.6

SP3 Series

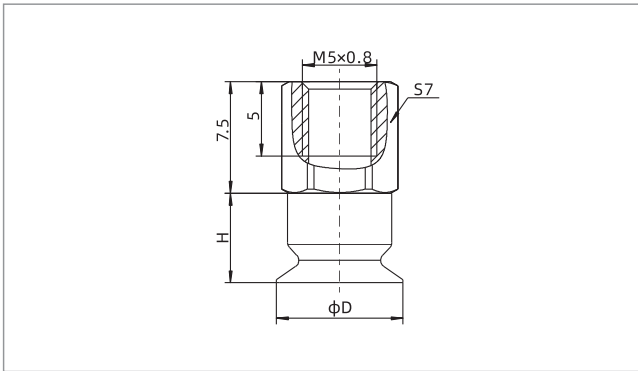
Suction Cup

Dimensions(mm) - C type

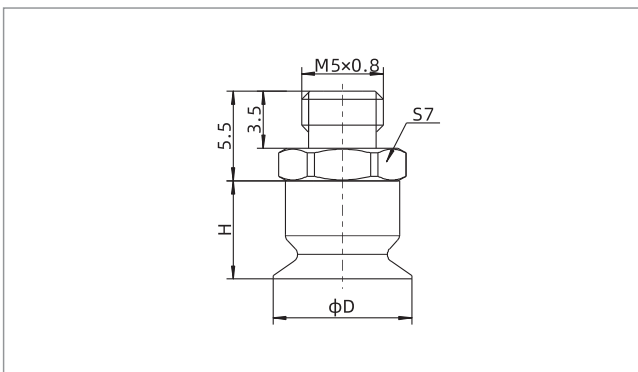


SP3C4-8

SP3C10-16



SP3C4-16 F - Female thread connection



SP3C4-16 M - Male thread connection

Model/Size	D	H	Y	Weight g
SP3C4□	4.5	6.0	0.5	0.3
SP3C6□	6.5	6.0	0.8	0.3
SP3C8□	8.5	6.0	0.8	0.3
SP3C10□	11.0	7.0	1.0	0.6
SP3C13□	14.0	7.0	1.2	0.7
SP3C16□	17.0	7.0	1.2	0.8

Model/Size	D	H	Weight g
SP3C4□-M5F	4.5	6.0	2.3
SP3C6□-M5F	6.5	6.0	2.3
SP3C8□-M5F	8.5	6.0	2.3
SP3C10□-M5F	11.0	7.0	5.7
SP3C13□-M5F	14.0	7.0	5.8
SP3C16□-M5F	17.0	7.0	5.9

Model/Size	D	H	Weight g
SP3C4□-M5M	4.5	6.0	1.7
SP3C6□-M5M	6.5	6.0	1.7
SP3C8□-M5M	8.5	6.0	1.7
SP3C10□-M5M	11.0	7.0	3.0
SP3C13□-M5M	14.0	7.0	3.1
SP3C16□-M5M	17.0	7.0	3.2

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

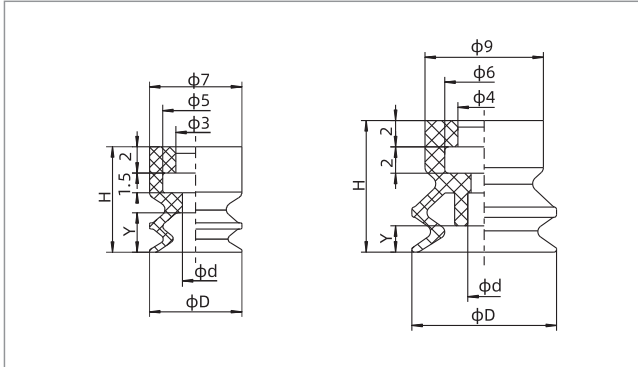
SNP

SP3 Series

Suction Cup



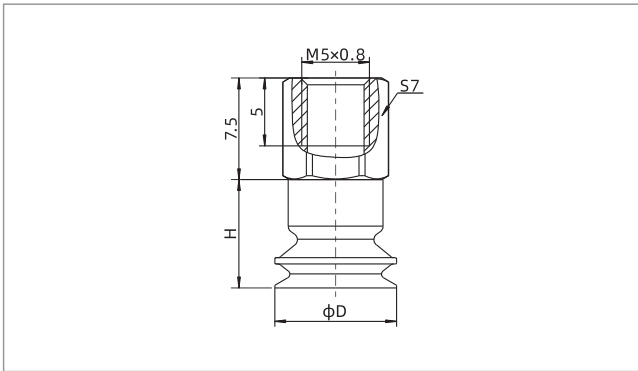
Dimensions(mm) - B type



SP3B4-8

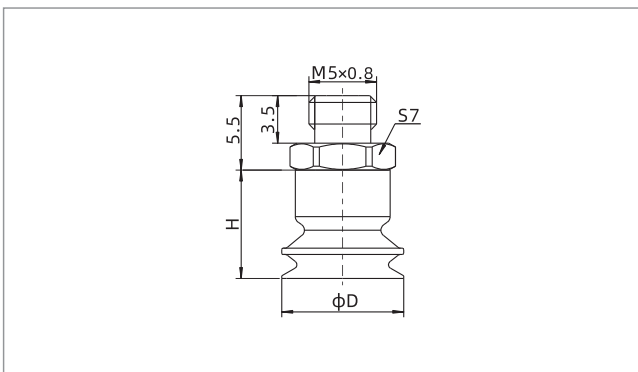
SP3B10-16

Model/Size	D	H	d	Y	Weight g
SP3B4□	4.5	8.0	1.8	2.2	0.3
SP3B6□	7.0	8.0	2.0	3.0	0.3
SP3B8□	9.0	8.0	2.0	3.0	0.4
SP3B10□	11.0	10.0	2.0	2.0	0.8
SP3B13□	14.0	10.0	3.0	2.0	1.0
SP3B16□	17.0	10.0	3.0	2.0	1.1



SP3B4-16 F - Female thread connection

Model/Size	D	H	Weight g
SP3B4□-M5F	4.5	8.0	2.3
SP3B6□-M5F	7.0	8.0	2.3
SP3B8□-M5F	9.0	8.0	2.4
SP3B10□-M5F	11.0	10.0	5.9
SP3B13□-M5F	14.0	10.0	6.1
SP3B16□-M5F	17.0	10.0	6.2



SP3B4-16 M - Male thread connection

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	Weight g
SP3B4□-M5M	4.5	8.0	1.7
SP3B6□-M5M	7.0	8.0	1.7
SP3B8□-M5M	9.0	8.0	1.8
SP3B10□-M5M	11.0	10.0	3.2
SP3B13□-M5M	14.0	10.0	3.4
SP3B16□-M5M	17.0	10.0	3.5

Mounting parts

Item	Model Female thread	Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3F-ST0.5	PJS-M3M-ST0.5	SP3U1.5, 2, 3.5
	PJS-M5F-ST1.5	PJS-M5M-ST1.5	SP3C4, 6, 8; SP3B4, 6, 8
	PJS-M5F-ST2	PJS-M5M-ST2-A	SP3C10, 13, 16; SP3B10, 13, 16

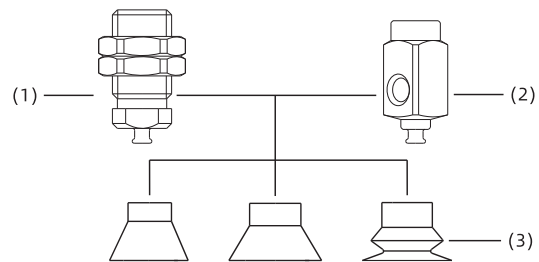
SP3 Series

Suction Cup with Locking Fitting

Structure

- ◇ Consisting of replacement suction cup(3) and locking fitting(1 or 2)
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SP3B10N - L M5F - M5F

① ② ③ ④

① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SP3B10N	Nil - Vertical	M3F - M3×0.5 female thread	M3F - M3×0.5 female thread
	L - Lateral	M5F - M5×0.8 female thread	M5F - M5×0.8 female thread M6M - M6×0.75 male thread M10M - M10×1 male thread M12M - M12×1 male thread

◇ Please refer to page 154 for suction cup selection

Selection

Model	Nil-Vertical Vacuum port connection	Mounting thread	L- Lateral Vacuum port connection	Mounting thread
SP3U1.5-3.5	M3F	M6M	M3F	M3F
SP3C4-8	M5F	M10M	M5F	M5F
SP3C10-16	M5F	M12M	M5F	M5F
SP3B4-8	M5F	M10M	M5F	M5F
SP3B10-16	M5F	M12M	M5F	M5F

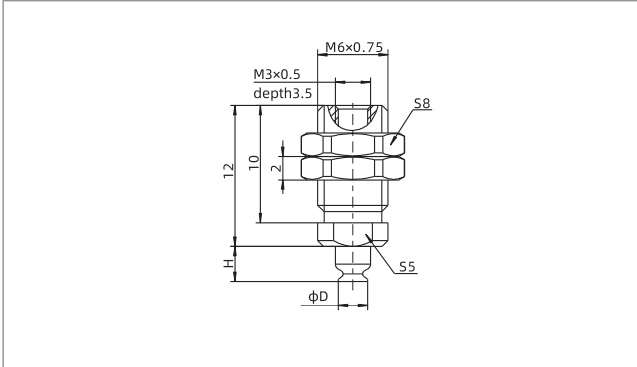
SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFD
SB
SBA
SF
SU
SPA
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP

SP3 Series

Suction Cup with Locking Fitting

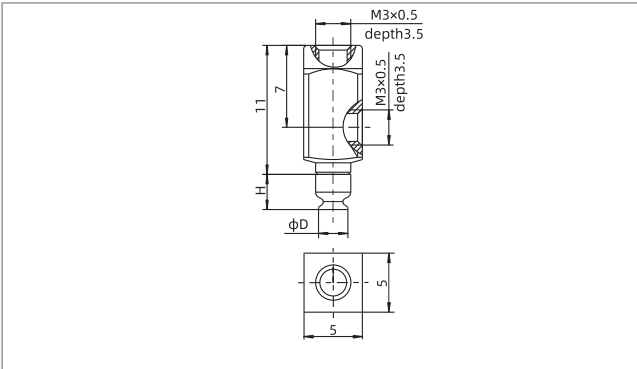


Dimensions(mm) - U type



SP3U1.5-3.5 Vertical-Male thread connection

Model/Size	D	H	Weight g
SP3U1.5□-M3F-M6M	2.0	3.0	2.8
SP3U2□-M3F-M6M	2.5	3.0	2.8
SP3U3.5□-M3F-M6M	4.0	3.0	2.8



SP3U1.5-3.5 Lateral-Female thread connection

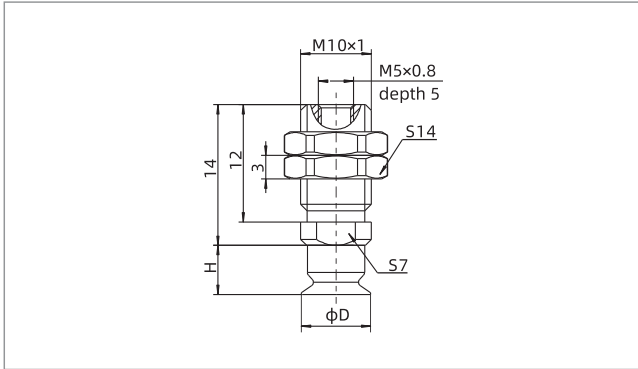
Model/Size	D	H	Weight g
SP3U1.5□-LM3F-M3F	2.0	3.0	1.9
SP3U2□-LM3F-M3F	2.5	3.0	1.9
SP3U3.5□-LM3F-M3F	4.0	3.0	1.9

SP3 Series

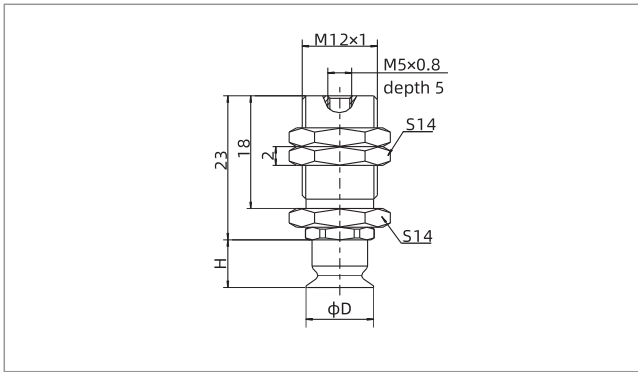
Suction Cup with Locking Fitting



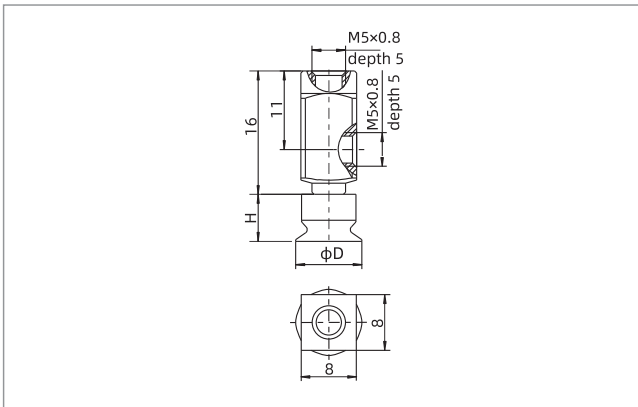
Dimensions(mm) - C type



SP3C4-8 Vertical-Male thread connection



SP3C10-16 Vertical-Male thread connection



SP3C4-16 Lateral-Female thread connection

Model/Size	D	H	Weight g
SP3C4□-M5F-M10M	4.5	6.0	11.0
SP3C6□-M5F-M10M	6.5	6.0	11.0
SP3C8□-M5F-M10M	8.5	6.0	11.0

Model/Size	D	H	Weight g
SP3C10□-M5F-M12M	11.0	7.0	18.8
SP3C13□-M5F-M12M	14.0	7.0	18.9
SP3C16□-M5F-M12M	17.0	7.0	19.0

Model/Size	D	H	Weight g
SP3C4□-LM5F-M5F	4.5	6.0	7.0
SP3C6□-LM5F-M5F	6.5	6.0	7.0
SP3C8□-LM5F-M5F	8.5	6.0	7.0
SP3C10□-LM5F-M5F	11.0	7.0	7.7
SP3C13□-LM5F-M5F	14.0	7.0	7.8
SP3C16□-LM5F-M5F	17.0	7.0	7.9

SZ

SP3

SUF

SAN

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

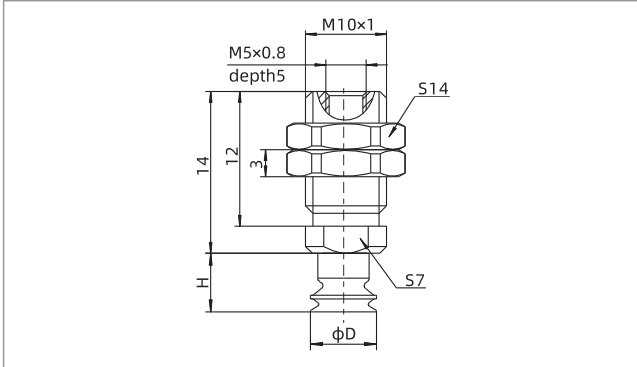
SNP

SP3 Series

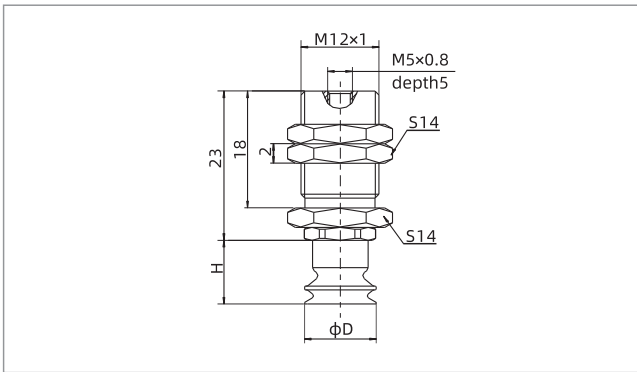
Suction Cup with Locking Fitting



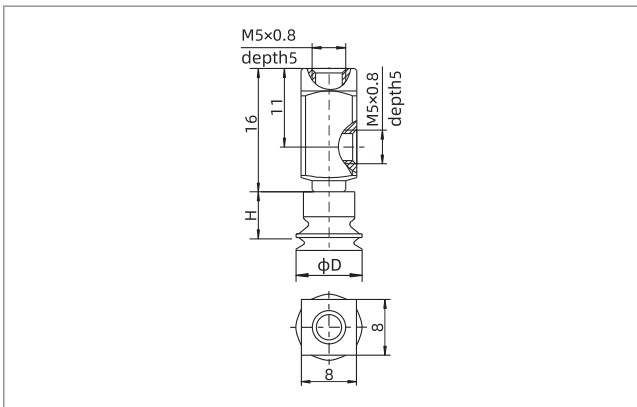
Dimensions(mm) -B type



SP3B□□-M5F-M10M



SP3B□□-M5F-M12M



SP3B□□-LM5F-M5F

Model/Size	D	H	Weight g
SP3B4□-M5F-M10M	4.5	8.0	11.0
SP3B6□-M5F-M10M	7.0	8.0	11.0
SP3B8□-M5F-M10M	9.0	8.0	11.1

Model/Size	D	H	Weight g
SP3B10□-M5F-M12M	11.0	10.0	19.0
SP3B13□-M5F-M12M	14.0	10.0	19.2
SP3B16□-M5F-M12M	17.0	10.0	19.3

Model/Size	D	H	Weight g
SP3B4□-LM5F-M5F	4.5	8.0	7.0
SP3B6□-LM5F-M5F	7.0	8.0	7.0
SP3B8□-LM5F-M5F	9.0	8.0	7.1
SP3B10□-LM5F-M5F	11.0	10.0	7.9
SP3B13□-LM5F-M5F	14.0	10.0	8.1
SP3B16□-LM5F-M5F	17.0	10.0	8.2

Mounting parts

Item	Model Vertical direction	Lateral direction	Applicable suction cup
Locking fitting	PJF-M3F-M6M-ST0.5	PJF-LM3F-M3F-ST0.5	SP3U1.5, 2, 3.5
	PJF-M5F-M10M-ST1.5	PJF-LM5F-M5F-ST1.5	SP3C4, 6, 8; SP3B4, 6, 8
	PJF-M5F-M12M-ST2	PJF-LM5F-M5F-ST2	SP3C10, 13, 16; SP3B10, 13, 16

SP3 Series

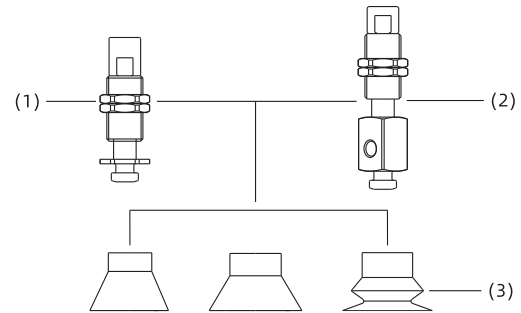
Suction Cup with Level Compensator



Structure

- ◇ Consisting of replacement suction cup(3) and level compensator(1 or 2)
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SP3B10N - I 10 R - M8

① ② ③ ④ ⑤

① Model	② Vacuum port direction	③ Buffer stroke	④ Rotary type	⑤ Mounting thread
SP3B10N	I - Vertical	3 15	Nil - Rotating	M6 - M6×0.75
	L - Lateral	6 20	R - Non-rotating	M8 - M8×0.75
		10		

◇ Please refer to page 154 for suction cup selection

Selection

Model	Vacuum port direction		Rotary type		Buffer stroke	Mounting thread
	I-Vertical	L-Lateral	Nil-Rotating	R-Non-rotating		
SP3U1.5-3.5	●	●	●	-	3 6	M6
SP3U1.5-3.5	●	●	-	●	3 6	M8
SP3C4-16	●	●	●	●	3 6 10 15 20	M8
SP3B4-16	●	●	●	●	3 6 10 15 20	M8

◇ Note: "●" default, in stock, "-" unavailable

SZ

SP3

SUF

SAN

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

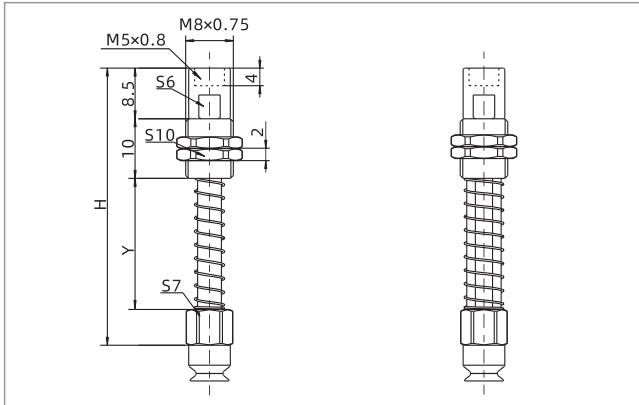
SNP

SP3 Series

Suction Cup with Level Compensator

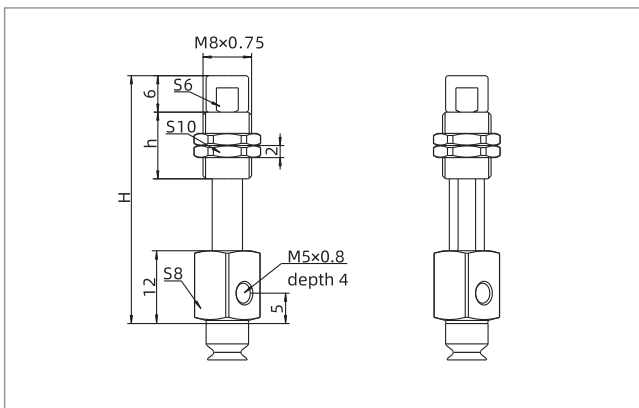


Dimensions(mm) -C type



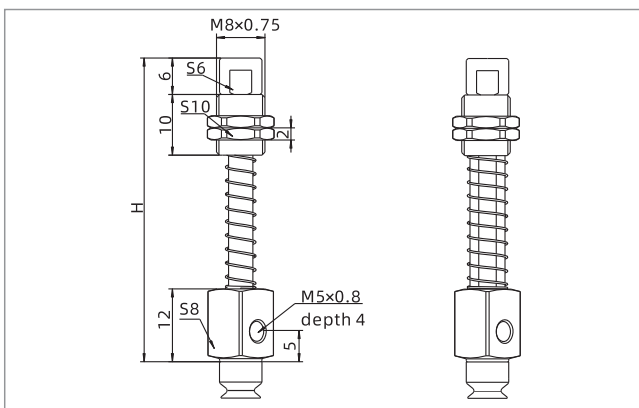
SP3C4-16 Vertical rotating

SP3C4-16 Vertical non-rotating



SP3C4-16 Lateral rotating

SP3C4-16 Lateral non-rotating



SP3C4-16 Lateral rotating

SP3C4-16 Lateral non-rotating

Model/Size	H	Y	Buffer stroke	F1 N	F2 N	Weight g
SP3C□-I15-M8	49.0	24.5	15	0.2	0.5	10.3
SP3C□-I15R-M8	49.0	24.5	15	0.2	0.5	12.3
SP3C□-I20-M8	56.5	32.0	20	0.2	0.5	10.9
SP3C□-I20R-M8	56.5	32.0	20	0.2	0.5	13.4

Model/Size	H	h	Buffer stroke	F1 N	F2 N	Weight g
SP3C□-L3-M8	33.0	11.0	3	0.2	0.5	12.8
SP3C□-L3R-M8	33.0	11.0	3	0.2	0.5	12.2
SP3C□-L6-M8	39.5	14.5	6	0.2	0.5	14.2
SP3C□-L6R-M8	39.5	14.5	6	0.2	0.5	13.4
SP3C□-L10-M8	49.5	20.5	10	0.2	0.5	16.6
SP3C□-L10R-M8	49.5	20.5	10	0.2	0.5	15.4

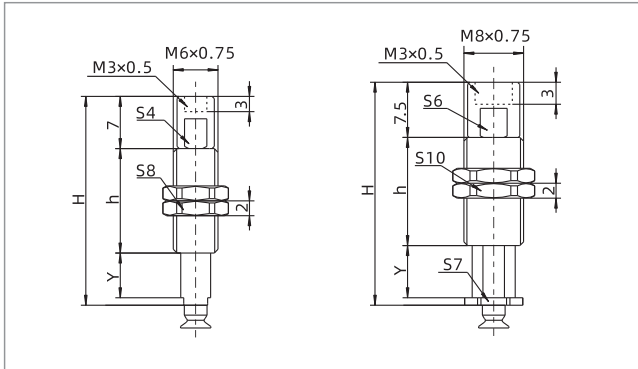
Model/Size	H	Buffer stroke	F1 N	F2 N	Weight g
SP3C□-L15-M8	52.5	15	0.2	0.5	16.3
SP3C□-L15R-M8	52.5	15	0.2	0.5	15.5
SP3C□-L20-M8	60.0	20	0.2	0.5	15.1
SP3C□-L20R-M8	60.0	20	0.2	0.5	16.6

◇ Note: 1. Please refer to page 154 for suction cup selection
2. "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke

SP3 Series

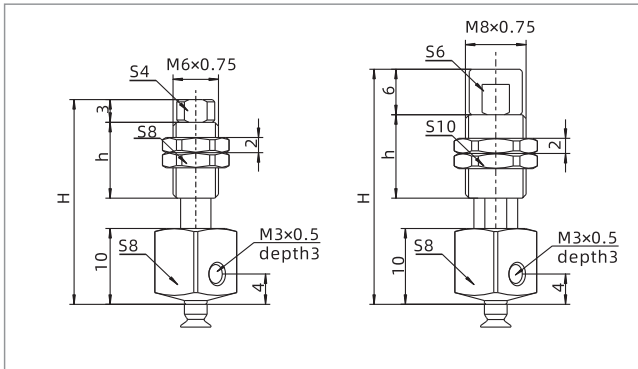
Suction Cup with Level Compensator

Dimensions(mm) -U type



SP3U1.5-3.5 Vertical rotating

SP3U1.5-3.5 Vertical non-rotating



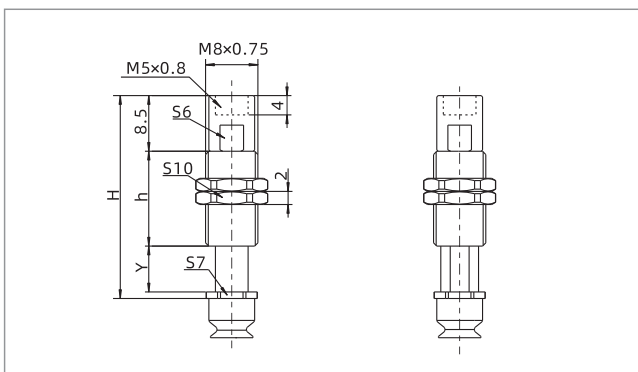
SP3U1.5-3.5 Lateral rotating

SP3U1.5-3.5 Lateral non-rotating

Model/Size	H	h	Y	Buffer stroke	F1 N	F2 N	Weight g
SP3U□-I3-M6	21.0	10.0	3.0	3	0.2	0.4	3.4
SP3U□-I3R-M8	23.5	11.0	3.0	6	0.2	0.5	6.8
SP3U□-I6-M6	28.0	14.0	6.0	3	0.2	0.5	4.4
SP3U□-I6R-M8	30.0	14.5	6.0	6	0.2	0.5	8.2

Model/Size	H	h	Buffer stroke	F1 N	F2 N	Weight g
SP3U□-L3-M6	27.0	10.0	3	0.2	0.4	7.7
SP3U□-L3R-M8	31.0	11.0	6	0.2	0.5	11.0
SP3U□-L6-M6	34.0	14.0	3	0.2	0.5	8.6
SP3U□-L6R-M8	37.5	14.5	6	0.2	0.5	12.2

Dimensions(mm) -C type



SP3C4-16 Vertical rotating

SP3C4-16 Vertical non-rotating

Model/Size	H	h	Y	Buffer stroke	F1 N	F2 N	Weight g
SP3C□-I3-M8	24.5	11.0	4.0	3	0.2	0.5	7.4
SP3C□-I3R-M8	24.5	11.0	4.0	3	0.2	0.5	7.3
SP3C□-I6-M8	31.0	14.5	7.0	6	0.2	0.5	8.6
SP3C□-I6R-M8	31.0	14.5	7.0	6	0.2	0.5	8.6
SP3C□-I10-M8	41.0	20.5	11.0	10	0.2	0.5	10.5
SP3C□-I10R-M8	41.0	20.5	11.0	10	0.2	0.5	10.5

◇ Note: 1. Please refer to page 154 for suction cup selection
2. "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

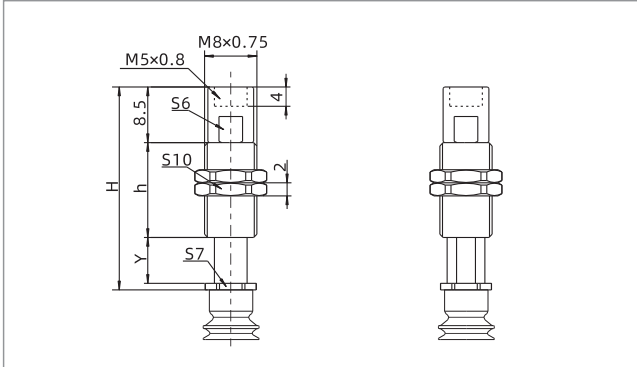
SNP

SP3 Series

Suction Cup with Level Compensator

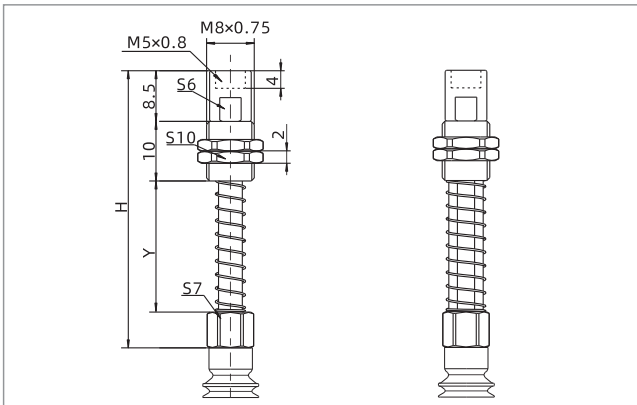


Dimensions(mm) -B type



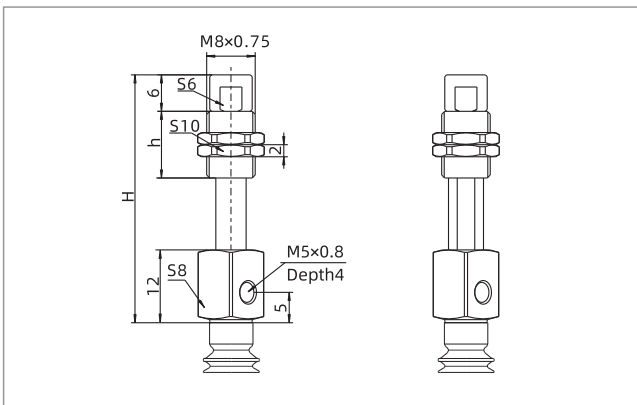
SP3B4-16 Vertical rotating

SP3B4-16 Vertical non-rotating



SP3B4-16 Vertical rotating

SP3B4-16 Vertical non-rotating



SP3B4-16 Lateral rotating

SP3B4-16 Lateral non-rotating

Model/Size	H	h	Y	Buffer stroke	F1 N	F2 N	Weight g
SP3B□-I3-M8	24.5	11.0	4	3	0.2	0.5	7.4
SP3B□-I3R-M8	24.5	11.0	4	3	0.2	0.5	7.3
SP3B□-I6-M8	31.0	14.5	7	6	0.2	0.5	8.6
SP3B□-I6R-M8	31.0	14.5	7	6	0.2	0.5	8.6
SP3B□-I10-M8	41.0	20.5	11	10	0.2	0.5	10.5
SP3B□-I10R-M8	41.0	20.5	11	10	0.2	0.5	10.5

Model/Size	H	Y	Buffer stroke	F1 N	F2 N	Weight g
SP3B□-I15-M8	49.0	24.5	15	0.2	0.5	10.3
SP3B□-I15R-M8	49.0	24.5	15	0.2	0.5	12.3
SP3B□-I20-M8	56.5	32.0	20	0.2	0.5	10.9
SP3B□-I20R-M8	56.5	32.0	20	0.2	0.5	13.4

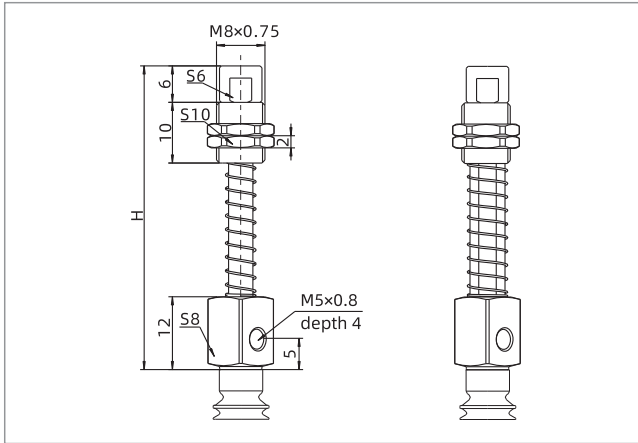
Model/Size	H	h	Buffer stroke	F1 N	F2 N	Weight g
SP3B□-L3-M8	33.0	11.0	3	0.2	0.5	12.8
SP3B□-L3R-M8	33.0	11.0	3	0.2	0.5	12.2
SP3B□-L6-M8	39.5	14.5	6	0.2	0.5	14.2
SP3B□-L6R-M8	39.5	14.5	6	0.2	0.5	13.4
SP3B□-L10-M8	49.5	20.5	10	0.2	0.5	16.6
SP3B□-L10R-M8	49.5	20.5	10	0.2	0.5	15.4

◇ Note: 1. Please refer to page 154 for suction cup selection
2. "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke

SP3 Series

Suction Cup with Level Compensator

Dimensions(mm) -B type



SP3B4-16 Lateral rotating

SP3B4-16 Lateral non-rotating

Model/Size	H	Buffer stroke	F1 N	F2 N	Weight g
SP3B□-L15-M8	52.5	15	0.2	0.5	16.3
SP3B□-L15R-M8	52.5	15	0.2	0.5	15.5
SP3B□-L20-M8	59.5	20	0.2	0.5	15.1
SP3B□-L20R-M8	59.5	20	0.2	0.5	16.6

◇ Note: 1. Please refer to page 154 for suction cup selection
2. "F1" means spring force at 0 stroke, "F2" means spring force at max. stroke

Mounting parts - Level compensator

Model Vertical rotating	Model Vertical non-rotating	Model Lateral rotating	Model Lateral non-rotating	Buffer stroke	Applicable suction cup
PSP3-I3ST0.5-M6	PSP3-I3RST0.5-M8	PSP3-L3ST0.5-M6	PSP3-L3RST0.5-M8	3	SP3U1.5, 2, 3.5
PSP3-I6ST0.5-M6	PSP3-I6RST0.5-M8	PSP3-L6ST0.5-M6	PSP3-L6RST0.5-M8	6	
PSP3-I3ST1.5-M8	PSP3-I3RST1.5-M8	PSP3-L3ST1.5-M8	PSP3-L3RST1.5-M8	3	SP3C4, 6, 8; SP3B4, 6, 8
PSP3-I6ST1.5-M8	PSP3-I6RST1.5-M8	PSP3-L6ST1.5-M8	PSP3-L6RST1.5-M8	6	
PSP3-I10ST1.5-M8	PSP3-I10RST1.5-M8	PSP3-L10ST1.5-M8	PSP3-L10RST1.5-M8	10	
PSP3-I15ST1.5-M8	PSP3-I15RST1.5-M8	PSP3-L15ST1.5-M8	PSP3-L15RST1.5-M8	15	
PSP3-I20ST1.5-M8	PSP3-I20RST1.5-M8	PSP3-L20ST1.5-M8	PSP3-L20RST1.5-M8	20	
PSP3-I3ST2-M8	PSP3-I3RST2-M8	PSP3-L3ST2-M8	PSP3-L3RST2-M8	3	SP3C10, 13, 16; SP3B10, 13, 16
PSP3-I6ST2-M8	PSP3-I6RST2-M8	PSP3-L6ST2-M8	PSP3-L6RST2-M8	6	
PSP3-I10ST2-M8	PSP3-I10RST2-M8	PSP3-L10ST2-M8	PSP3-L10RST2-M8	10	
PSP3-I15ST2-M8	PSP3-I15RST2-M8	PSP3-L15ST2-M8	PSP3-L15RST2-M8	15	
PSP3-I20ST2-M8	PSP3-I20RST2-M8	PSP3-L20ST2-M8	PSP3-L20RST2-M8	20	

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SUF Series

Small Flat Suction Cup

AIRBEST



Features

- ◇ Standard flat lip
- ◇ Small size, light weight

Advantages

- ◇ Good airtightness, suitable for handling workpiece with smooth and even surface
- ◇ Suitable for handling small workpieces in electronic industry



Applications

- ◇ Suitable for handling small workpieces, such as electronic components, sheet metal, solar wafer, etc.

Structure

- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately.

How to order

SUF 3.5 N - M5M

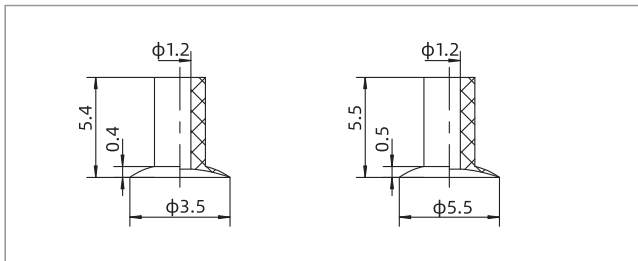
① ② ③ ④

① Series	② Diameter	③ Material & Hardness		④ Connection thread
SUF	3.5 - ϕ 3.5mm	N - NBR	55	Nil - Suction cup only M5M - M5x0.8 male thread
	5.5 - ϕ 5.5mm	S - Silicone	50	

Selection

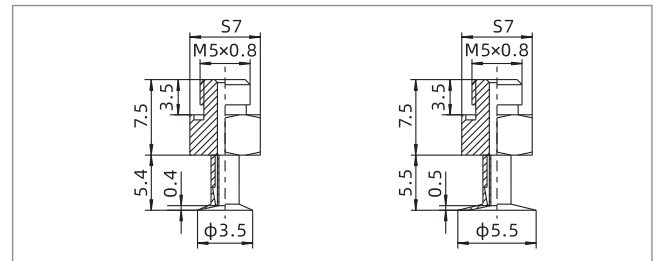
Model	Connection thread M - Male thread		MPQ pcs	Weight g
SUF3.5N SUF3.5S	SUF3.5N-M5M	SUF3.5S-M5M	10	0.1
SUF5.5N SUF5.5S	SUF5.5N-M5M	SUF5.5S-M5M	10	0.1

Dimensions(mm)



SUF3.5

SUF5.5



SUF3.5□-M5M

SUF5.5□-M5M

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model	Applicable suction cup
Fitting for suction cup	PJS-M5M-SUF5.5	SUF3.5,5.5

SAN Series

Nozzle Suction Cup

AIRBEST



Suction Cup

Features

- ◇ Nozzle design
- ◇ Small diameter
- ◇ Conductive material available

Advantages

- ◇ Fast handling of mini type workpieces
- ◇ Ideal for occasions with limited space

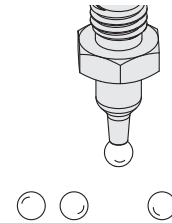


Applications

- ◇ Handling of mini type electronic components and thin sheet metal
- ◇ Handling of workpieces of small size and light weight
- ◇ Conductive material is suitable for electronic industry

Structure

- ◇ Split structure for easy replacement of wearing parts



How to order

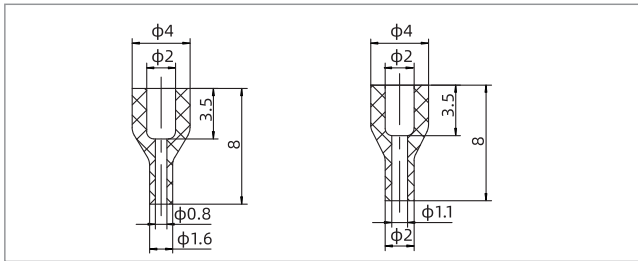
SAN 1.1 N - M5M

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SAN	0.8 - ϕ 0.8mm 1.1 - ϕ 1.1mm	N - NBR 55	Nil - Suction cup only M5M - M5x0.8 male thread
		WS - White silicone 50	
		CN - Conductive NBR 55	
		CS - Conductive silicone 55	

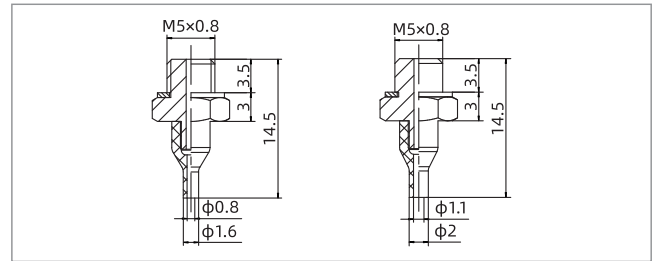
◇ Note: Min. package: 10pcs/bag

Dimensions(mm)



SAN0.8

SAN1.1



SAN0.8□-M5M

SAN1.1□-M5M

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model	Applicable suction cup
Fitting for suction cup	PJS-M5M-SAN1.1	SAN0.8, 1.1

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOE

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SAO Series

Oval Flat Suction Cup

AIRBEST



ELECTRONICS

RoHS

Features

- ◇ Oval and Flat structure
- ◇ Conductive material available
- ◇ Various sizes available

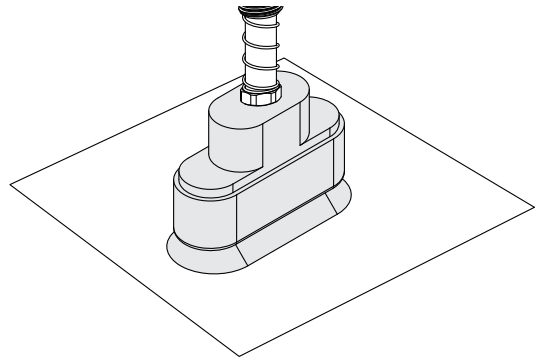
Advantages

- ◇ Small sizes, large suction force, suitable for handling of long and narrow workpieces
- ◇ Discharge static electricity gently to protect workpieces from damage
- ◇ Suitable for workpieces of various sizes and shapes



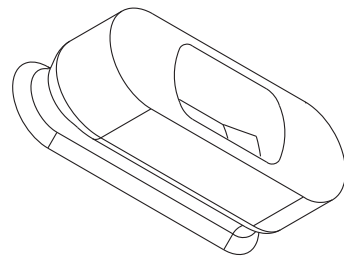
Applications

- ◇ Handling of long and narrow workpieces with even surface
- ◇ Handling of electronic components
- ◇ Conductive material is suitable for 3C industry



Structure

- ◇ Split structure for easy replacement of wearing parts



SAO Series

Oval Flat Suction Cup

How to order

SAO 8×20 N

① ② ③

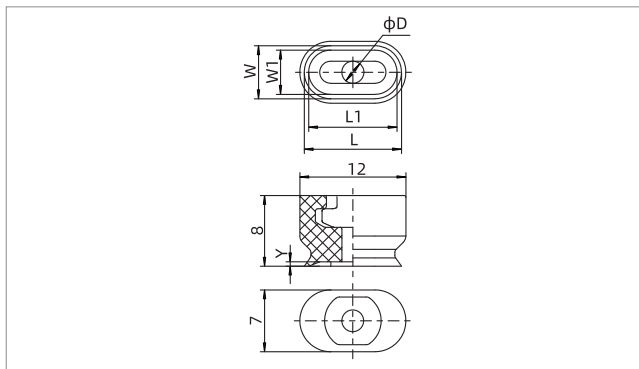
① Series	② Size	③ Material & Hardness
SAO	3.5×7 6×20	N - NBR 55
	4×10 8×20	WS - White silicone 50
	5×10 4×30	CN - Conductive NBR 55
	6×10 5×30	CS - Conductive silicone 55
	4×20 6×30	
	5×20 8×30	

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min. Curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SAO3.5×7	0.9	<0.1	6	0.5	4	10
SAO4×10	1.6	<0.1	7	0.4	4	10
SAO5×10	2	<0.1	9	0.4	4	10
SAO6×10	2.4	<0.1	13	0.5	4	10
SAO4×20	3.2	<0.1	8	0.8	4	10
SAO5×20	4.2	<0.1	11	0.7	4	10
SAO6×20	5	<0.1	14	0.9	4	10
SAO8×20	6.5	<0.1	16	0.9	4	10
SAO4×30	5.2	<0.1	8	1.3	4	10
SAO5×30	6.5	<0.1	10	1.1	4	10
SAO6×30	7.8	<0.1	14	1.2	4	10
SAO8×30	10.2	0.1	18	1.3	4	10

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



Model/Size	W	L	W1	L1	D	Y
SAO3.5×7□	4.5	8	3.5	7	2-1.5	0.5
SAO4×10□	5	11	4	10	2-1.5	0.5
SAO5×10□	6	11	5	10	2.5	0.5
SAO6×10□	7	11	6	10	2.5	0.5

SAO

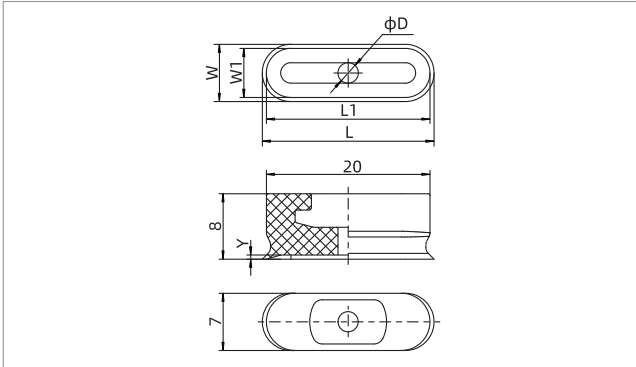
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SAO Series

Oval Flat Suction Cup

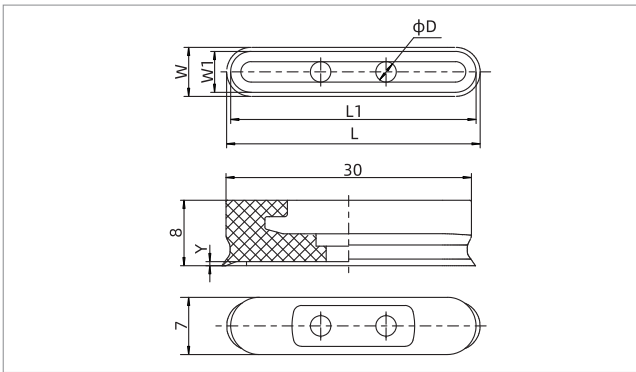


Dimensions(mm)



Model/Size	W	L	W1	L1	D	Y
SAO4×20□	5	21	4	20	2-1.8	0.5
SAO5×20□	6	21	5	20	2-2	0.5
SAO6×20□	7	21	6	20	2.5	0.5
SAO8×20□	9	21	8	20	3	0.8

SAO



Model/Size	W	L	W1	L1	D	Y
SAO4×30□	5	31	4	30	2-1.8	0.5
SAO5×30□	6	31	5	30	2-2.5	0.5
SAO6×30□	7	31	6	30	2-2.5	0.5
SAO8×30□	9	31	8	30	2-2.5	0.8

SAO

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SAO Series

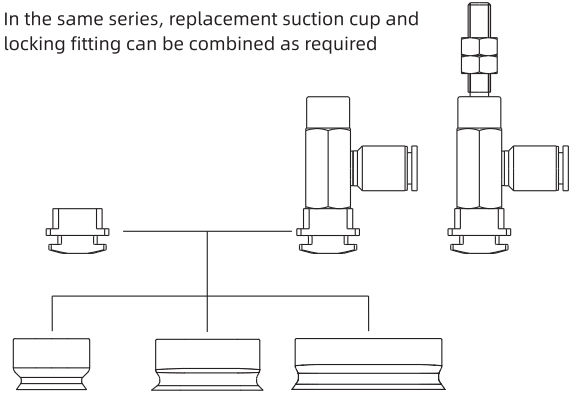
Suction Cup with Locking Fitting



Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port, female thread for mounting
- ◇ Lateral vacuum port, male and female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SAO5×20N - LA6 - M5F

① ② ③

① Model	② Vacuum port direction	③ Mounting thread
SAO5×20N	Nil - Vertical LA4 - Lateral, one-touch fitting φ4 hose LA6 - Lateral, one-touch fitting φ6 hose	M5M - M5×0.8 male thread M5F - M5×0.8 female thread

◇ Please refer to page 170 for suction cup selection

Selection

Connection thread M - Male thread		F - Female thread			
SAO3.5×7□-LA4-M5M	SAO3.5×7□-LA6-M5M	SAO3.5×7□-LA4-M5F	SAO3.5×7□-LA6-M5F	SAO3.5×7□-M5F	
SAO4×10□-LA4-M5M	SAO4×10□-LA6-M5M	SAO4×10□-LA4-M5F	SAO4×10□-LA6-M5F	SAO4×10□-M5F	
SAO5×10□-LA4-M5M	SAO5×10□-LA6-M5M	SAO5×10□-LA4-M5F	SAO5×10□-LA6-M5F	SAO5×10□-M5F	
SAO6×10□-LA4-M5M	SAO6×10□-LA6-M5M	SAO6×10□-LA4-M5F	SAO6×10□-LA6-M5F	SAO6×10□-M5F	
SAO4×20□-LA4-M5M	SAO4×20□-LA6-M5M	SAO4×20□-LA4-M5F	SAO4×20□-LA6-M5F	SAO4×20□-M5F	
SAO5×20□-LA4-M5M	SAO5×20□-LA6-M5M	SAO5×20□-LA4-M5F	SAO5×20□-LA6-M5F	SAO5×20□-M5F	
SAO6×20□-LA4-M5M	SAO6×20□-LA6-M5M	SAO6×20□-LA4-M5F	SAO6×20□-LA6-M5F	SAO6×20□-M5F	
SAO8×20□-LA4-M5M	SAO8×20□-LA6-M5M	SAO8×20□-LA4-M5F	SAO8×20□-LA6-M5F	SAO8×20□-M5F	
SAO4×30□-LA4-M5M	SAO4×30□-LA6-M5M	SAO4×30□-LA4-M5F	SAO4×30□-LA6-M5F	SAO4×30□-M5F	
SAO5×30□-LA4-M5M	SAO5×30□-LA6-M5M	SAO5×30□-LA4-M5F	SAO5×30□-LA6-M5F	SAO5×30□-M5F	
SAO6×30□-LA4-M5M	SAO6×30□-LA6-M5M	SAO6×30□-LA4-M5F	SAO6×30□-LA6-M5F	SAO6×30□-M5F	
SAO8×30□-LA4-M5M	SAO8×30□-LA6-M5M	SAO8×30□-LA4-M5F	SAO8×30□-LA6-M5F	SAO8×30□-M5F	

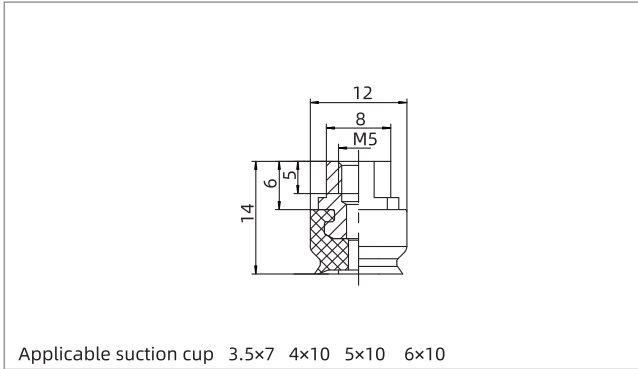
- SZ
- SP3
- SUF
- SAN
- SAO**
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SAO Series

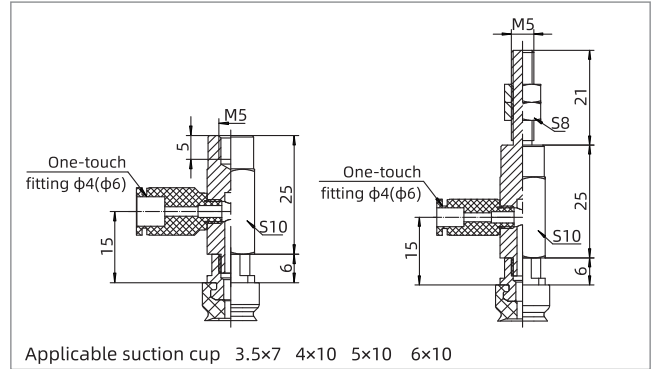


Suction Cup with Locking Fitting

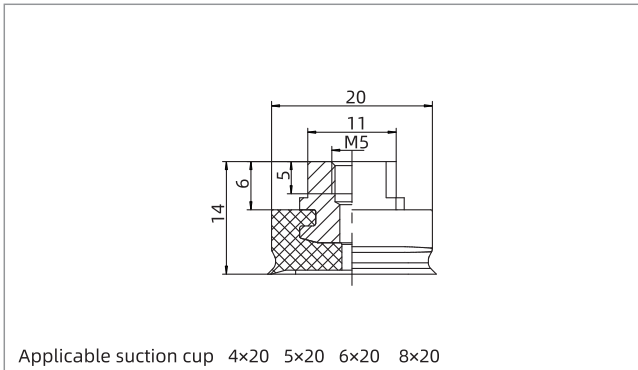
Dimensions(mm)



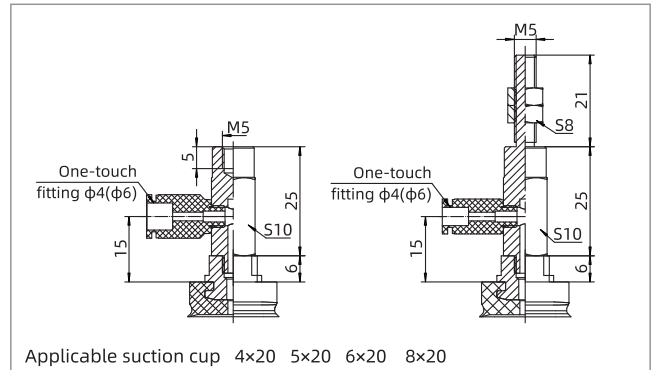
Vertical-Female thread connection



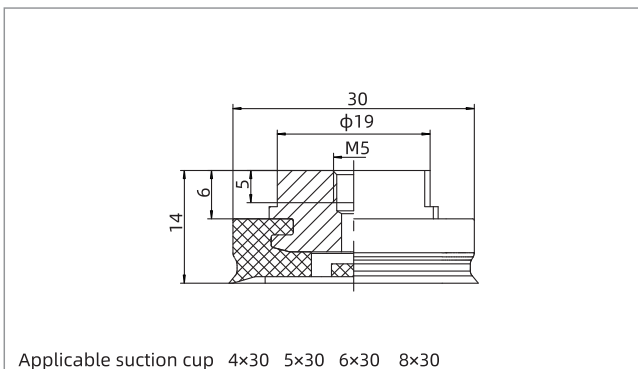
Lateral-Female thread connection Lateral-Male thread connection



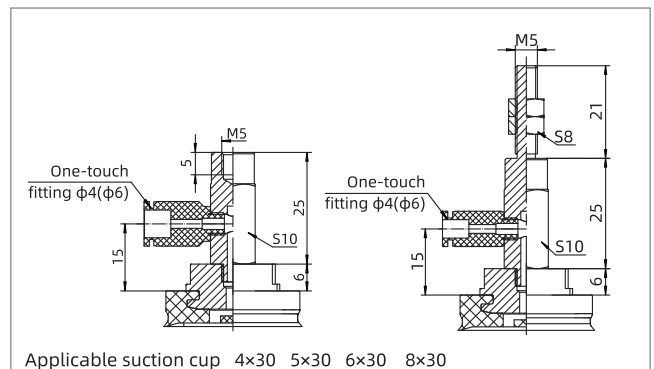
Vertical-Female thread connection



Lateral-Female thread connection Lateral-Male thread connection



Vertical-Female thread connection



Lateral-Female thread connection Lateral-Male thread connection

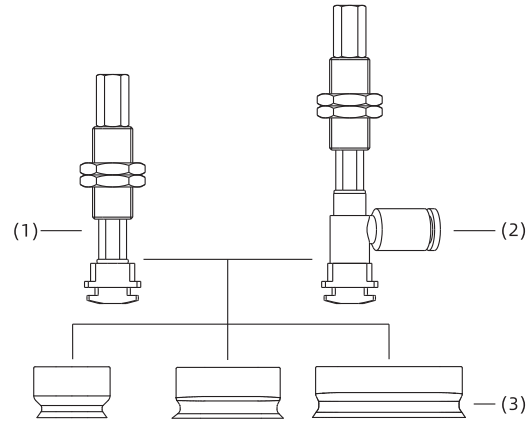
SAO Series

Suction Cup with Level Compensator

Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SAO5×20N - E I 10 R A6 - M10

① ② ③ ④ ⑤ ⑥ ⑦

① Series	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Rotary type	⑥ Vacuum port connection	⑦ Mounting thread
SAO5×20N	E - PSPE Series	I - Internal spring	10 40 20 50 30	R - Vertical non-rotating B - Lateral non-rotating	Nil - M5×0.8 female thread A4 - One-touch fitting φ4 hose A6 - One-touch fitting φ6 hose	M10 - M10×1

◇ Please refer to page 170 for suction cup selection

Selection

Rotary type/ Vacuum port connection	Nil	A4	A6
R - Vertical non-rotating	●	●	●
B - Lateral non-rotating	-	●	●

◇ Note: "●" default, in stock, "-" unavailable

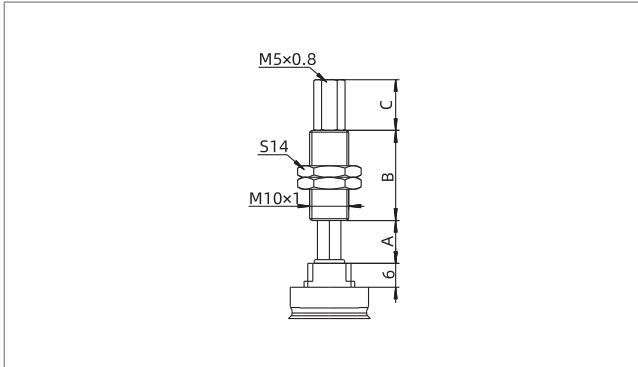
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SAO Series

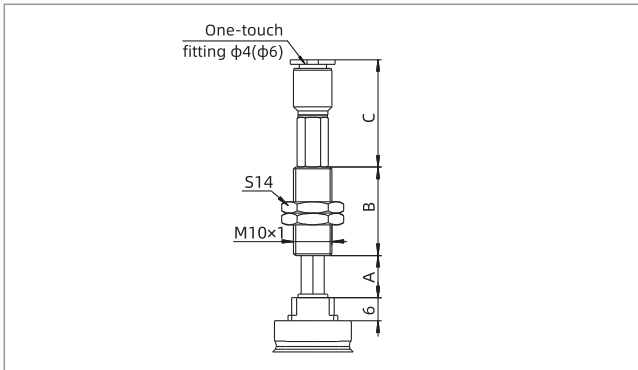
Suction Cup with Level Compensator



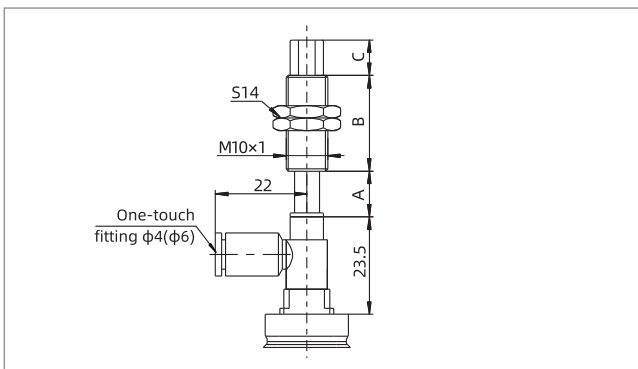
Dimensions(mm)



Vertical-Female thread connection



Vertical-One-touch fitting



Lateral-One-touch fitting

Model/Size	A	B	C	Buffer stroke	F1 (N)	F2 (N)
SAO□-E110R-M10	11	23	13	10	1.0	3.0
SAO□-E120R-M10	21	51	13	20	1.0	3.0
SAO□-E130R-M10	31	51	13	30	1.0	3.0
SAO□-E140R-M10	41	77	13	40	1.0	3.0
SAO□-E150R-M10	51	77	13	50	1.0	3.0

Model/Size	A	B	C	Buffer stroke	F1 (N)	F2 (N)
SAO□-E110R□-M10	11	23	28	10	1.0	3.0
SAO□-E120R□-M10	21	51	28	20	1.0	3.0
SAO□-E130R□-M10	31	51	28	30	1.0	3.0
SAO□-E140R□-M10	41	77	28	40	1.0	3.0
SAO□-E150R□-M10	51	77	28	50	1.0	3.0

Model/Size	A	B	C	Buffer stroke	F1 (N)	F2 (N)
SAO□-E110B□-M10	11	23	8.5	10	1.0	3.0
SAO□-E120B□-M10	21	51	8.5	20	1.0	3.0
SAO□-E130B□-M10	31	51	8.5	30	1.0	3.0
SAO□-E140B□-M10	41	77	8.5	40	1.0	3.0
SAO□-E150B□-M10	51	77	8.5	50	1.0	3.0

◇ Note: 1. Please refer to page 170 for suction cup selection
2. "F1" means spring force at 0 stroke, "F2" means spring force at max. Stroke

SOFA Series

Oval Flat Suction Cup

AIRBEST



Suction Cup

Features

- ◇ Oval Flat suction cup

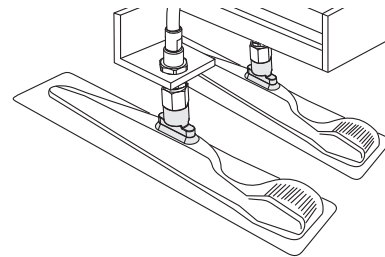
Advantages

- ◇ Handling long and narrow workpieces or flat workpieces with reinforced rib on surface
- ◇ Small size, light weight



Applications

- ◇ Handling small, long and narrow workpieces
- ◇ Electronic products



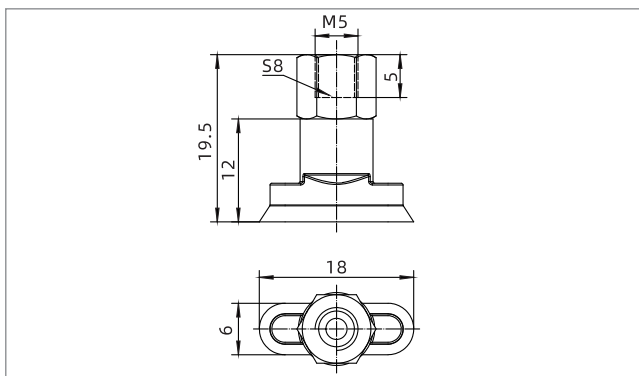
How to order

SOFA 6×18 N - M5F
 ① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SOFA	6×18	N - NBR 55 WS - White silicone 50	Nil - Suction cup only M5F - M5 female thread

- ◇ Min package: 10pcs

Dimensions(mm)



SOFA6x18-M5F

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOE
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

STP Series

Ultra-thin Flower-shaped Suction Cup

AIRBEST



PLASTIC BAG



HIGH SEALING



Features

- ◇ Ultra-thin soft sealing lip design
- ◇ Double reinforced rib structure
- ◇ Food grade POM and silicone
- ◇ Lateral air ports are evenly distributed
- ◇ Two sizes and two hardness are optional

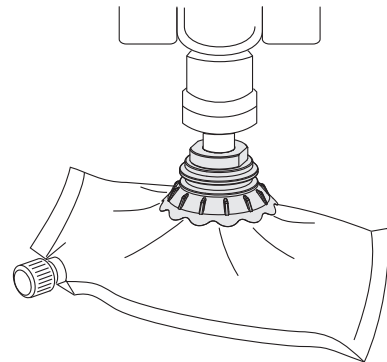
Advantages

- ◇ Optimal sealing, good for fitting different soft packing bags
- ◇ Effectively enhance suction cup strength, ensure maximum grasping capacity
- ◇ Can be used for food package handling
- ◇ Prevent soft package from deformation during grabbing and blocking the air port
- ◇ 35 degrees white silicone is suitable for softer bags, 50 degrees blue silicone is suitable for harder bags



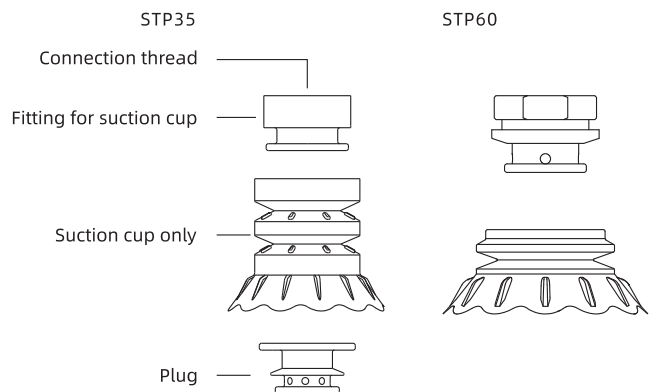
Applications

- ◇ Suitable for handling soft packaging plastic bags, such as bags of washing powder, detergent, tissue, express bags, etc.
- ◇ Food grade silicone can be used in food industry, such as bag of milk, bread, puffed food, etc.



Structure

- ◇ STP35 is 2.5 bellows and with large compressed stroke
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately



STP Series

Ultra-thin Flower-shaped Suction Cup



How to order

STP 60 S - G3F

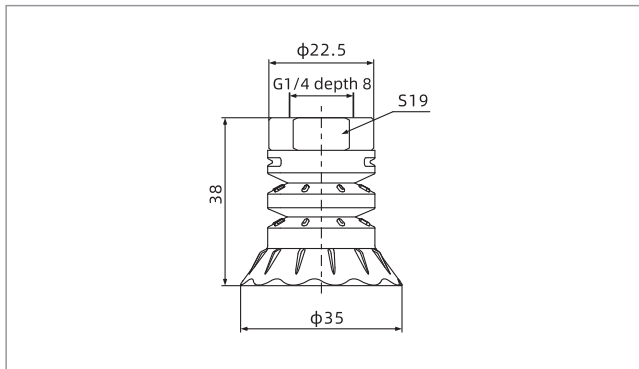
① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
STP	35 - ϕ 35mm	S - Silicone 50	G2F - G1/4 female thread
	60 - ϕ 60mm	WS - White silicone 35	G3F - G3/8 female thread

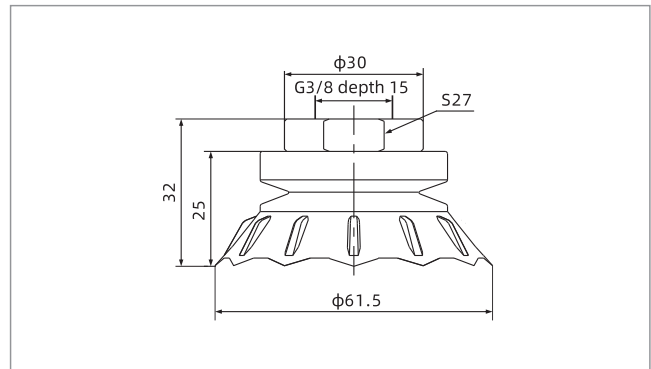
Selection

Model	Material S	WS	MPQ pcs	Weight g
STP35	STP35S-G2F	STP35WS-G2F	1	5
STP60	STP60S-G3F	STP60WS-G3F	1	9

Dimensions(mm)



STP35□-G2F



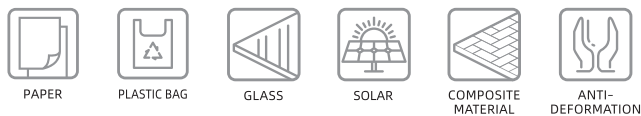
STP60□-G3F

◇Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP**
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFT Series

Thin Lip Flat Suction Cup



Features

- ◇ Ultra-thin sealing lip
- ◇ High temperature and mark free material is optional

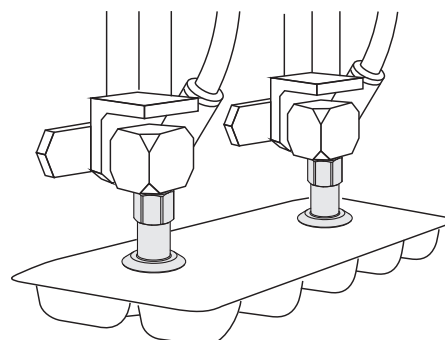
Advantages

- ◇ Suitable for film, paper and solar panels
- ◇ Prevent the workpiece from being sucked into the suction cup
- ◇ Suction without mark, can also for high temperature and mark free
- ◇ Prevent paper and film from wrinkling
- ◇ High temperature resistance, ozone resistance and UV radiation, suitable for handling in paper and printing industry



Applications

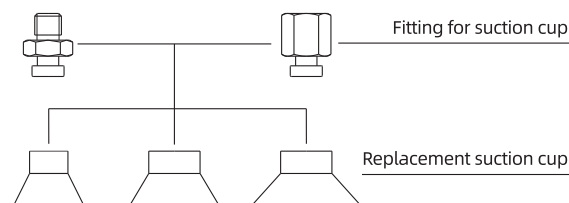
- ◇ Handling all kinds of packaging materials, such as paper, plastic film, opening plastic bag
- ◇ Handling fragile workpieces, such as thin wooden panels, solar silicon wafers, solar cell



Structure

- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately

In same series, replacement suction cup and fitting can be combined on request.



SFT Series

Thin Lip Flat Suction Cup

How to order

SFT 15 HD - M5M

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SFT	15 - ϕ 15mm	WS - White silicone 50	Nil - Suction cup only
	20 - ϕ 20mm	HD - High temp/ Mark free material 60	M5M - M5x0.8 male thread
	24 - ϕ 24mm	NR - Natural rubber 40	G1M - G1/8 male thread
	30 - ϕ 30mm		G2M - G1/4 male thread
	34 - ϕ 34mm		G1F - G1/8 female thread
	35 - ϕ 35mm		G2F - G1/4 female thread
	40 - ϕ 40mm		

Selection

Model	Connection thread	
	M - Male thread	F - Female thread
SFT15□	SFT15□-M5M SFT15□-G1M	SFT15□-G1F
SFT20□	SFT20□-M5M SFT20□-G1M	SFT20□-G1F
SFT24□	SFT24□-M5M SFT24□-G1M	SFT24□-G1F
SFT30□	SFT30□-G2M	SFT30□-G2F
SFT34□	SFT34□-G2M	SFT34□-G2F
SFT35□	SFT35□-G2M	SFT35□-G2F
SFT40□	SFT40□-G2M	SFT40□-G2F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFT15	8	0.2	16	0.5	6	10
SFT20	14	0.5	18	0.8	6	5
SFT24	20	0.7	23	1	6	5
SFT30	32	1.3	28	2.7	8	5
SFT34	41	2	33	3.1	8	5
SFT35	43	1.5	19	5.8	8	5
SFT40	56.5	3	39	4.5	8	5

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

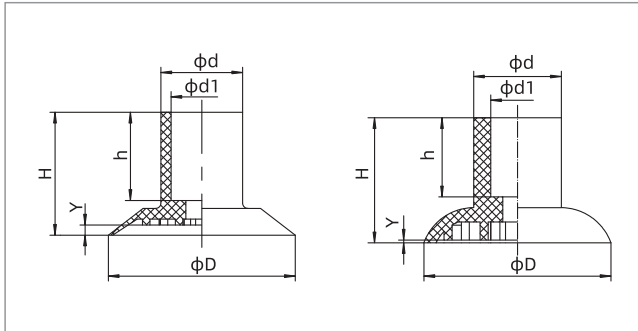
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFT Series

Thin Lip Flat Suction Cup



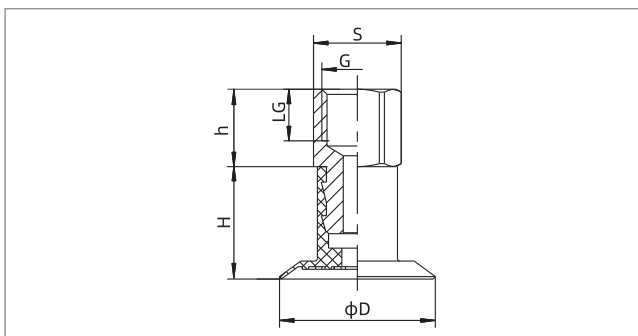
Dimensions(mm) - Suction cup only



SFT15-40

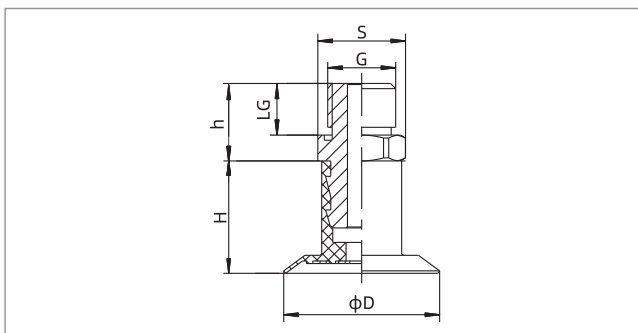
SFT35

Model/Size	D	H	d	h	d1	Y
SFT15□	14.5	10	9	7.2	4.5	0.9
SFT20□	20.9	10.4	10.5	7.2	4.5	1.5
SFT24□	24.4	10.8	10	7.2	4.5	1.7
SFT30□	30.6	21.8	15.6	15.7	11.2	2
SFT34□	34.5	23	14.8	16.8	11.2	1.4
SFT35□	35	23.5	16.5	14.8	10	0.5
SFT40□	40.5	20.5	16	14.5	8	2.3



SFT - Female thread connection

Model/Size	D	H	h	G	LG	S
SFT15□-G1F	14.5	10	12	G1/8	8	14
SFT20□-G1F	20.9	10.4	12	G1/8	8	14
SFT24□-G1F	24.4	10.8	12	G1/8	8	14
SFT30□-G2F	30.6	21.8	15	G1/4	10	17
SFT34□-G2F	34.5	23	15	G1/4	10	17
SFT35□-G2F	35	23.5	15	G1/4	10	17
SFT40□-G2F	40.5	20.5	15	G1/4	10	17



SFT - Male thread connection

Model/Size	D	H	h	G	LG	S
SFT15□-M5M	14.5	10	10	M5×0.8	5	7
SFT15□-G1M	14.5	10	13.5	G1/8	7.5	14
SFT20□-M5M	20.9	10.4	10	M5×0.8	5	7
SFT20□-G1M	20.9	10.4	13.5	G1/8	7.5	14
SFT24□-M5M	24.4	10.8	10	M5×0.8	5	7
SFT24□-G1M	24.4	10.8	13.5	G1/8	7.5	14
SFT30□-G2M	30.6	21.8	15	G1/4	10	17
SFT34□-G2M	34.5	23	15	G1/4	10	17
SFT35□-G2M	35	23.5	15	G1/4	10	17
SFT40□-G2M	40.5	20.5	15	G1/4	10	17

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	F - Female thread	Applicable suction cup
Fitting for suction cup	PJS-M5M-SFT24	-	SFT15, 20, 24
	PJS-G1M-SFT24	PJS-G1F-SFT24	SFT15, 20, 24
	PJS-G2M-SFT34	PJS-G2F-SFT34	SFT30, 34
	PJS-G2M-SFT35	PJS-G2F-SFT35	SFT35
	PJS-G2M-SFT40	PJS-G2F-SFT40	SFT40

SFA Series

Ultra-thin Lip Flat Suction Cup Special for Plastic Bags

AIRBEST



PLASTIC BAG



HIGH SEALING

RoHS

Suction Cup

Features

- ◇ Ultra-thin sealing lip
- ◇ Support structure at the bottom

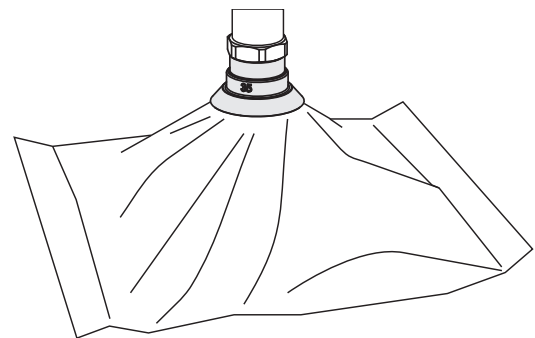
Advantages

- ◇ Suitable for film products, can fit workpiece closely
- ◇ Prevent the workpiece from being sucked into suction cup and wrinkling
- ◇ Food grade silicone, suitable for food package



Applications

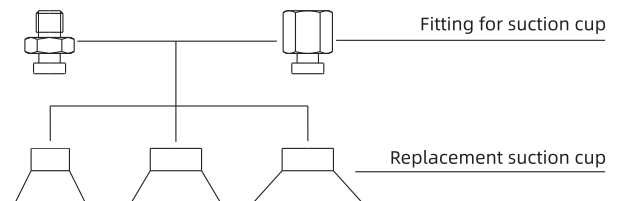
- ◇ Handling plastic film packaging bag
- ◇ Open film packaging bag in packaging production line



Structure

- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately

In same series, replacement suction cup and fitting can be combined on request.



SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFD
SB
SBA
SF
SU
SPA
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP

SFA Series



Ultra-thin Lip Flat Suction Cup Special for Plastic Bags

How to order

SFA 20 S - M5M

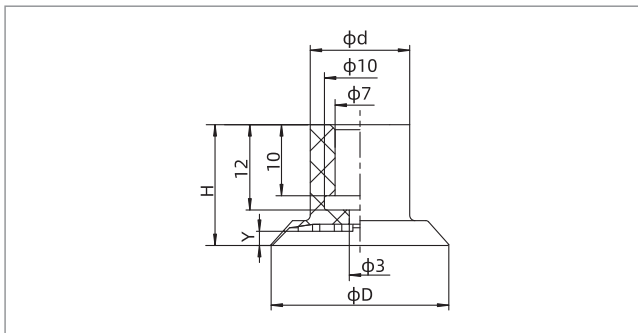
① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SFA	20 - ϕ 20mm	S - Silicone 40	Nil - Suction cup only
	25 - ϕ 25mm		M5M - M5x0.8 male thread M5F - M5x0.8 female thread
	35 - ϕ 35mm		G1M - G1/8 male thread M8F - M8x1.25 female thread
	50 - ϕ 50mm		G2M - G1/4 male thread G3M - G3/8 male thread

Selection

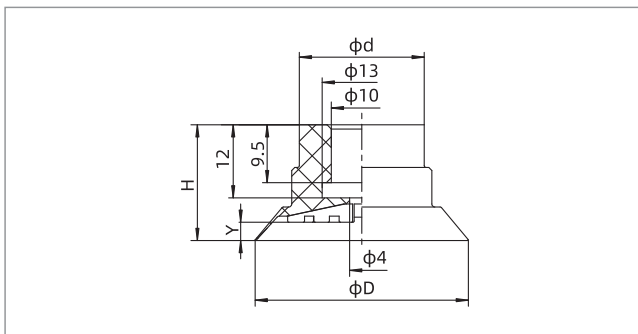
Model	Connection thread M - Male thread		F - Female thread	MPQ pcs
	SFA20S	SFA20S-M5M		
SFA25S	SFA25S-M5M	SFA25S-G1M	SFA25S-M5F	5
SFA35S	SFA35S-G2M	SFA35S-G3M	SFA35S-M8F	5
SFA50S	SFA50S-G2M	SFA50S-G3M	SFA50S-M8F	1

Dimensions(mm) - Suction cup only



SFA20-25

Model/Size	D	H	d	Y
SFA20S	20	17	13	1.6
SFA25S	25	17	14	2



SFA35-50

Model/Size	D	H	d	Y
SFA35S	35	19	20.5	3
SFA50S	50	22	20.5	4.5

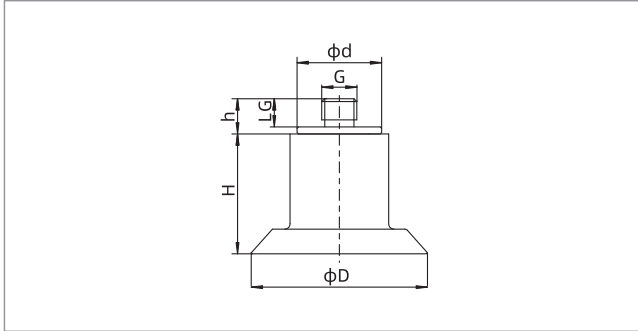
SFA Series

Ultra-thin Lip Flat Suction Cup Special for Plastic Bags

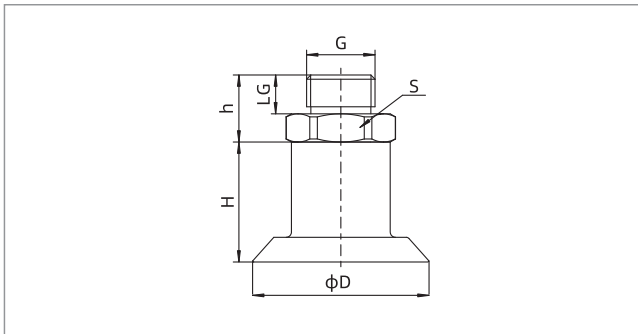


Suction Cup

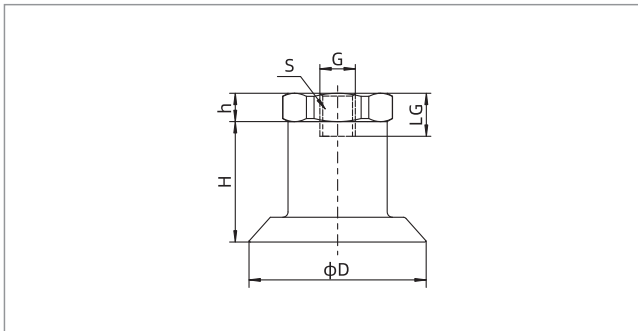
Dimensions(mm) - Suction cup with fitting



SFA - Male thread connection



SFA - Male thread connection



SFA - Female thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	h	G	LG	d
SFA20S-M5M	20	17	5	M5×0.8	4	12
SFA25S-M5M	25	17	5	M5×0.8	4	12

Model/Size	D	H	h	G	LG	S
SFA20S-G1M	20	17	9.5	G1/8	5.5	14
SFA25S-G1M	25	17	9.5	G1/8	5.5	14
SFA35S-G2M	35	19	11.5	G1/4	6.5	21
SFA35S-G3M	35	19	11.5	G3/8	6.5	21
SFA50S-G2M	50	22	11.5	G1/4	6.5	21
SFA50S-G3M	50	22	11.5	G3/8	6.5	21

Model/Size	D	H	h	G	LG	S
SFA20S-M5F	20	17	4	M5×0.8	5	14
SFA25S-M5F	25	17	4	M5×0.8	5	14
SFA35S-M8F	35	19	6	M8×1.25	8	21
SFA50S-M8F	50	22	6	M8×1.25	8	21

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-M5M-SFA20	PJS-M5F-SFA20	SFA20,25
	PJS-G1M-SFA20	-	SFA20,25
	PJS-G2M-SFA50	PJS-M8F-SFA50	SFA35,50
	PJS-G3M-SFA50	-	SFA35,50

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA**
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBL Series

4.5 Bellows Suction Cup

AIRBEST



FOOD
PACKAGING



PLASTIC BAG



FDA



Features

- ◇ 4.5 Bellows
- ◇ Thin sealing lip
- ◇ Food grade silicone

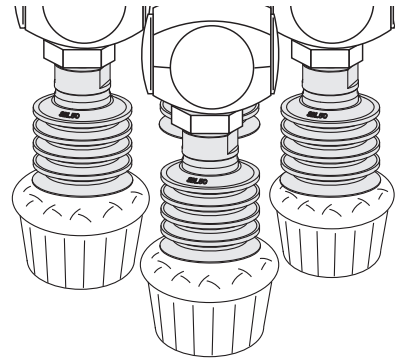
Advantages

- ◇ Suitable for handling workpieces with irregular shape
- ◇ Grabbing soft package with good airtightness
- ◇ Direct contact with food



Applications

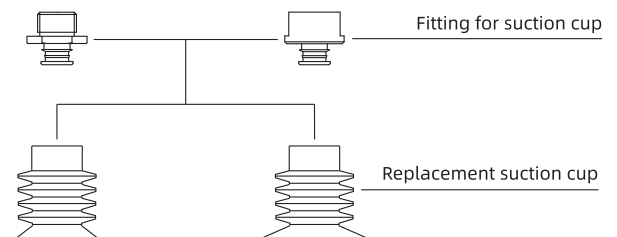
- ◇ Handling very soft products, such as plastic bags, aluminum foil bags, etc
- ◇ Handling fragile products, such as glass, egg, etc
- ◇ Handling food, such as bread, biscuits, etc
- ◇ Grabbing package bags containing solid products, powder or liquid safely



Structure

- ◇ Multiple bellows, large compressed stroke
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately

In same series, replacement suction cup and fitting can be combined on request.



SBL Series

4.5 Bellows Suction Cup

How to order

SBL 15 S - M5M

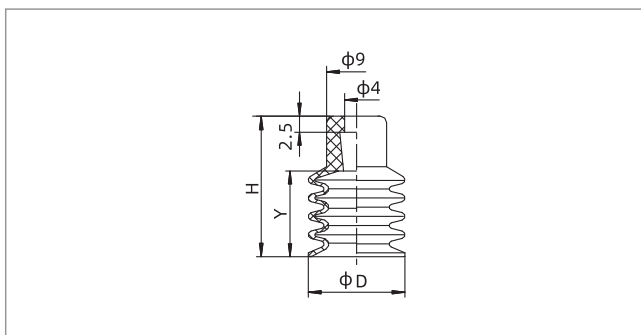
① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SBL	15 - ϕ 15mm	N - NBR 55	Nil - Suction cup only
	20 - ϕ 20mm	S - Silicone 50	G1F - G1/8 female thread
	30 - ϕ 30mm	WS - White silicone 50	G2F - G1/4 female thread
	40 - ϕ 40mm		G3F - G3/8 female thread
	50 - ϕ 50mm		

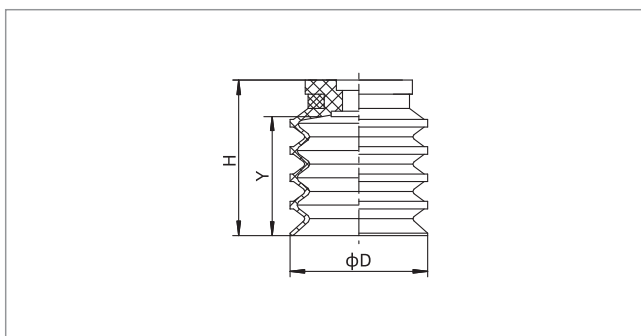
Selection

Model	Connection thread		MPQ pcs
	M - Male thread	F - Female thread	
SBL15□	SBL15□-M5M	-	5
SBL20□	SBL20□-G1M	SBL20□-G1F	5
SBL30□	SBL30□-G1M	SBL30□-G1F	1
SBL40□	SBL40□-G1M	SBL40□-G1F	1
SBL50□	SBL50□-G2M	SBL50□-G3M	1

Dimensions(mm) - Suction cup only



SBL15



SBL20-50

Model/Size	D	H	Y	Weight g
SBL15□	15.5	21.5	13.5	12

Model/Size	D	H	Y	Weight g
SBL20□	20	23	17.5	2.3
SBL30□	30	32	25.5	5.8
SBL40□	40	42	34.5	12.4
SBL50□	50	52	40	20.9

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

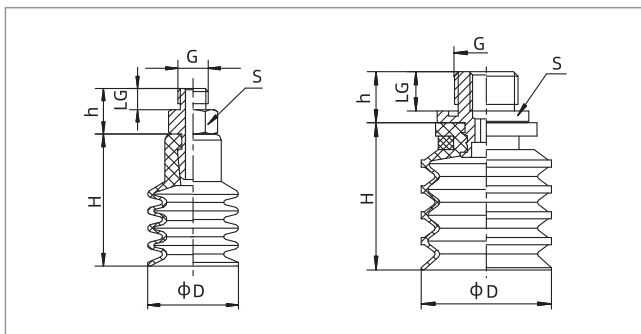
SOP

SNP

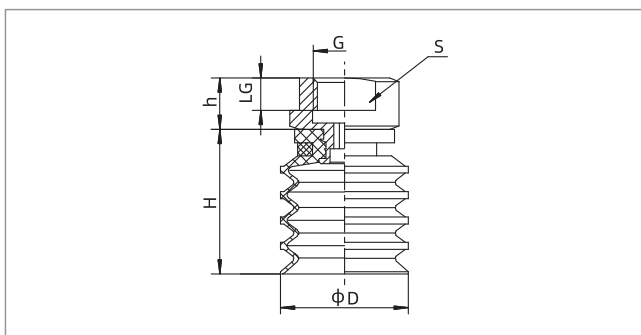
SBL Series

4.5 Bellows Suction Cup

Dimensions(mm) - Suction cup with fitting



SBL - Male thread connection



SBL - Female thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	h	G	LG	S
SBL15□-M5M	15.5	21.5	9	M5×0.8	5	7
SBL20□-G1M	20	23	7.8	G1/8	6	13
SBL30□-G1M	30	32	12	G1/8	6	17
SBL40□-G1M	40	42	12	G1/8	6	17
SBL50□-G2M	50	52	17	G1/4	9	24
SBL50□-G3M	50	52	18	G3/8	10	24

Model/Size	D	H	h	G	LG	S
SBL20□-G1F	20	23	8	G1/8	7	13
SBL30□-G1F	30	32	10	G1/8	7	17
SBL40□-G1F	40	42	10	G1/8	7	17
SBL50□-G2F	50	52	13	G1/4	10	24
SBL50□-G3F	50	52	13	G3/8	11	24

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-M5M-SC3	-	SBL15
	PJS-G1M-SF1	PJS-G1F-SF1	SBL20
	PJS-G1M-SF2	PJS-G1F-SF2	SBL30,40
	PJS-G2M-SF3	PJS-G2F-SF3	SBL50
	PJS-G3M-SF3	PJS-G3F-SF3	SBL50

SBLP Series

Bellows Suction Cup Special for Soft Packing Bags

AIRBEST



FOOD
PACKAGING



PLASTIC BAG



FDA

RoHS

Suction Cup

Features

- ◇ Thin sealing lip
- ◇ 4.5 Bellows structure
- ◇ Big size, increasing vacuum flow
- ◇ Food grade silicone
- ◇ Plugs are optional

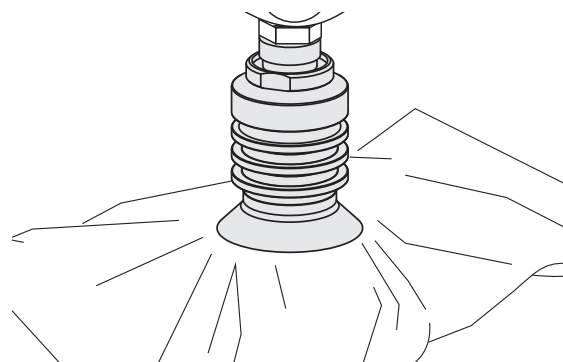
Advantages

- ◇ Have good airtightness when grab soft packing bag or flexible workpiece
- ◇ Effectively compensate height difference of packing bag with irregular shapes
- ◇ When grabbing porous workpieces, it can compensate the grabbing capacity by large flow
- ◇ Direct contact with food
- ◇ Prevent soft plastic film to be sucked into suction cup



Applications

- ◇ Handling soft packing bag, such as EXPRESS bag, aluminum foil bags, laundry detergent bags, water bags, etc.
- ◇ Handling food package, such as bread, biscuits, milk, etc.
- ◇ Suitable for opening the bags, such as woven bags opening and dragging, etc.
- ◇ Grabbing packing bags containing solid products, powder or liquid safely



Structure

- ◇ Multiple bellows, large compressed stroke
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately
- ◇ T1 - White round plug, for light, thin and soft workpieces with large deformation
- ◇ T2 - Blue flower shape plug, for hard workpieces with small deformation

T1 Round plug



Fitting for suction cup



Replacement suction cup



T2 Flower shape plug

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SBLP Series

Bellows Suction Cup Special for Soft Packing Bags

How to order

SBLP 40 S - G3M - T1

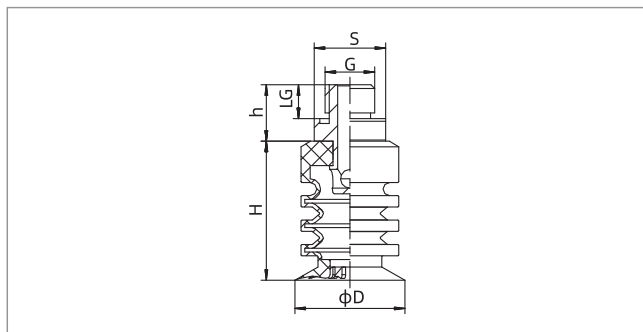
① ② ③ ④ ⑤

① Series	② Diameter	③ Material & Hardness	④ Connection thread	⑤ Special specification
SBLP	30 - ϕ 30mm	S - Silicone 40	Nil - Suction cup	Nil - Standard
	40 - ϕ 40mm		G2M - G1/4 male thread	T1 - White round plug
	50 - ϕ 50mm		G3M - G3/8 male thread	T2 - Blue flower shape plug
			G4M - G1/2 male thread	

Selection

Model	M - Male thread	T1 - White round plug	T2 - Blue flower shape plug	MPQ pcs
SBLP30S	SBLP30S-G2M	-	SBLP30S-T2 SBLP30S-G2M-T2	1
SBLP40S	SBLP40S-G3M	SBLP40S-T1 SBLP40S-G3M-T1	SBLP40S-T2 SBLP40S-G3M-T2	1
SBLP50S	SBLP50S-G4M	-	SBLP50S-T2 SBLP50S-G4M-T2	1

Dimensions(mm)



SBLP

Model/Size	D	H	G	h	LG	S	Weight g
SBLP30S-G2M	30	36.5	G1/4	15	9	19	14.4
SBLP40S-G3M	40	40	G3/8	16	10	22	24.1
SBLP50S-G4M	50	55	G1/2	16	10	28	43.3

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	T1 - White round plug	T2 - Blue flower shape plug	Applicable suction cup
Fitting for suction cup	PJS-G2M-SBLP30	-	SBLP30-T2	SBLP30
	PJS-G3M-SBLP40	SBLP40-T1	SBLP40-T2	SBLP40
	PJS-G4M-SBLP50	-	SBLP50-T2	SBLP50

SBS Series

Bellows Suction Cup Special for Spherical Objects

AIRBEST



SPHERICAL
OBJECT



FDA



Suction Cup

Features

- ◇ Ultra-soft and tapered sealing lip
- ◇ Special inner structure
- ◇ Food grade silicone

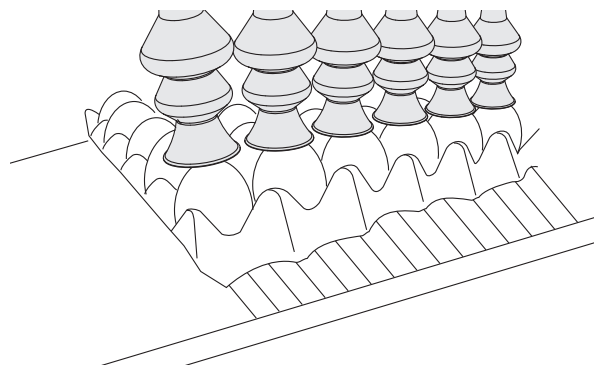
Advantages

- ◇ Effectively fit surface of spherical workpiece
- ◇ The corresponding suction cup can be accurately selected according to the shape of the adsorbed food
- ◇ Direct contact with food



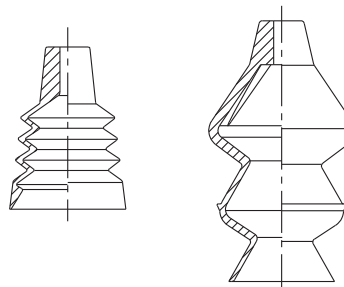
Applications

- ◇ Directly contact and handle candy and food, which are round, oval, and with irregular shapes
- ◇ Handling food with irregular surfaces or decorative shapes
- ◇ Multiple bellows suction cups are suitable for handling soft-contact food, such as eggs



Structure

- ◇ Special sealing lip, suitable for handling irregular products
- ◇ Ultra-thin, soft and tapered sealing lip, suitable for handling fragile objects



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP**
- SBS**
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBS Series



Bellows Suction Cup Special for Spherical Objects

How to order

SBS 30 S

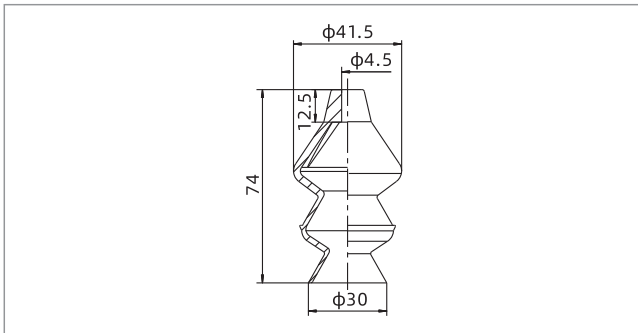
① ② ③

① Series	② Diameter	③ Material & Hardness
SBS	30 - ϕ 30mm	S - Silicone 35
	33 - ϕ 33mm	WS - White silicone 50
	34 - ϕ 34mm	WSA - White silicone 30
	35 - ϕ 35mm	

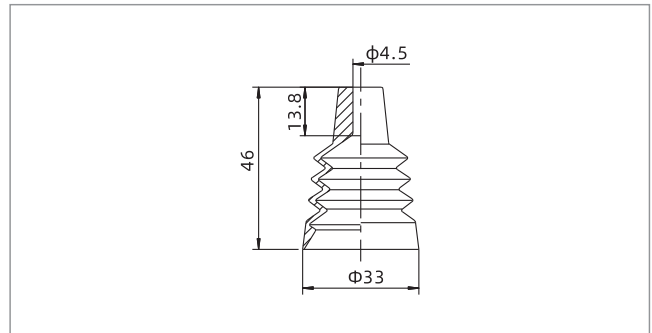
Selection

Model	Material S	WS	WSA	MPQ pcs	Weight g
SBS30	SBS30S	-	-	1	17
SBS33	-	SBS33WS	SBS33WSA	1	8
SBS34	-	SBS34WS	SBS34WSA	1	19.3
SBS35	-	SBS35WS	SBS35WSA	1	9.7

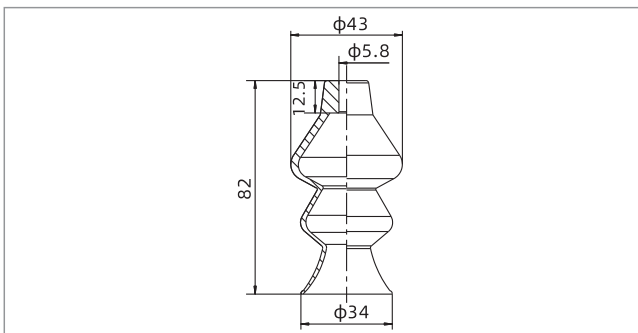
Dimensions(mm)



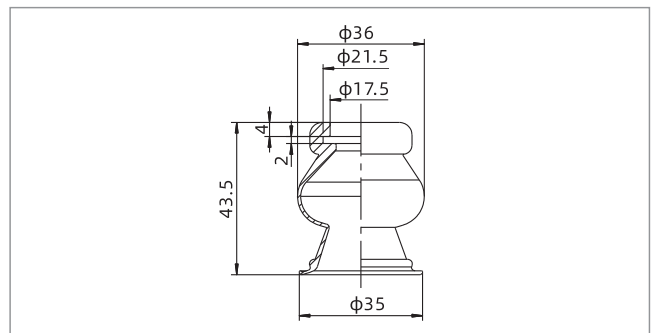
SBS30



SBS33



SBS34



SBS35

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SFP Series

PU Flat Suction Cup



PACKAGING



LONG LIFETIME

Features

- ◇ Support structure at bottom
- ◇ PU material
- ◇ Various sizes are available

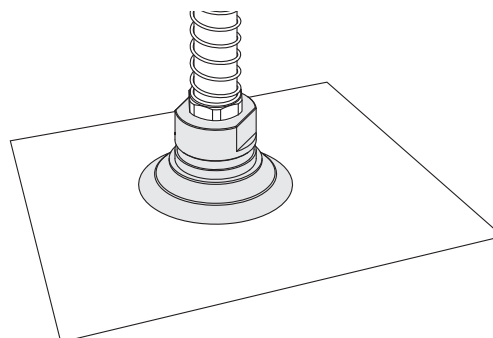
Advantages

- ◇ Preventing thin workpieces from permanent deformation
- ◇ Good wear resistance, long lifetime
- ◇ Suitable for workpieces with different sizes and shapes



Applications

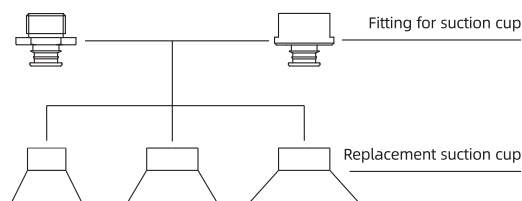
- ◇ Suitable for handling cardboard box or cardboard
- ◇ Suitable for handling carton or handling in packaging machinery
- ◇ Suitable for stacking and unstacking
- ◇ PU material has good wear resistance, suitable for heavy load occasions



Structure

- ◇ Suction cup and fitting are split structure design
- ◇ Fitting for suction cup is with mesh filter

In same series, replacement suction cup and fitting can be combined on request



SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SFP Series

PU Flat Suction Cup



How to order

SFP 20 U - G1F
 ① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SFP	20 - ϕ 20mm	U - PU 60	Nil - Suction cup only
	30 - ϕ 30mm	UY - PU 40	G1M - G1/8 male thread
	40 - ϕ 40mm		G1F - G1/8 female thread

Selection

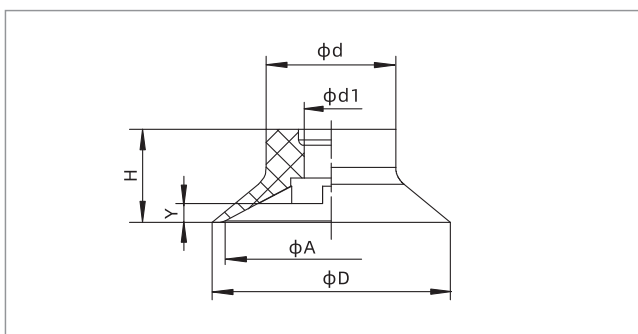
Model	Connection thread	F - Female thread
	M - Male thread	
SFP20□	SFP20□-G1M	SFP20□-G1F
SFP30□	SFP30□-G1M	SFP30□-G1F
SFP40□	SFP40□-G1M	SFP40□-G1F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFP20	14	0.36	24	1.1	6	5
SFP30	21	1	42	2.5	6	5
SFP40	56.5	2.7	52	6	6	5

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm) - Suction cup only



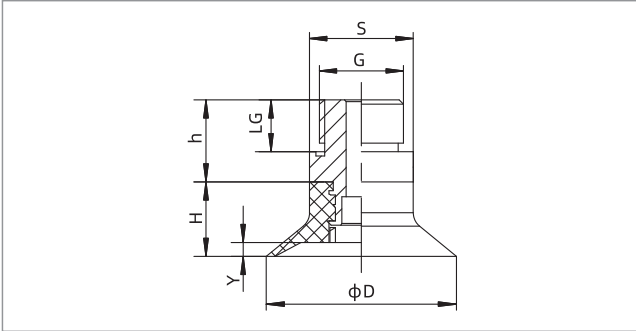
SFP20-40

Model/Size	D	H	A	d	d1	y
SFP20□	22	8.6	20	12	5	1.6
SFP30□	31	10.5	30	15.8	5	2
SFP40□	41	14	40	21	6.5	2.5

SFP Series

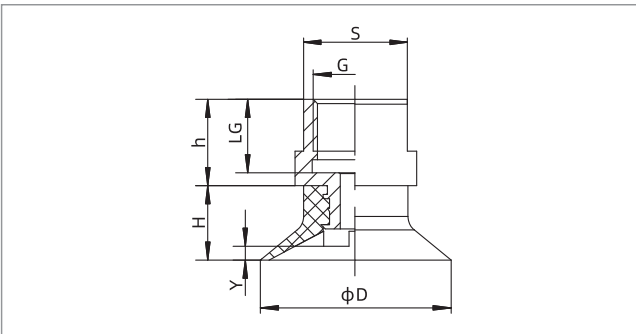
PU Flat Suction Cup

Dimensions(mm)



SFP20-40 Male thread connection

Model/Size	D	H	G	h	LG	S	Y
SFP20□-G1M	22	8.6	G1/8	7.8	6	13	1.6
SFP30□-G1M	31	10.5	G1/8	7.8	6	13	2
SFP40□-G1M	41	14	G1/8	12	6	17	2.5



SFP20-40 Female thread connection

Model/Size	D	H	G	h	LG	S	Y
SFP20□-G1F	22	8.6	G1/8	8	7	13	1.6
SFP30□-G1F	31	10.5	G1/8	8	7	13	2
SFP40□-G1F	41	14	G1/8	10	7	17	2.5

◇ Note: The dimensional tolerance conforms to GB/T3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-G1M-SF1-EW	PJS-G1F-SF1-EW	SFP20, 30
	PJS-G1M-SF2-EW	PJS-G1F-SF2-EW	SFP40

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP**
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBP Series

PU Bellows Suction Cup



PACKAGING



LONG LIFETIME

Features

- ◇ 1.5 Bellows
- ◇ Internal support structure at bottom
- ◇ PU material
- ◇ Various sizes are available

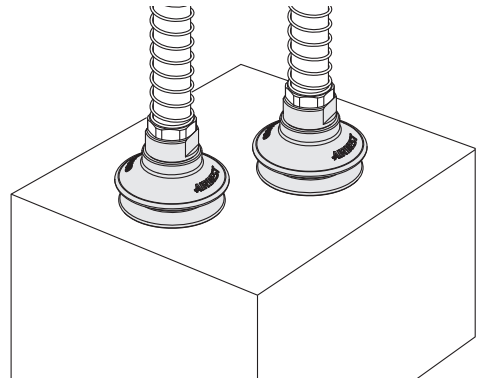
Advantages

- ◇ Easy to fit the uneven surface of workpiece, and has buffer effect
- ◇ Prevent thin workpieces from permanent deformation
- ◇ Good wear resistance, long lifetime
- ◇ Suitable for workpieces with different sizes and shapes



Applications

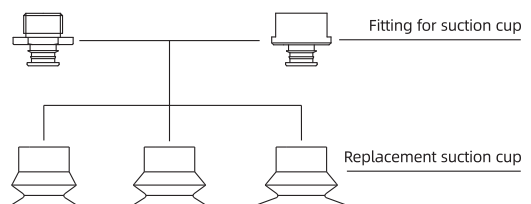
- ◇ Suitable for handling cardboard box or cardboard
- ◇ Suitable for handling carton or handling in packaging machinery
- ◇ Suitable for stacking and unstacking
- ◇ PU material has good wear resistance, suitable for heavy load occasions



Structure

- ◇ For suction cup with diameter $\phi 10$ - $\phi 50$ mm, suction cup and fitting are split structure design
- ◇ For suction cup with diameter $\phi 70$ mm, suction cup and fitting are one-piece structure design
- ◇ Fitting for suction cup is with filter mesh

In same series, replacement suction cup and fitting can be combined on request



SBP Series

PU Bellows Suction Cup

How to order

SBP 30 U - G1F
 ① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SBP	10 - ϕ 10mm	U - PU 60	Nil - Suction cup only
	15 - ϕ 15mm	UY - PU 40	M5M - M5x0.8 male thread
	20 - ϕ 20mm	UD - PU 30 60	G1M - G1/8 male thread
	30 - ϕ 30mm		G2M - G1/4 male thread
	40 - ϕ 40mm		G3M - G3/8 male thread
	50 - ϕ 50mm		G1F - G1/8 female thread
	70 - ϕ 70mm		G2F - G1/4 female thread G3F - G3/8 female thread

Selection

Model	Connection thread	
	M - Male thread	F - Female thread
SBP10□	SBP10□-M5M	-
SBP15□	SBP15□-M5M	-
SBP20□	SBP20□-G1M	SBP20□-G1F
SBP30□	SBP30□-G1M	SBP30□-G1F
SBP40□	SBP40□-G1M	SBP40□-G1F
SBP50□	SBP50□-G2M SBP50□-G3M	SBP50□-G2F SBP50□-G3F
SBP70□	SBP70□-G3M	SBP70□-G3F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SBP10	3.5	0.2	10	0.8	6	5
SBP15	7.9	0.5	25	1.4	6	5
SBP20	14	2	31	2.1	6	5
SBP30	31	4	47	4.8	6	5
SBP40	56.5	9	59	11.5	6	1
SBP50	88	17	68	20.7	8	1
SBP70	173	55	91	68.3	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

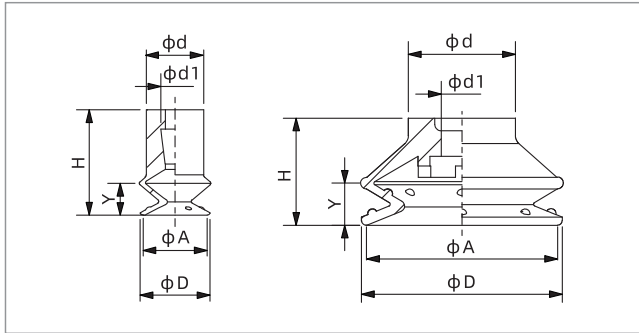
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP**
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBP Series

PU Bellows Suction Cup



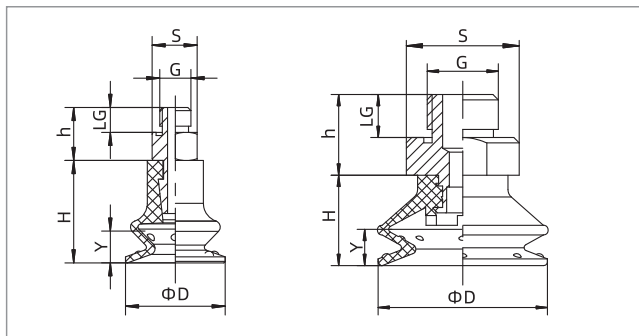
Dimensions(mm)



SBP10-15

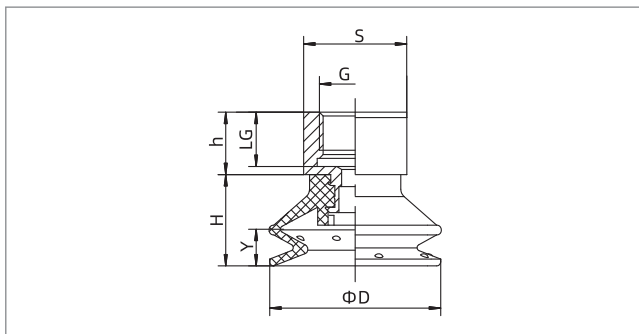
SBP20-50

Model/Size	D	H	A	d	d1	y
SBP10□	10.9	16.5	10	9	5	5
SBP15□	16	19	15	9	5.5	5.8
SBP20□	21	18	20	12	5	7.5
SBP30□	31.5	16.8	30	16.8	6.5	6.6
SBP40□	42	22.4	40	22.4	6.5	8.8
SBP50□	52.5	29.3	50	28	10.5	12.3



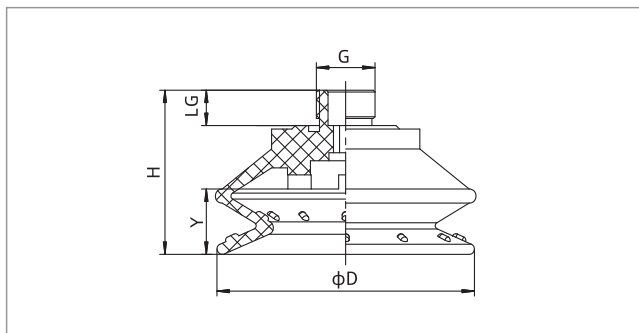
SBP10-50 Male thread connection

Model/Size	D	H	G	h	LG	S	Y
SBP10□-M5M	10.9	16.5	M5×0.8	7.5	3.5	7	5
SBP15□-M5M	16	19	M5×0.8	7.5	3.5	7	5.8
SBP20□-G1M	21	18	G1/8	7.8	6	13	7.5
SBP30□-G1M	31.5	16.8	G1/8	12	6	17	6.6
SBP40□-G1M	42	22.4	G1/8	12	6	17	8.8
SBP50□-G2M	52.5	29.3	G1/4	17	9	24	12.3
SBP50□-G3M	52.5	29.3	G3/8	18	10	24	12.3



SBP20-50 Female thread connection

Model/Size	D	H	G	h	LG	S	Y
SBP20□-G1F	21	18	G1/8	8	7	13	7.5
SBP30□-G1F	31.5	16.8	G1/8	10	7	17	6.6
SBP40□-G1F	42	22.4	G1/8	10	7	17	8.8
SBP50□-G2F	52.5	29.3	G1/4	13	10	24	12.3
SBP50□-G3F	52.5	29.3	G3/8	13	11	24	12.3



SBP70 Male thread connection

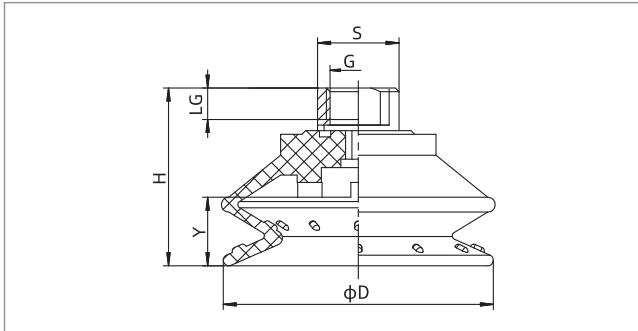
Model/Size	D	H	G	LG	Y
SBP70□-G3M	73	46.5	G3/8	10	16.5

SBP Series

PU Bellows Suction Cup



Dimensions(mm)



Model/Size	D	H	G	LG	S	Y
SBP70□-G3F	73	48	G3/8	11.5	22	16.5

SBP70 Female thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-M5M-SC3	-	SBP10, 15
	PJS-G1M-SF1-EW	PJS-G1F-SF1-EW	SBP20
	PJS-G1M-SF2-EW	PJS-G1F-SF2-EW	SBP30, 40
	PJS-G2M-SF3-EW	PJS-G2F-SF3-EW	SBP50
	PJS-G3M-SF3-EW	PJS-G3F-SF3-EW	SBP50

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP**
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SXP Series

PU Bellows Suction Cup



PACKAGING



LONG LIFETIME

Features

- ◇ 2.5 Bellows
- ◇ Internal support structure at bottom
- ◇ PU material
- ◇ Various sizes are available

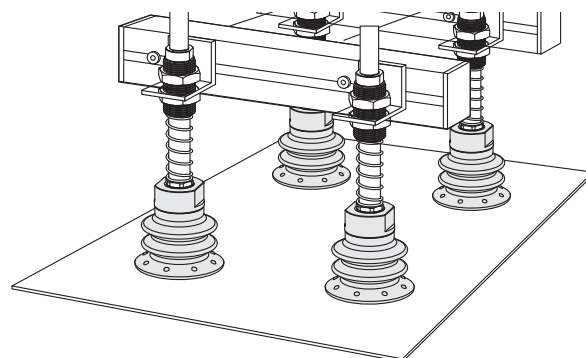
Advantages

- ◇ Easy to fit uneven surface of workpiece, and has buffer effect
- ◇ Prevent thin workpieces from permanent deformation
- ◇ Good wear resistance, long lifetime
- ◇ Suitable for workpieces with different sizes and shapes



Applications

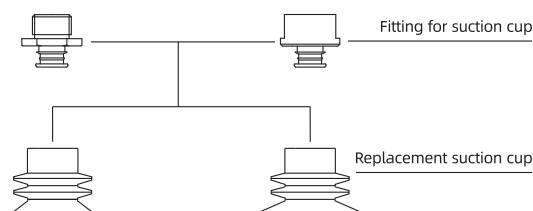
- ◇ Suitable for workpieces with every uneven surfaces, such as cartons, pipes, etc, fitting surfaces perfectly
- ◇ Suitable for handling cardboard box or cardboard
- ◇ Suitable for handling carton or handling in packaging machinery
- ◇ PU material has good wear resistance, suitable for heavy load occasions



Structure

- ◇ For suction cup with diameter $\phi 20\text{-}\phi 50\text{mm}$, suction cup and fitting are split structure design
- ◇ For suction cup with diameter $\phi 70\text{mm}$, suction cup and fitting are one-piece structure design
- ◇ Fitting for suction cup is with filter mesh

In same series, replacement suction cup and fitting can be combined on request



SXP Series

PU Bellows Suction Cup

How to order

SXP 30 U - G1F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SXP	20 - φ20mm	U - PU 60	Nil - Scution cup only
	25 - φ25mm	UG - PU 55	G1M - G1/8 male thread
	30 - φ30mm	UD - PU 30 60	G2M - G1/4 male thread
	35 - φ35mm		G3M - G3/8 male thread
	40 - φ40mm		G1F - G1/8 female thread
	50 - φ50mm		G2F - G1/4 female thread
	70 - φ70mm		G3F - G3/8 female thread

Selection

Model	Connection thread	
	M - Male thread	F - Female thread
SXP20□	SXP20□-G1M	SXP20□-G1F
SXP25□	SXP25□-G1M	SXP25□-G1F
SXP30□	SXP30□-G1M	SXP30□-G1F
SXP35□	SXP35□-G1M	SXP35□-G1F
SXP40□	SXP40□-G1M	SXP40□-G1F
SXP50□	SXP50□-G2M SXP50□-G3M	SXP50□-G2F SXP50□-G3F
SXP70□	SXP70□-G3M	SXP70□-G3F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SXP20	14	2	24	1.8	6	5
SXP25	22	3	31	3.1	6	5
SXP30	31	5	30	4.4	6	5
SXP35	43	9	39	7.4	6	1
SXP40	56.5	11	45	10.4	6	1
SXP50	88	21	55	19.9	8	1
SXP70	173	55	80	66	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

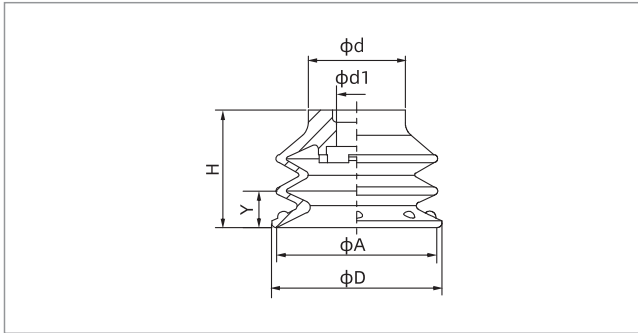
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP**
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SXP Series

PU Bellows Suction Cup

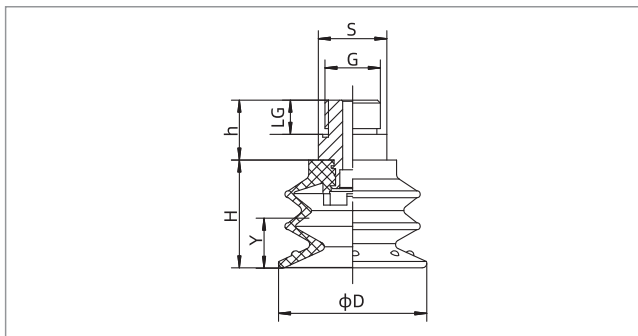


Dimensions(mm)



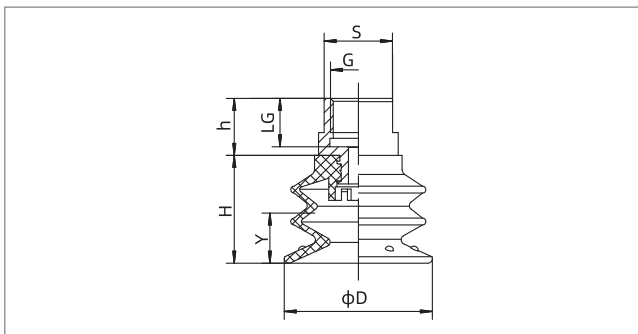
SXP20-50

Model/Size	D	H	A	d	d1	y
SXP20□	21	14.8	20	12	5	4.5
SXP25□	26	18.9	24.4	15.4	5	7.3
SXP30□	30	21.3	28	16.5	5	8
SXP35□	35	25.3	33	21	6.5	9.8
SXP40□	40	28.4	37.5	22	6.5	10.6
SXP50□	50	35.5	47	27.5	10.5	13.4



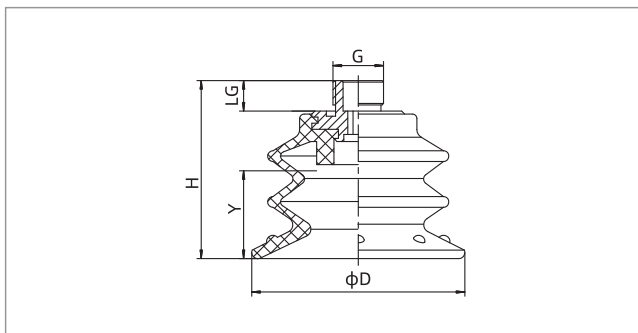
SXP20-50 Male thread connection

Model/Size	D	H	G	h	LG	S	Y
SXP20□-G1M	21	14.8	G1/8	7.8	6	13	4.5
SXP25□-G1M	26	18.9	G1/8	7.8	6	13	7.3
SXP30□-G1M	30	21.3	G1/8	7.8	6	13	8
SXP35□-G1M	35	25.3	G1/8	12	6	17	9.8
SXP40□-G1M	40	28.4	G1/8	12	6	17	10.6
SXP50□-G2M	50	35.5	G1/4	17	9	24	13.4
SXP50□-G3M	50	35.5	G3/8	18	10	24	13.4



SXP20-50 Female thread connection

Model/Size	D	H	G	h	LG	S	Y
SXP20□-G1F	21	14.8	G1/8	8	7	13	4.5
SXP25□-G1F	26	18.9	G1/8	8	7	13	7.3
SXP30□-G1F	30	21.3	G1/8	8	7	13	8
SXP35□-G1F	35	25.3	G1/8	10	7	17	9.8
SXP40□-G1F	40	28.4	G1/8	10	7	17	10.6
SXP50□-G2F	50	35.5	G1/4	13	10	24	13.4
SXP50□-G3F	50	35.5	G3/8	13	11	24	13.4



SXP70 Male thread connection

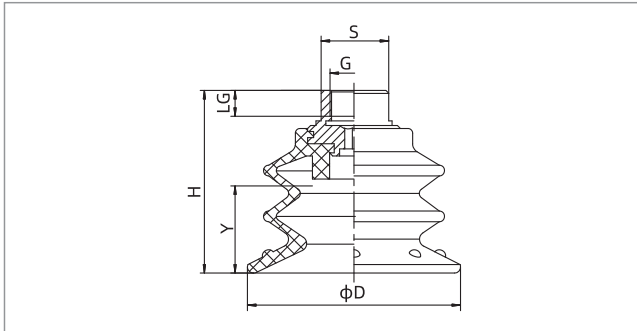
Model/Size	D	H	G	LG	Y
SXP70□-G3M	70	58.5	G3/8	10	18.6

SXP Series

PU Bellows Suction Cup



Dimensions(mm)



Model/Size	D	H	G	LG	S	Y
SXP70□-G3F	70	60	G3/8	11.5	22	18.6

SXP70 Female thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	F - Female thread	Applicable suction cup
Fitting for suction cup	PJS-G1M-SF1-EW	PJS-G1F-SF1-EW	SXP20, 25, 30
	PJS-G1M-SF2-EW	PJS-G1F-SF2-EW	SXP35, 40
	PJS-G2M-SF3-EW	PJS-G2F-SF3-EW	SXP50
	PJS-G3M-SF3-EW	PJS-G3F-SF3-EW	SXP50

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SGP Series

PU Bellows Suction Cup



PACKAGING



LONG LIFETIME

Features

- ◇ 2.5 Bellows
- ◇ Internal support structure at bottom
- ◇ PU material
- ◇ Various sizes are available

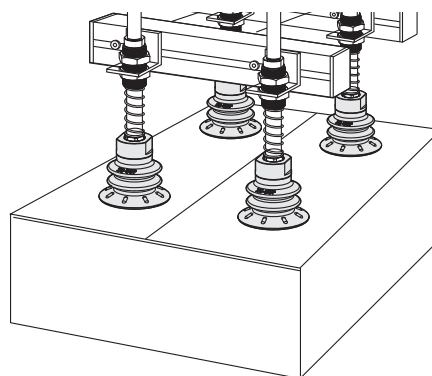
Advantages

- ◇ Easy to fit uneven surface of workpiece, and has buffer effect
- ◇ Prevent thin workpieces from permanent deformation
- ◇ Good wear resistance, long lifetime
- ◇ Suitable for workpieces with different sizes and shapes



Applications

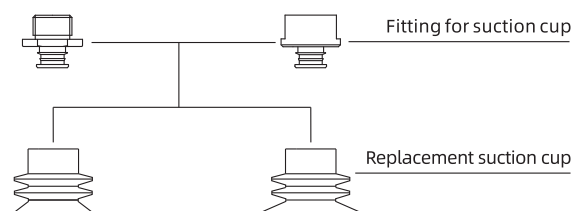
- ◇ Suitable for workpieces with every uneven surfaces, such as cartons, pipes, etc, fit surfaces perfectly
- ◇ Suitable for handling cardboard box or cardboard
- ◇ Suitable for handling carton or handling in packaging machinery
- ◇ PU material has good wear resistance, suitable for heavy load occasions



Structure

- ◇ Suction cup and fitting are split structure design
- ◇ Fitting for suction cup is with filter mesh

In same series, replacement suction cup and fitting can be combined on request



SGP Series

PU Bellows Suction Cup

How to order

SGP 35 U - G1F
 ①
 ②
 ③
 ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SGP	25 - ϕ 25mm	U - PU 55	Nil - Suction cup only
	35 - ϕ 35mm	UD - PU 30	G1M - G1/8 male thread
	45 - ϕ 45mm		G2M - G1/4 male thread
	55 - ϕ 55mm		G3M - G3/8 male thread G1F - G1/8 female thread G2F - G1/4 female thread G3F - G3/8 female thread

Selection

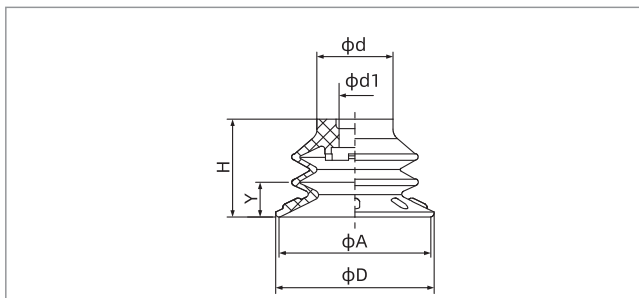
Model	Connection thread	
	M - Male thread	F - Female thread
SGP25□	SGP25□-G1M	SGP25□-G1F
SGP35□	SGP35□-G1M	SGP35□-G1F
SGP45□	SGP45□-G1M	SGP45□-G1F
SGP55□	SGP55□-G2M SGP55□-G3M	SGP55□-G2F SGP55□-G3F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SGP25	22	3	31	2	6	5
SGP35	43	6	42	4.8	6	5
SGP45	71	13	54	11	6	1
SGP55	106	23	64	19.9	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



Model/Size	D	H	A	d	d1	y
SGP25□	25	15.5	24	12	5	5.5
SGP35□	35	22.3	33.4	16.5	5	8.4
SGP45□	45	29.3	42.8	16.8	6.6	11.5
SGP55□	55	36.3	52.4	27.5	10.5	12.9

SGP25-55

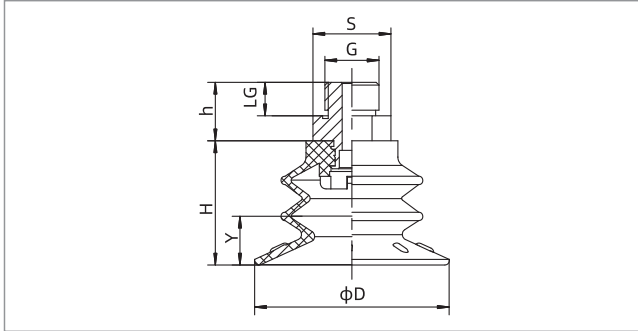
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SGP Series

PU Bellows Suction Cup

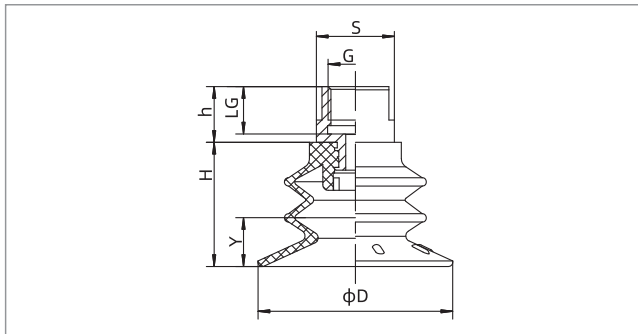


Dimensions(mm)



SGP25-55 Male thread connection

Model/Size	D	H	G	h	LG	S	Y
SGP25□-G1M	25	15.5	G1/8	7.8	6	13	5.5
SGP35□-G1M	35	22.3	G1/8	7.8	6	13	8.4
SGP45□-G1M	45	29.3	G1/8	12	6	17	11.5
SGP55□-G2M	55	36.3	G1/4	17	9	24	12.9
SGP55□-G3M	55	36.3	G3/8	18	10	24	12.9



SGP25-55 Female thread connection

Model/Size	D	H	G	h	LG	S	Y
SGP25□-G1F	25	15.5	G1/8	8	7	13	5.5
SGP35□-G1F	35	22.3	G1/8	8	7	13	8.4
SGP45□-G1F	45	29.3	G1/8	10	7	17	11.5
SGP55□-G2F	55	36.3	G1/4	13	10	24	12.9
SGP55□-G3F	55	36.3	G3/8	13	11	24	12.9

◇ Note: The dimensional tolerance conforms to GB/T3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-G1M-SF1-EW	PJS-G1F-SF1-EW	SGP25, 35
	PJS-G1M-SF2-EW	PJS-G1F-SF2-EW	SGP45
	PJS-G2M-SF3-EW	PJS-G2F-SF3-EW	SGP55
	PJS-G3M-SF3-EW	PJS-G3F-SF3-EW	SGP55

SBOF Series

2.5 Bellows Oval Suction Cup



Features

- ◇ 2.5 Bellows oval suction cup
- ◇ Material Vinyl

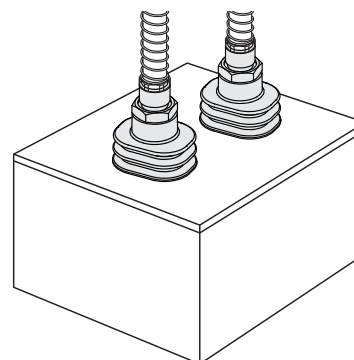
Advantages

- ◇ Easy to fit uneven surface of workpiece, and has buffer effect
- ◇ Excellent wearing resistance, long lifetime



Applications

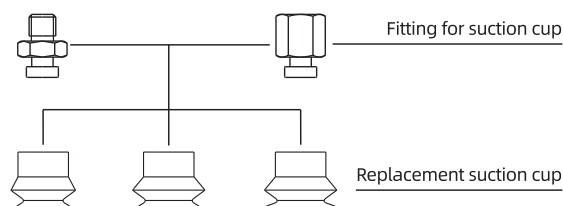
- ◇ Suitable for unpacking machines and handling soft packaging products
- ◇ Suitable for medical industry, such as washing packing bags containing chlorinated disinfectant
- ◇ Suitable for handling CD and DVD



Structure

- ◇ 2.5 Bellows, large compressed stroke
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately

In same series, replacement suction cup and fitting can be combined on request.



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP**
- SBOF**
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBOF Series

2.5 Bellows Oval Suction Cup



How to order

SBOF 35×28 V - G2M

① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SBOF	35×28 mm 45×28 mm	V - Vinyl 55	Nil - Suction cup only M10M - M10×1.5 male thread G2M - G1/4 male thread G2F - G1/4 female thread

Selection

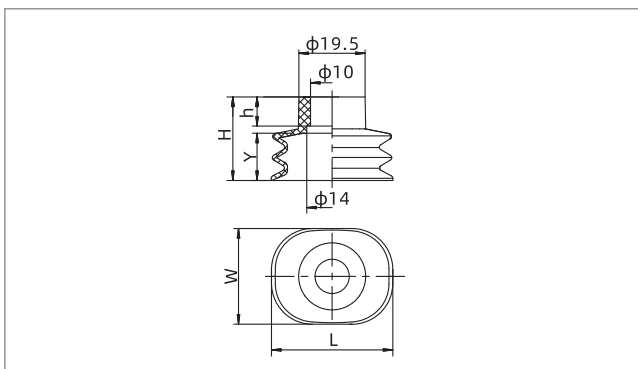
Model	Connection thread	
	M - Male thread	F - Female thread
SBOF35×28V	SBOF35×28V-M10M	SBOF35×28V-G2M SBOF35×28V-G2F
SBOF45×28V	SBOF45×28V-M10M	SBOF45×28V-G2M SBOF45×28V-G2F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SBOF35×28	44	22	39	5.8	8	1
SBOF45×28	57	26	39	8.2	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm) - Suction cup only



Model/Size	L	W	H	h	Y(Stroke)
SBOF35×28V	35	28	24.5	8.5	12
SBOF45×28V	45	28	25	9.5	13

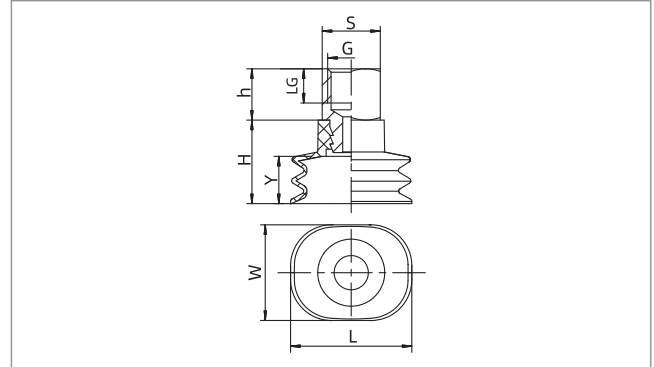
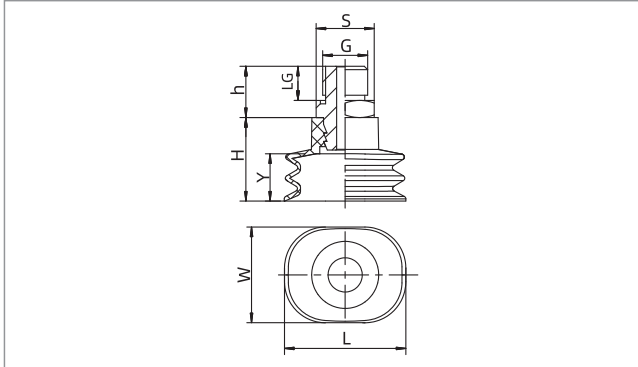
SBOF

SBOF Series

2.5 Bellows Oval Suction Cup



Dimensions(mm) - Suction cup with fitting



SBOF - Male thread connection

SBOF - Female thread connection

Model/Size	L	W	H	h	G	LG	S	Y
SBOF35×28V-M10M	35	28	24.5	15	M10×1.5	10	17	12
SBOF35×28V-G2M	35	28	24.5	15	G1/4	10	17	12
SBOF35×28V-G2F	35	28	24.5	15	G1/4	12	17	12
SBOF45×28V-M10M	45	28	25	15	M10×1.5	10	17	13
SBOF45×28V-G2M	45	28	25	15	G1/4	10	17	13
SBOF45×28V-G2F	45	28	25	15	G1/4	12	17	13

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model	Applicable suction cup
Fitting for suction cup	PJS-M10M-SBOF	SBOF35×28,SBOF45×28
	PJS-G2M-SBOF	SBOF35×28,SBOF45×28
	PJS-G2F-SBOF	SBOF35×28,SBOF45×28

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF**
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

STC Series

AIRBEST

1.5 Bellows Suction Cup Special for Metal Sheet



METAL SHEET



SLIPPING RESISTANCE



OILY SURFACE

RoHS

Features

- ◇ 1.5 Bellows structure
- ◇ Internal large area pattern support structure
- ◇ Various sizes and specifications are available

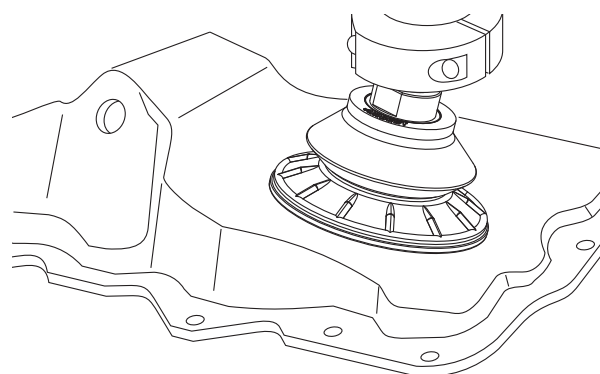
Advantages

- ◇ Easy to fit the uneven surface of workpiece, and has buffer effect
- ◇ Effectively enhance friction force between suction cups and workpieces
- ◇ Suitable for workpieces with different sizes and shapes



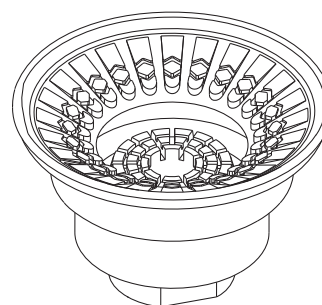
Applications

- ◇ Suitable for fast handling of metal plates, short cycle time
- ◇ Handling metal sheet and aluminum plates without deformation
- ◇ The internal special pattern groove design prevents the oily sheet metal from slipping during handling
- ◇ Used in automotive stamping metal parts handling system



Structure

- ◇ 1.5 Bellows structure, large compressed stroke
- ◇ Suction cup and fitting are one-piece structure design



STC Series

1.5 Bellows Suction Cup Special for Metal Sheet

How to order

STC 50 N - G3F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
STC	22 - φ22mm	N - NBR 60	G2F - G1/4 female thread
	30 - φ30mm		G3F - G3/8 female thread
	40 - φ40mm		G2M - G1/4 male thread
	50 - φ50mm		M10M - M10×1.5 male thread
	60 - φ60mm		M14M - M14×1.5 male thread
	80 - φ80mm		RA - Rectangular adapter
	100 - φ100mm		
	125 - φ125mm		

Selection

Model	Connection thread					
	G2M	M10M	M14M	G2F	G3F	RA
STC22N-□	STC22N-G2M	STC22N-M10M	STC22N-M14M	STC22N-G2F	STC22N-G3F	STC22N-RA
STC30N-□	STC30N-G2M	STC30N-M10M	STC30N-M14M	STC30N-G2F	STC30N-G3F	STC30N-RA
STC40N-□	STC40N-G2M	STC40N-M10M	STC40N-M14M	STC40N-G2F	STC40N-G3F	STC40N-RA
STC50N-□	STC50N-G2M	STC50N-M10M	STC50N-M14M	STC50N-G2F	STC50N-G3F	STC50N-RA
STC60N-□	STC60N-G2M	STC60N-M10M	STC60N-M14M	STC60N-G2F	STC60N-G3F	STC60N-RA
STC80N-□	STC80N-G2M	STC80N-M10M	STC80N-M14M	STC80N-G2F	STC80N-G3F	STC80N-RA
STC100N-□	STC100N-G2M	STC100N-M10M	STC100N-M14M	STC100N-G2F	STC100N-G3F	STC100N-RA
STC125N-□	STC125N-G2M	STC125N-M10M	STC125N-M14M	STC125N-G2F	STC125N-G3F	STC125N-RA

Technical parameters

Model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-out force Oily surface (N)	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
STC22	23	20	6.5	1.5	20	8.6	6	5
STC30	35	28	12	6.3	35	12	6	5
STC40	62	37	34	7.2	40	13.5	6	1
STC50	85	58	55	11.2	45	21	8	1
STC60	141	88	83	22.5	52	29	8	1
STC80	236	141	136	57	70.5	51	8	1
STC100	371	228	221	92	95	77	8	1
STC125	558	352	335	191	140	165	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces

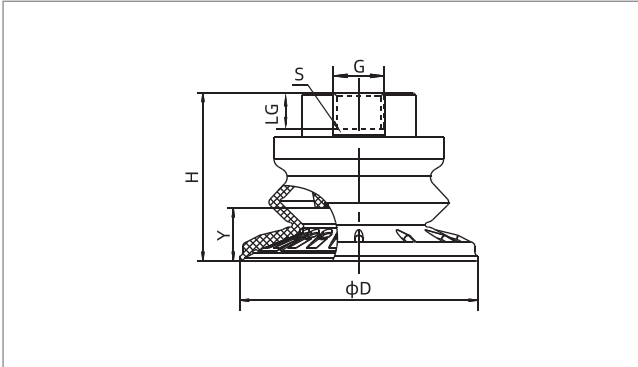
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

STC Series



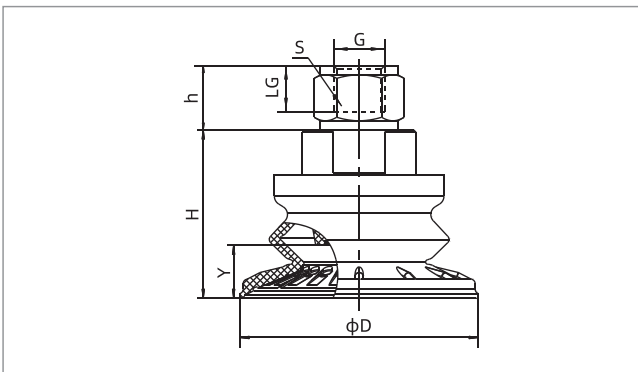
1.5 Bellows Suction Cup Special for Metal Sheet

Dimensions(mm)



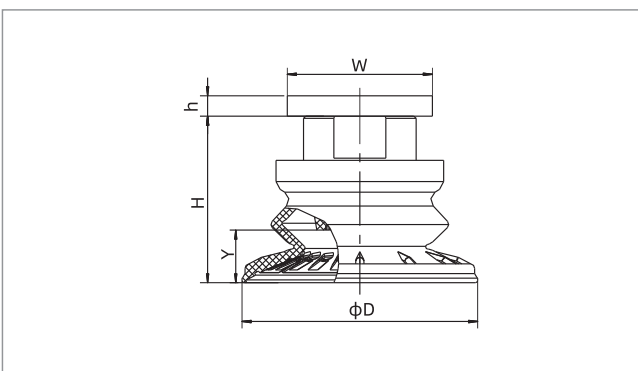
F - Female thread

Model/Size	D	H	G	LG	S	Y
STC22N-G2F	22	25	G1/4	11	17	5.5
STC30N-G2F	32	28	G1/4	11	17	9.5
STC40N-G2F	42	28.5	G1/4	11	17	10
STC50N-G3F	52	36.2	G3/8	13	22	11.5
STC60N-G3F	62.5	41	G3/8	13	22	14.5
STC80N-G3F	82	49.5	G3/8	13	22	22.5
STC100N-G3F	103	55	G3/8	13	22	25
STC125N-G3F	128	68	G3/8	13	22	32



F - Female thread

Model/Size	D	H	G	h	LG	S	Y
STC22N-G3F	22	25	G3/8	14	11	22	5.5
STC30N-G3F	32	28	G3/8	14	11	22	9.5
STC40N-G3F	42	28.5	G3/8	14	11	22	10
STC50N-G2F	52	36.2	G1/4	14	11	22	11.5
STC60N-G2F	62.5	41	G1/4	14	11	22	14.5
STC80N-G2F	82	49.5	G1/4	14	11	22	22.5
STC100N-G2F	103	55	G1/4	14	11	22	25
STC125N-G2F	128	68	G1/4	14	11	22	32



RA - Rectangular adapter

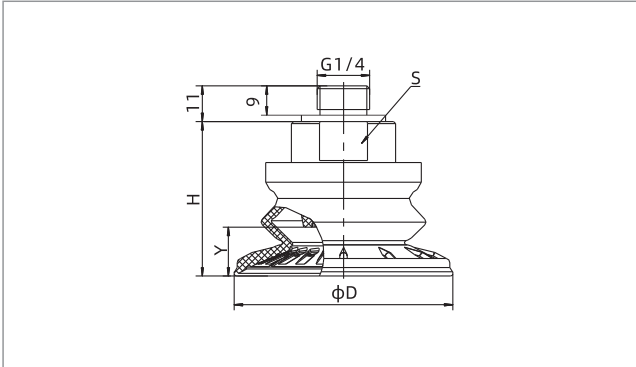
Model/Size	D	H	W	h	Y
STC22N-RA	22	25	31.8×31.8	4.7	5.5
STC30N-RA	32	28	31.8×31.8	4.7	9.5
STC40N-RA	42	28.5	31.8×31.8	4.7	10
STC50N-RA	52	36.2	31.8×31.8	4.7	11.5
STC60N-RA	62.5	41	31.8×31.8	4.7	14.5
STC80N-RA	82	49.5	31.8×31.8	4.7	22.5
STC100N-RA	103	55	31.8×31.8	4.7	25
STC125N-RA	128	68	31.8×31.8	4.7	32

STC Series

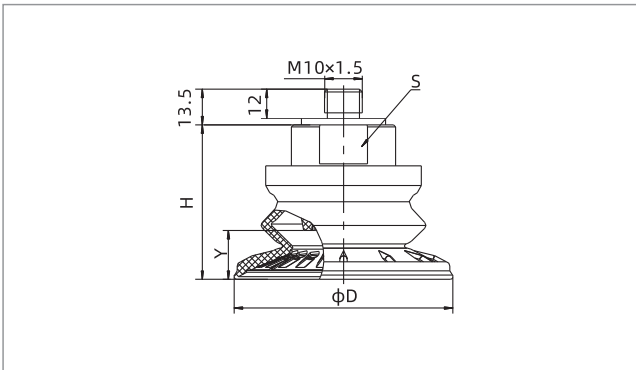
1.5 Bellows Suction Cup Special for Metal Sheet



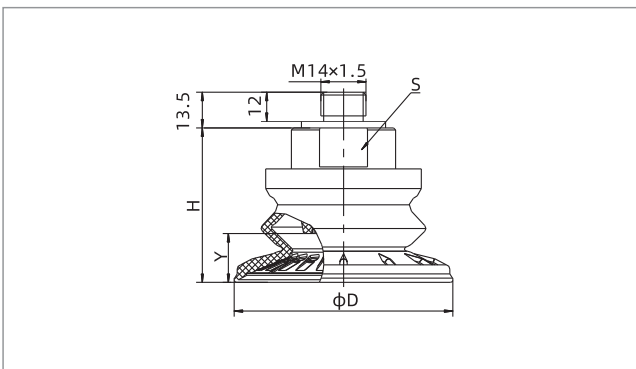
Dimensions(mm)



M - Male thread



M - Male thread



M - Male thread

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	S	Y
STC22N-G2M	22	25	17	5.5
STC30N-G2M	32	28	17	9.5
STC40N-G2M	42	28.5	17	10
STC50N-G2M	52	36.2	22	11.5
STC60N-G2M	62.5	41	22	14.5
STC80N-G2M	82	49.5	22	22.5
STC100N-G2M	103	55	22	25
STC125N-G2M	128	68	22	32

Model/Size	D	H	S	Y
STC22N-M10M	22	25	17	5.5
STC30N-M10M	32	28	17	9.5
STC40N-M10M	42	28.5	17	10
STC50N-M10M	52	36.2	22	11.5
STC60N-M10M	62.5	41	22	14.5
STC80N-M10M	82	49.5	22	22.5
STC100N-M10M	103	55	22	25
STC125N-M10M	128	68	22	32

Model/Size	D	H	S	Y
STC22N-M14M	22	25	17	5.5
STC30N-M14M	32	28	17	9.5
STC40N-M14M	42	28.5	17	10
STC50N-M14M	52	36.2	22	11.5
STC60N-M14M	62.5	41	22	14.5
STC80N-M14M	82	49.5	22	22.5
STC100N-M14M	103	55	22	25
STC125N-M14M	128	68	22	32

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC**
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SKF
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFF Series

AIRBEST

Flat Suction Cup Special for Metal Sheet



METAL SHEET



SLIPPING RESISTANCE



OILY SURFACE



Features

- ◇ Internal large area support structure
- ◇ Various sizes are available

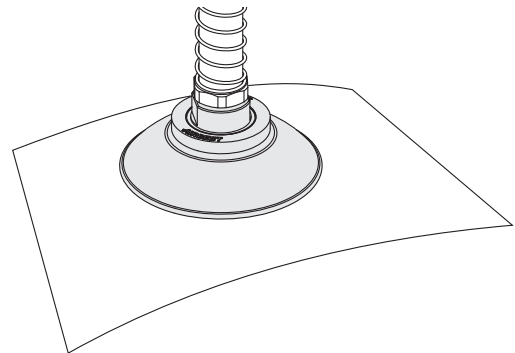
Advantages

- ◇ Effectively enhance the friction force between suction cups and workpieces
- ◇ Suitable for workpieces with different sizes and shapes



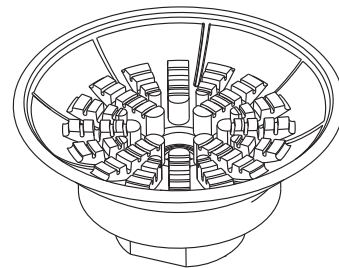
Applications

- ◇ Handling of oily metal sheet
- ◇ Handling metal sheet and aluminum plates without deformation
- ◇ Used for loading and unloading of material during CNC or machine tool processing
- ◇ Handling curved metal sheets
- ◇ Used in automotive stamping metal parts handling systems



Structure

- ◇ Suction cup and fitting are one-piece structure



SFF Series

Flat Suction Cup Speical for Metal Sheet



How to order

SFF 50 N - G3F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SFF	30 - ϕ 30mm	N - NBR 60	G2F - G1/4 female thread
	40 - ϕ 40mm	NG - NBR 45	G3F - G3/8 female thread
	50 - ϕ 50mm		G2M - G1/4 male thread
	60 - ϕ 60mm		M10M - M10x1.5 male thread
	80 - ϕ 80mm		M14M - M14x1.5 male thread
	100 - ϕ 100mm		RA - Rectangular adapter
	125 - ϕ 125mm		

Selection

Model	Connection thread					
	G2M	M10M	M14M	G2F	G3F	RA
SFF30□-□	SFF30□-G2M	SFF30□-M10M	SFF30□-M14M	SFF30□-G2F	SFF30□-G3F	SFF30□-RA
SFF40□-□	SFF40□-G2M	SFF40□-M10M	SFF40□-M14M	SFF40□-G2F	SFF40□-G3F	SFF40□-RA
SFF50□-□	SFF50□-G2M	SFF50□-M10M	SFF50□-M14M	SFF50□-G2F	SFF50□-G3F	SFF50□-RA
SFF60□-□	SFF60□-G2M	SFF60□-M10M	SFF60□-M14M	SFF60□-G2F	SFF60□-G3F	SFF60□-RA
SFF80□-□	SFF80□-G2M	SFF80□-M10M	SFF80□-M14M	SFF80□-G2F	SFF80□-G3F	SFF80□-RA
SFF100□-□	SFF100□-G2M	SFF100□-M10M	SFF100□-M14M	SFF100□-G2F	SFF100□-G3F	SFF100□-RA
SFF125□-□	SFF125□-G2M	SFF125□-M10M	SFF125□-M14M	SFF125□-G2F	SFF125□-G3F	SFF125□-RA

Technical parameters

Model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-out force Oily surface(N)	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFF30	45	35	33	1.6	35	11	6	1
SFF40	72	54	51	3.5	47.5	13	6	1
SFF50	112	90	86	7.5	70	20	8	1
SFF60	145	102	93	12.6	81	26	8	1
SFF80	288	212	190	35	115	43	8	1
SFF100	445	322	308	60	141	57	8	1
SFF125	660	475	400	115	165	145	10	1

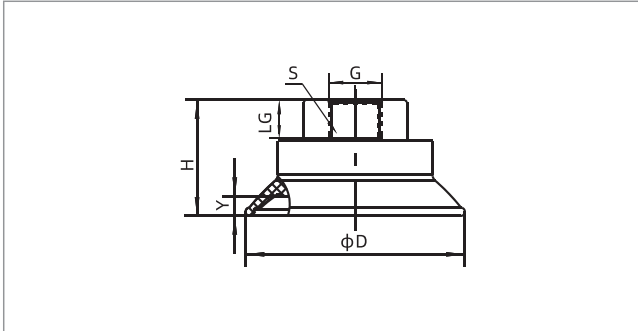
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFF Series

Flat Suction Cup Speical for Metal Sheet

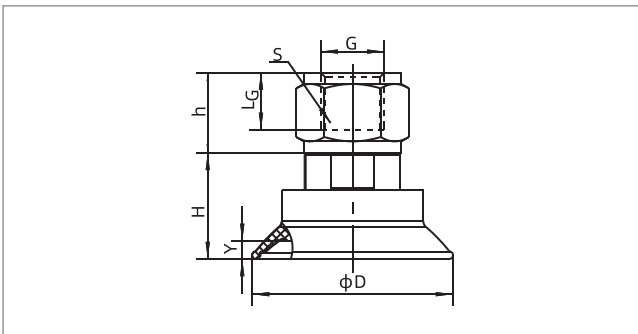


Dimensions(mm)



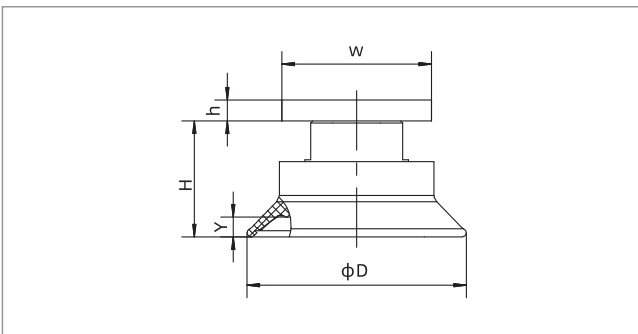
Model/Size	D	H	G	LG	S	Y
SFF30□-G2F	32	19.5	G1/4	11	17	2.7
SFF40□-G2F	42	22	G1/4	11	17	3.4
SFF50□-G3F	52	28	G3/8	13	22	4.7
SFF60□-G3F	62.5	31	G3/8	13	22	6
SFF80□-G3F	83	34.5	G3/8	13	22	6
SFF100□-G3F	102	36.5	G3/8	13	22	9.2
SFF125□-G3F	128	43	G3/8	13	22	12.5

F - Female thread connection



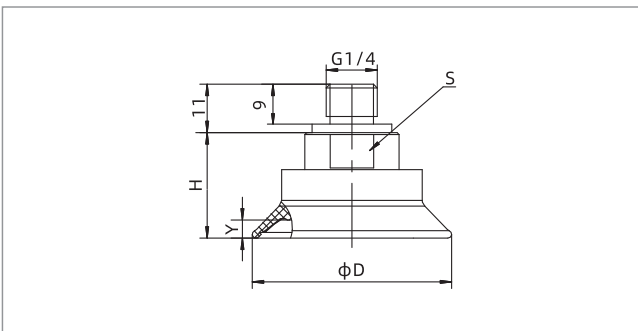
Model/Size	D	H	G	h	LG	S	Y
SFF30□-G3F	32	19.5	G3/8	14	11	22	2.7
SFF40□-G3F	42	22	G3/8	14	11	22	3.4
SFF50□-G2F	52	28	G1/4	14	11	22	4.7
SFF60□-G2F	62.5	31	G1/4	14	11	22	6
SFF80□-G2F	83	34.5	G1/4	14	11	22	6
SFF100□-G2F	102	36.5	G1/4	14	11	22	9.2
SFF125□-G2F	128	43	G1/4	14	11	22	12.5

F - Female thread connection



Model/Size	D	H	W	h	Y
SFF30□-RA	32	19.5	31.8×31.8	4.7	2.7
SFF40□-RA	42	22	31.8×31.8	4.7	3.7
SFF50□-RA	52	28	31.8×31.8	4.7	4.7
SFF60□-RA	62.5	31	31.8×31.8	4.7	6
SFF80□-RA	83	34.5	31.8×31.8	4.7	6
SFF100□-RA	102	36.5	31.8×31.8	4.7	9.2
SFF125□-RA	128	43	31.8×31.8	4.7	12.5

RA - Rectangular adapter



Model/Size	D	H	s	Y
SFF30□-G2M	32	19.5	17	2.7
SFF40□-G2M	42	22	17	3.7
SFF50□-G2M	52	28	22	4.7
SFF60□-G2M	62.5	31	22	6
SFF80□-G2M	83	34.5	22	6
SFF100□-G2M	102	36.5	22	9.2
SFF125□-G2M	128	43	22	12.5

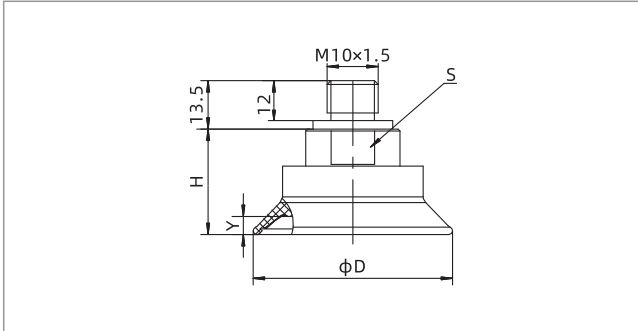
M - Male thread connection

SFF Series

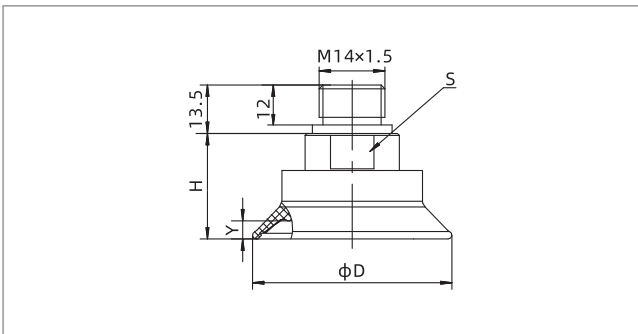
Flat Suction Cup Special for Metal Sheet



Dimensions(mm)



M - Male thread connection



M - Male thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	s	Y
SFF30□-M10M	32	19.5	17	2.7
SFF40□-M10M	42	22	17	3.7
SFF50□-M10M	52	28	22	4.7
SFF60□-M10M	62.5	31	22	6
SFF80□-M10M	83	34.5	22	6
SFF100□-M10M	102	36.5	22	9.2
SFF125□-M10M	128	43	22	12.5

Model/Size	D	H	s	Y
SFF30□-M14M	32	19.5	17	2.7
SFF40□-M14M	42	22	17	3.7
SFF50□-M14M	52	28	22	4.7
SFF60□-M14M	62.5	31	22	6
SFF80□-M14M	83	34.5	22	6
SFF100□-M14M	102	36.5	22	9.2
SFF125□-M14M	128	43	22	12.5

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SOB Series

AIRBEST

Oval Suction Cup Special for Metal Sheet



METAL SHEET



LONG AND NARROW OBJECT



SLIPPING RESISTANCE



OILY SURFACE

RoHS

Features

- ◇ 1.5 Bellows oval structure
- ◇ Internal large area pattern support structure
- ◇ Various sizes and specifications are available

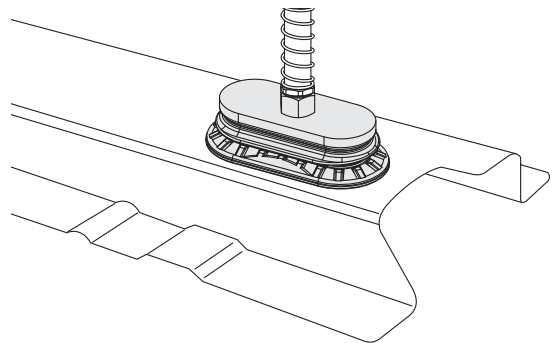
Advantages

- ◇ Handling long and narrow workpieces with even surface or curvature
- ◇ Suitable for workpieces with different sizes and shapes



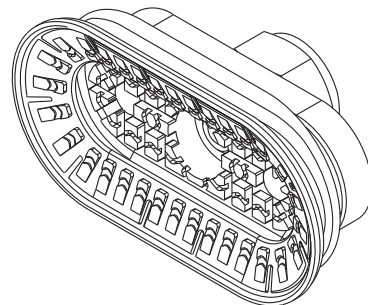
Applications

- ◇ Handling narrow and long metal parts in fast speed, short cycle time
- ◇ Handling metal sheet and aluminum plates without deformation
- ◇ Handling automotive stamping metal parts



Structure

- ◇ 1.5 Bellows structure
- ◇ Suction cup and fitting are one-piece structure



SOB Series

Oval Suction Cup Special for Metal Sheet



How to order

SOB 30×60 N - G3F

① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SOB	30×60 40×80 55×110 70×140	N - NBR 60	G2F - G1/4 female thread G3F - G3/8 female thread G2M - G1/4 male thread M10M - M10×1.5 male thread M14M - M14×1.5 male thread RA - Rectangular adapter

Selection

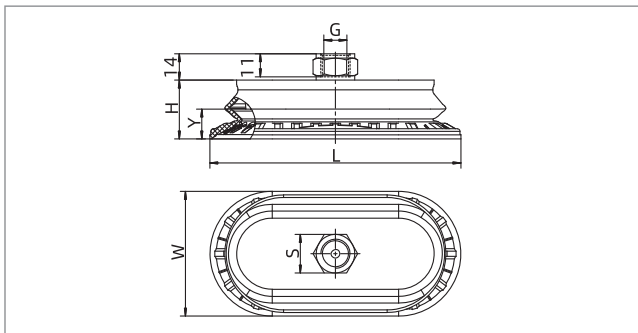
Model	Connection thread					
	G2M	M10M	M14M	G2F	G3F	RA
SOB30×60N-□	SOB30×60N-G2M	SOB30×60N-M10M	SOB30×60N-M14M	SOB30×60N-G2F	SOB30×60N-G3F	SOB30×60N-RA
SOB40×80N-□	SOB40×80N-G2M	SOB40×80N-M10M	SOB40×80N-M14M	SOB40×80N-G2F	SOB40×80N-G3F	SOB40×80N-RA
SOB55×110N-□	SOB55×110N-G2M	SOB55×110N-M10M	SOB55×110N-M14M	SOB55×110N-G2F	SOB55×110N-G3F	SOB55×110N-RA
SOB70×140N-□	SOB70×140N-G2M	SOB70×140N-M10M	SOB70×140N-M14M	SOB70×140N-G2F	SOB70×140N-G3F	SOB70×140N-RA

Technical parameters

Model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-out force (Oily surface)N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SOB30×60	53	60	50	8.7	25	26	6	1
SOB40×80	110	118	101	20	32	33	8	1
SOB55×110	197	200	183	50	50	75	8	1
SOB70×140	275	295	267	100	70	117	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces

Dimensions(mm)



Model/Size	L	W	H	G	S	Y
SOB30×60N-G2F	62	31	20	G1/4	17	6
SOB30×60N-G3F	62	31	20	G3/8	22	6
SOB40×80N-G2F	82	41	22.7	G1/4	17	8.8
SOB40×80N-G3F	82	41	22.7	G3/8	22	8.8
SOB55×110N-G2F	112	57	29	G1/4	17	12.5
SOB55×110N-G3F	112	57	29	G3/8	22	12.5
SOB70×140N-G2F	143	70.5	33	G1/4	17	17
SOB70×140N-G3F	143	70.5	33	G3/8	22	17

F - Female thread connection

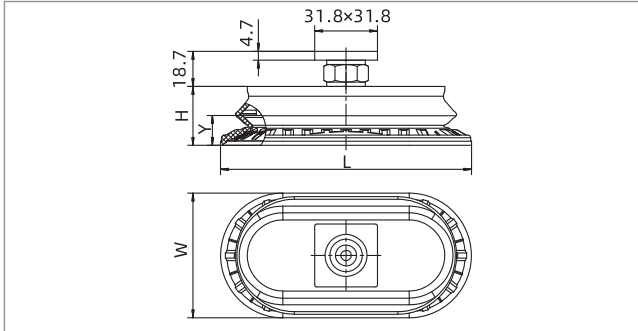
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SKF
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SOB Series

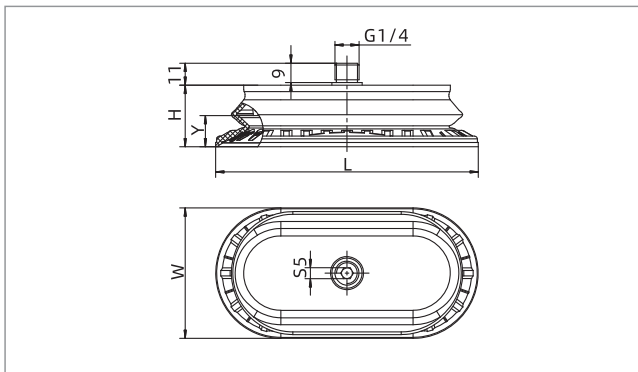
Oval Suction Cup Special for Metal Sheet



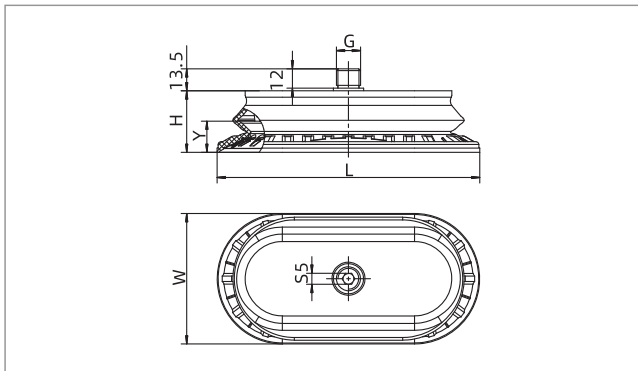
Dimensions(mm)



RA - Rectangular adapter



M - Male thread connection



M - Male thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	L	W	H	Y
SOB30×60N-RA	62	31	20	6
SOB40×80N-RA	82	41	22.7	8.8
SOB55×110N-RA	112	57	29	12.5
SOB70×140N-RA	143	70.5	33	17

Model/Size	L	W	H	Y
SOB30×60N-G2M	62	31	20	6
SOB40×80N-G2M	82	41	22.7	8.8
SOB55×110N-G2M	112	57	29	12.5
SOB70×140N-G2M	143	70.5	33	17

Model/Size	L	W	H	G	Y
SOB30×60N-M10M	62	31	20	M10×1.5	6
SOB30×60N-M14M	62	31	20	M14×1.5	6
SOB40×80N-M10M	82	41	22.7	M10×1.5	8.8
SOB40×80N-M14M	82	41	22.7	M14×1.5	8.8
SOB55×110N-M10M	112	57	29	M10×1.5	12.5
SOB55×110N-M14M	112	57	29	M14×1.5	12.5
SOB70×140N-M10M	143	70.5	33	M10×1.5	17
SOB70×140N-M14M	143	70.5	33	M14×1.5	17

SOF Series

Oval Flat Suction Cup Special for Metal Sheet

AIRBEST



METAL SHEET



LONG AND NARROW OBJECT



SLIPPING RESISTANCE



OILY SURFACE



Suction Cup

Features

- ◇ Oval flat suction cup
- ◇ Internal large area pattern support structure
- ◇ Various sizes are available

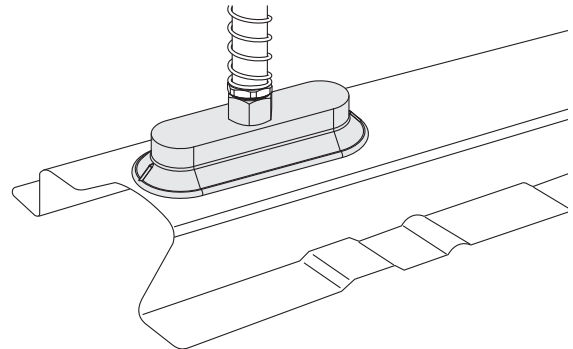
Advantages

- ◇ Handling long and narrow workpieces
- ◇ Effectively enhance friction force between suction cups and workpieces
- ◇ Suitable for workpieces with different sizes and shapes



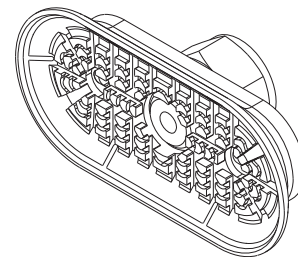
Applications

- ◇ Handling narrow and long metal parts in fast speed, short cycle time
- ◇ Handling metal sheet and aluminum plates without deformation
- ◇ Handling automotive stamping metal parts



Structure

- ◇ Suction cup and fitting are one-piece structure



SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SOF Series



Oval Flat Suction Cup Speical for Metal Sheet

How to order

SOF 40×80 N - G3F

① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SOF	16×50 40×110	N - NBR 60	G2F - G1/4 female thread
	20×80 50×100	NG - NBR 45	G3F - G3/8 female thread
	23×60 60×120		G2M - G1/4 male thread
	30×90 70×140		M10M - M10×1.5 male thread
	40×80		M14M - M14×1.5 male thread
			RA - Rectangular adapter

Selection

Model	Connection thread					
	G2M	M10M	M14M	G2F	G3F	RA
SOF16×50□-□	SOF16×50□-G2M	SOF16×50□-M10M	SOF16×50□-M14M	SOF16×50□-G2F	SOF16×50□-G3F	SOF16×50□-RA
SOF20×80□-□	SOF20×80□-G2M	SOF20×80□-M10M	SOF20×80□-M14M	SOF20×80□-G2F	SOF20×80□-G3F	SOF20×80□-RA
SOF23×60□-□	SOF23×60□-G2M	SOF23×60□-M10M	SOF23×60□-M14M	SOF23×60□-G2F	SOF23×60□-G3F	SOF23×60□-RA
SOF40×80□-□	SOF40×80□-G2M	SOF40×80□-M10M	SOF40×80□-M14M	SOF40×80□-G2F	SOF40×80□-G3F	SOF40×80□-RA
SOF30×90□-□	SOF30×90□-G2M	SOF30×90□-M10M	SOF30×90□-M14M	SOF30×90□-G2F	SOF30×90□-G3F	SOF30×90□-RA
SOF40×110□-□	SOF40×110□-G2M	SOF40×110□-M10M	SOF40×110□-M14M	SOF40×110□-G2F	SOF40×110□-G3F	SOF40×110□-RA
SOF50×100□-□	SOF50×100□-G2M	SOF50×100□-M10M	SOF50×100□-M14M	SOF50×100□-G2F	SOF50×100□-G3F	SOF50×100□-RA
SOF60×120□-□	SOF60×120□-G2M	SOF60×120□-M10M	SOF60×120□-M14M	SOF60×120□-G2F	SOF60×120□-G3F	SOF60×120□-RA
SOF70×140□-□	SOF70×140□-G2M	SOF70×140□-M10M	SOF70×140□-M14M	SOF70×140□-G2F	SOF70×140□-G3F	SOF70×140□-RA

Technical parameters

Model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-out force (Oily surface)N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SOF16×50	33	24	12	2	8	17	4	1
SOF20×80	78	38	35	5	25	23	4	1
SOF23×60	57	37	33	3	20	29	4	1
SOF30×90	125	77	60	10	30	24	4	1
SOF40×80	141	110	100	11	50	43	6	1
SOF40×110	200	188	118	25	35	47	6	1
SOF50×100	217	181	121	20	75	56	6	1
SOF60×120	312	254	170	35	75	70	6	1
SOF70×140	445	344	230	52	90	77	8	1

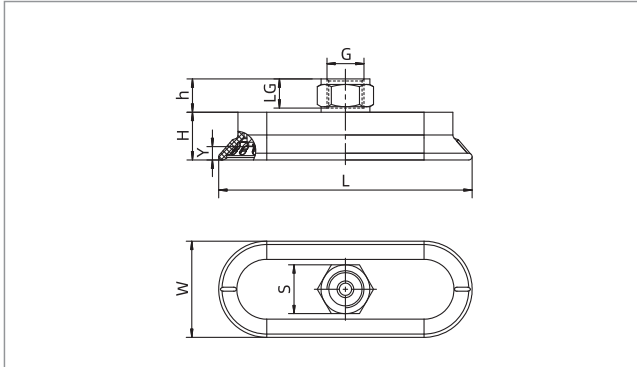
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

SOF Series

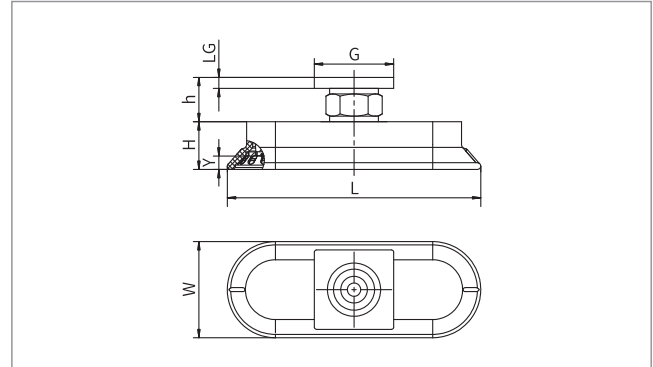
Oval Flat Suction Cup Special for Metal Sheet



Dimensions(mm)



F - Female thread connection



RA-Rectangular adapter

Model/Size	L	W	H	G	LG	h	S	Y
SOF16×50□-G2F	50	16	19.5	G1/4	11	14	17	3
SOF16×50□-G3F	50	16	19.5	G3/8	11	14	22	3
SOF16×50□-RA	50	16	19.5	31.8×31.8	4.7	18.7	-	3
SOF20×80□-G2F	84	24	15.5	G1/4	11	14	17	5
SOF20×80□-G3F	84	24	15.5	G3/8	11	14	22	5
SOF20×80□-RA	84	24	15.5	31.8×31.8	4.7	18.7	-	5
SOF23×60□-G2F	61.5	22.5	12	G1/4	11	14	17	3
SOF23×60□-G3F	61.5	22.5	12	G3/8	11	14	22	3
SOF23×60□-RA	61.5	22.5	12	31.8×31.8	4.7	18.7	-	3
SOF30×90□-G2F	93	33	16	G1/4	11	14	17	5
SOF30×90□-G3F	93	33	16	G3/8	11	14	22	5
SOF30×90□-RA	93	33	16	31.8×31.8	4.7	18.7	-	5
SOF40×80□-G2F	82	43	14	G1/4	11	14	17	4
SOF40×80□-G3F	82	43	14	G3/8	11	14	22	4
SOF40×80□-RA	82	43	14	31.8×31.8	4.7	18.7	-	4
SOF40×110□-G2F	113	43	21.5	G1/4	11	14	17	6
SOF40×110□-G3F	113	43	21.5	G3/8	11	14	22	6
SOF40×110□-RA	113	43	21.5	31.8×31.8	4.7	18.7	-	6
SOF50×100□-G2F	102	49	16	G1/4	11	14	17	5
SOF50×100□-G3F	102	49	16	G3/8	11	14	22	5
SOF50×100□-RA	102	49	16	31.8×31.8	4.7	18.7	-	5
SOF60×120□-G2F	123	65	18	G1/4	11	14	17	6
SOF60×120□-G3F	123	65	18	G3/8	11	14	22	6
SOF60×120□-RA	123	65	18	31.8×31.8	4.7	18.7	-	6
SOF70×140□-G2F	141	67.5	19	G1/4	11	14	17	7
SOF70×140□-G3F	141	67.5	19	G3/8	11	14	22	7
SOF70×140□-RA	141	67.5	19	31.8×31.8	4.7	18.7	-	7

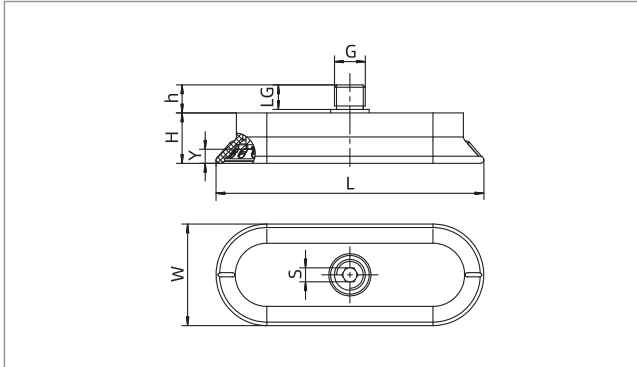
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF**
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SKF
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SOF Series



Oval Flat Suction Cup Special for Metal Sheet

Dimensions(mm)



M - Male thread connection

Model/Size	L	W	H	G	LG	h	S	Y
SOF16×50□-G2M	50	16	19.5	G1/4	9	11	5	3
SOF16×50□-M10M	50	16	19.5	M10×1.5	12	13.5	5	3
SOF16×50□-M14M	50	16	19.5	M14×1.5	12	13.5	5	3
SOF20×80□-G2M	84	24	15.5	G1/4	9	11	5	5
SOF20×80□-M10M	84	24	15.5	M10×1.5	12	13.5	5	5
SOF20×80□-M14M	84	24	15.5	M14×1.5	12	13.5	5	5
SOF23×60□-G2M	61.5	22.5	12	G1/4	9	11	5	3
SOF23×60□-M10M	61.5	22.5	12	M10×1.5	12	13.5	5	3
SOF23×60□-M14M	61.5	22.5	12	M14×1.5	12	13.5	5	3
SOF30×90□-G2M	93	33	16	G1/4	9	11	5	5
SOF30×90□-M10M	93	33	16	M10×1.5	12	13.5	5	5
SOF30×90□-M14M	93	33	16	M14×1.5	12	13.5	5	5
SOF40×80□-G2M	82	43	14	G1/4	9	11	5	4
SOF40×80□-M10M	82	43	14	M10×1.5	12	13.5	5	4
SOF40×80□-M14M	82	43	14	M14×1.5	12	13.5	5	4
SOF40×110□-G2M	113	43	21.5	G1/4	9	11	5	6
SOF40×110□-M10M	113	43	21.5	M10×1.5	12	13.5	5	6
SOF40×110□-M14M	113	43	21.5	M14×1.5	12	13.5	5	6
SOF50×100□-G2M	102	49	16	G1/4	9	11	5	5
SOF50×100□-M10M	102	49	16	M10×1.5	12	13.5	5	5
SOF50×100□-M14M	102	49	16	M14×1.5	12	13.5	5	5
SOF60×120□-G2M	123	65	18	G1/4	9	11	5	6
SOF60×120□-M10M	123	65	18	M10×1.5	12	13.5	5	6
SOF60×120□-M14M	123	65	18	M14×1.5	12	13.5	5	6
SOF70×140□-G2M	141	67.5	19	G1/4	9	11	5	7
SOF70×140□-M10M	141	67.5	19	M10×1.5	12	13.5	5	7
SOF70×140□-M14M	141	67.5	19	M14×1.5	12	13.5	5	7

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SOG Series



Oval Concave Suction Cup Special for Cylindrical Objects



CYLINDRICAL OBJECT



BATTERY



SLIPPING RESISTANCE



Suction Cup

Features

- ◇ Concave sealing lip structure
- ◇ Internal groove structure

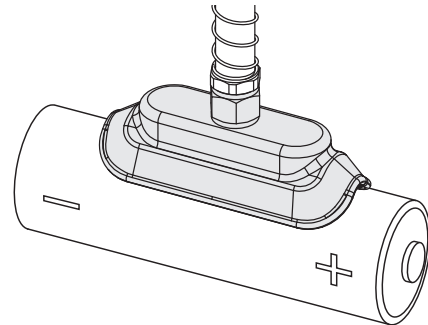
Advantages

- ◇ Suitable for handling cylindrical workpiece
- ◇ Effectively increase the friction force between suction cup and workpiece surface



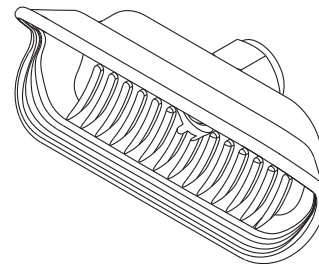
Applications

- ◇ Suitable for cylindrical workpieces, such as steel pipes, plastic round pipes, lithium batteries, etc
- ◇ Handling oily round metal pipes



Structure

- ◇ Concave oval flat structure design



SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFD
SB
SBA
SF
SU
SPA
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP

SOG Series



Oval Concave Suction Cup Special for Cylindrical Objects

How to order

SOG 35×100 N - G2F

① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SOG	15×40 35×100	N - NBR 45	M5F - M5×0.8 female thread M5M - M5×0.8 male thread G2F - G1/4 female thread G3F - G3/8 female thread G2M - G1/4 male thread M10M - M10×1.5 male thread M14M - M14×1.5 male thread RA - Rectangular adapter

Selection

Model	Connection thread			
	M5M	G2M	M10M	M14M
SOG15×40N-□	SOG15×40N-M5M	-	-	-
SOG35×100N-□	-	SOG35×100N-G2M	SOG35×100N-M10M	SOG35×100N-M14M

Model	Connection thread			
	M5F	G2F	G3F	RA
SOG15×40N-□	SOG15×40N-M5F	-	-	-
SOG35×100N-□	-	SOG35×100N-G2F	SOG35×100N-G3F	SOG35×100N-RA

Technical parameters

Model	Vertical pull-out force N	Inner volume cm ³	Min. curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SOG15×40	22	1.3	8	17	6	5
SOG35×100	122	11	25	23	8	1

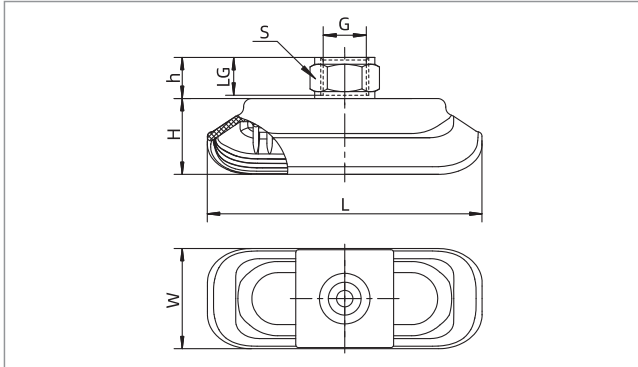
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

SOG Series

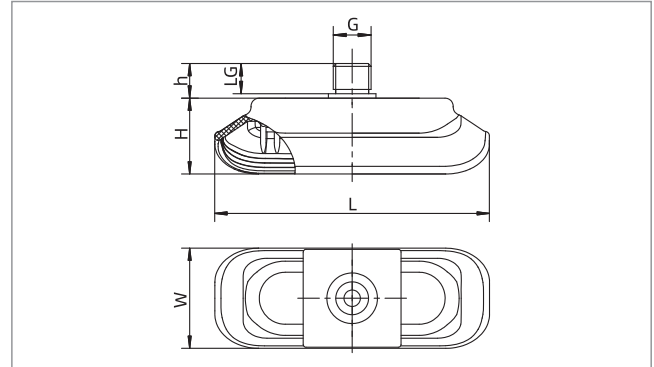


Oval Concave Suction Cup Special for Cylindrical Objects

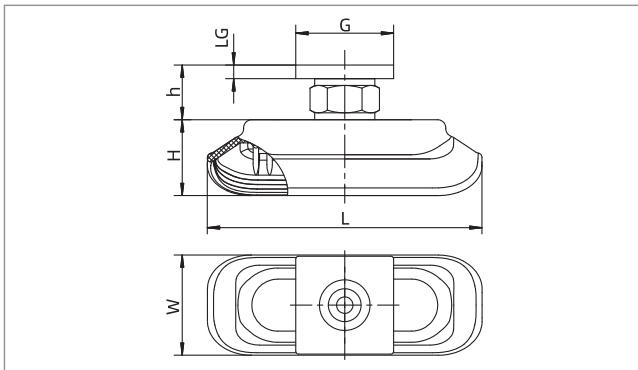
Dimensions(mm)



F - Female thread connection



M - Male thread connection



RA - Rectangular adapter

Model/Size	L	W	H	G	LG	h	S
SOG15×40N-M5F	42	15.5	14	M5×0.8	-	-	-
SOG15×40N-M5M	42	15.5	14	M5×0.8	5	6.5	8
SOG35×100N-G2F	100.5	36.5	28	G1/4	11	14	17
SOG35×100N-G3F	100.5	36.5	28	G3/8	11	14	22
SOG35×100N-G2M	100.5	36.5	28	G1/4	9	11	5
SOG35×100N-M10M	100.5	36.5	28	M10×1.5	12	13.5	5
SOG35×100N-M14M	100.5	36.5	28	M14×1.5	12	13.5	5
SOG35×100N-RA	100.5	36.5	28	31.8×31.8	4.7	18.7	-

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SFM Series

Flat Suction Cup Special for Oily Metal Sheet



Features

- ◇ Large compressed stroke, good flexibility
- ◇ PU material
- ◇ Internal large area support structure
- ◇ Various sizes are available

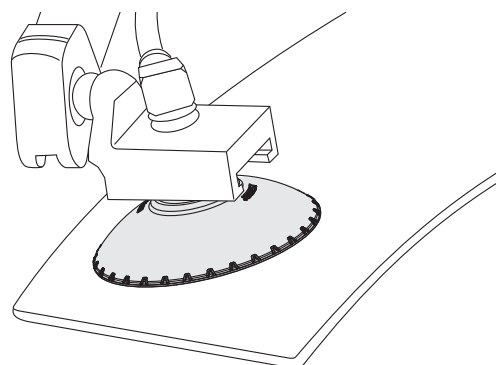
Advantages

- ◇ Easy to fit workpieces with different shapes of surfaces
- ◇ Long lifetime, and wear resistance, ozone resistance and oil resistance are excellent
- ◇ Effectively enhance friction force between suction cups and workpieces
- ◇ Suitable for workpieces with different sizes and shapes



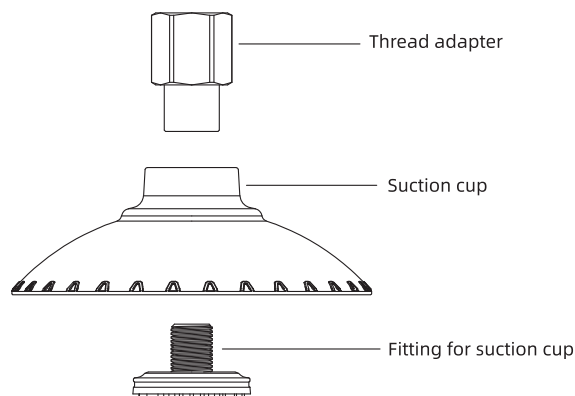
Applications

- ◇ Handling of oily metal sheet
- ◇ Handling curved metal sheet
- ◇ Handling automotive stamping metal parts



Structure

- ◇ Split structure design, wearing parts can be replaced separately



SFM Series

Flat Suction Cup Special for Oily Metal Sheet



How to order

SFM 50 U - G3F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SFM	30 - ϕ 30mm	U - PU	Nil - Suction cup only
	40 - ϕ 40mm		G1F - G1/8 female thread
	50 - ϕ 50mm		G2F - G1/4 female thread
	60 - ϕ 60mm		G3F - G3/8 female thread
	80 - ϕ 80mm		G2M - G1/4 male thread
	100 - ϕ 100mm		M10M - M10 \times 1.5 male thread
	120 - ϕ 120mm		M14M - M14 \times 1.5 male thread RA - Rectangular adapter

Selection

Model	Connection thread						
	G2M	M10M	M14M	G1F	G2F	G3F	RA
SFM30U	-	SFM30U-M10M	-	SFM30U-G1F	-	-	SFM30U-RA
SFM40U	-	SFM40U-M10M	-	SFM40U-G1F	-	-	SFM40U-RA
SFM50U	SFM50U-G2M	SFM50U-M10M	SFM50U-M14M	-	SFM50U-G2F	SFM50U-G3F	SFM50U-RA
SFM60U	SFM60U-G2M	SFM60U-M10M	SFM60U-M14M	-	SFM60U-G2F	SFM60U-G3F	SFM60U-RA
SFM80U	SFM80U-G2M	SFM80U-M10M	SFM80U-M14M	-	SFM80U-G2F	SFM80U-G3F	SFM80U-RA
SFM100U	SFM100U-G2M	SFM100U-M10M	SFM100U-M14M	-	SFM100U-G2F	SFM100U-G3F	SFM100U-RA
SFM120U	SFM120U-G2M	SFM120U-M10M	SFM120U-M14M	-	SFM120U-G2F	SFM120U-G3F	SFM120U-RA

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFM30	45	4.5	25	3.5	6	1
SFM40	70	8.5	30	5.0	6	1
SFM50	112	18.6	35	8.5	8	1
SFM60	150	26	40	11	8	1
SFM80	285	56	60	21	8	1
SFM100	420	105	70	35	10	1
SFM120	580	153	90	55	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

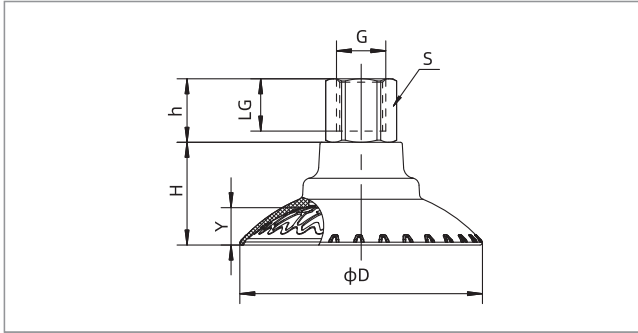
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM**
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SGF
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFM Series

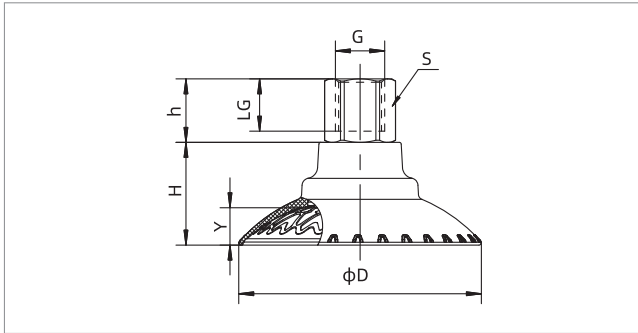


Flat Suction Cup Special for Oily Metal Sheet

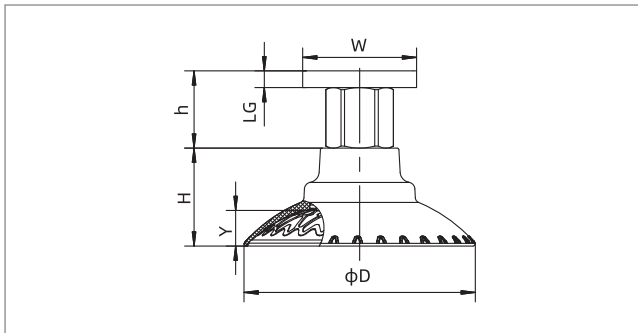
Dimensions(mm)



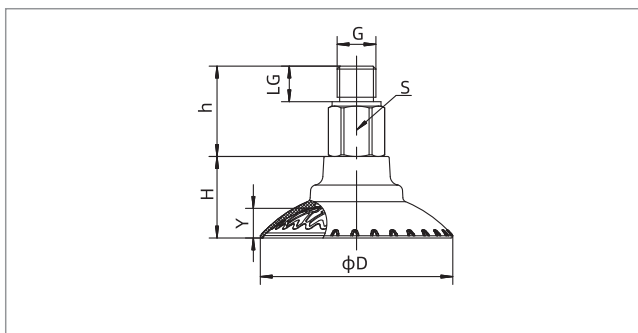
F - Female thread connection



F - Female thread connection



RA - Rectangular adapter



M - Male thread connection

Model/Size	D	H	G	h	LG	S	Y
SFM30U-G1F	34	17.5	G1/8	14	10	14	4
SFM40U-G1F	43.5	20	G1/8	14	10	14	6.3
SFM50U-G2F	55	25	G1/4	17	12	17	7.8
SFM60U-G2F	65	27.5	G1/4	17	12	17	10
SFM80U-G2F	85	30	G1/4	17	12	17	13
SFM100U-G2F	105.5	37	G1/4	17	12	17	15.5
SFM120U-G2F	123	41	G1/4	17	12	17	18.5

Model/Size	D	H	G	h	LG	S	Y
SFM50U-G3F	55	25	G3/8	17	12	22	7.8
SFM60U-G3F	65	27.5	G3/8	17	12	22	10
SFM80U-G3F	85	30	G3/8	17	12	22	13
SFM100U-G3F	105.5	37	G3/8	17	12	22	15.5
SFM120U-G3F	123	41	G3/8	17	12	22	18.5

Model/Size	D	H	w	h	LG	Y
SFM30U-RA	34	17.5	31.8×31.8	21.7	4.7	4
SFM40U-RA	43.5	20	31.8×31.8	21.7	4.7	6.3
SFM50U-RA	55	25	31.8×31.8	21.7	4.7	7.8
SFM60U-RA	65	27.5	31.8×31.8	21.7	4.7	10
SFM80U-RA	85	30	31.8×31.8	21.7	4.7	13
SFM100U-RA	105.5	37	31.8×31.8	21.7	4.7	15.5
SFM120U-RA	123	41	31.8×31.8	21.7	4.7	18.5

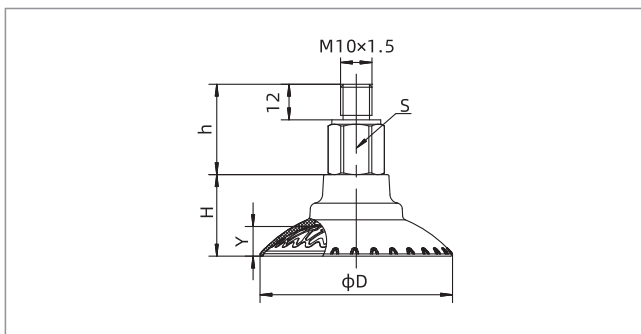
Model/Size	D	H	G	h	LG	S	Y
SFM50U-G2M	55	25	G1/4	28	9	17	7.8
SFM60U-G2M	65	27.5	G1/4	28	9	17	10
SFM80U-G2M	85	30	G1/4	28	9	17	13
SFM100U-G2M	105.5	37	G1/4	28	9	17	15.5
SFM120U-G2M	123	41	G1/4	28	9	17	18.5

SFM Series

Flat Suction Cup Special for Oily Metal Sheet

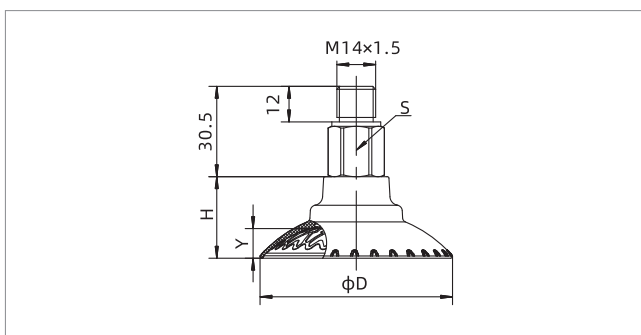


Dimensions(mm)



M - Male thread connection

Model/Size	D	H	h	S	Y
SFM30U-M10M	34	17.5	27.5	14	4
SFM40U-M10M	43.5	20	27.5	14	6.3
SFM50U-M10M	55	25	30.5	17	7.8
SFM60U-M10M	65	27.5	30.5	17	10
SFM80U-M10M	85	30	30.5	17	13
SFM100U-M10M	105.5	37	30.5	17	15.5
SFM120U-M10M	123	41	30.5	17	18.5

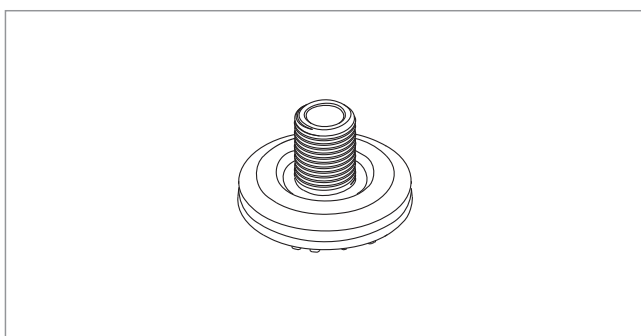


M - Male thread connection

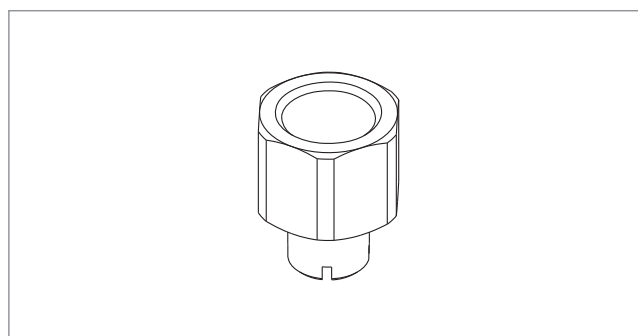
Model/Size	D	H	h	S	Y
SFM50U-M14M	55	25	30.5	17	7.8
SFM60U-M14M	65	27.5	30.5	17	10
SFM80U-M14M	85	30	30.5	17	13
SFM100U-M14M	105.5	37	30.5	17	15.5
SFM120U-M14M	123	41	30.5	17	18.5

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts



PJS - Fitting for suction cup



PJT - Thread adapter

Item	Model	Applicable suction cup
Fitting for suction cup	PJS-M8M-SFM40	SFM30,40
	PJS-G1M-SFM80	SFM50,60,80
	PJS-G1M-SFM120	SFM100,120
Thread adapter	PJT-M8F-G1F	SFM30,40
	PJT-G1F-G2F	SFM50,60,80,100,120
	PJT-G1F-G3F	SFM50,60,80,100,120

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM**
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SOM Series

Oval Flat Suction Cup Special for Long and Narrow Objects



Features

- ◇ Large stroke and good flexibility
- ◇ PU material
- ◇ Internal large area pattern support structure
- ◇ Non-rotating structure
- ◇ Various sizes are available

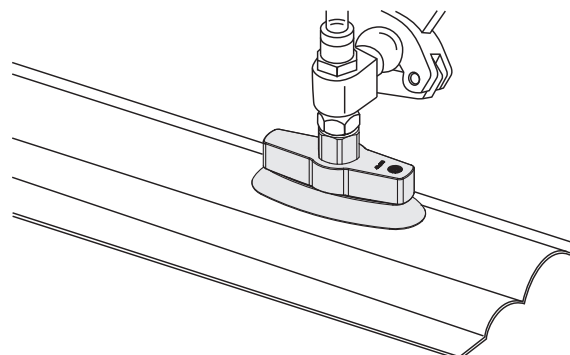
Advantages

- ◇ Easy to fit the workpieces with different shapes of surfaces
- ◇ Long lifetime, excellent wear resistance, ozone resistance, oil resistance
- ◇ Effectively increase friction force between suction cups and workpieces
- ◇ The parts can be recycled
- ◇ The direction of suction cup can be accurately positioned according to workpiece shape
- ◇ Suitable for workpieces with different sizes and shapes



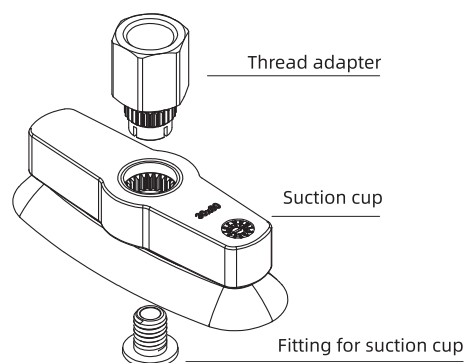
Applications

- ◇ Handling of oval workpiece with curved surface
- ◇ Handling long and narrow or cylindrical workpieces



Structure

- ◇ Split structure design, wearing parts can be replaced separately



SOM Series

Oval Flat Suction Cup Special for Long and Narrow Objects



How to order

SOM 30×80 U - G2F

① ② ③ ④

① Series	② Size	③ Material & Hardness	④ Connection thread
SOM	20×60	U - PU	70
	30×80		
	40×100		
			Nil - Suction cup only G2F - G1/4 female thread G3F - G3/8 female thread G2M - G1/4 male thread M10M - M10×1.5 male thread M14M - M14×1.5 male thread RA - Rectangular adapter

Selection

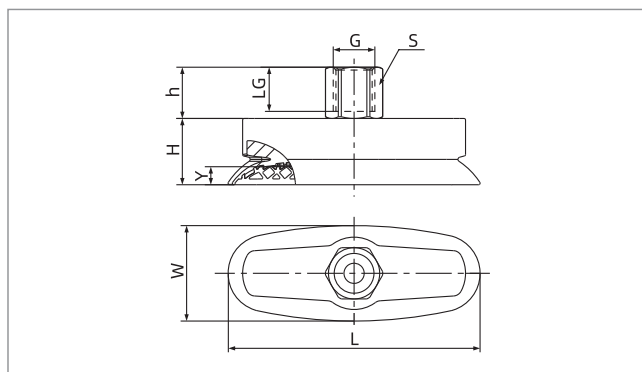
Model	Connection thread					
	G2M	M10M	M14M	G2F	G3F	RA
SOM20×60U	SOM20×60U-G2M	SOM20×60U-M10M	SOM20×60U-M14M	SOM20×60U-G2F	-	SOM20×60U-RA
SOM30×80U	SOM30×80U-G2M	SOM30×80U-M10M	SOM30×80U-M14M	SOM30×80U-G2F	-	SOM30×80U-RA
SOM40×100U	SOM40×100U-G2M	SOM40×100U-M10M	SOM40×100U-M14M	-	SOM40×100U-G3F	SOM40×100U-RA

Technical parameters

Model	Vertical pull-out force N	Lateral pull-out force N	Lateral pull-out force (Oily surface)N	Inner volume cm ³	Min curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SOM20×60U	61	44	44	5	10	14	8	1
SOM30×80U	116	110	110	12	20	24.4	8	1
SOM40×100U	187	135	135	25	32	50.6	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

Dimensions(mm)



Model/Size	L	W	H	G	h	LG	S	Y
SOM20×60U-G2F	63.5	20.5	22	G1/4	17	12	17	5
SOM30×80U-G2F	83.5	31.5	22	G1/4	17	12	17	6
SOM40×100U-G3F	103.5	43.5	29	G3/8	17	12	22	7

F - Female thread connection

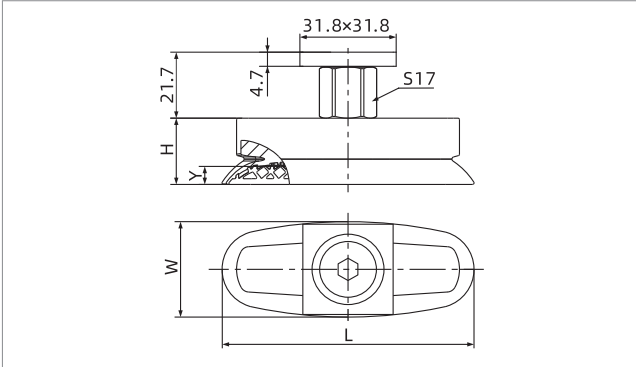
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SOM Series

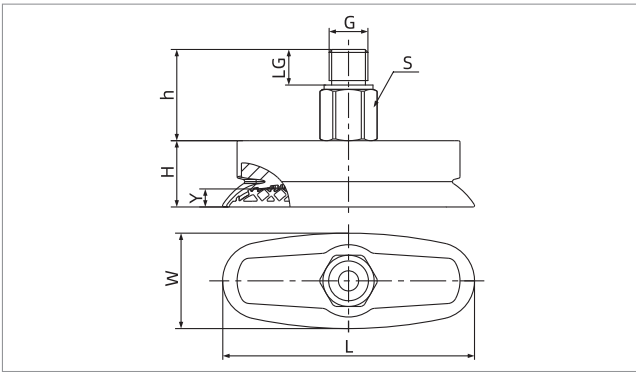


Oval Flat Suction Cup Special for Long and Narrow Objects

Dimensions(mm)



RA - Rectangular adapter



M - Male thread connection

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	L	W	H	Y
SOM20×60U-RA	63.5	20.5	22	5
SOM30×80U-RA	83.5	31.5	22	6
SOM40×100U-RA	103.5	43.5	29	7

Model/Size	L	W	H	G	h	LG	S	Y
SOM20×60U-G2M	63.5	20.5	22	G1/4	28	9	17	5
SOM20×60U-M10M	63.5	20.5	22	M10×1.5	30.5	11	17	5
SOM20×60U-M14M	63.5	20.5	22	M14×1.5	30.5	11	17	5
SOM30×80U-G2M	83.5	31.5	22	G1/4	28	9	17	6
SOM30×80U-M10M	83.5	31.5	22	M10×1.5	30.5	11	17	6
SOM30×80U-M14M	83.5	31.5	22	M14×1.5	30.5	11	17	6
SOM40×100U-G2M	103.5	43.5	29	G1/4	28	9	17	7
SOM40×100U-M10M	103.5	43.5	29	M10×1.5	30.5	11	17	7
SOM40×100U-M14M	103.5	43.5	29	M14×1.5	30.5	11	17	7

SBF Series

1.5 Bellows Suction Cup Special for Metal Sheet



METAL SHEET



SLIPPING RESISTANCE



OILY SURFACE



LONG LIFETIME

Features

- ◇ 1.5 Bellows
- ◇ PU material
- ◇ Internal large area support structure
- ◇ Various sizes for option

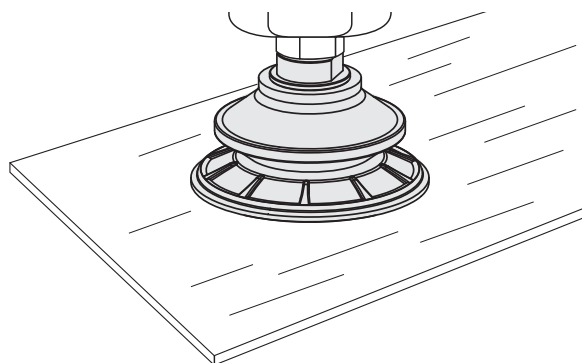
Advantages

- ◇ Easy to fit uneven surface of workpiece, and has buffer effect
- ◇ Excellent wear resistance and oil resistance, long lifetime
- ◇ Effectively increase the friction force between suction cups and workpieces
- ◇ Suitable for workpieces with different sizes and shapes



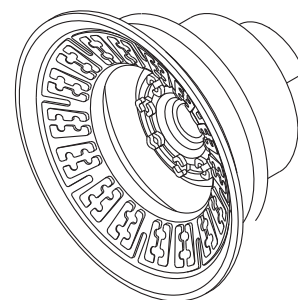
Applications

- ◇ Handling metal sheet in high speed, short cycle time
- ◇ Handling metal sheet and aluminum plate without deformation
- ◇ Special pattern slot design of suction cup prevents from slipping during handling oily sheet metal, ensuring accurate positioning
- ◇ Used in automotive stamping metal parts handling system



Structure

- ◇ 1.5 Bellows, large compressed stroke
- ◇ Suction cup and fitting are one-piece structure design



SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

XP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SBF Series



1.5 Bellows Suction Cup Special for Metal Sheet

How to order

SBF 50 U - G3F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread	
SBF	30 - φ32mm	U - PU	70	G2F - G1/4 female thread
	40 - φ42mm			G3F - G3/8 female thread
	50 - φ51.5mm			G2M - G1/4 male thread
	60 - φ64mm			M10M - M10×1.5 male thread
	80 - φ84mm			RA - Rectangular adapter
	100 - φ103mm			

Selection - Model(Connection thread)

Model	Connection thread				
	G2M	M10M	G2F	G3F	RA - Rectangular adapter
SBF30U-□	SBF30U-G2M	SBF30U-M10M	SBF30U-G2F	SBF30U-G3F	SBF30U-RA
SBF40U-□	SBF40U-G2M	SBF40U-M10M	SBF40U-G2F	SBF40U-G3F	SBF40U-RA
SBF50U-□	SBF50U-G2M	SBF50U-M10M	SBF50U-G2F	SBF50U-G3F	SBF50U-RA
SBF60U-□	SBF60U-G2M	SBF60U-M10M	SBF60U-G2F	SBF60U-G3F	SBF60U-RA
SBF80U-□	SBF80U-G2M	SBF80U-M10M	SBF80U-G2F	SBF80U-G3F	SBF80U-RA
SBF100U-□	SBF100U-G2M	SBF100U-M10M	SBF100U-G2F	SBF100U-G3F	SBF100U-RA

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SBF30	33	5.5	30	18.5	6	1
SBF40	60	7.0	45	20.0	6	1
SBF50	103	11.5	50	40.0	8	1
SBF60	145	22.0	55	45.0	8	1
SBF80	235	60.0	72	75.0	10	1
SBF100	380	98.0	97	118.0	10	1

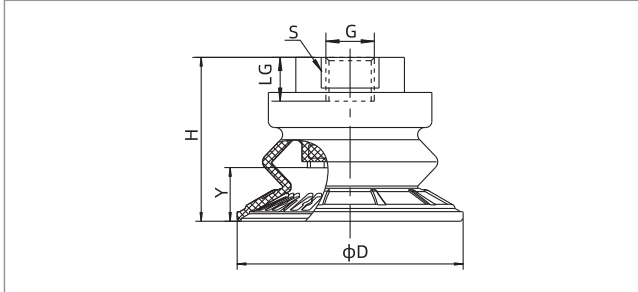
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

SBF Series

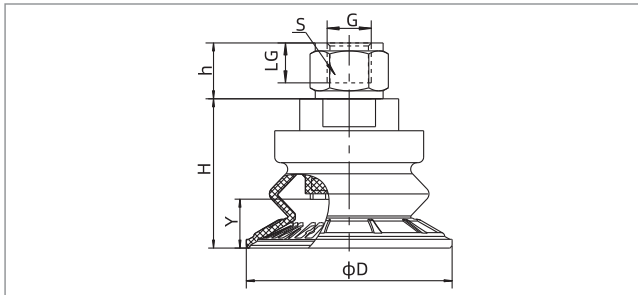
1.5 Bellows Suction Cup Special for Metal Sheet



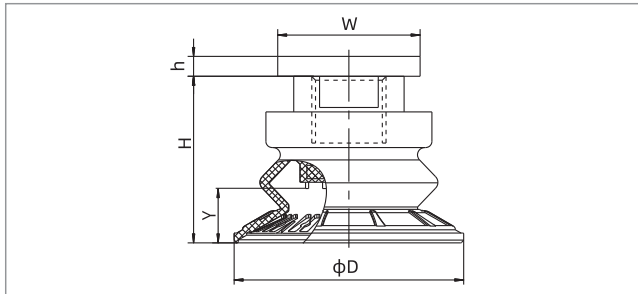
Dimensions(mm)



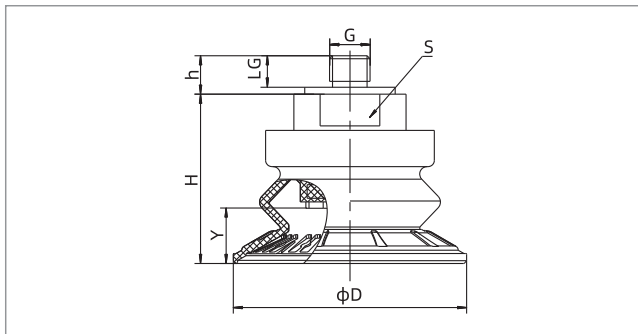
F - Female thread connection



F - Female thread connection



RA - Rectangular adapter



M - Male thread connection

Model/Size	D	H	G	LG	S	Y
SBF30U-G2F	32	28	G1/4	10	17	7
SBF40U-G2F	42	29	G1/4	10	17	9
SBF50U-G3F	51.5	37	G3/8	13	21	12.5
SBF60U-G3F	64	41.5	G3/8	13	21	15
SBF80U-G3F	84	49.5	G3/8	13	21	23
SBF100U-G3F	103	55	G3/8	13	22	22

Model/Size	D	H	G	h	LG	S	Y
SBF30U-G3F	32	28	G3/8	14	11	22	7
SBF40U-G3F	42	29	G3/8	14	11	22	9
SBF50U-G2F	51.5	37	G1/4	14	11	22	12.5
SBF60U-G2F	64	41.5	G1/4	14	11	22	15
SBF80U-G2F	84	49.5	G1/4	14	11	22	23
SBF100U-G2F	103	55	G1/4	14	11	22	22

Model/Size	D	H	W	h	Y
SBF30U-RA	32	28	31.8×31.8	4.7	7
SBF40U-RA	42	29	31.8×31.8	4.7	9
SBF50U-RA	51.5	37	31.8×31.8	4.7	12.5
SBF60U-RA	64	41.5	31.8×31.8	4.7	15
SBF80U-RA	84	49.5	31.8×31.8	4.7	23
SBF100U-RA	103	55	31.8×31.8	4.7	22

Model/Size	D	H	G	h	LG	S	Y
SBF30U-G2M	32	28	G1/4	11	9	17	7
SBF30U-M10M	32	28	M10×1.5	13.5	12	17	7
SBF40U-G2M	42	29	G1/4	11	9	17	9
SBF40U-M10M	42	29	M10×1.5	13.5	12	17	9
SBF50U-G2M	51.5	37	G1/4	11	9	21	12.5
SBF50U-M10M	51.5	37	M10×1.5	13.5	12	21	12.5
SBF60U-G2M	64	41.5	G1/4	11	9	21	15
SBF60U-M10M	64	41.5	M10×1.5	13.5	12	21	15
SBF80U-G2M	84	49.5	G1/4	11	9	21	23
SBF80U-M10M	84	49.5	M10×1.5	13.5	12	21	23
SBF100U-G2M	103	55	G1/4	11	9	22	22
SBF100U-M10M	103	55	M10×1.5	13.5	12	22	22

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF**
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SDM Series

Flat Suction Cup Special for Metal Sheet



Features

- ◇ PU material
- ◇ Thicken the wall thickness, internal reinforced rib structure design

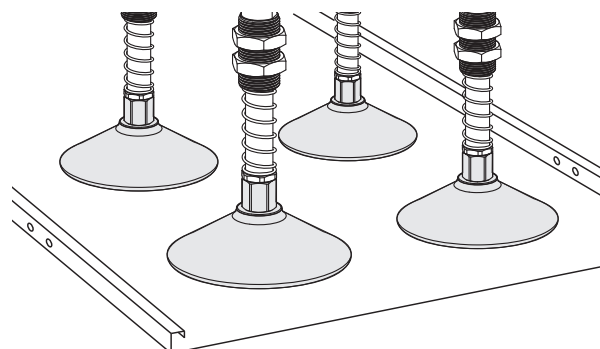
Advantages

- ◇ Long lifetime, excellent wear resistance, ozone resistance, oil resistance
- ◇ Effectively prevent deformation of metal sheet during handling



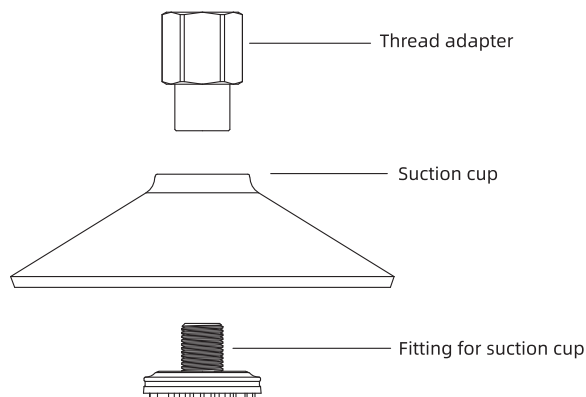
Applications

- ◇ Handling metal sheet and aluminum plate without deformation



Structure

- ◇ Split structure design, wearing parts can be replaced separately



SDM Series

Flat Suction Cup Special for Metal Sheet



How to order

SDM 100 U - G3F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SDM	100 - ϕ 100mm	U - PU 70	Nil - Suction cup only G2F - G1/4 female thread G3F - G3/8 female thread

Selection

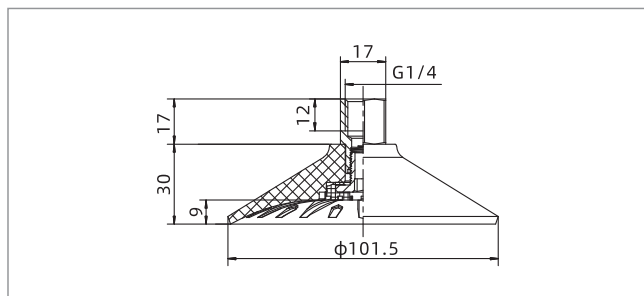
Model	Connection thread	
	G2F	G3F
SDM100U	SDM100U-G2F	SDM100U-G3F

Technical parameters

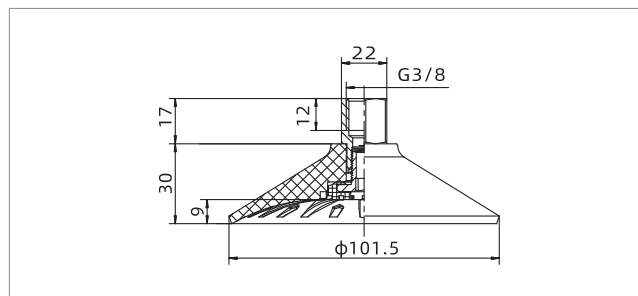
Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SDM100	375	56	160	62	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

Dimensions(mm)



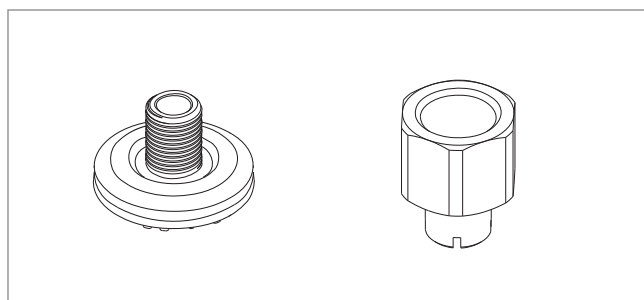
SDM100U-G2F



SDM100U-G3F

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts



PJS - Fitting for suction cup

PJT - Thread adapter

Item	Model	Applicable suction cup
Fitting for suction cup	PJS-G1M-SFM80	SDM100
Thread adapter	PJT-G1F-G2F	SDM100
	PJT-G1F-G3F	SDM100

SFU Series

Big Flat Suction Cup



Features

- ◇ Large area support structure at bottom
- ◇ Double sealing lip
- ◇ Small inner volume
- ◇ Rubber parts can be replaced separately
- ◇ Various sizes are available

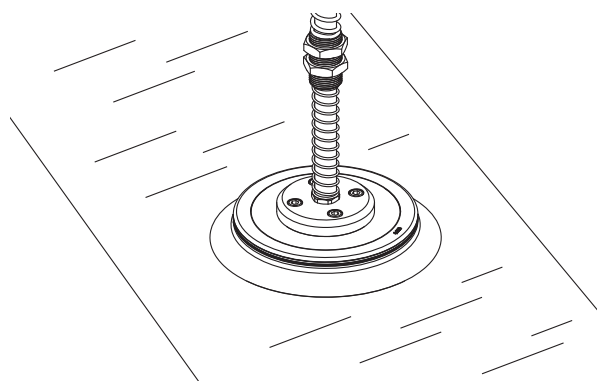
Advantages

- ◇ Prevent thin workpieces from permanent deformation
- ◇ Excellent airtightness, large suction force
- ◇ Short work cycle
- ◇ Reduce customer's cost greatly
- ◇ Suitable for workpieces with different sizes and shapes



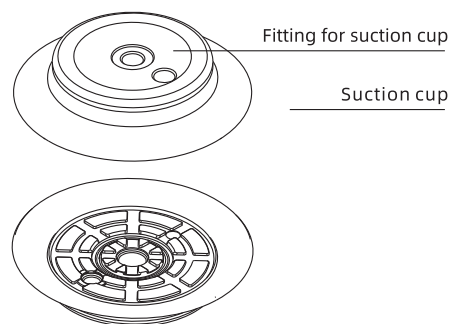
Applications

- ◇ Handling workpieces with flat or slightly deformed surfaces
- ◇ Touch valve is optional, which closes relevant vacuum circuit when it detects that there is no contact with workpiece



Structure

- ◇ Fitting for suction cup and rubber parts are split structure design, wearing parts can be replaced separately
- ◇ Separate functional port is available
- ◇ Touch valve is optional, preventing accidental vacuum leakage



SFU Series

Big Flat Suction Cup

How to order

SFU 210 H N - G4F - V
 ① ② ③ ④ ⑤ ⑥

① Series	② Diameter	③ Stroke	④ Material & Hardness	⑤ Connection thread	⑥ Special specification
SFU	100 - φ100mm	Nil - Standard stroke	N - NBR	55 G2F - G1/4 female thread	Nil - Standard
	125 - φ125mm	H - High stroke	WS - White silicone	60 G3F - G3/8 female thread	V - With touch valve
	160 - φ160mm			G4F - G1/2 female thread	
	210 - φ210mm				
	250 - φ250mm				
	300 - φ300mm				
	360 - φ360mm				
	400 - φ400mm				

Selection

Model	Connection thread	Special specification
SFU100□	SFU100□-G2F	-
SFU125□	SFU125□-G2F	-
SFU160□	SFU160□-G4F	SFU160□-G4F-V
SFU210□ SFU210H□	SFU210□-G4F SFU210H□-G4F	SFU210□-G4F-V
SFU250□ SFU250H□	SFU250□-G4F SFU250H□-G4F	SFU250□-G4F-V
SFU300□	SFU300□-G4F	-
- SFU360H□	- SFU360H□-G4F	-
SFU400□	SFU400□-G4F	-

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFU100□-G2F	400	45	175	108	12	1
SFU125□-G2F	670	78	275	215	12	1
SFU160□-G4F	1,100	145	475	397	16	1
SFU210□-G4F	1,900	190	1,050	861	16	1
SFU210H□-G4F	1,900	300	550	885	16	1
SFU250□-G4F	2,600	370	1,100	1,230	16	1
SFU250H□-G4F	2,600	500	750	1,332	16	1
SFU300□-G4F	4,000	490	1,800	1,996	16	1
SFU360H□-G4F	5,800	1,250	1,500	3,696	16	1
SFU400□-G4F	7,000	860	3,300	4,720	16	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

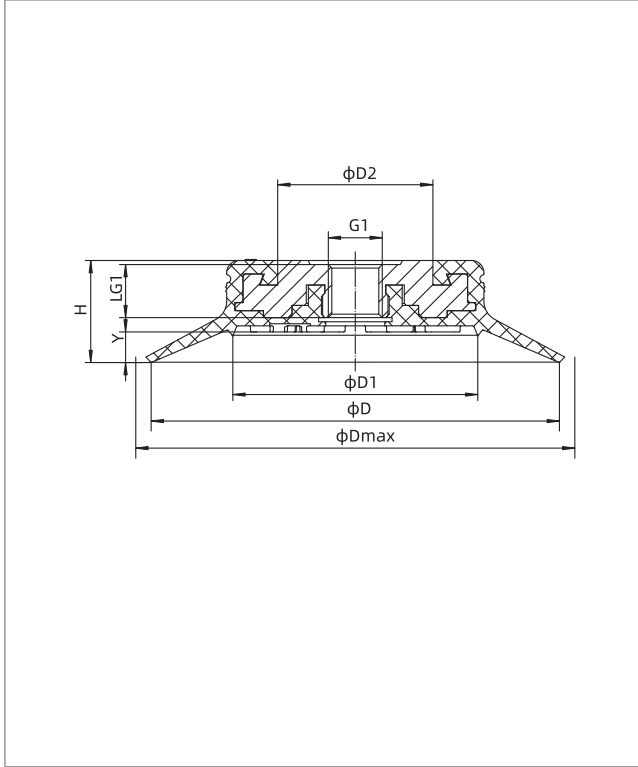
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU**
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFU Series

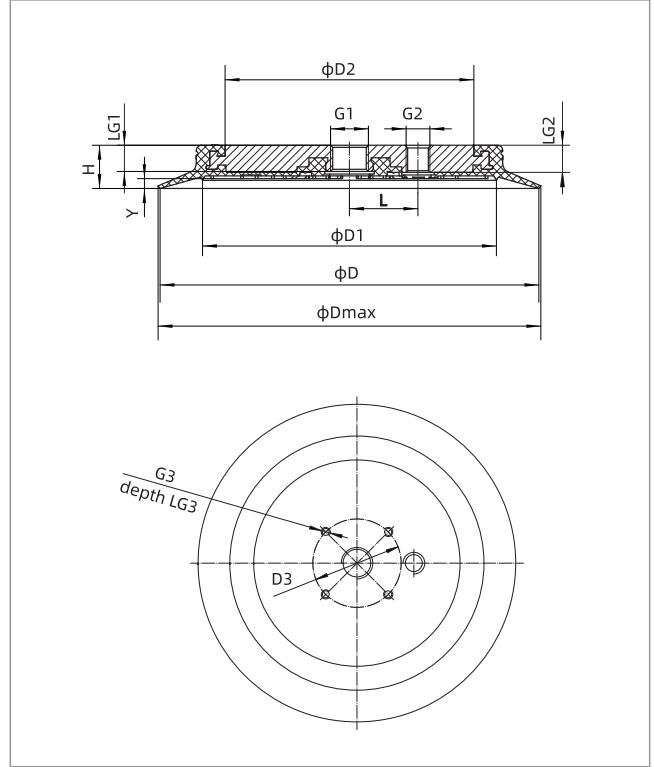
Big Flat Suction Cup



Dimensions(mm)



SFU100



SFU125-400

Model/Size	D	Dmax	D1	D2	D3	H	G1	G2	LG1	LG2	G3	LG3	L	Y
SFU100□-G2F	100	108	60	38	-	25	G1/4	-	13	-	-	-	-	7
SFU125□-G2F	125	132	83	64	-	25	G1/4	G1/4	13	14	-	-	24	7
SFU160□-G4F	160	170	113	91	-	25	G1/2	G1/4	13	15	-	-	38	7
SFU210□-G4F	210	220	163	138	59	25	G1/2	G1/4	14.5	15	M6	8	38	5
SFU210H□-G4F	210	220	159	138	59	30	G1/2	G1/4	14.5	15	M6	8	38	10
SFU250□-G4F	250	265	203	178	59	26	G1/2	G1/2	14.5	15	M6	8	76	7
SFU250H□-G4F	250	265	203	178	59	30	G1/2	G1/2	14.5	15	M6	8	76	11
SFU300□-G4F	300	320	253	226.5	59	25.5	G1/2	G1/2	14.5	15	M8	10	76	6
SFU360H□-G4F	360	385	309	275	59	35	G1/2	G1/2	17	17	M8	10	86	12
SFU400□-G4F	400	430	349	315	59	29	G1/2	G1/2	17	17	M8	10	86	6

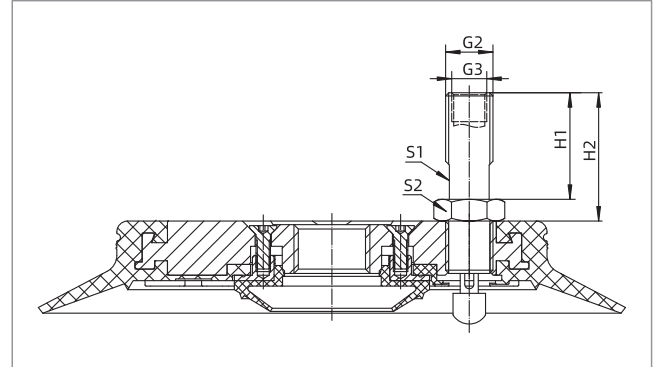
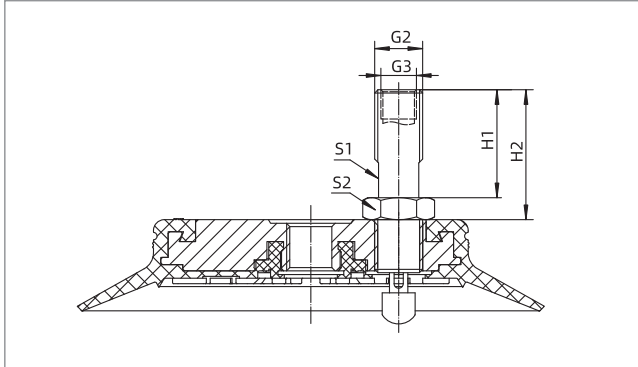
◇ Note: 1. The dimensional tolerance conforms to GB/T3672.1-2002-1 M3 rubber product dimensional tolerance standard.
 2. Dmax is outer diameter of the suction cup when it is completely compressed

SFU Series

Big Flat Suction Cup



Dimensions(mm)



SFU125

SFU160-250

Model/Size	G2	G3	H1	H2	S1	S2
SFU125□-G2F-V	G1/4	G1/8	30	36	11	17
SFU160□-G4F-V	G1/4	G1/8	30	36	11	17
SFU210□-G4F-V	G1/4	G1/8	30	36	11	17
SFU250□-G4F-V	G1/2	G3/8	31.5	39.5	19	27

Mounting parts

Item	Model	Applicable suction cup
Touch valve	ZVD-G2M	SFU125,160,210
	ZVD-G4M	SFU250

Item	Model	Applicable suction cup
Rubber parts for suction cup	SFU100N SFU100WS	SFU100□-G2F
	SFU125N SFU125WS	SFU125□-G2F
	SFU160N SFU160WS	SFU160□-G4F
	SFU210N SFU210WS	SFU210□-G4F
	SFU210HN SFU210HWS	SFU210H□-G4F
	SFU250N SFU250WS	SFU250□-G4F
	SFU250HN SFU250HWS	SFU250H□-G4F
	SFU300N SFU300WS	SFU300□-G4F
SFU360HN SFU360HWS	SFU360H□-G4F	
	SFU400N SFU400WS	SFU400□-G4F

◇ Note: When you buy rubber parts only, pls ensure that the fitting for suction cup you buy is in good condition, and send it back to factory to replace the rubber parts

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU**
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFK Series

Flat Suction Cup Special for Objects with Rough Surface



Features

- ◇ Sealing ring is made of flexible EPDM foam rubber
- ◇ Internal large area support structure
- ◇ Small inner volume
- ◇ Various sizes are available

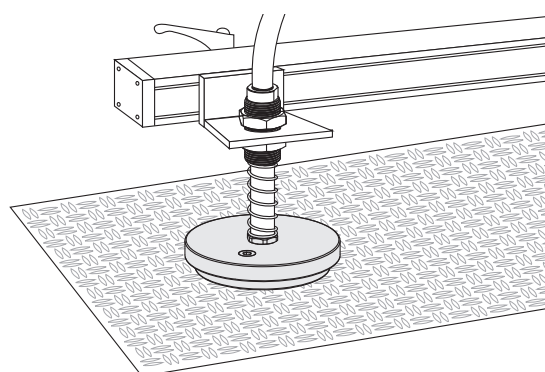
Advantages

- ◇ Suitable for workpieces with rough or uneven surfaces
- ◇ Slipping resistance. Prevent thin workpiece from permanent deformation
- ◇ Short work cycle
- ◇ Suitable for workpieces with different sizes and shapes



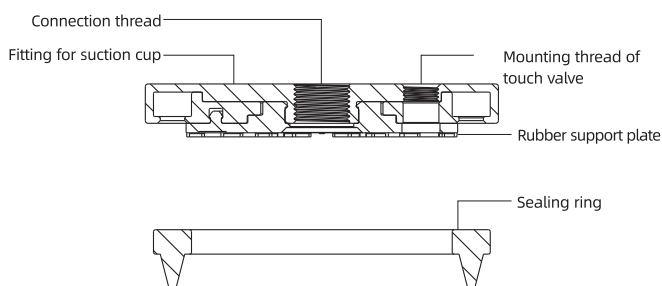
Applications

- ◇ Handling workpieces with uneven surfaces, such as embossed steel plate, decorative glass, rough slate, wooden plate, etc.
- ◇ Touch valve is optional, which will close vacuum chamber when it detects that suction cups do not contact workpieces, in order to avoid vacuum leakage



Structure

- ◇ Split structure design, wearing parts can be replaced separately
- ◇ Separate functional port is equipped



SFK Series

Flat Suction Cup Special for Objects with Rough Surface



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK**
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

How to order

SFK 110 E - G4F - V

① ② ③ ④ ⑤

① Series	② Diameter	③ Material & Hardness	④ Connection thread	⑤ Special specification
SFK	110 - ϕ 110mm	E - EPDM	Nil - Sealing ring only G4F - G1/2 female thread	Nil - Standard V - With touch valve
	160 - ϕ 160mm			
	200 - ϕ 200mm			
	250 - ϕ 250mm			

Selection

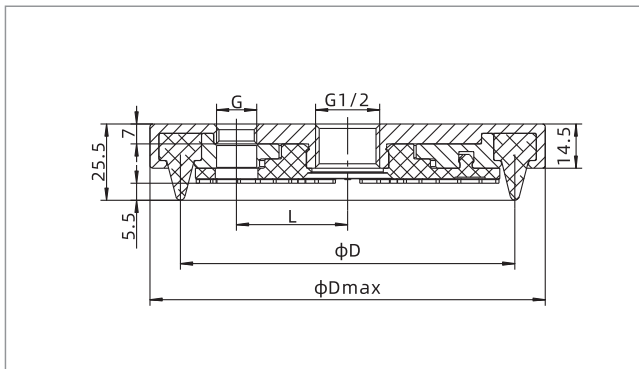
Model	Connection thread F - Female thread	
	SFK110E	SFK110E-G4F
SFK160E	SFK160E-G4F	SFK160E-G4F-V
SFK200E	SFK200E-G4F	SFK200E-G4F-V
SFK250E	SFK250E-G4F	SFK250E-G4F-V

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFK110	480	70	300	465	10	1
SFK160	1080	145	600	935	10	1
SFK200	1800	225	1000	1445	12	1
SFK250	2800	360	1500	2225	12	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



Model/Size	Dmax	D	G	L
SFK110E-G4F	130	110	G1/4	36.5
SFK160E-G4F	179	160	G1/4	36.5
SFK200E-G4F	219	200	G1/2	76
SFK250E-G4F	269	250	G1/2	76

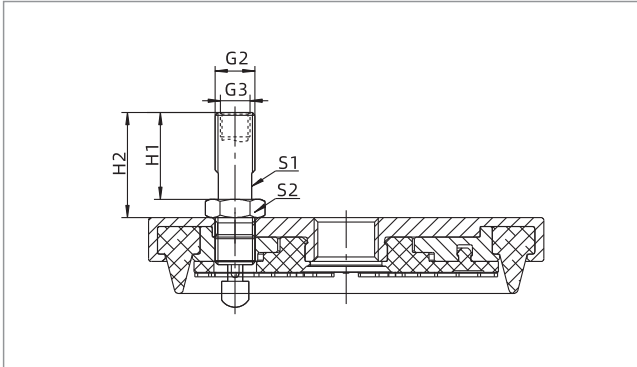
SFK110-250

SFK Series



Flat Suction Cup Special for Objects with Rough Surface

Dimensions(mm)



SFK110-250

Model/Size	G2	G3	H1	H2	S1	S2
SFK110E-G4F-V	G1/4	G1/8	27.5	33.5	11	17
SFK160E-G4F-V	G1/4	G1/8	27.5	33.5	11	17
SFK200E-G4F-V	G1/2	G3/8	29.5	37.5	19	27
SFK250E-G4F-V	G1/2	G3/8	29.5	37.5	19	27

- ◇ Note: 1. The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard
- 2. The height of the touch valve contact beyond the suction cup lip can be adjusted by itself according to the actual application. Locking the nut after height position is determined. Applicable thread sealant should be applied to the thread connection of touch valve and fitting for suction cup

Accessories

Item	Model	Applicable suction cup
Touch valve	ZVD-G2M	SFK110,160
	ZVD-G4M	SFK200,250

SHT Series

High Temperature Suction Cup



Features

- ◇ The body is made of stainless steel
- ◇ The sealing ring is made of special high temperature resistant textile material
- ◇ Long time high temperature resistance up to 600°C

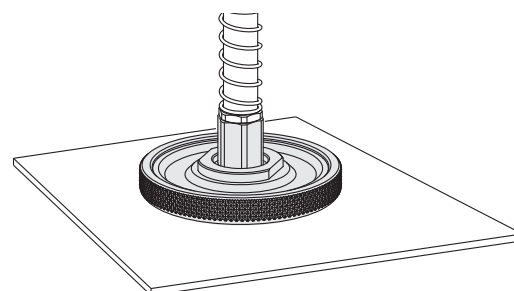
Advantages

- ◇ Strong wear resistance
- ◇ Excellent high temperature resistance, can achieve long time contact with the workpiece



Applications

- ◇ Handling workpieces with smooth and flat surfaces
- ◇ Hot forming of metal workpieces and other processes
- ◇ For float glass and tempering processes
- ◇ Note: All components in the matching vacuum circuit should be made of high temperature resistant materials



Structure

- ◇ Split structure design, wearing parts can be replaced separately

How to order

SHT 35 - G1F
 ① ② ③

① Series	② Diameter	③ Connection thread
SHT	35 - ϕ 35mm 60 - ϕ 60mm 90 - ϕ 90mm	Nil - Sealing parts only G1F - G1/8 female thread G2F - G1/4 female thread

Selection

Model	Connection thread G1F	G2F
SHT35-□	SHT35-G1F	-
SHT60-□	-	SHT60-G2F
SHT90-□	-	SHT90-G2F

SHT Series

High Temperature Suction Cup

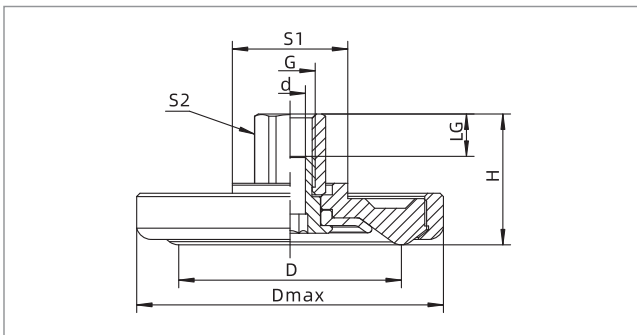


Technical parameters

Model	Pull-out force N	Inner volume cm ³	Vacuum flow (NL/min) (Vacuum level-70kPa)	Weight g	Recommended hose dia. mm	MPQ pcs
SHT35-G1F	60	4	20	195	6	1
SHT60-G2F	130	10	22	408	8	1
SHT90-G2F	280	30	24	655	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces.

Dimensions(mm)



SHT

Model/Size	D	H	G	LG	Dmax	d	S1	S2
SHT35-G1F	35	28	G1/8	9	53	6	30	14
SHT60-G2F	58	34	G1/4	11	80	8	30	17
SHT90-G2F	90	33	G1/4	11	112	8	46	17

SDL Series

Annular Suction Cup

AIRBEST



METAL SHEET

RoHS

Suction Cup

Features

- ◇ Closed annular structure, consisting of inner and outer sealing lips
- ◇ Larger area hollow part inside
- ◇ Circular threaded mounting holes

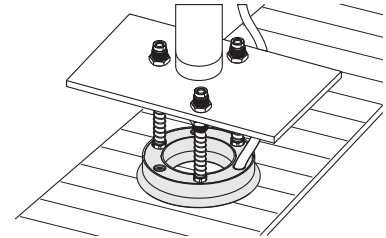
Advantages

- ◇ Good sealing
- ◇ Detection instrument can be designed in the hollow part for separation of vacuum and detection
- ◇ Firm installation



Applications

- ◇ Handling of workpieces with flat surface, such as metal sheet, steel plate, annular metal stamping parts, plywood and plastic plate



Structure

- ◇ One-piece structure of fitting and suction cup

How to order

SDL 100 N - G1F
 ① ② ③ ④

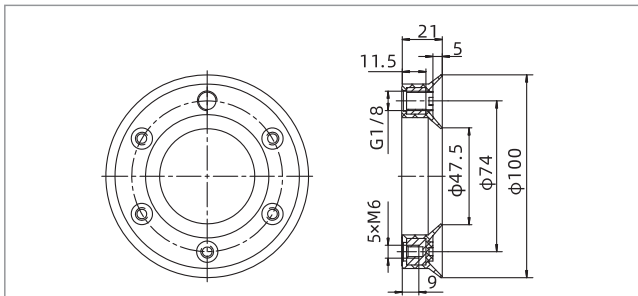
① Series	② Diameter	③ Material & Hardness	④ Connection thread
SDL	100 - ϕ 100mm	N - NBR 55	G1F - G1/8 female thread

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SDL100N-G1F	258	44	107	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SDL100

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SZ
 SP3
 SUF
 SAN
 SAO
 SOFA
 STP
 SFT
 SFA
 SBL
 SBLLP
 SBS
 SFP
 SBP
 XSP
 SGP
 SBOF
 STC
 SFF
 SOB
 SOF
 SOG
 SFM
 SOM
 SBF
 SDM
 SFU
 SFK
 SHT
 SDL
 SFG
 SFD
 SB
 SBA
 SF
 SU
 SPA
 SPF
 SPC
 SPJ
 SPU
 SH
 SHB
 SBB
 SOP
 SNP

SFG Series

Flat Suction Cup Special for Glass Industry

AIRBEST



GLASS



SLIPPING
RESISTANCE



HIGH SEALING



Features

- ◇ Double flat sealing lips
- ◇ Inner large area pattern support structure at the bottom
- ◇ Small inner volume, two compressed stroke
- ◇ Some specifications are split structure
- ◇ Various sizes are available

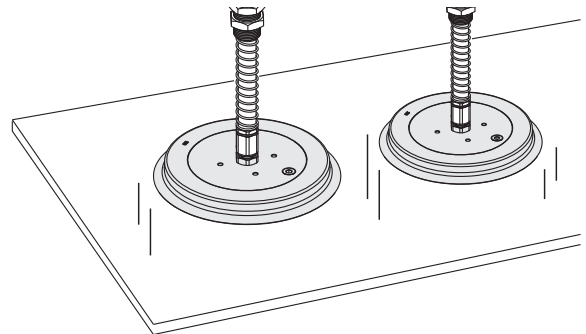
Advantages

- ◇ Excellent airtightness
- ◇ Large friction coefficients, prevent deformation of workpiece
- ◇ Short work cycle, with high stroke, it can suck glass with a certain curvature
- ◇ Metal parts can be used repeatedly, reducing customer's cost greatly
- ◇ Suitable for workpieces with different sizes and shapes



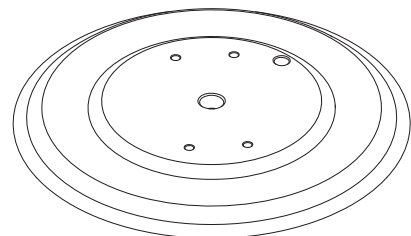
Applications

- ◇ Handling workpieces with smooth surface such as glass, plastic plate, ect. Realizing long time pressure holding
- ◇ Handling big workpieces with a certain curvature on surface, such as car windshields
- ◇ Handling thin workpieces, such as flat glass or coated glass
- ◇ Handling glass plate surfaced with separation powder or stripping powder



Structure

- ◇ Double sealing lip, special pattern structure
- ◇ For SFG200 and diameter less than 200mm, they are split structure, wearing parts can be replaced separately. For diameter more than 200mm, they are one-piece structure
- ◇ With large area aluminum fitting for suction cup, it can effectively prevent light and thin workpiece from bending when handling heavy load workpieces
- ◇ Standard stroke and high stroke are optional, with high stroke, it can suck glass with a certain curvature
- ◇ With separate functional port



SFG Series

Flat Suction Cup Special for Glass Industry



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- [SFG](#)
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

How to order

SFG 150 H E - G4F

① ② ③ ④ ⑤

① Series	② Diameter	③ Stroke	④ Material & Hardness	⑤ Connection thread
SFG	125 - φ125mm	Nil - Standard stroke	E - EPDM	55 G2F - G1/4 female thread
	150 - φ150mm	H - High stroke	HD - High temp/ Mark free material	60 G3F - G3/8 female thread
	200 - φ200mm			G4F - G1/2 female thread
	250 - φ250mm			
	300 - φ300mm			
	350 - φ350mm			
	400 - φ400mm			

Selection

Model/ Stroke	H - High stroke
SFG125□-G2F SFG125□-G3F	-
SFG150□-G4F	SFG150H□-G4F
SFG200□-G4F	-
-	SFG250H□-G4F
-	SFG300H□-G4F
-	SFG350H□-G4F
SFG400□-G4F	-

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFG125	740	44	1,500	290	8	1
SFG150	1,100	65	2,000	490	8	1
SFG150H	1,100	119	370	490	8	1
SFG200	1,950	144	3,500	1,040	10	1
SFG250H	2,950	372	1,600	950	10	1
SFG300H	4,300	550	2,400	1,510	12	1
SFG350H	5,780	779	3,000	2,040	12	1
SFG400	7,600	560	13,500	2,635	12	1

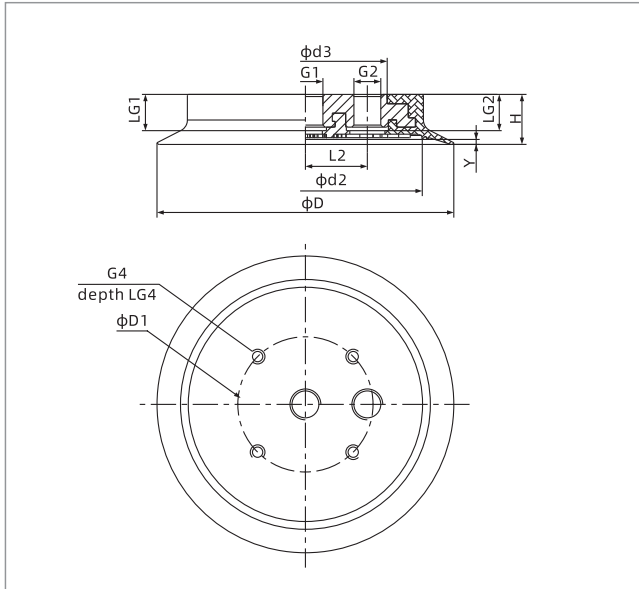
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

SFG Series

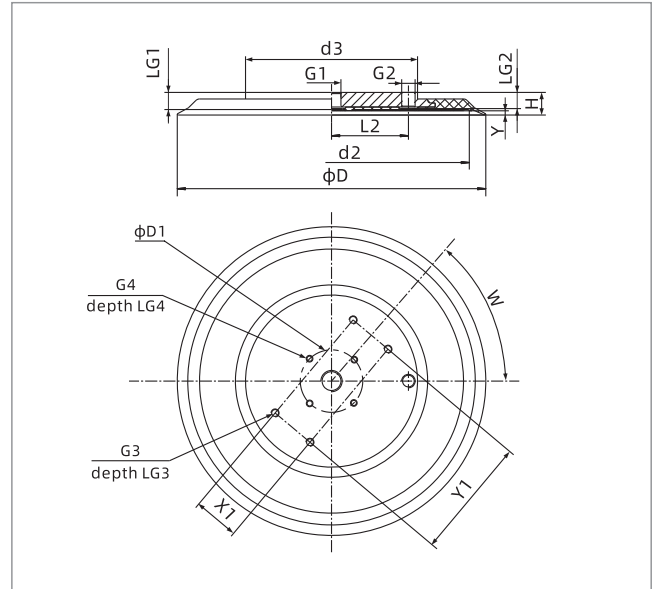
Flat Suction Cup Special for Glass Industry



Dimensions(mm)



SFG125-200



SFG250-400

Model/Size	D	d2	d3	G1	G2	G3	G4	D1	H	L2	LG1	LG2	LG3	LG4	W	X1	Y1	Y
SFG125□-G2F	125	100	70	G1/4	G1/4	-	4-M6	59	21.5	26.5	14	14	-	8	-	-	-	3
SFG125□-G3F	125	100	70	G3/8	G1/4	-	4-M6	59	21.5	26.5	14	14	-	8	-	-	-	3
SFG150□-G4F	150	125	93	G1/2	G1/4	-	4-M6	59	21.5	36.5	14	14	-	8	-	-	-	3.3
SFG150H□-G4F	150	126	70	G1/2	G1/4	-	4-M6	59	26	26.5	14	14	-	8	-	-	-	7.5
SFG200□-G4F	200	185	134	G1/2	G1/4	-	4-M6	59	22	52.8	14	14	-	8	-	-	-	3.6
SFG250H□-G4F	250	217	140	G1/2	G1/4	4-M8	4-M6	59	27	52.5	14.5	14.5	12	8	70	45	100	9
SFG300H□-G4F	300	272	170	G1/2	G1/4	4-M8	4-M8	59	27	76	14.5	14.5	12	10	50	45	120	9
SFG350H□-G4F	350	317	170	G1/2	G1/4	4-M8	4-M8	59	27	76	14.5	14.5	12	10	50	45	120	9
SFG400□-G4F	400	372	170	G1/2	G1/4	4-M8	4-M8	59	22.5	76	14.5	14.5	12	10	50	45	120	4.5

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model	Applicable suction cup
Rubber parts for suction cup	SFG125E SFG125HD	SFG125□-G2F SFG125□-G3F
	SFG150E SFG150HD	SFG150□-G4F
	SFG150HE SFG150HHD	SFG150H□-G4F
	SFG200E SFG200HD	SFG200□-G4F

◇ Note: When you buy rubber parts only, pls ensure that the fitting for suction cup you buy is in good condition, and send it back to factory to replace the rubber parts

SFD Series

Flat Suction Cup Special for Wood Industry

AIRBEST



Suction Cup

Features

- ◇ Double sealing lip
- ◇ With large area support structure at the bottom

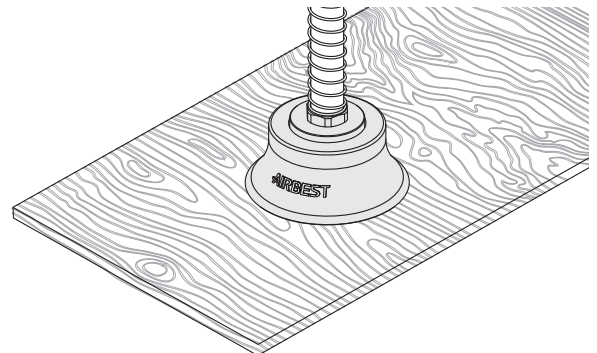
Advantages

- ◇ Excellent airtightness for workpieces with rough or smooth surfaces
- ◇ Prevent thin workpiece from permanent deformation



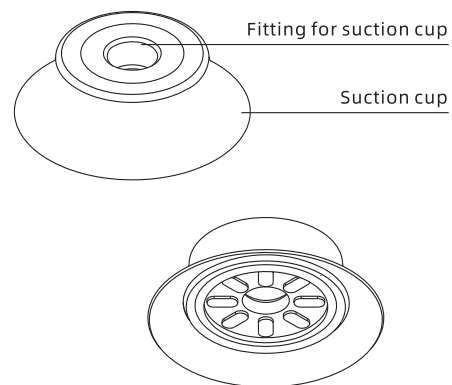
Applications

- ◇ Suitable for even workpiece with slightly rough surface, such as wooden plate, wooden floor, wooden doors, etc



Structure

- ◇ Double sealing lip
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG**
- SFD**
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SFD Series

Flat Suction Cup Special for Wood Industry



How to order

SFD 40 NR - G1F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SFD	40 - ϕ 40mm	N - NBR 55	Nil - Suction cup only
	70 - ϕ 70mm	WS - White silicone 50	G1F - G1/8 female thread
		NR - Natural rubber 40	G2F - G1/4 female thread

Selection

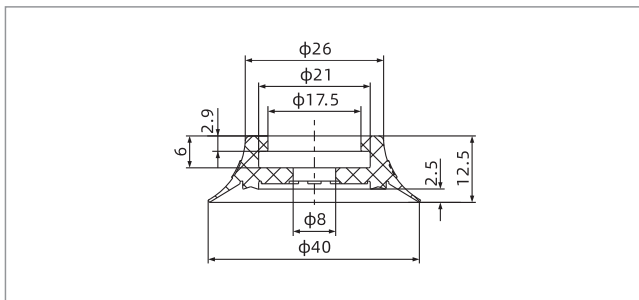
Model	Connection thread F - Female thread
SFD40□	SFD40□-G1F
SFD70□	SFD70□-G2F

Technical parameters

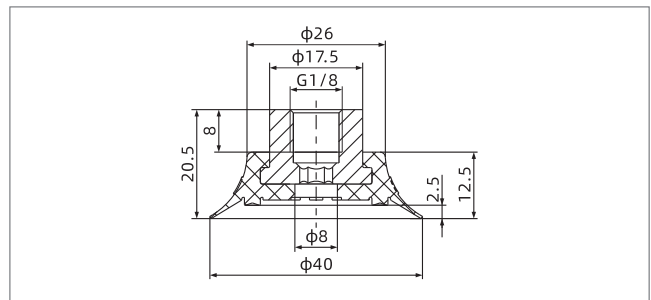
Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SFD40	60	3.8	48	4.8	8	1
SFD70	185	25	85	32.2	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

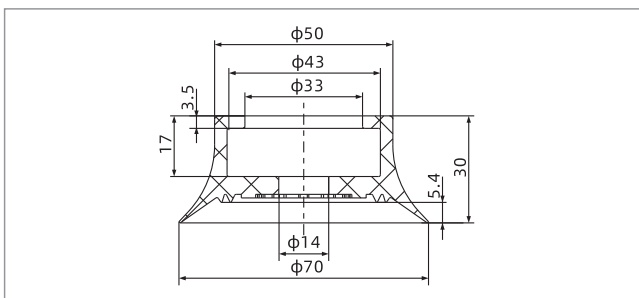
Dimensions(mm)



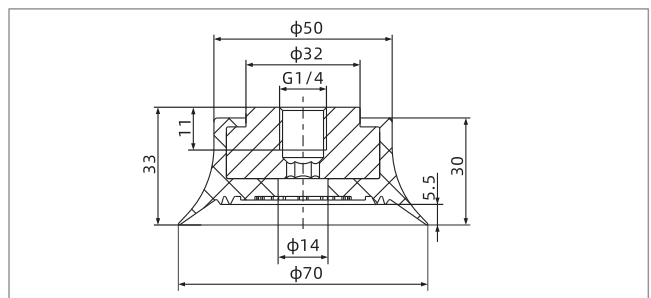
SFD40



SFD40□-G1F



SFD70



SFD70□-G2F

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SB Series

Universal Bellows Suction Cup

AIRBEST



Suction Cup

Features

- ◇ 1.5 Bellows
- ◇ Support structure at the bottom
- ◇ Various sizes for option

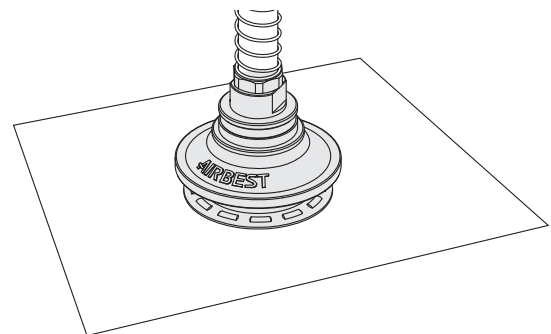
Advantages

- ◇ Easy to fit uneven surface of workpiece, and has buffer effect
- ◇ Handling thin workpiece without permanent deformation
- ◇ Suitable for workpieces with different sizes and shapes



Applications

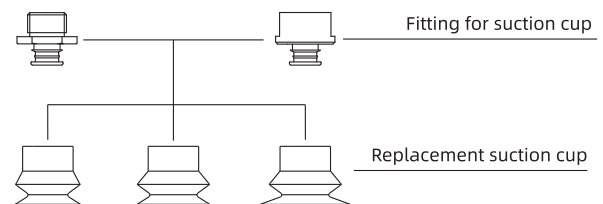
- ◇ Handling of workpieces with uneven surface, such as carton, cardboard, cambered workpiece, pipe, etc
- ◇ Handling fragile workpieces, such as electronic components, plastic injection parts, etc
- ◇ Handling smooth wood plate, smooth steel plate and so on



Structure

- ◇ 1.5 Bellows, large compressed stroke.
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately.

In same series, replacement suction cup and fitting can be combined on request.



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD**
- SB**
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SB Series

Universal Bellows Suction Cup



How to order

SB 30 N - G1M - EW
 ① ② ③ ④ ⑤

① Series	② Diameter	③ Material & Hardness	④ Connection thread	⑤ Special specification	
SB	5 - φ5mm	20 - φ20mm	N - NBR	55 Nil - Suction cup only	Nil - Standard
	6 - φ6mm	30 - φ30mm	S - Silicone	50 M5M - M5x0.8 male thread	EW - With mesh filter
	8 - φ8mm	40 - φ40mm	WS - White silicone	50 G1M - G1/8 male thread	EH - With throttle valve
	10 - φ10mm	50 - φ50mm	CS - Conductive silicone	55 G2M - G1/4 male thread	
	12 - φ12mm	75 - φ75mm		G3M - G3/8 male thread	
	15 - φ15mm	110 - φ110mm	G1F - G1/8 female thread		
	17 - φ17mm	150 - φ150mm	G2F - G1/4 female thread		
			G3F - G3/8 female thread		
			G4F - G1/2 female thread		

Selection

Model	Connection thread	
	M - Male thread	F - Female thread
SB5□	SB5□-M5M	-
SB6□	SB6□-M5M	-
SB8□	SB8□-M5M	-
SB10□	SB10□-M5M	-
SB12□	SB12□-M5M	-
SB15□	SB15□-M5M	-
SB17□	SB17□-G1M	SB17□-G1F
SB20□	SB20□-G1M	SB20□-G1F
SB30□	SB30□-G1M	SB30□-G1F
SB40□	SB40□-G1M	SB40□-G1F
SB50□	SB50□-G2M SB50□-G3M	SB50□-G2F SB50□-G3F
SB75□	-	SB75□-G2F
SB110□	-	SB110□-G4F
SB150□	-	SB150□-G4F

SB Series

Universal Bellows Suction Cup

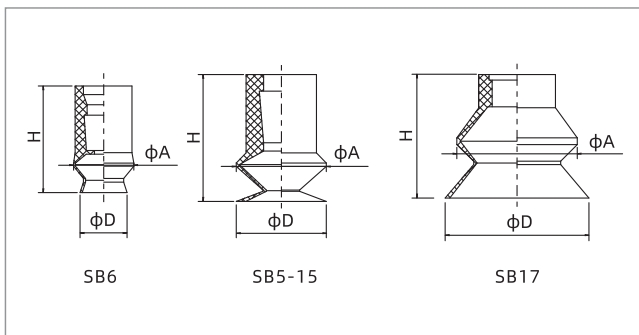


Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SB5	0.8	<0.1	8	0.3	4	10
SB6	1.2	<0.1	8	0.5	4	10
SB8	2.1	<0.1	10	0.4	4	10
SB10	3.2	0.4	12	0.9	4	10
SB12	4.7	0.5	15	1.5	6	10
SB15	7.4	0.8	20	1.5	6	10
SB17	9.5	1.1	25	1	6	10
SB20	18	1.2	30	3	6	5
SB30	33	14	35	7.5	6	5
SB40	60	18	50	13	6	5
SB50	92	26	80	24	8	1
SB75	210	96	60	68	8	1
SB110	412	314	120	178	12	1
SB150	740	798	160	439.5	12	1

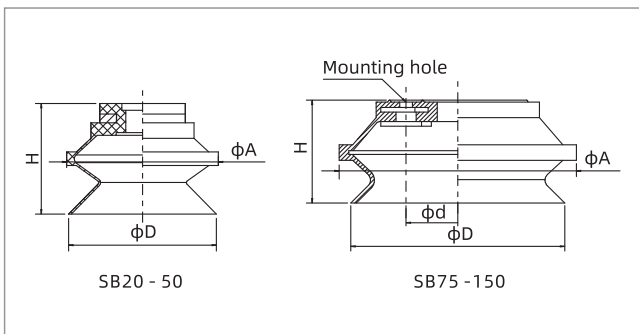
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm) - Suction cup only



Model/Size	D	A	H
SB5□	5.8	6.2	9.2
SB6□	7	9	13.5
SB8□	8.8	9.6	11.9
SB10□	11	12	16
SB12□	12	14	16.5
SB15□	17.5	17.5	19.5
SB17□	18.5	16.6	15.6

SB



Model/Size	D	A	H	d	Mounting hole
SB20□	22	24	19	-	-
SB30□	34	36	26	-	-
SB40□	43	46	28	-	-
SB50□	53	58	35	-	-
SB75□	78	83	37	35	4-φ6
SB110□	115	124	54	55	8-φ6
SB150□	155	166	71	70.5	8-φ6

SB

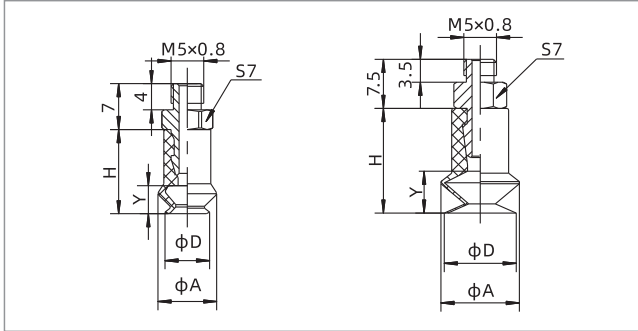
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SB Series

Universal Bellows Suction Cup

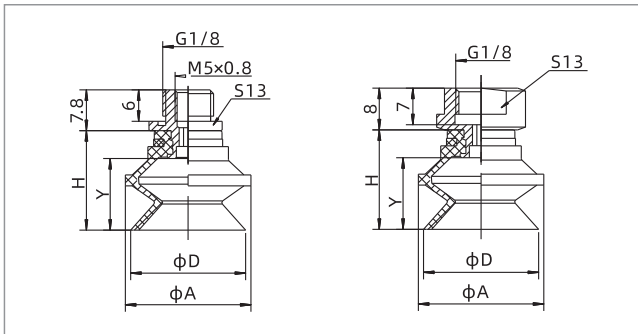


Dimensions(mm) - Suction cup with fitting



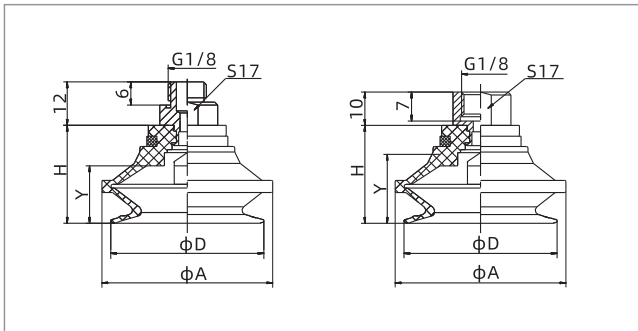
SB6□-M5M

SB□□-M5M



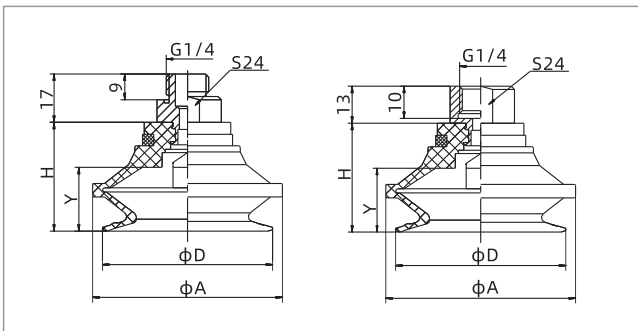
SB□□-G1M

SB□□-G1F



SB□□-G1M

SB□□-G1F



SB50□-G2M

SB50□-G2F

Model/Size	D	A	H	Y
SB5□-M5M	5.8	6.2	9.2	3.6
SB6□-M5M	7	9	13.5	4.5
SB8□-M5M	8.8	9.6	11.9	6.5
SB10□-M5M	11	12	16	7
SB12□-M5M	12	14	16.5	5.5
SB15□-M5M	15.5	17.5	19.5	10

Model/Size	D	A	H	Y
SB17□-G1M	18.5	16.6	15.6	10.5
SB17□-G1F	18.5	16.6	15.6	10.5
SB20□-G1M	22	24	19	9
SB20□-G1F	22	24	19	9

Model/Size	D	A	H	Y
SB30□-G1M	34	36	26	19
SB30□-G1F	34	36	26	19
SB40□-G1M	43	46	28	20
SB40□-G1F	43	46	28	20

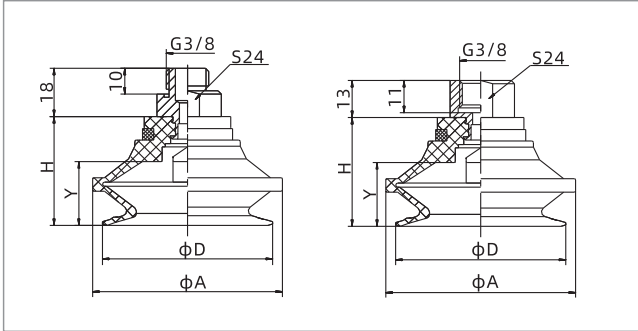
Model/Size	D	A	H	Y
SB50□-G2M	53	58	35	20
SB50□-G2F	53	58	35	20

SB Series

Universal Bellows Suction Cup

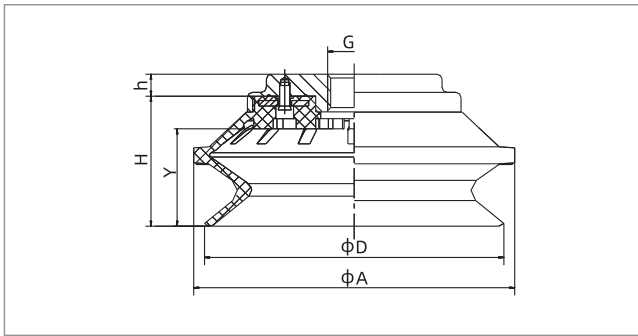


Dimensions(mm) - Suction cup with fitting



SB50□-G3M

SB50□-G3F



SB75-150

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	A	H	Y
SB50□-G3M	53	58	35	20
SB50□-G3F	53	58	35	20

Model/Size	D	A	H	h	G	Y
SB75□-G2F	78	83	37	13	G1/4	27
SB110□-G4F	115	124	54	9	G1/2	38.5
SB150□-G4F	155	166	71	10	G1/2	44.5

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-M5M-SC1	-	SB6
	PJS-M5M-SC2	-	SB5,8
	PJS-M5M-SC3	-	SB10,12,15
	PJS-G1M-SF1	PJS-G1F-SF1	SB17,20
	PJS-G1M-SF2	PJS-G1F-SF2	SB30,40
	PJS-G2M-SF3	PJS-G2F-SF3	SB50
	PJS-G3M-SF3	PJS-G3F-SF3	SB50
	-	PJS-G2F-SF75	SB75
	-	PJS-G4F-SF110	SB110
-	PJS-G4F-SF150	SB150	

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB**
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBA Series

1.5 Bellows Suction Cup

AIRBEST



Features

- ◇ 1.5 Bellows
- ◇ Special material with high temperature resistance is optional
- ◇ Various sizes for option

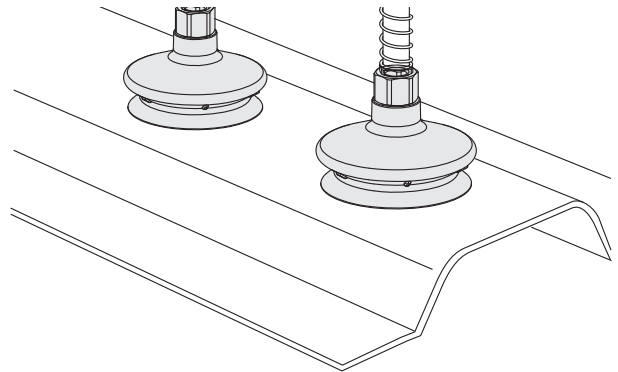
Advantages

- ◇ Easy to fit uneven surface of workpiece, has buffer effect
- ◇ Can handle workpiece with high temperature
- ◇ Fitting can be used repeatedly, greatly reducing customer's cost
- ◇ Suitable for workpieces with different sizes and shapes



Applications

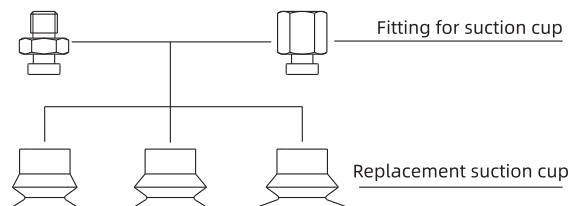
- ◇ Handling of workpieces with uneven surface, such as carton, cardboard, cambered workpiece, pipe, etc.
- ◇ Handling high temperature plastic injection parts, metal sheet, glass, etc.
- ◇ Handling smooth wood plate, smooth steel plate and so on



Structure

- ◇ 1.5 Bellows, large compressed stroke
- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately
- ◇ Mark free plug is optional, for grasping without any mark

In same series, replacement suction cup and fitting can be combined on request.



SBA Series

1.5 Bellows Suction Cup



How to order

SBA 33 N - G2M - PK

① ② ③ ④ ⑤

① Series	② Diameter	③ Material & Hardness	④ Connection thread	⑤ Special specification
SBA	6 - φ6mm	27 - φ27mm	N - NBR	55 Nil - Suction cup only Nil - Standard type
	11 - φ11mm	33 - φ33mm	WS - White silicone	50 M5M - M5×0.8 male thread PK - With mark free plug
	14 - φ14mm	43 - φ43mm	HD - High temp/Mark free	60 G1M - G1/8 male thread
	16 - φ16mm	53 - φ53mm	NR - Natural rubber	40 G2M - G1/4 male thread
	20 - φ20mm	63 - φ63mm		M5F - M5×0.8 female thread
	22 - φ22mm	78 - φ78mm		G1F - G1/8 female thread
	25 - φ25mm			G2F - G1/4 female thread

Selection

Model	Connection thread		F - Female thread	
	M - Male thread			
SBA6□	SBA6□-M5M		SBA6□-M5F	
SBA11□	SBA11□-M5M	SBA11□-G1M	SBA11□-M5F	SBA11□-G1F
SBA14□	SBA14□-M5M	SBA14□-G1M	SBA14□-M5F	SBA14□-G1F
SBA16□	SBA16□-M5M	SBA16□-G1M	SBA16□-M5F	SBA16□-G1F
SBA20□	SBA20□-M5M	SBA20□-G1M	SBA20□-M5F	SBA20□-G1F
SBA22□	SBA22□-M5M	SBA22□-G1M	SBA22□-M5F	SBA22□-G1F
SBA25□	SBA25□-M5M	SBA25□-G1M	SBA25□-M5F	SBA25□-G1F
SBA27□	SBA27□-G2M		SBA27□-G2F	
SBA33□	SBA33□-G2M		SBA33□-G2F	
SBA43□	SBA43□-G2M		SBA43□-G2F	
SBA53□	SBA53□-G2M		SBA53□-G2F	
SBA63□	SBA63□-G2M		SBA63□-G2F	
SBA78□	SBA78□-G2M		SBA78□-G2F	

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SWP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SKF
- SHT
- SDL
- SFG
- SFD
- SB
- SBA**
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBA Series



1.5 Bellows Suction Cup

Selection - With mark free plug

Model	M - Male thread		F - Female thread	
SBA11□-PK	SBA11□-M5M-PK	SBA11□-G1M-PK	SBA11□-M5F-PK	SBA11□-G1F-PK
SBA14□-PK	SBA14□-M5M-PK	SBA14□-G1M-PK	SBA14□-M5F-PK	SBA14□-G1F-PK
SBA16□-PK	SBA16□-M5M-PK	SBA16□-G1M-PK	SBA16□-M5F-PK	SBA16□-G1F-PK
SBA20□-PK	SBA20□-M5M-PK	SBA20□-G1M-PK	SBA20□-M5F-PK	SBA20□-G1F-PK
SBA22□-PK	SBA22□-M5M-PK	SBA22□-G1M-PK	SBA22□-M5F-PK	SBA22□-G1F-PK
SBA25□-PK	SBA25□-M5M -PK	SBA25□-G1M-PK	SBA25□-M5F-PK	SBA25□-G1F-PK
SBA27□-PK	SBA27□-G2M-PK		SBA27□-G2F-PK	
SBA33□-PK	SBA33□-G2M-PK		SBA33□-G2F-PK	
SBA43□-PK	SBA43□-G2M-PK		SBA43□-G2F-PK	
SBA53□-PK	SBA53□-G2M-PK		SBA53□-G2F-PK	

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min. curved radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SBA6	1.4	0.1	2	0.2	4	10
SBA11	3.8	0.2	10	1.0	6	10
SBA14	5.0	0.4	13	1.1	6	10
SBA16	6.7	0.8	20	1.4	6	10
SBA20	10.7	1.2	30	1.5	6	5
SBA22	15.2	1.4	25	2.2	6	5
SBA25	17.3	3.2	20	3.1	6	5
SBA27	24.0	3.4	23	4.7	6	5
SBA33	39.6	4.8	40	7.2	6	5
SBA43	64.5	11.4	60	11.9	6	5
SBA53	95.0	26.0	75	20.2	8	1
SBA63	135.0	44.0	75	25.5	8	1
SBA78	218.0	76.0	70	52.6	8	1

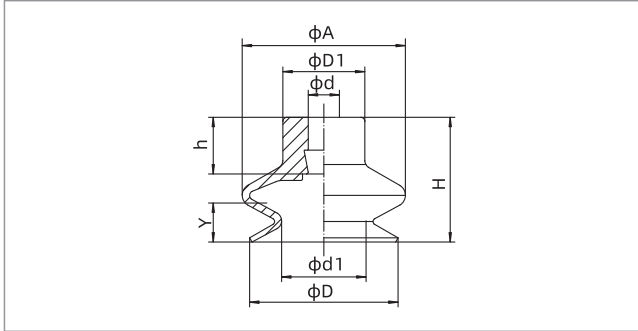
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

SBA Series

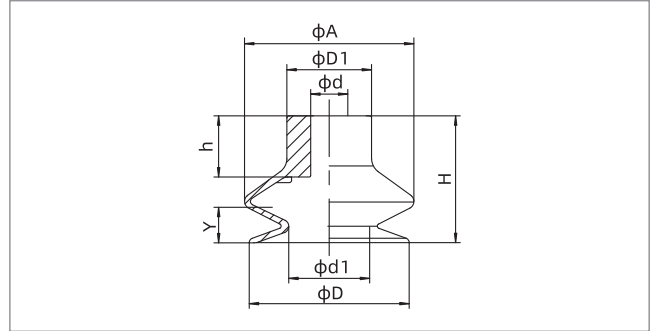
1.5 Bellows Suction Cup



Dimensions(mm) - Suction cup only



SBA6-25



SBA27-78

Model/Size	D	H	A	D1	d	d1	h	Y
SBA6□	5.5	9	6	7	3.7	2.7	5	3
SBA11□	10.5	16	12	10	4	5	7	4
SBA14□	13	15.5	13.5	10	4	5	7	6
SBA16□	15.5	19	17	10	4	8	7	7
SBA20□	18	15	20	10	4	11	7	8
SBA22□	22	19	24	10	4	11	9	9
SBA25□	24	23	25	10	4	9.5	9	11.5
SBA27□	26	25	27.5	16	8	14	13	9
SBA33□	35	27	36	18	8	17	13	10
SBA43□	43	28	45	18	8	21.5	13	11.5
SBA53□	53	34	58	18	8	32	13	15.5
SBA63□	63	33.5	66	18	8	43.5	13	15
SBA78□	78	46.5	83	25	12	54.5	20	14.5

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

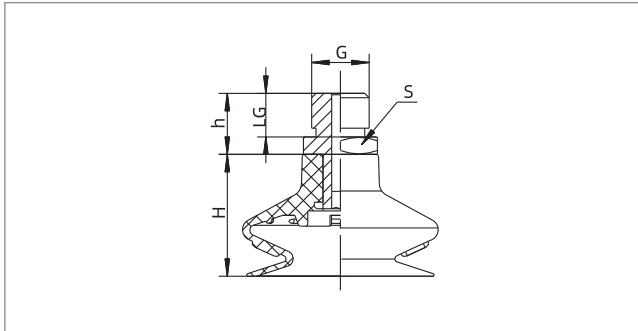
SNP

SBA Series

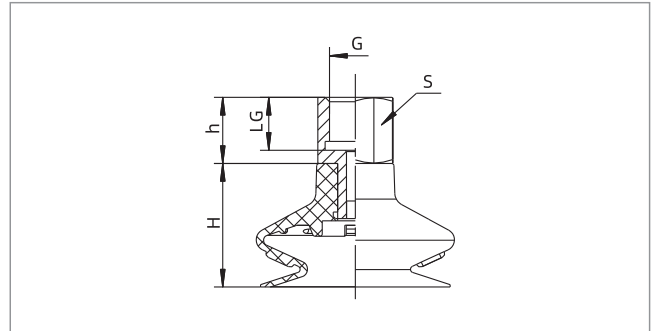
1.5 Bellows Suction Cup



Dimensions(mm) - Suction cup with fitting



SBA - Male thread connection



SBA - Female thread connection

Model/Size	H	h	G	LG	S
SBA6□-M5M	9	7.5	M5×0.8	3.5	7
SBA11□-M5M	16	7.5	M5×0.8	3.5	7
SBA11□-G1M	16	13.5	G1/8	7.5	14
SBA14□-M5M	15.5	7.5	M5×0.8	3.5	7
SBA14□-G1M	15.5	13.5	G1/8	7.5	14
SBA16□-M5M	19	7.5	M5×0.8	3.5	7
SBA16□-G1M	19	13.5	G1/8	7.5	14
SBA20□-M5M	15	7.5	M5×0.8	3.5	7
SBA20□-G1M	15	13.5	G1/8	7.5	14
SBA22□-M5M	19	7.5	M5×0.8	3.5	7
SBA22□-G1M	19	13.5	G1/8	7.5	14
SBA25□-M5M	23	7.5	M5×0.8	3.5	7
SBA25□-G1M	23	13.5	G1/8	7.5	14
SBA27□-G2M	25	15	G1/4	11	17
SBA33□-G2M	27	15	G1/4	11	17
SBA43□-G2M	28	15	G1/4	11	17
SBA53□-G2M	34	15	G1/4	11	17
SBA63□-G2M	33.5	15	G1/4	11	17
SBA78□-G2M	46.5	15	G1/4	11	21

Model/Size	H	h	G	LG	S
SBA6□-M5F	9	10	M5×0.8	5.5	7
SBA11□-M5F	16	10	M5×0.8	5.5	8
SBA11□-G1F	16	12	G1/8	8	14
SBA14□-M5F	15.5	10	M5×0.8	5.5	8
SBA14□-G1F	15.5	12	G1/8	8	14
SBA16□-M5F	19	10	M5×0.8	5.5	8
SBA16□-G1F	19	12	G1/8	8	14
SBA20□-M5F	15	10	M5×0.8	5.5	8
SBA20□-G1F	15	12	G1/8	8	14
SBA22□-M5F	19	10	M5×0.8	5.5	8
SBA22□-G1F	19	12	G1/8	8	14
SBA25□-M5F	23	10	M5×0.8	5.5	8
SBA25□-G1F	23	12	G1/8	8	14
SBA27□-G2F	25	15	G1/4	12	17
SBA33□-G2F	27	15	G1/4	12	17
SBA43□-G2F	28	15	G1/4	12	17
SBA53□-G2F	34	15	G1/4	12	17
SBA63□-G2F	33.5	15	G1/4	12	17
SBA78□-G2F	46.5	15	G1/4	12	21

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model	Applicable suction cup	
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-M5M-SBA6	PJS-M5F-SBA6	SBA6
	PJS-M5M-SC3	PJS-M5F-SC3	SBA11,14,16,20,22,25
	PJS-G1M-SC3	PJS-G1F-SC3	SBA11,14,16,20,22,25
	PJS-G2M-ST5	PJS-G2F-ST5	SBA27,33,43,53,63
	PJS-G2M-ST8	PJS-G2F-ST8	SBA78

SF Series

Universal Flat Suction Cup



Features

- ◇ Support structure at the bottom
- ◇ Small inner volume
- ◇ Various sizes are available

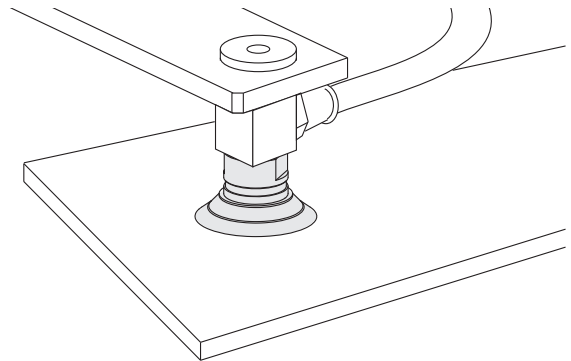
Advantages

- ◇ Handling thin workpiece without permanent deformation
- ◇ Short work cycle
- ◇ Suitable for workpieces with different sizes and shapes



Applications

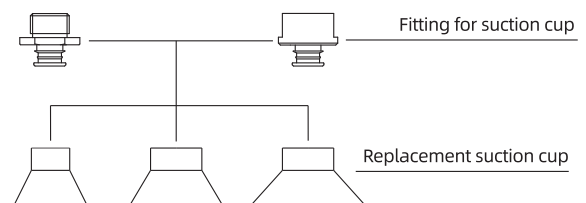
- ◇ Suitable for flat workpiece with smooth or slightly rough surfaces, such as smooth wood plate, smooth steel plate, plywood, plastic plate, etc.
- ◇ Suitable for handling electronic components, anti-static material can effectively prevent electrostatic damage to electronic products



Structure

- ◇ Suction cup and fitting are split structure design, wearing parts can be replaced separately
- ◇ Contact inductive valve is optional for suction cup with diameter $\phi 50-150\text{mm}$, in order to avoid accidental vacuum leakage

In same series, replacement suction cup and fitting can be combined on request.



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA**
- SF**
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SF Series

Universal Flat Suction Cup



How to order

SF 50 N - G2F - EB
 ①
 ②
 ③
 ④
 ⑤

① Series	② Diameter	③ Material & Hardness	④ Connection thread	⑤ Special specification
SF	15 - φ15mm	N - NBR	55 Nil - Suction cup only	Nil - Standard
	20 - φ20mm	S - Silicone	50 M5M - M5×0.8 male thread	EB - With contact inductive valve
	25 - φ25mm	WS - White silicone	50 G1M - G1/8 male thread	EW - With mesh filter
	30 - φ30mm	CS - Conductive silicone	55 G2M - G1/4 male thread	EH - With throttle valve
	40 - φ40mm		G3M - G3/8 male thread	
	50 - φ50mm		G1F - G1/8 female thread	
	75 - φ75mm		G2F - G1/4 female thread	
	110 - φ110mm		G3F - G3/8 female thread	
	150 - φ150mm		G4F - G1/2 female thread	
	200 - φ200mm		G6F - G3/4 female thread	
	300 - φ300mm			

Selection

Model	Connection thread M - Male thread	F - Female thread
SF15□	SF15□-M5M	-
SF20□	SF20□-G1M	SF20□-G1F
SF25□	SF25□-G1M	SF25□-G1F
SF30□	SF30□-G1M	SF30□-G1F
SF40□	SF40□-G1M	SF40□-G1F
SF50□	SF50□-G2M SF50□-G3M	SF50□-G2F SF50□-G2F-EB SF50□-G3F
SF75□	-	SF75□-G2F SF75□-G2F-EB
SF110□	-	SF110□-G4F SF110□-G4F-EB
SF150□	-	SF150□-G4F SF150□-G4F-EB
SF200□	-	SF200□-G4F
SF300□	-	SF300□-G6F

SF Series

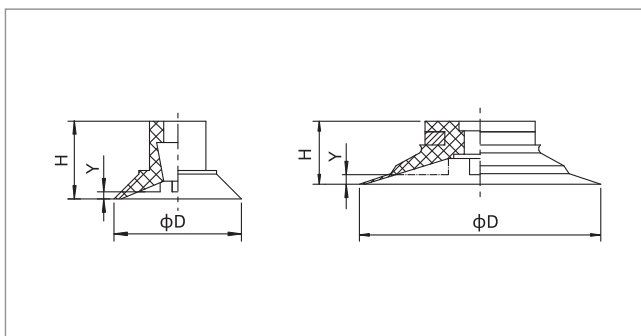
Universal Flat Suction Cup

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SF15	8	0.5	0.7	6	10
SF20	14.5	0.8	1.4	6	5
SF25	22	1.2	1.8	6	5
SF30	32	1.5	2.6	6	5
SF40	60	3	5.2	6	5
SF50	88	7	11.5	6	1
SF75	200	20	47.2	8	1
SF110	430	60	116	10	1
SF150	795	160	344.2	10	1
SF200	1,500	550	732.2	12	1
SF300	3,200	730	2,700	12	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

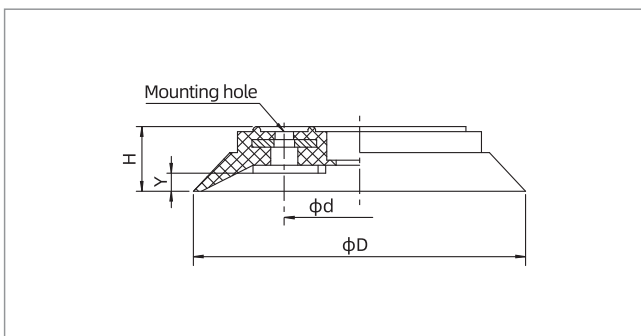
Dimensions(mm) - Suction cup only



SF15

SF20-50

Model/Size	D	H	Y
SF15 □	16.5	11	0.8
SF20 □	22	8	1
SF25 □	27	9	1
SF30 □	32	10	1.2
SF40 □	42	13	1.2
SF50 □	53	17.5	3.2



SF75-200

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	d	Y	Mounting hole
SF75 □	77	13	35	4	4-φ6
SF110 □	112	20	55	6	8-φ6
SF150 □	152	26	70	8	8-φ6
SF200 □	200	45	40	20	4-φ9

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

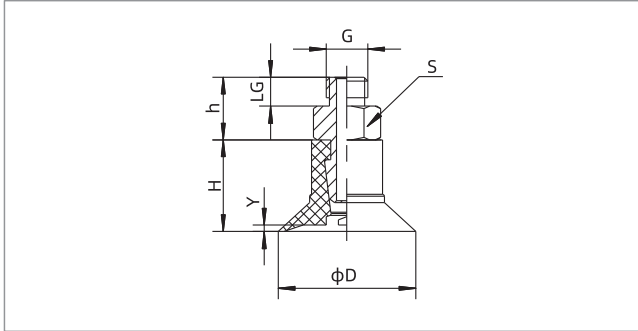
SNP

SF Series

Universal Flat Suction Cup

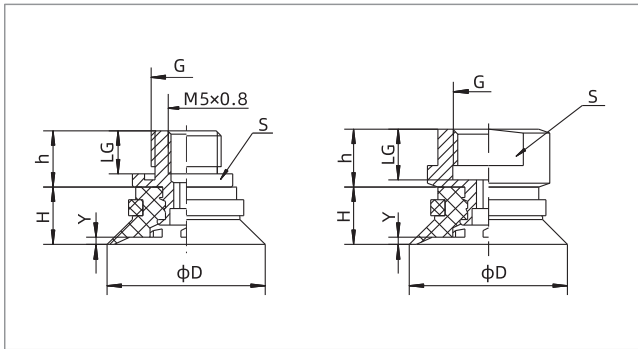


Dimensions(mm) - Suction cup with fitting



SF15□-M5M Male thread connection

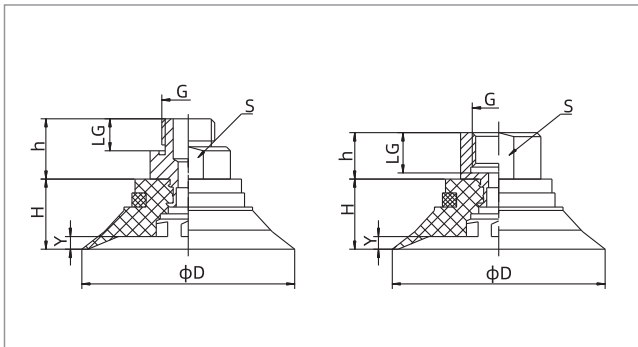
Model/Size	D	H	G	LG	h	S	Y
SF15□-M5M	16.5	11	M5×0.8	3.5	7.5	7	0.8



SF20-30 Male thread connection

SF20-30 Female thread connection

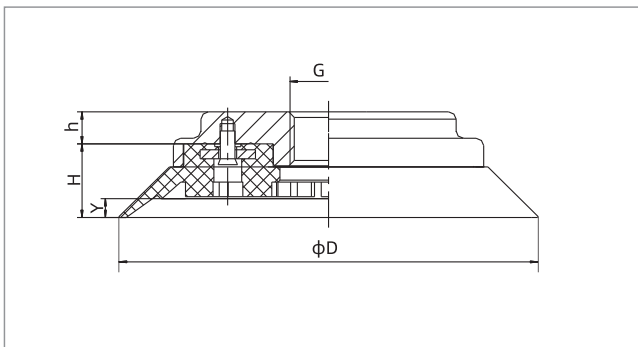
Model/Size	D	H	G	LG	h	S	Y
SF20□-G1M	22	8	G1/8	6	7.8	13	1
SF20□-G1F	22	8	G1/8	7	8	13	1
SF25□-G1M	27	9	G1/8	6	7.8	13	1
SF25□-G1F	27	9	G1/8	7	8	13	1
SF30□-G1M	32	10	G1/8	6	7.8	13	1.2
SF30□-G1F	32	10	G1/8	7	8	13	1.2



SF40-50 Male thread connection

SF40-50 Female thread connection

Model/Size	D	H	G	LG	h	S	Y
SF40□-G1M	42	13	G1/8	6	12	17	1.2
SF40□-G1F	42	13	G1/8	7	10	17	1.2
SF50□-G2M	53	17.5	G1/4	9	17	24	3.2
SF50□-G2F	53	17.5	G1/4	10	13	24	3.2
SF50□-G3M	53	17.5	G3/8	10	18	24	3.2
SF50□-G3F	53	17.5	G3/8	11	13	24	3.2



SF75-150 Female thread connection

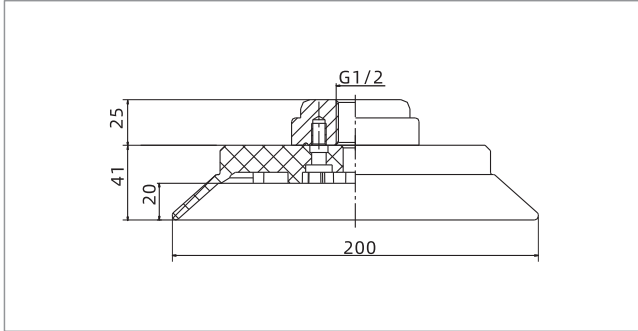
Model/Size	D	H	G	h	Y
SF75□-G2F	77	13	G1/4	13	4
SF110□-G4F	112	20	G1/2	9	6
SF150□-G4F	152	26	G1/2	10	8

SF Series

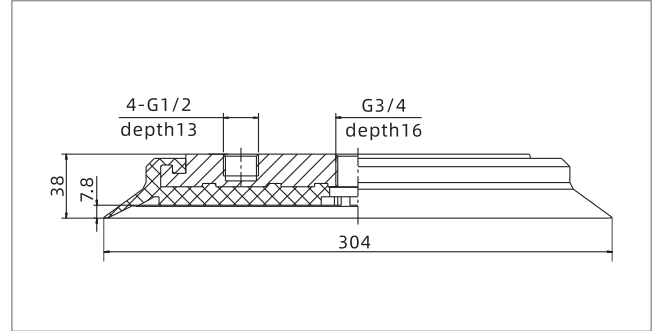
Universal Flat Suction Cup



Dimensions(mm) - Suction cup with fitting

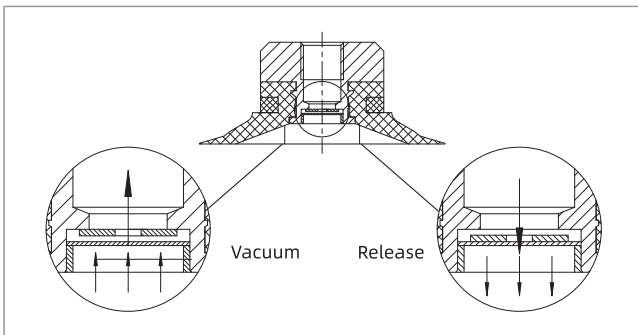


SF200 Female thread connection



SF300 Female thread connection

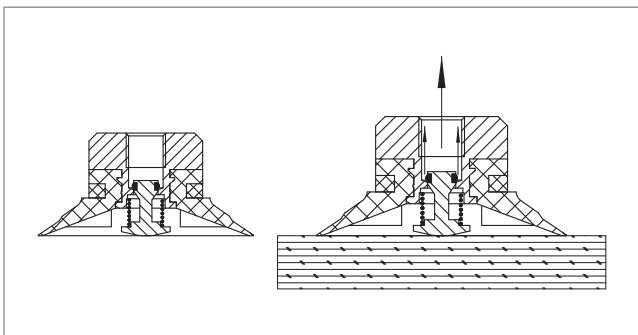
Accessories



EH - Throttle valve

EH - Throttle valve

- ◇ The flow through the vacuum port increases when the suction cup doesn't contact the workpiece, the valve plate fits the vacuum port, just little vacuum flow leaks from the small hole
- ◇ The flow through the vacuum port reduces when the suction cup sucks the workpiece, the valve plate leaves the vacuum port, suction cup works normally. (Suction cup must work vertically when it is equipped with throttle valve)



EB - Contact inductive valve

EB - Contact inductive valve

- ◇ When the suction cup doesn't contact the workpiece, the inductive valve closes the vacuum port to prevent the vacuum flow leakage
- ◇ When the suction cup contacts the workpiece, compresses the valve rod of the inductive valve, the vacuum port opens and the suction cup works normally

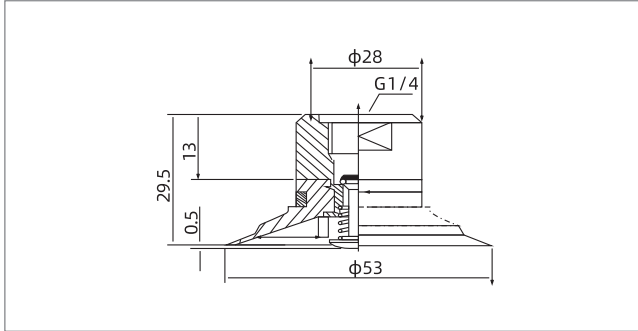
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SF Series

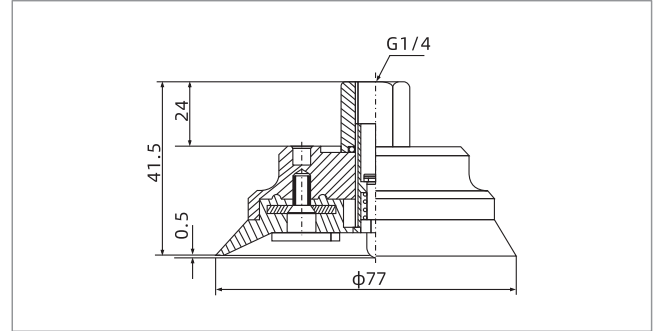
Universal Flat Suction Cup



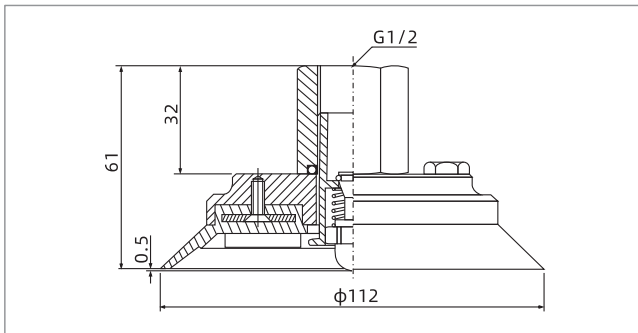
Dimensions(mm) - With contact inductive valve



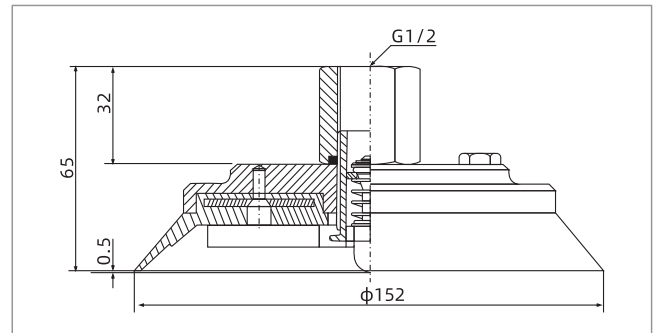
SF50□-G2F-EB



SF75□-G2F-EB



SF110□-G4F-EB



SF150□-G4F-EB

Mounting parts

Item	Model		Applicable suction cup
	M - Male thread	F - Female thread	
Fitting for suction cup	PJS-M5M-SC3	-	SF15
	PJS-G1M-SF1	PJS-G1F-SF1	SF20, 25, 30
	PJS-G1M-SF2	PJS-G1F-SF2	SF40
	PJS-G2M-SF3	PJS-G2F-SF3	SF50
	PJS-G3M-SF3	PJS-G3F-SF3	SF50
	-	PJS-G2F-SF75	SF75
	-	PJS-G4F-SF110	SF110
	-	PJS-G4F-SF150	SF150
-	PJS-G4F-SF200	SF200	

SU Series

Universal Flat Suction Cup



Features

- ◇ Standard flat lip
- ◇ Small inner volume
- ◇ Various sizes are available

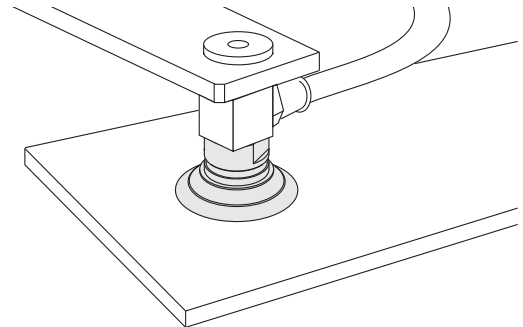
Advantages

- ◇ Suitable for handling most of workpieces with smooth and flat surface or slightly curved surface
- ◇ Short work cycle
- ◇ Suitable for workpieces with different sizes and shapes



Applications

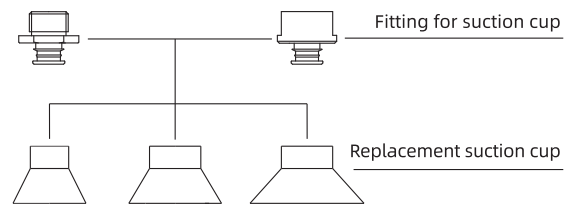
- ◇ Suitable for handling workpiece with smooth and flat surface or slightly curved surface, such as glass, wood plate, metal sheet, plastic plate, etc
- ◇ Suitable for handling automotive body parts



Structure

- ◇ Suction cup with diameter $\phi 6$ - $\phi 50$ mm and fitting are split structure design, wearing parts can be replaced separately
- ◇ For SU80, suction cup and fitting are one-piece structure

In same series, replacement suction cup and fitting can be combined on request



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SU Series

Universal Flat Suction Cup



How to order

SU 20 N - G1F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SU	6 - φ6mm	25 - φ25mm	N - NBR 55 Nil - Suctoin cup only M5M - M5x0.8 male thread
	8 - φ8mm	30 - φ30mm	S - Silicone 50 G1F - G1/8 female thread G1M - G1/8 male thread
	10 - φ10mm	40 - φ40mm	WS - White silicone 50 G2F - G1/4 female thread G2M - G1/4 male thread
	15 - φ15mm	50 - φ50mm	CS - Conductive silicone 55 G3F - G3/8 female thread G3M - G3/8 male thread
	20 - φ20mm	80 - φ80mm	

Selection

Model	Connection thread	
	M - Male thread	F - Female thread
SU6□	SU6□-M5M	-
SU8□	SU8□-M5M	-
SU10□	SU10□-M5M	-
SU15□	SU15□-M5M	-
SU20□	SU20□-G1M	SU20□-G1F
SU25□	SU25□-G1M	SU25□-G1F
SU30□	SU30□-G1M	SU30□-G1F
SU40□	SU40□-G1M	SU40□-G1F
SU50□	SU50□-G2M SU50□-G3M	SU50□-G2F SU50□-G3F
SU80□	-	SU80□-G1F

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min.curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SU6	2.1	<0.1	7.5	0.1	4	10
SU8	3.2	<0.1	10	0.2	4	10
SU10	4.7	<0.1	12	0.6	6	10
SU15	7.4	0.5	20	0.6	6	10
SU20	9.5	0.8	30	1.2	6	5
SU25	18	1.2	45	1.5	6	5
SU30	33	1.5	45	2.4	6	5
SU40	60	3	65	5.2	6	5
SU50	92	7	80	10.6	6	1
SU80	210	24	120	31	8	1

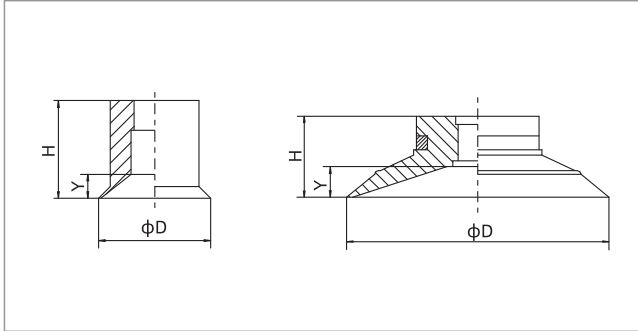
◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

SU Series

Universal Flat Suction Cup



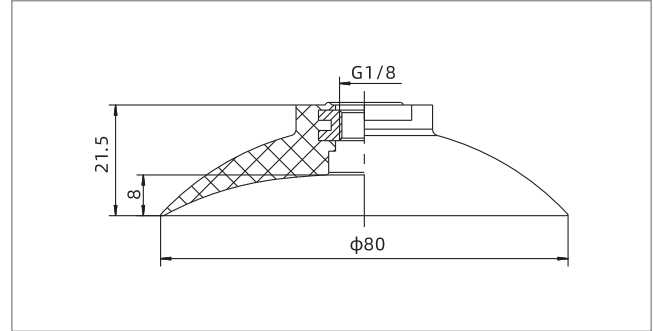
Dimensions(mm) - Suction cup only



SU6-15

SU20-50

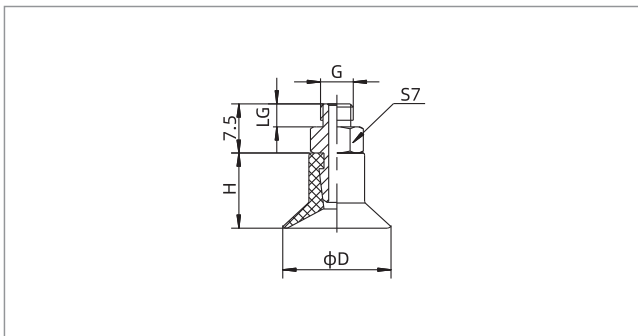
Model/Size	D	H	Y (Stroke)
SU6□	7	6.5	1.5
SU8□	9	7	2
SU10□	11	10.5	2
SF15□	16.5	11	3



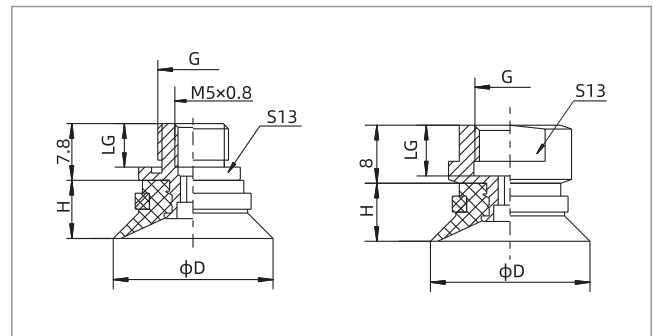
SU80

Model/Size	D	H	Y (Stroke)
SU20□	22	8	2.2
SU25□	27	9	2.9
SU30□	32	9.5	4.5
SU40□	42	13	5.2
SU50□	53	17.5	7

Dimensions(mm) - Suction cup with fitting



SU6-15 Male thread connection



SU20-30 Male thread connection

SU20-30 Female thread connection

Model/Size	D	H	G	LG	h	S
SU6□-M5M	7	6.5	M5 × 0.8	3.5	7.5	7
SU8□-M5M	9	7	M5 × 0.8	3.5	7.5	7
SU10□-M5M	11	10.5	M5 × 0.8	3.5	7.5	7
SU15□-M5M	16.5	11	M5 × 0.8	3.5	7.5	7
SU20□-G1M	22	8	G1/8	6	7.8	13
SU20□-G1F	22	8	G1/8	7	8	13
SU25□-G1M	27	9	G1/8	6	7.8	13
SU25□-G1F	27	9	G1/8	7	8	13
SU30□-G1M	32	9.5	G1/8	6	7.8	13
SU30□-G1F	32	9.5	G1/8	7	8	13

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

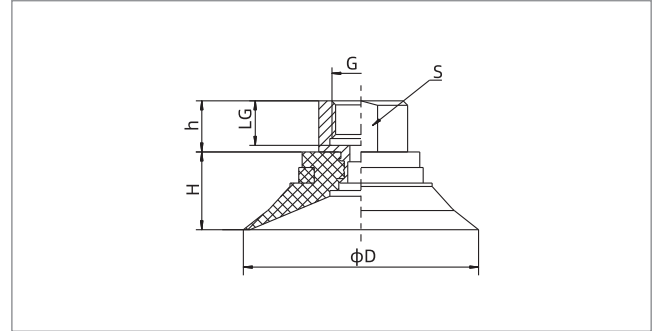
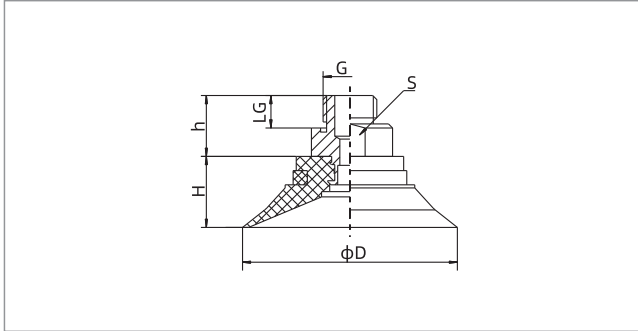
SNP

SU Series

Universal Flat Suction Cup



Dimensions(mm) - Suction cup with fitting



SU40-50 Male thread connection

SU40-50 Female thread connection

Model/Size	D	H	G	LG	h	S
SU40□-G1M	42	13	G1/8	6	12	17
SU40□-G1F	42	13	G1/8	7	10	17
SU50□-G2M	53	17.5	G1/4	9	17	24
SU50□-G2F	53	17.5	G1/4	10	13	24
SU50□-G3M	53	17.5	G3/8	10	18	24
SU50□-G3F	53	17.5	G3/8	11	13	24

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model	F - Female thread	Applicable suction cup
	M - Male thread		
Fitting for suction cup	PJS-M5M-SC2	-	SU6,8
	PJS-M5M-SC3	-	SU10,15
	PJS-G1M-SF1	PJS-G1F-SF1	SU20,25,30
	PJS-G1M-SF2	PJS-G1F-SF2	SU40
	PJS-G2M-SF3	PJS-G2F-SF3	SU50
	PJS-G3M-SF3	PJS-G3F-SF3	SU50

SPA Series

Thin Lip Flat Suction Cup



PAPER ANTI-DEFORMATION



Features

- ◇ Thin lip, flat and short stroke
- ◇ With support structure at the bottom
- ◇ Available in various sizes

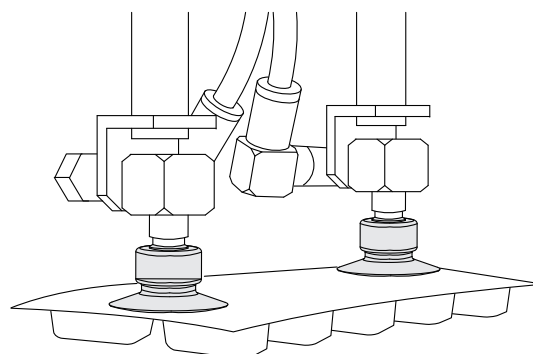
Advantages

- ◇ Good sealing for handling of thin and flat workpieces
- ◇ Prevents fold during handling of paper and thin film
- ◇ Suitable for workpieces of various sizes and shapes



Applications

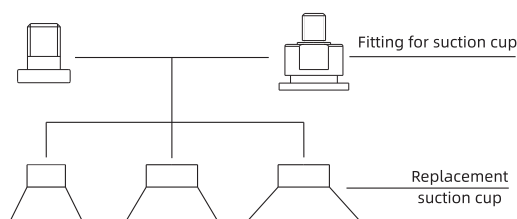
- ◇ Suitable for occasions that has high requirements for mark on product surface during handling, such as paper, plastic film, aluminum foil and copper foil
- ◇ B type suction cup is flat and with thin lip, which is more suitable for handling thin workpieces that are easy to wrinkle, such as aluminum foil, copper foil



Structure

- ◇ Split structure for easy replacement of wearing parts

In the same series, replacement suction cup and fitting can be combined as required



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU**
- SPA**
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPA Series

Thin Lip Flat Suction Cup



How to order

SPA 15 A N - M5M

① ② ③ ④ ⑤

① Series	② Diameter	③ Stroke	④ Material & Hardness	⑤ Connection thread
SPA	10 - ϕ 10mm	A	N - NBR 55	Nil - Suction cup only M5M - M5x0.8 male thread M6M - M6x1 male thread M8M - M8x1 male thread
	15 - ϕ 15mm	B	WS - White silicone 50	
	20 - ϕ 20mm	X	CN - Conductive NBR 55	
	30 - ϕ 30mm	D	CS - Conductive silicone 55	
	40 - ϕ 40mm			
	50 - ϕ 50mm			

Selection

Model	Connection thread M - Male thread	Model	Connection thread M - Male thread
SPA10A□	SPA10A□-M5M	SPA20A□	SPA20A□-M5M
SPA10B□	SPA10B□-M5M	SPA20B□	SPA20B□-M5M
SPA10X□	SPA10X□-M5M	SPA25A□	SPA25A□-M6M SPA25A□-M8M
SPA15A□	SPA15A□-M5M	SPA30A□	SPA30A□-M6M SPA30A□-M8M
SPA15B□	SPA15B□-M5M	SPA30B□	SPA30B□-M5M
SPA15X□	SPA15X□-M5M	SPA40A□	SPA40A□-M6M SPA40A□-M8M
SPA15D□	SPA15D□-M5M	SPA50A□	SPA50A□-M6M SPA50A□-M8M

Technical parameters

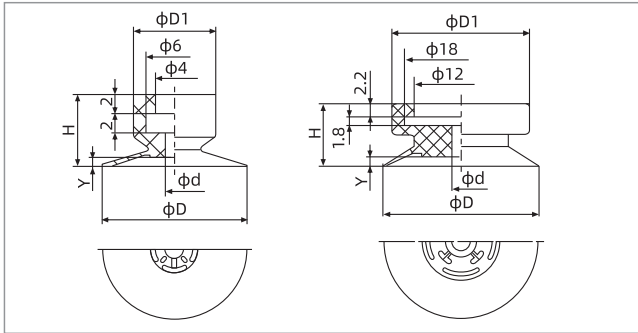
Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SPA10A	3.5	<0.1	0.3	4	10
SPA10B	3.5	<0.1	0.56	4	10
SPA10X	3.5	<0.1	0.3	4	10
SPA15A	8	<0.1	0.28	4	10
SPA15B	8	<0.1	0.4	4	10
SPA15X	8	<0.1	0.36	4	10
SPA15D	8	<0.1	0.28	4	10
SPA20A	15	0.3	0.8	4	5
SPA20B	15	<0.1	0.7	4	5
SPA25A	22	0.6	2.0	4	5
SPA30A	32	1.1	2.6	4	5
SPA30B	32	0.2	3.4	4	5
SPA40A	56	2.6	2.6	6	5
SPA50A	88	5.8	4.3	6	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

SPA Series

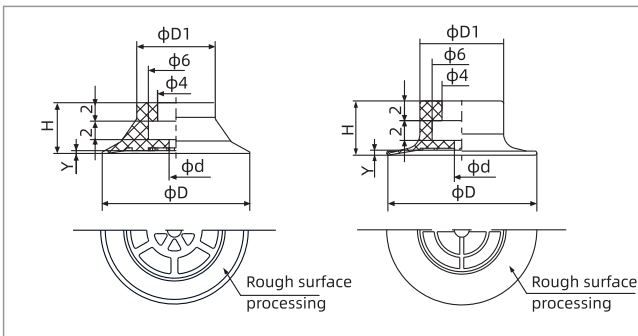
Thin Lip Flat Suction Cup

Dimensions(mm) - Suction cup only



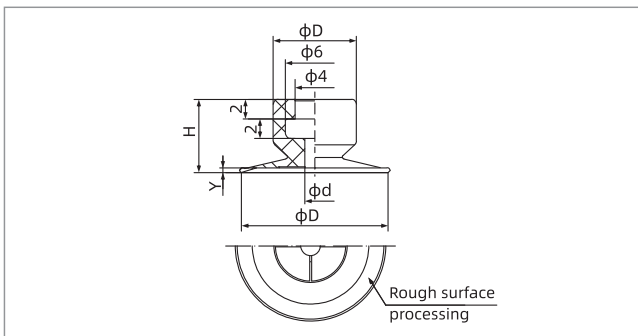
SPA10A-20A

SPA25A-50A



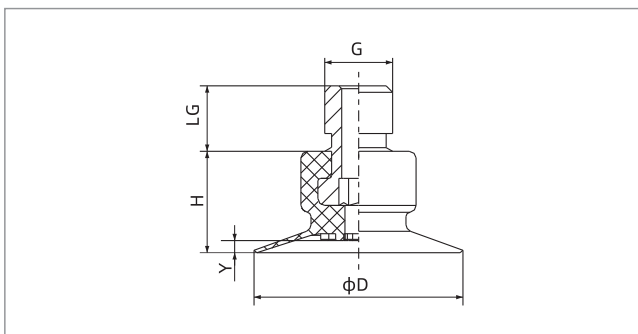
SPA10-15X

SPA15D



SPA10B-30B

Dimensions(mm) - Suction cup with fitting



SPA10-30 Male thread connection

Model/Size	D	D1	H	d	Y
SPA10A□	10	8.5	7.5	2	0.6
SPA15A□	15	8.5	7.5	2	0.9
SPA20A□	20	9	10	2	1.2
SPA25A□	25	22	10	3	1.5
SPA30A□	30	22	10	3	1.8
SPA40A□	40	22	10	3	2.4
SPA50A□	50	22	10	3	3

Model/Size	D	D1	H	d	Y
SPA10X□	11	6	5.5	1.5	0.3
SPA15X□	15	8.5	5.5	1.5	0.3
SPA15D□	15	8.5	5.5	1.5	0.5

Model/Size	D	D1	H	d	Y
SPA10B□	10	8.5	7.5	2	0.3
SPA15B□	15	8.5	7.5	2	0.5
SPA20B□	20	8.5	10	2	0.8
SPA30B□	30	15	11	3	0.3

Model/Size	D	H	G	LG	Y
SPA10A□-M5M	10	7.5	M5×0.8	5	0.6
SPA10B□-M5M	10	7.5	M5×0.8	5	0.3
SPA15A□-M5M	15	7.5	M5×0.8	5	0.9
SPA15B□-M5M	15	7.5	M5×0.8	5	0.5
SPA15X□-M5M	15	5.5	M5×0.8	5	0.3
SPA15D□-M5M	15	5.5	M5×0.8	5	0.5
SPA20A□-M5M	20	10	M5×0.8	5	1.2
SPA20B□-M5M	20	10	M5×0.8	5	0.8
SPA30B□-M5M	30	11	M5×0.8	5	0.3

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

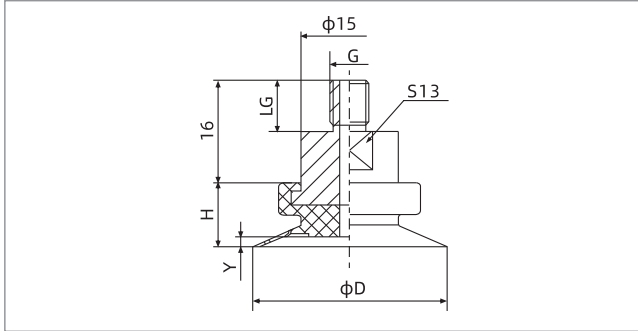
SNP

SPA Series

Thin Lip Flat Suction Cup



Dimensions(mm) - Suction cup with fitting



Model/size	D	H	G	LG	Y
SPA25A□-M6M	25	10	M6×1	8	1.5
SPA25A□-M8M	25	10	M8×1.25	8	1.5
SPA30A□-M6M	30	10	M6×1	8	1.8
SPA30A□-M8M	30	10	M8×1.25	8	1.8
SPA40A□-M6M	40	10	M6×1	8	2.4
SPA40A□-M8M	40	10	M8×1.25	8	2.4
SPA50A□-M6M	50	10	M6×1	8	3
SPA50A□-M8M	50	10	M8×1.25	8	3

SPA25A-50A

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M5M-ST2	SPA10A, 10B, 15A, 15B, 15X, 15D, 20A, 20B
	PJS-M5M-ST3	SPA30B
	PJS-M6M-ST7	SPA25A, 30A, 40A, 50A
	PJS-M8M-ST7	SPA25A, 30A, 40A, 50A

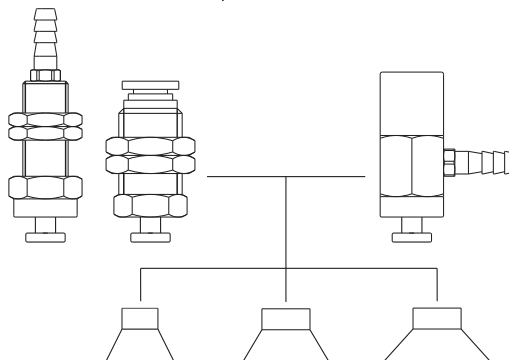
SPA Series

Suction Cup with Locking Fitting

Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port, Pagoda fitting or one-touch fitting for connection, male thread for mounting
- ◇ Lateral vacuum port, Pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPA10AN - L B6 - M4F

① ② ③ ④

① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SPA10AN	Nil - Vertical direction L - Lateral direction	A4 - One-touch fitting ϕ 4 hose A6 - One-touch fitting ϕ 6 hose B6 - Pagoda fitting ϕ 6 hose	M4F - M4x0.7 female thread M6F - M6x1 female thread M8M - M8x1 male thread M10M - M10x1 male thread M12M - M12x1 male thread M14M - M14x1 male thread

◇ Please refer to page 275 for suction cup selection

Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Vertical-One-touch fitting	Lateral-Pagoda fitting
SPA10A□	SPA10A□-B6-M8M	SPA10A□-A4-M12M	SPA10A□-LB6-M4F
SPA10B□	SPA10B□-B6-M8M	SPA10B□-A4-M12M	SPA10B□-LB6-M4F
SPA15A□	SPA15A□-B6-M8M	SPA15A□-A4-M12M	SPA15A□-LB6-M4F
SPA15B□	SPA15B□-B6-M8M	SPA15B□-A4-M12M	SPA15B□-LB6-M4F
SPA15X□	SPA15X□-B6-M8M	SPA15X□-A4-M12M	SPA15X□-LB6-M4F
SPA15D□	SPA15D□-B6-M8M	SPA15D□-A4-M12M	SPA15D□-LB6-M4F
SPA20A□	SPA20A□-B6-M8M	SPA20A□-A4-M12M	SPA20A□-LB6-M4F
SPA20B□	SPA20B□-B6-M8M	SPA20B□-A4-M12M	SPA20B□-LB6-M4F
SPA25A□	SPA25A□-B6-M10M	SPA25A□-A6-M14M	SPA25A□-LB6-M6F
SPA30A□	SPA30A□-B6-M10M	SPA30A□-A6-M14M	SPA30A□-LB6-M6F
SPA30B□	SPA30B□-B6-M10M	SPA30B□-A6-M14M	SPA30B□-LB6-M6F
SPA40A□	SPA40A□-B6-M10M	SPA40A□-A6-M14M	SPA40A□-LB6-M6F
SPA50A□	SPA50A□-B6-M10M	SPA50A□-A6-M14M	SPA50A□-LB6-M6F

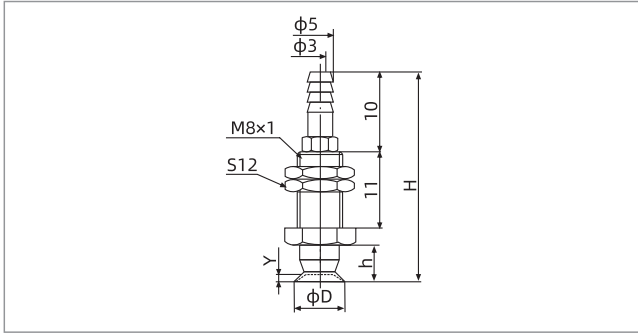
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SWP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPA Series

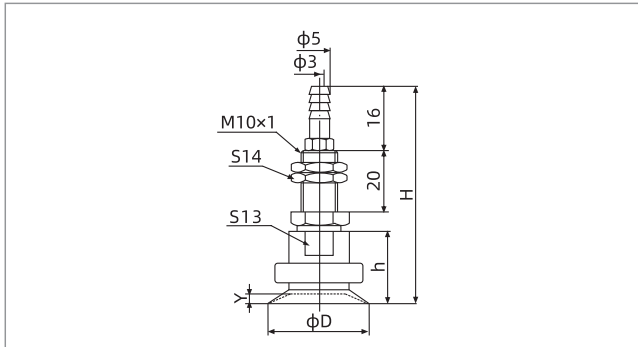


Suction Cup with Locking Fitting

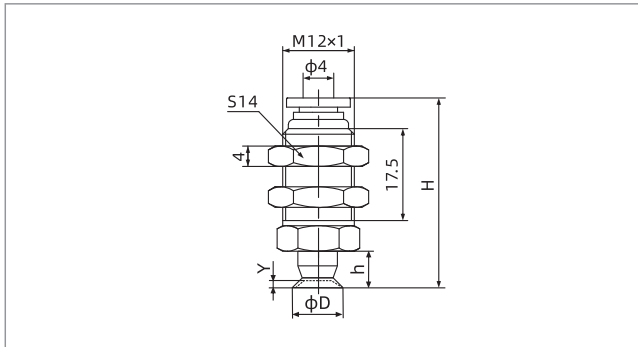
Dimensions(mm)



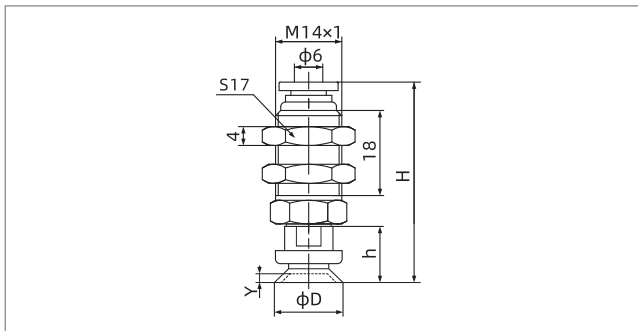
SPA10-20 Vertical-Pagoda fitting



SPA25-50 Vertical-Pagoda fitting



SPA10-20 Vertical-One-touch fitting



SPA25-50 Vertical-One-touch fitting

Model/Size	D	H	h	Y
SPA10A□-B6-M8M	10	31.5	7.5	0.6
SPA10B□-B6-M8M	10	31.5	7.5	0.3
SPA15A□-B6-M8M	15	31.5	7.5	0.9
SPA15B□-B6-M8M	15	31.5	7.5	0.5
SPA15X□-B6-M8M	15	29.5	5.5	0.3
SPA15D□-B6-M8M	15	29.5	5.5	0.5
SPA20A□-B6-M8M	20	34	10	12
SPA20B□-B6-M8M	20	34	10	0.8

Model/Size	D	H	h	Y
SPA25A□-B6-M10M	25	66	18	1.5
SPA30A□-B6-M10M	30	66	18	1.8
SPA30B□-B6-M10M	30	59	11	1.5
SPA40A□-B6-M10M	40	66	18	2.4
SPA50A□-B6-M10M	50	66	18	3

Model/Size	D	H	h	Y
SPA10A□-A4-M12M	10	35	7.5	0.6
SPA10B□-A4-M12M	10	35	7.5	0.3
SPA15A□-A4-M12M	15	35	7.5	0.9
SPA15B□-A4-M12M	15	35	7.5	0.5
SPA15X□-A4-M12M	15	33	5.5	0.3
SPA15D□-A4-M12M	15	33	5.5	0.5
SPA20A□-A4-M12M	20	37.5	10	12
SPA20B□-A4-M12M	20	37.5	10	0.8

Model/Size	D	H	h	Y
SPA25A□-A6-M14M	25	48	18	1.5
SPA30A□-A6-M14M	30	48	18	1.8
SPA30B□-A6-M14M	30	40	11	1.5
SPA40A□-A6-M14M	40	48	18	2.4
SPA50A□-A6-M14M	50	48	18	3

SPA Series

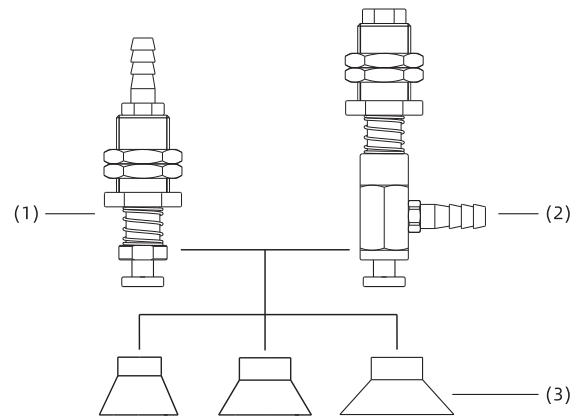


Suction Cup with Level Compensator

Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SPA10AN - F E 10 LB6 - M11

① ② ③ ④ ⑤ ⑥

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Vacuum port connection	⑥ Mounting thread
SPA10AN	F - PSPF Series	E - External spring	4 6	B6 - Vertical, pagoda fitting $\phi 6$ hose	M11 - M11 \times 1
			10 15	LB6 - Lateral, pagoda fitting $\phi 6$ hose	M14 - M14 \times 1

Selection

Model	Vacuum port direction Vertical - Pagoda fitting		Lateral - Pagoda fitting	
SPA10A□	SPA10A□-FE4B6-M11	SPA10A□-FE10B6-M11	SPA10A□-FE4LB6-M11	SPA10A□-FE10LB6-M11
SPA10B□	SPA10B□-FE4B6-M11	SPA10B□-FE10B6-M11	SPA10B□-FE4LB6-M11	SPA10B□-FE10LB6-M11
SPA15A□	SPA15A□-FE4B6-M11	SPA15A□-FE10B6-M11	SPA15A□-FE4LB6-M11	SPA15A□-FE10LB6-M11
SPA15B□	SPA15B□-FE4B6-M11	SPA15B□-FE10B6-M11	SPA15B□-FE4LB6-M11	SPA15B□-FE10LB6-M11
SPA15X□	SPA15X□-FE4B6-M11	SPA15X□-FE10B6-M11	SPA15X□-FE4LB6-M11	SPA15X□-FE10LB6-M11
SPA15D□	SPA15D□-FE4B6-M11	SPA15D□-FE10B6-M11	SPA15D□-FE4LB6-M11	SPA15D□-FE10LB6-M11
SPA20A□	SPA20A□-FE4B6-M11	SPA20A□-FE10B6-M11	SPA20A□-FE4LB6-M11	SPA20A□-FE10LB6-M11
SPA20B□	SPA20B□-FE4B6-M11	SPA20B□-FE10B6-M11	SPA20B□-FE4LB6-M11	SPA20B□-FE10LB6-M11
SPA25A□	SPA25A□-FE6B6-M14	SPA25A□-FE15B6-M14	SPA25A□-FE6LB6-M14	SPA25A□-FE15LB6-M14
SPA30A□	SPA30A□-FE6B6-M14	SPA30A□-FE15B6-M14	SPA30A□-FE6LB6-M14	SPA30A□-FE15LB6-M14
SPA30B□	SPA30B□-FE6B6-M14	SPA30B□-FE15B6-M14	SPA30B□-FE6LB6-M14	SPA30B□-FE15LB6-M14
SPA40A□	SPA40A□-FE6B6-M14	SPA40A□-FE15B6-M14	SPA40A□-FE6LB6-M14	SPA40A□-FE15LB6-M14
SPA50A□	SPA50A□-FE6B6-M14	SPA50A□-FE15B6-M14	SPA50A□-FE6LB6-M14	SPA50A□-FE15LB6-M14

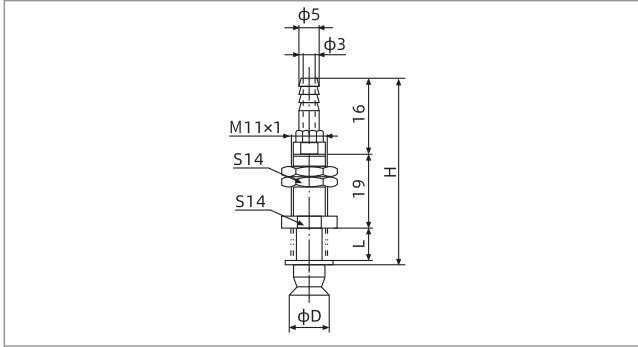
SPA Series

Suction Cup with Level Compensator

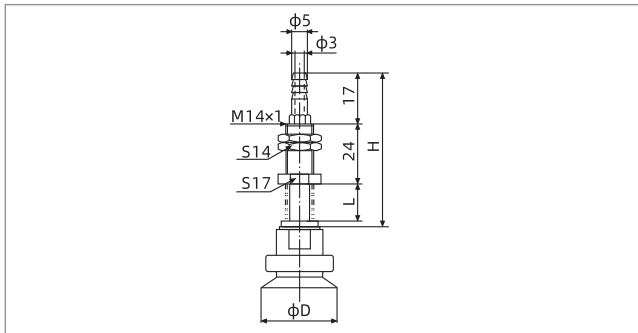


Suction Cup

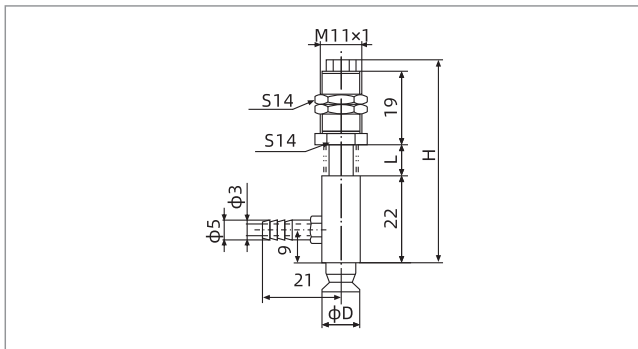
Dimensions(mm)



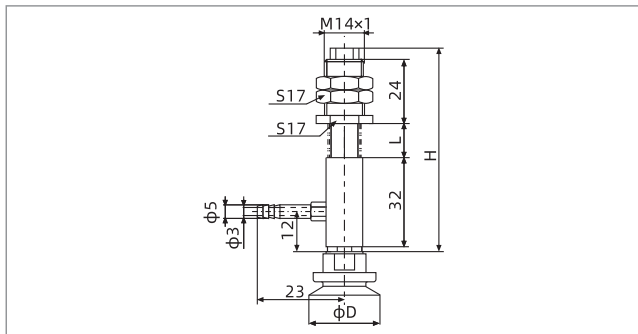
SPA10-20 Vertical-Pagoda fitting



SPA25-50 Vertical-Pagoda fitting



SPA10-20 Lateral-Pagoda fitting



SPA25-50 Lateral-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPA10□□-FE4B6-M11	10	46	8	4
SPA10□□-FE10B6-M11	10	58	20	10
SPA15□□-FE4B6-M11	15	46	8	4
SPA15□□-FE10B6-M11	15	58	20	10
SPA20□□-FE4B6-M11	20	46	8	4
SPA20□□-FE10B6-M11	20	58	20	10

Model/Size	D	H	L	Buffer stroke
SPA25□□-FE6B6-M14	25	57	13	6
SPA25□□-FE15B6-M14	25	74	30	15
SPA30□□-FE6B6-M14	30	57	13	6
SPA30□□-FE15B6-M14	30	74	30	15
SPA40□□-FE6B6-M14	40	57	13	6
SPA40□□-FE15B6-M14	40	74	30	15
SPA50□□-FE6B6-M14	50	57	13	6
SPA50□□-FE15B6-M14	50	74	30	15

Model/Size	D	H	L	Buffer stroke
SPA10□□-FE4LB6-M11	10	52	8	4
SPA10□□-FE10LB6-M11	10	64	20	10
SPA15□□-FE4LB6-M11	15	52	8	4
SPA15□□-FE10LB6-M11	15	64	20	10
SPA20□□-FE4LB6-M11	20	52	8	4
SPA20□□-FE10LB6-M11	20	64	20	10

Model/Size	D	H	L	Buffer stroke
SPA25□□-FE6LB6-M14	25	73	13	6
SPA25□□-FE15LB6-M14	25	90	30	15
SPA30□□-FE6LB6-M14	30	73	13	6
SPA30□□-FE15LB6-M14	30	90	30	15
SPA40□□-FE6LB6-M14	40	73	13	6
SPA40□□-FE15LB6-M14	40	90	30	15
SPA50□□-FE6LB6-M14	50	73	13	6
SPA50□□-FE15LB6-M14	50	90	30	15

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SPF Series

Flat Suction Cup

AIRBEST



UNIVERSAL

RoHS

Features

- ◇ With support structure at the bottom
- ◇ Optimal design
- ◇ Small inner volume
- ◇ Available in various sizes

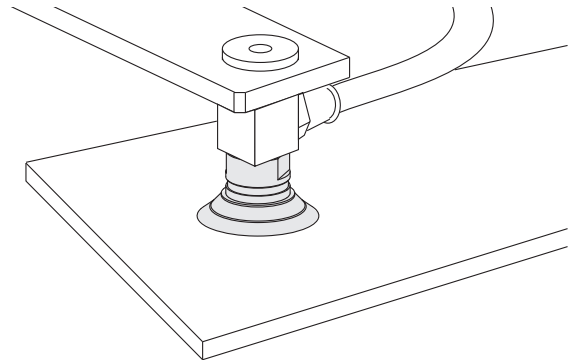
Advantages

- ◇ Be able to prevent permanent deformation of workpieces
- ◇ Small size, large suction force
- ◇ Short working cycle
- ◇ Suitable for workpieces of various sizes and shapes



Applications

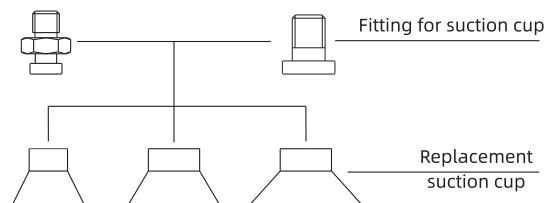
- ◇ Handling of flat workpieces with smooth or slightly rough surface such as wood, metal plate, plywood and plastic plate
- ◇ Suitable for handling electronic components, conductive material can effectively prevent electrostatic damage to electronic components



Structure

- ◇ Suction cups with diameter less than 50mm adopt split structure for easy replacement of wearing parts
- ◇ One-piece structure for suction cup with diameter 60mm-200mm

In the same series, replacement suction cup and fitting can be combined as required



SPF Series

Flat Suction Cup

How to order

SPF 15 N - M5M

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SPF	2 - φ2mm	35 - φ35mm	N - NBR 55
	3.5 - φ3.5mm	40 - φ40mm	WS - White silicone 50
	5 - φ5mm	50 - φ50mm	CN - Conductive NBR 55
	6 - φ6mm	60 - φ60mm	CS - Conductive silicone 55
	8 - φ8mm	80 - φ80mm	
	10 - φ10mm	95 - φ95mm	
	15 - φ15mm	120 - φ120mm	
	20 - φ20mm	150 - φ150mm	
	25 - φ25mm	200 - φ200mm	
	30 - φ30mm		
			Nil - Suction cup only
			M3M - M3×0.5 male thread
			M5M - M5×0.8 male thread
			M8M - M8×1.25 male thread
			M10F - M10×1.25 female thread

Selection

Model	Connection thread M - Male thread
SPF2□	SPF2□-M3M
SPF3.5□	SPF3.5□-M3M
SPF5□	SPF5□-M5M
SPF6□	SPF6□-M5M
SPF8□	SPF8□-M5M
SPF10□	SPF10□-M5M
SPF15□	SPF15□-M5M
SPF20□	SPF20□-M5M

Model	Connection thread M - Male thread
SPF25□	SPF25□-M5M
SPF30□	SPF30□-M5M
SPF35□	SPF35□-M5M
SPF40□	SPF40□-M5M
SPF50□	SPF50□-M8M
SPF60□-M10F	-
SPF80□-M10F	-
SPF95□-M10F	-

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SPF2	0.15	<0.1	0.1	4	10
SPF3.5	0.4	<0.1	0.1	4	10
SPF5	0.9	<0.1	0.2	4	10
SPF6	1.2	<0.1	0.2	4	10
SPF8	2.2	<0.1	0.2	4	10
SPF10	3.5	<0.1	0.3	4	10
SPF15	8	0.2	0.4	6	10
SPF20	15	0.5	1.6	6	5
SPF25	24	1.1	2.5	6	5
SPF30	32	1	3.3	6	5

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SPF35	43	2.4	6.6	6	5
SPF40	60	3.4	8.4	6	5
SPF50	92	5.7	10.4	8	1
SPF60	127	11	23.2	8	1
SPF80	226	25.3	48.2	8	1
SPF95	319	38	70.3	10	1
SPF120	510	81	159.5	10	1
SPF150	800	171	322.4	12	1
SPF200	1,410	364	521.5	12	1

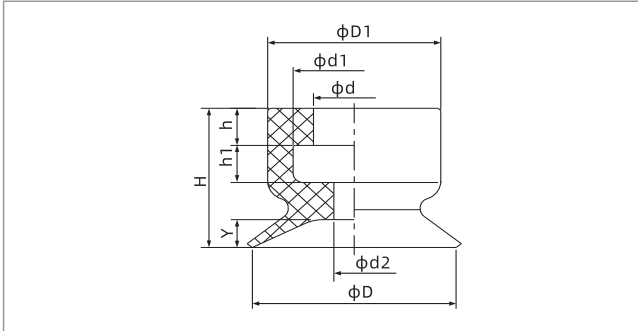
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

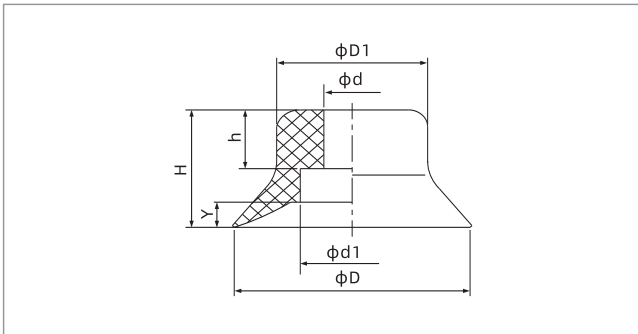
Flat Suction Cup



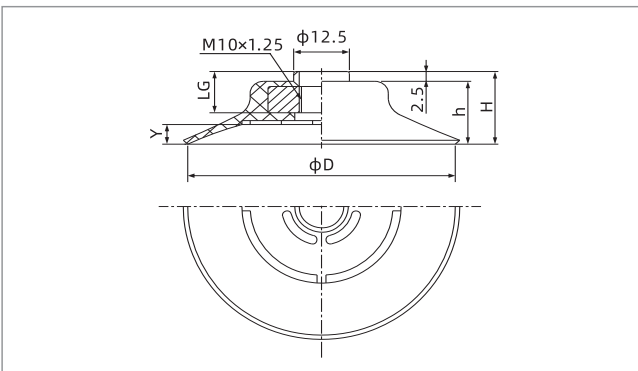
Dimensions(mm) - Suction cup only



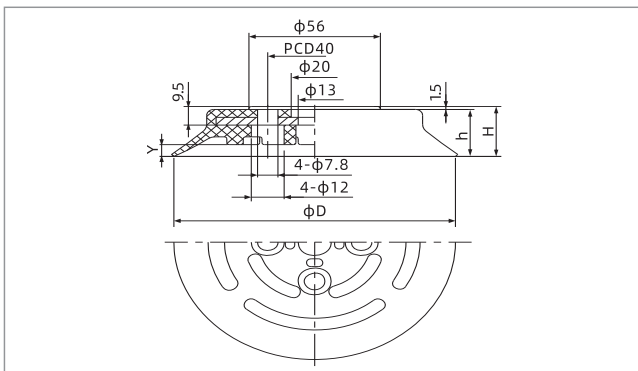
SPF2-15



SPF20-50



SPF60-95



SPF120-200

Model/Size	D	H	D1	d	h	d1	h1	d2	Y
SPF2□	2	4	4	2	1.5	3	1	1.2	0.5
SPF3.5□	3.5	4	4	2	1.5	3	1	1.2	0.5
SPF5□	5	6.5	7.5	4	2	6	2	1.4	0.8
SPF6□	6	6.5	7.5	4	2	6	2	2	0.8
SPF8□	8	7	8	4	2	6	2	2	1.2
SPF10□	10	7.5	8.5	4	2	6	2	2	1.5
SPF15□	15	8	9	4	2	6	2	2	1.9

Model/Size	D	H	D1	d	h	d1	Y
SPF20□	20	10	15	6	4.5	10.8	2.3
SPF25□	25	14	16	6	7	11	3
SPF30□	29	12	14	6	7	11	2
SPF35□	35	14	21	6	7	11	3
SPF40□	40	14	24	6	7	11	3.5
SPF50□	50	15	27	8	7	20	4

Model/Size	D	H	h	LG	Y
SPF60□-M10F	60	18.5	16	10.5	5
SPF80□-M10F	80	20.5	18	11.5	6
SPF95□-M10F	95	21	18.5	11	6

Model/size	D	H	h	Y
SPF120□	120	25.5	24	6
SPF150□	150	32.5	31	9
SPF200□	200	37.5	36	13

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SPF Series

Flat Suction Cup

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3M-ST1	SPF2, 3.5
	PJS-M5M-ST2	SPF5, 6, 8, 10, 15
	PJS-M5M-ST3	SPF20
	PJS-M5M-ST4	SPF25, 30, 35, 40
	PJS-M8M-ST6	SPF50

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SPF Series

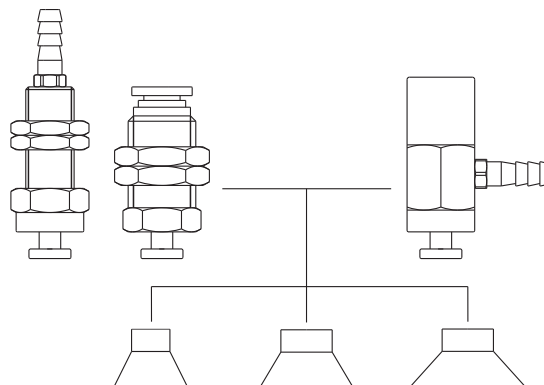


Suction Cup with Locking Fitting

Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port, Pagoda fitting or one-touch fitting for connection, male thread for mounting
- ◇ Lateral vacuum port, Pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPF10N - L B6 - M4F

① ② ③ ④

① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SPF10N	Nil - Vertical direction	A4 - One-touch fitting ϕ 4 hose	M3F - M3 \times 0.5 female thread
	L - Lateral direction	A6 - One-touch fitting ϕ 6 hose	M4F - M4 \times 0.7 female thread
		B4 - Pagoda fitting ϕ 4 hose	M6F - M6 \times 1 female thread
		B6 - Pagoda fitting ϕ 6 hose	M8F - M8 \times 1.25 female thread
		R1 - Rc1/8 female thread	M16F - M16 \times 2 female thread
			M5M - M5 \times 0.5 male thread
			M8M - M8 \times 1 male thread
		M10M - M10 \times 1 male thread	
		M12M - M12 \times 1 male thread	
		M14M - M14 \times 1 male thread	
		M16M - M16 \times 1.5 male thread	

◇ Please refer to page 284 for suction cup selection

Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Vertical-One-touch fitting	Lateral-Pagoda fitting
SPF2□	SPF2□-B4-M5M	-	SPF2□-LB4-M3F
SPF3.5□	SPF3.5□-B4-M5M	-	SPF3.5□-LB4-M3F
SPF5□	SPF5□-B6-M8M	SPF5□-A4-M12M	SPF5□-LB6-M4F
SPF6□	SPF6□-B6-M8M	SPF6□-A4-M12M	SPF6□-LB6-M4F
SPF8□	SPF8□-B6-M8M	SPF8□-A4-M12M	SPF8□-LB6-M4F
SPF10□	SPF10□-B6-M8M	SPF10□-A4-M12M	SPF10□-LB6-M4F
SPF15□	SPF15□-B6-M8M	SPF15□-A4-M12M	SPF15□-LB6-M4F
SPF20□	SPF20□-B6-M10M	SPF20□-A6-M14M	SPF20□-LB6-M4F
SPF25□	SPF25□-B6-M10M	SPF25□-A6-M14M	SPF25□-LB6-M6F
SPF30□	SPF30□-B6-M10M	SPF30□-A6-M14M	SPF30□-LB6-M6F
SPF35□	SPF35□-B6-M10M	SPF35□-A6-M14M	SPF35□-LB6-M6F
SPF40□	SPF40□-B6-M10M	SPF40□-A6-M14M	SPF40□-LB6-M6F
SPF50□	SPF50□-B6-M10M	SPF50□-A6-M14M	SPF50□-LB6-M6F

SPF Series

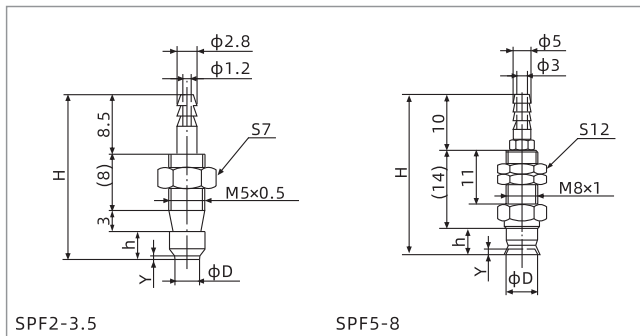
Suction Cup with Locking Fitting



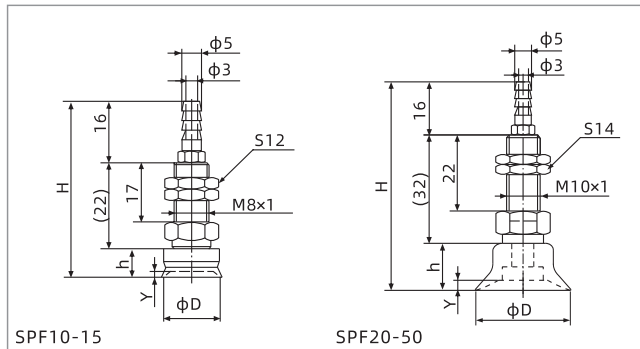
Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Lateral-Pagoda fitting
SPF60□	SPF60□-R1-M16M	SPF60□-LR1-M8F
SPF80□	SPF80□-R1-M16M	SPF80□-LR1-M8F
SPF95□	SPF95□-R1-M16M	SPF95□-LR1-M8F
SPF120□	-	SPF120□-LR1-M16F
SPF150□	-	SPF150□-LR1-M16F
SPF200□	-	SPF200□-LR1-M16F

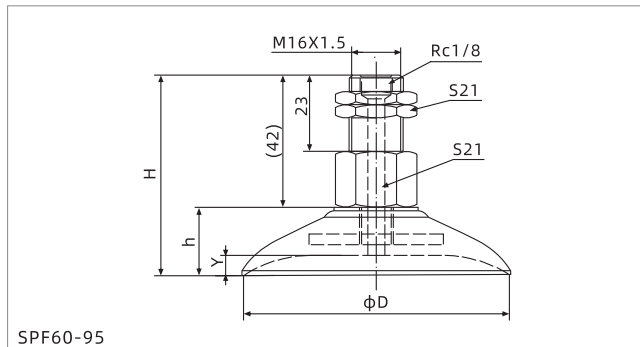
Dimensions(mm)



Vertical-Pagoda fitting



Vertical-Pagoda fitting



Vertical-Female thread connection

Model/Size	D	H	h	Y
SPF2□-B4-M5M	2	23.5	4	0.5
SPF3.5□-B4-M5M	3.5	23.5	4	0.5
SPF5□-B6-M8M	5	30.5	6.5	0.8
SPF6□-B6-M8M	6	30.5	6.5	0.8
SPF8□-B6-M8M	8	31	7	1.2

Model/Size	D	H	h	Y
SPF10□-B6-M8M	10	45.5	7.5	1.5
SPF15□-B6-M8M	15	46	8	1.9
SPF20□-B6-M10M	20	58	10	2.3
SPF25□-B6-M10M	25	62	14	3
SPF30□-B6-M10M	30	60	12	2
SPF35□-B6-M10M	35	62	14	3
SPF40□-B6-M10M	40	62	14	3.5
SPF50□-B6-M10M	50	63	15	4

Model/Size	D	H	h	Y
SPF60□-R1-M16M	60	58	16	5
SPF80□-R1-M16M	80	60	18	6
SPF95□-R1-M16M	95	60.5	18.5	6

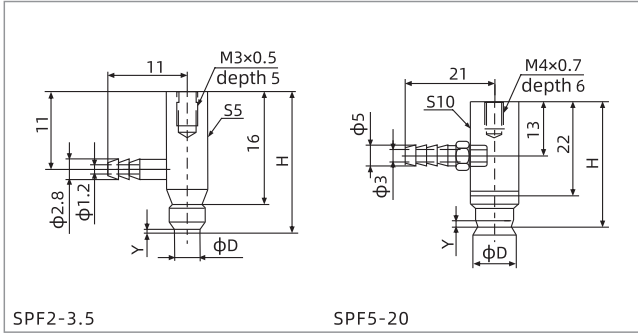
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SPF
- SOB
- SOE
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SKF
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series



Suction Cup with Locking Fitting

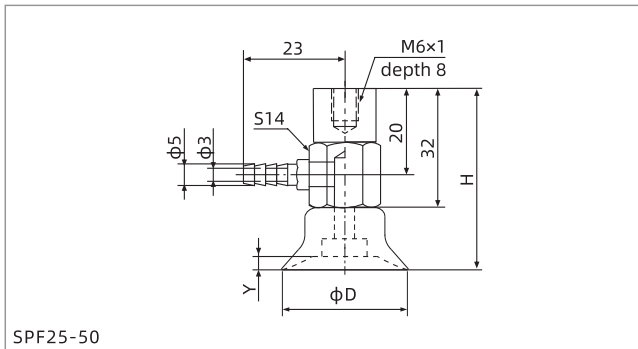
Dimensions(mm)



SPF2-3.5

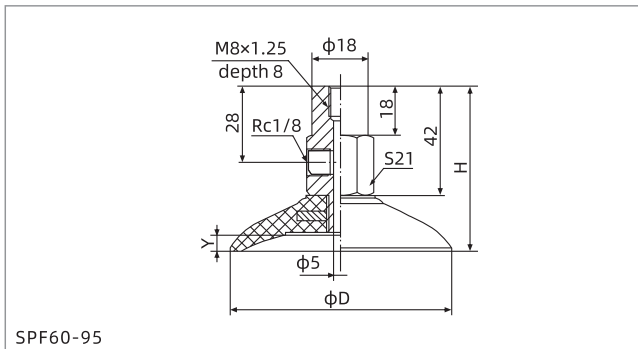
SPF5-20

Lateral-Pagoda fitting



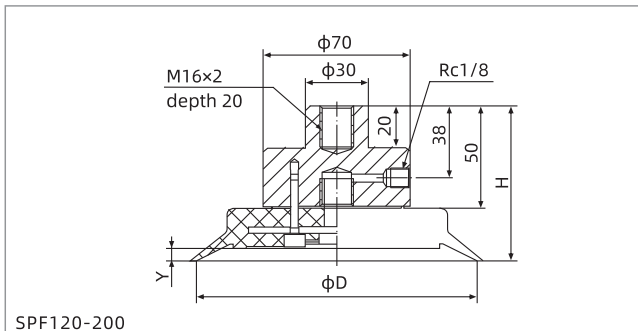
SPF25-50

Lateral-Pagoda fitting



SPF60-95

Lateral-Female thread connection



SPF120-200

Lateral-Female thread connection

Model/Size	D	H	Y
SPF2□-LB4-M3F	2	20	0.5
SPF3.5□-LB4-M3F	3.5	20	0.5
SPF5□-LB6-M4F	5	28.5	0.8
SPF6□-LB6-M4F	6	28.5	0.8
SPF8□-LB6-M4F	8	29	1.2
SPF10□-LB6-M4F	10	29.5	1.5
SPF15□-LB6-M4F	15	30	1.9
SPF20□-LB6-M4F	20	32	2.3

Model/Size	D	H	Y
SPF25□-LB6-M6F	25	46	3
SPF30□-LB6-M6F	30	44	2
SPF35□-LB6-M6F	35	46	3
SPF40□-LB6-M6F	40	46	3.5
SPF50□-LB6-M6F	50	47	4

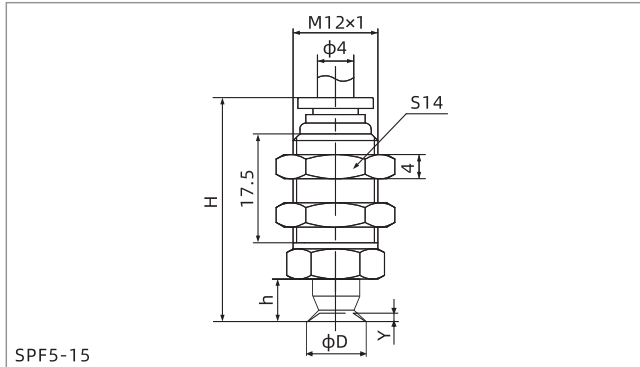
Model/Size	D	H	Y
SPF60□-LR1-M8F	60	58	5
SPF80□-LR1-M8F	80	58.5	6
SPF95□-LR1-M8F	95	59	6

Model/Size	D	H	Y
SPF120□-LR1-M16F	120	75.5	6
SPF150□-LR1-M16F	150	82.5	9
SPF200□-LR1-M16F	200	87.5	13

SPF Series

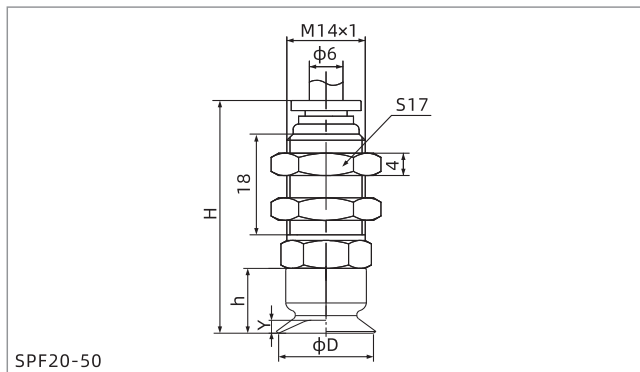
Suction Cup with Locking Fitting

Dimensions(mm)



SPF5-15

Vertical-One-touch fitting



SPF20-50

Vertical-One-touch fitting

Model/Size	D	H	Y
SPF5□-A4-M12M	5	34	0.8
SPF6□-A4-M12M	6	34	0.8
SPF8□-A4-M12M	8	34.5	1.2
SPF10□-A4-M12M	10	35	1.5
SPF15□-A4-M12M	15	35.5	1.9

Model/Size	D	H	Y
SPF20□-A6-M14M	20	40	2.3
SPF25□-A6-M14M	25	44	3
SPF30□-A6-M14M	30	42	2
SPF35□-A6-M14M	35	44	3
SPF40□-A6-M14M	40	44	3.5
SPF50□-A6-M14M	50	45	4

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

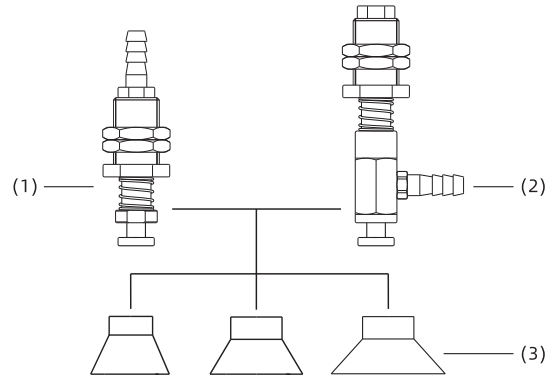


Suction Cup with Level Compensator

Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SPF10N - F E 10 LB6 - M11

① ② ③ ④ ⑤ ⑥

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Vacuum port connection	⑥ Mounting thread
SPF10N	F - PSPF Series	E - External spring	2 5 3 10 4 15 6 30	B4 - Vertical, Pagoda fitting ϕ 4 hose B6 - Vertical, Pagoda fitting ϕ 6 hose LB4 - Lateral, Pagoda fitting ϕ 4 hose LB6 - Lateral, Pagoda fitting ϕ 6 hose LR1 - Lateral, Rc1/8 female thread	M5 - M5x0.5 M9 - M9x1 M11 - M11x1 M14 - M14x1 M16 - M16x1.5

Selection

Model	Vacuum port direction Vertical-Pagoda fitting		Lateral-Pagoda fitting	
SPF2□	SPF2□-FE2B4-M5	SPF2□-FE5B4-M5	SPF2□-FE2LB4-M5	SPF2□-FE5B4-M5
SPF3.5□	SPF3.5□-FE2B4-M5	SPF3.5□-FE5B4-M5	SPF3.5□-FE2LB4-M5	SPF3.5□-FE5LB4-M5
SPF5□	SPF5□-FE3B6-M9	SPF5□-FE10B6-M9	SPF5□-FE3LB6-M9	SPF5□-FE10LB6-M9
SPF6□	SPF6□-FE3B6-M9	SPF6□-FE10B6-M9	SPF6□-FE3LB6-M9	SPF6□-FE10LB6-M9
SPF8□	SPF8□-FE3B6-M9	SPF8□-FE10B6-M9	SPF8□-FE3LB6-M9	SPF8□-FE10LB6-M9
SPF10□	SPF10□-FE4B6-M11	SPF10□-FE10B6-M11	SPF10□-FE4LB6-M11	SPF10□-FE10LB6-M11
SPF15□	SPF15□-FE4B6-M11	SPF15□-FE10B6-M11	SPF15□-FE4LB6-M11	SPF15□-FE10LB6-M11
SPF20□	SPF20□-FE4B6-M11	SPF20□-FE10B6-M11	SPF20□-FE4LB6-M11	SPF20□-FE10LB6-M11
SPF25□	SPF25□-FE6B6-M14	SPF25□-FE15B6-M14	SPF25□-FE6LB6-M14	SPF25□-FE15LB6-M14
SPF30□	SPF30□-FE6B6-M14	SPF30□-FE15B6-M14	SPF30□-FE6LB6-M14	SPF30□-FE15LB6-M14
SPF35□	SPF35□-FE6B6-M14	SPF35□-FE15B6-M14	SPF35□-FE6LB6-M14	SPF35□-FE15LB6-M14
SPF40□	SPF40□-FE6B6-M14	SPF40□-FE15B6-M14	SPF40□-FE6LB6-M14	SPF40□-FE15LB6-M14
SPF50□	SPF50□-FE6B6-M14	SPF50□-FE15B6-M14	SPF50□-FE6LB6-M14	SPF50□-FE15LB6-M14

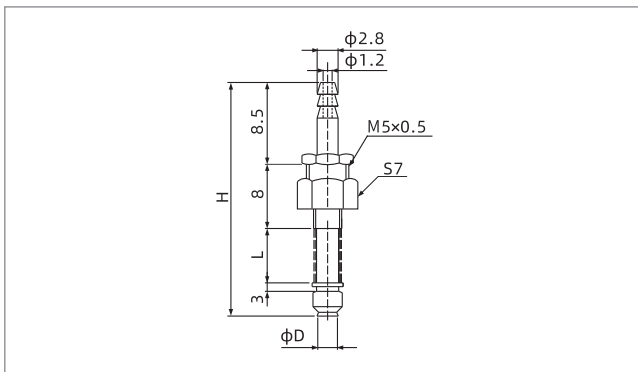
SPF Series

Suction Cup with Level Compensator

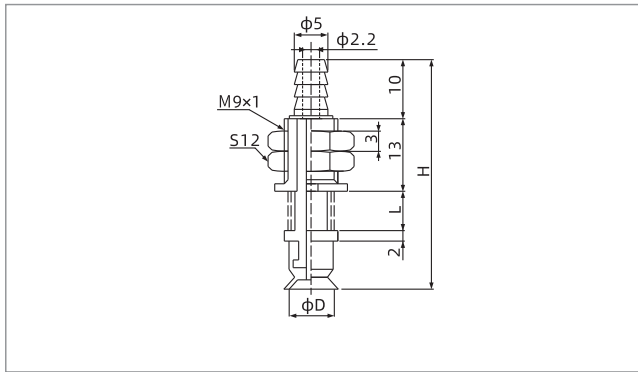
Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Lateral-Pagoda fitting	
		SPF60□-FE10LR1-M16	SPF60□-FE30LR1-M16
SPF60□	-	SPF60□-FE10LR1-M16	SPF60□-FE30LR1-M16
SPF80□	-	SPF80□-FE10LR1-M16	SPF80□-FE30LR1-M16
SPF95□	-	SPF95□-FE10LR1-M16	SPF95□-FE30LR1-M16

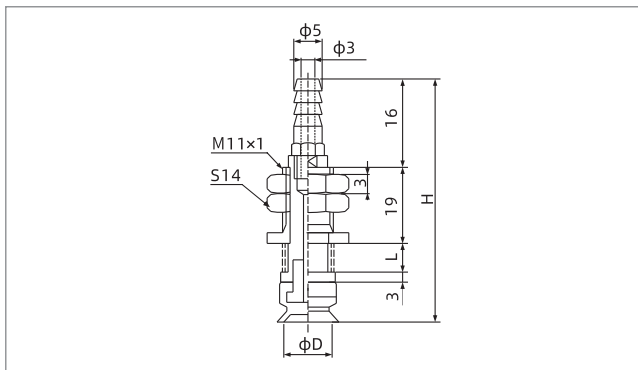
Dimensions(mm)



SPF2-3.5 Vertical-Pagoda fitting



SPF5-8 Vertical-Pagoda fitting



SPF10-20 Vertical-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPF2□-FE2B4-M5	2	28.5	5	2.5
SPF2□-FE5B4-M5	2	33.5	10	5
SPF3.5□-FE2B4-M5	3.5	28.5	5	2.5
SPF3.5□-FE5B4-M5	3.5	33.5	10	5

Model/Size	D	H	L	Buffer stroke
SPF5□-FE3B6-M9	5	37.5	6	3
SPF5□-FE10B6-M9	5	51.5	20	10
SPF6□-FE3B6-M9	6	37.5	6	3
SPF6□-FE10B6-M9	6	51.5	20	10
SPF8□-FE3B6-M9	8	38	6	3
SPF8□-FE10B6-M9	8	52	20	10

Model/Size	D	H	L	Buffer stroke
SPF10□-FE4B6-M11	10	53.5	8	4
SPF10□-FE10B6-M11	10	65.5	20	10
SPF15□-FE4B6-M11	15	54	8	4
SPF15□-FE10B6-M11	15	66	20	10
SPF20□-FE4B6-M11	20	56	8	4
SPF20□-FE10B6-M11	20	68	20	10

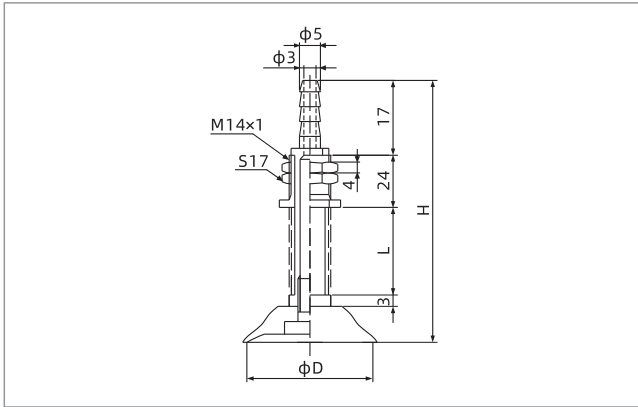
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPF Series

Suction Cup with Level Compensator

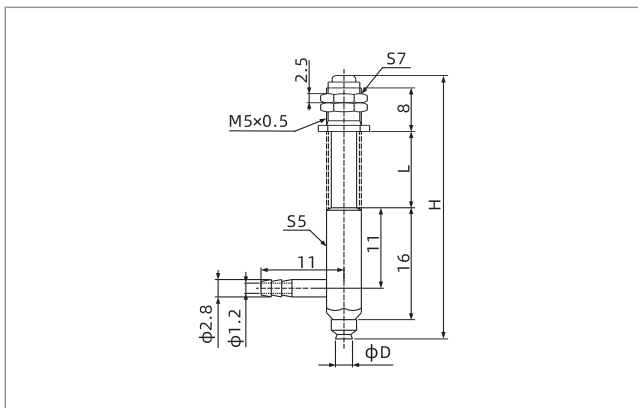


Dimensions(mm)



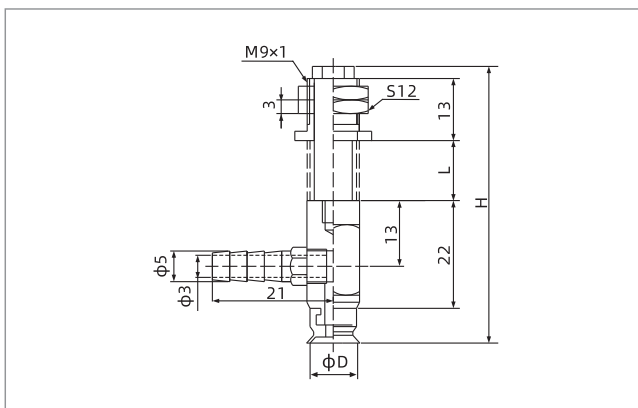
SPF25-50 Vertical-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPF25□-FE6B6-M14	25	71	13	6
SPF25□-FE15B6-M14	25	88	30	15
SPF30□-FE6B6-M14	30	69	13	6
SPF30□-FE15B6-M14	30	86	30	15
SPF35□-FE6B6-M14	35	71	13	6
SPF35□-FE15B6-M14	35	88	30	15
SPF40□-FE6B6-M14	40	71	13	6
SPF40□-FE15B6-M14	40	88	30	15
SPF50□-FE6B6-M14	50	72	13	6
SPF50□-FE15B6-M14	50	89	30	15



SPF2-3.5 Lateral-Pagoda fitting

Model/Size	D	H	L	Buffer stroke
SPF2□-FE2LB4-M5	2	35.5	5	2.5
SPF2□-FE5LB4-M5	2	40.5	10	5
SPF3.5□-FE2LB4-M5	3.5	35.5	5	2.5
SPF3.5□-FE5LB4-M5	3.5	40.5	10	5



SPF5-8 Lateral-Pagoda fitting

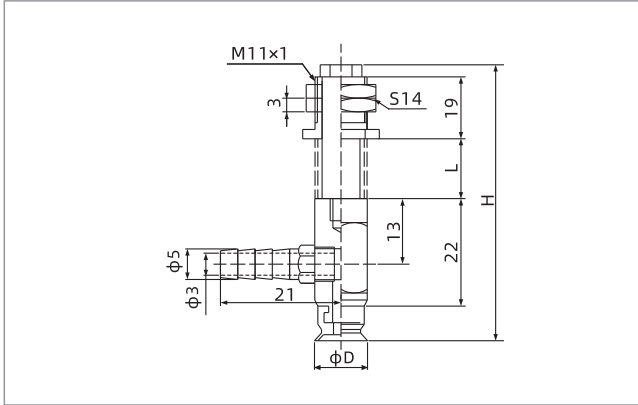
Model/Size	D	H	L	Buffer stroke
SPF5□-FE3LB6-M9	5	50.5	6	3
SPF5□-FE10LB6-M9	5	64.5	20	10
SPF6□-FE3LB6-M9	6	50.5	6	3
SPF6□-FE10LB6-M9	6	64.5	20	10
SPF8□-FE3LB6-M9	8	51	6	3
SPF8□-FE10LB6-M9	8	65	20	10

SPF Series

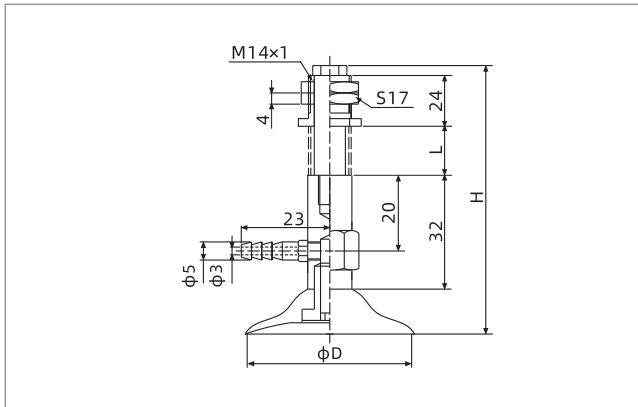
Suction Cup with Level Compensator



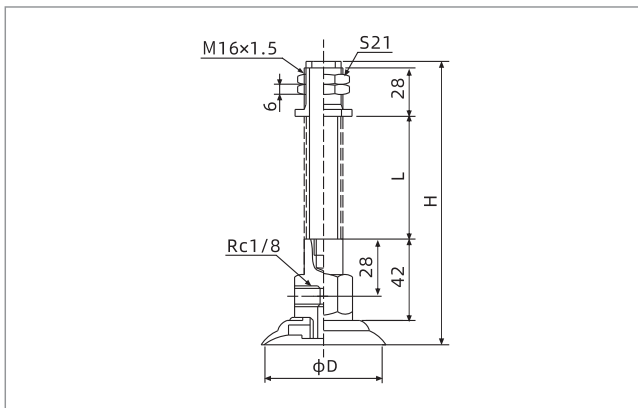
Dimensions(mm)



SPF10-20 Lateral-Pagoda fitting



SPF25-50 Lateral-Pagoda fitting



SPF60-95 Lateral-Female thread connection

Model/Size	D	H	L	Buffer stroke
SPF10□-FE4LB6-M11	10	59.5	8	4
SPF10□-FE10LB6-M11	10	71.5	20	10
SPF15□-FE4LB6-M11	15	60	8	4
SPF15□-FE10LB6-M11	15	72	20	10
SPF20□-FE4LB6-M11	20	62	8	4
SPF20□-FE10LB6-M11	20	74	20	10

Model/Size	D	H	L	Buffer stroke
SPF25□-FE6B6-M14	25	87	13	6
SPF25□-FE15B6-M14	25	104	30	15
SPF30□-FE6B6-M14	30	85	13	6
SPF30□-FE15B6-M14	30	102	30	15
SPF35□-FE6B6-M14	35	87	13	6
SPF35□-FE15B6-M14	35	104	30	15
SPF40□-FE6B6-M14	40	87	13	6
SPF40□-FE15B6-M14	40	104	30	15
SPF50□-FE6B6-M14	50	88	13	6
SPF50□-FE15B6-M14	50	105	30	15

Model/Size	D	H	L	Buffer stroke
SPF60□-FE10LR1-M16	60	110	20	10
SPF60□-FE30LR1-M16	60	150	60	30
SPF80□-FE10LR1-M16	80	112	20	10
SPF80□-FE30LR1-M16	80	152	60	30
SPF95□-FE10LR1-M16	95	112.5	20	10
SPF95□-FE30LR1-M16	95	152.5	60	30

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF**
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPC Series

Bellows Suction Cup

AIRBEST



PACKAGING



PLASTIC



ELECTRONICS



Features

- ◇ 2.5 bellows
- ◇ Soft and tapered lips
- ◇ Available in various sizes

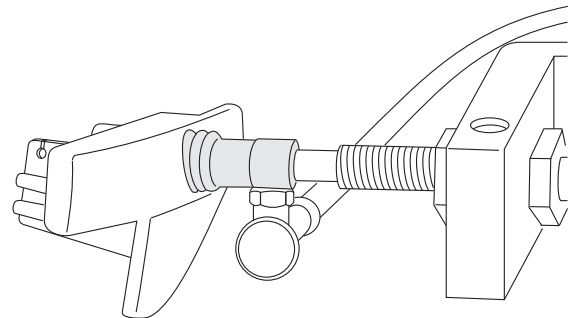
Advantages

- ◇ Large suction force, and have good buffer effect when suck workpiece with uneven surface
- ◇ Good sealing and long compressed stroke, suitable for handling workpieces with uneven surface
- ◇ Suitable for workpieces of various sizes and shapes



Applications

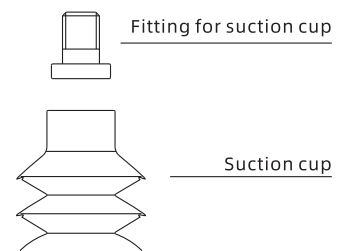
- ◇ Handling of fragile workpieces such as electronic components and injection molding parts
- ◇ Handling of workpieces with uneven surface such as paper and pipes



Structure

- ◇ 2.5 bellows, long compressed stroke
- ◇ Split structure for easy replacement of wearing parts

In the same series, suction cup and fitting can be combined as required



SPC Series

Bellows Suction Cup

How to order

SPC 15 N - M5M

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SPC	3 - ϕ 3mm 20 - ϕ 20mm	N - NBR 55	Nil - Suction cup only
	5 - ϕ 5mm 25 - ϕ 25mm	WS - White silicone 50	M5M - M5×0.8 male thread
	7 - ϕ 7mm 30 - ϕ 30mm	CN - Conductive NBR 55	M8M - M8×1.25 male thread
	10 - ϕ 10mm 40 - ϕ 40mm	CS - Conductive silicone 55	G1M - G1/8 male thread
	12 - ϕ 12mm 60 - ϕ 60mm		M3M - M3×0.5 male thread
	15 - ϕ 15mm 90 - ϕ 90mm		
	18 - ϕ 18mm		

Selection

Model	Connection thread M - Male thread
SPC3□	SPC3□-M3M
SPC5□	SPC5□-M5M
SPC7□	SPC7□-M5M
SPC10□	SPC10□-M5M
SPC12□	SPC12□-M5M
SPC15□	SPC15□-M5M
SPC18□	SPC18□-M5M

Model	Connection thread M - Male thread
SPC20□	SPC20□-M5M
SPC25□	SPC25□-M5M
SPC30□	SPC30□-M8M
SPC40□	SPC40□-M8M
SPC60□	SPC60□-M8M
SPC90□	SPC90□-G1M

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min. Curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SPC3	0.5	<0.1	4	0.2	4	10
SPC5	0.9	<0.1	7.5	0.2	4	10
SPC7	1.7	<0.1	12	0.3	4	10
SPC10	3.5	0.2	13	0.8	6	10
SPC12	5	0.4	13	1.3	6	10
SPC15	8	0.9	15	1.7	6	10
SPC18	11.5	1.5	20	1.8	6	10
SPC20	14	2	27	2.8	6	5
SPC25	22	5	30	4	6	5
SPC30	32	8.3	35	10.5	6	5
SPC40	56	16.5	60	22.5	8	5
SPC60	127	52	75	52.4	8	1
SPC90	286	135	85	152.8	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

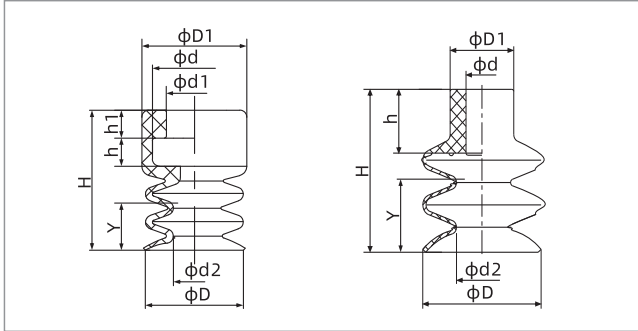
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC**
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPC Series

Bellows Suction Cup

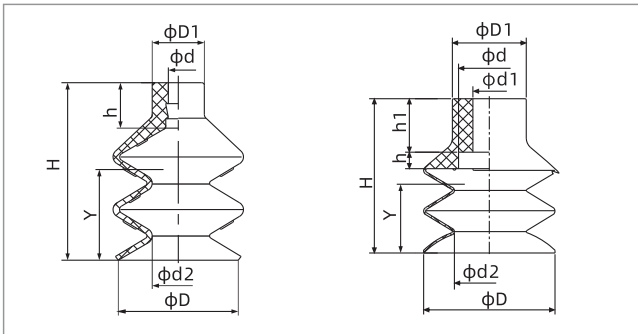


Dimensions(mm) - Suction cup only



SPC3-7

SPC10-20



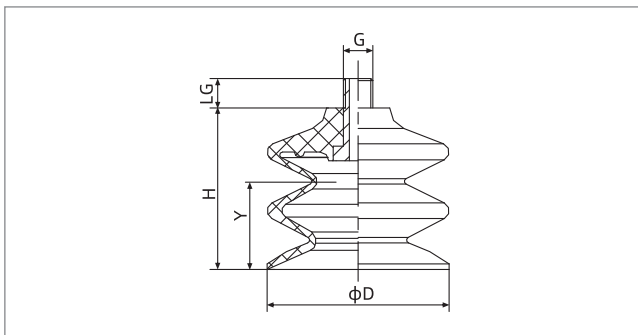
SPC12 SPC25

SPC30-90

Model/Size	D	H	D1	d	h	d1	h1	d2	Y
SPC3□	3	6	4	3	1	2	1.5	1.2	2.5
SPC5□	5	9.5	7.5	6	2	4	2	2	4
SPC7□	7	10	7.5	6	2	4	2	3	5
SPC10□	9	15	9	5	7	-	-	4	6
SPC15□	15.2	22.8	10	5	9	-	-	6	13.8
SPC18□	18.6	23	10	5	9	-	-	8	14
SPC20□	20.6	23	10	5	9	-	-	9.5	14

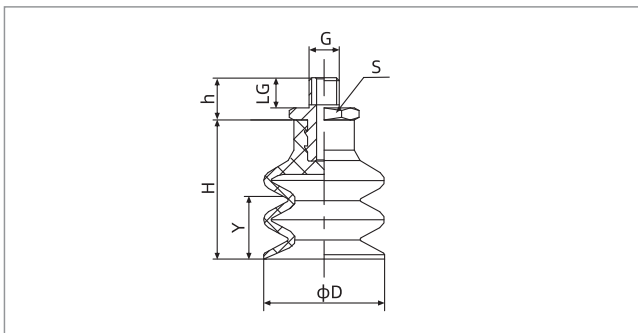
Model/Size	D	H	D1	d	h	d1	h1	d2	Y
SPC12□	13	21.6	10	3.8	8.5	-	-	5	9
SPC25□	24	34	10	3.8	8.5	-	-	10	25.5
SPC30□	32	37.5	18	15	4	8	13	17	20.5
SPC40□	42	46	20	15	4	8	13	16	29
SPC60□	62	55	21.5	15	5	8	13	29	37
SPC90□	88	87.5	25	25	6	12	20	32	61.5

Dimensions(mm) - Suction cup with fitting



SPC3-7 SPC30-90

Model/Size	D	H	G	LG	Y
SPC3□-M3M	3	6	M3×0.5	5	2.5
SPC5□-M5M	5	9.5	M5×0.8	5	4
SPC7□-M5M	7	10	M5×0.8	5	5
SPC30□-M8M	32	37.5	M8×1.25	6.5	20.5
SPC40□-M8M	42	46	M8×1.25	6.5	29
SPC60□-M8M	62	55	M8×1.25	6.5	37
SPC90□-G1M	88	87.5	G1/8	7	61.5



SPC10-25

Model/size	D	H	G	LG	h	S	Y
SPC10□-M5M	10	15	M5×0.8	5	7	10	6
SPC12□-M5M	13	21.6	M5×0.8	3.5	7.5	7	9
SPC15□-M5M	15.2	22.8	M5×0.8	5	7	8	13.8
SPC18□-M5M	18.6	23	M5×0.8	5	7	8	14
SPC20□-M5M	20.6	23	M5×0.8	5	7	8	14
SPC25□-M5M	24	34	M5×0.8	3.5	7.5	7	25.5

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SPC Series

Bellows Suction Cup

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3M-ST1	SPC3
	PJS-M5M-ST2	SPC5, 7
	PJS-M5M-SPC10	SPC10
	PJS-M5M-SPC15	SPC15, 18, 20
	PJS-M5M-SC3	SPC12, 25
	PJS-M8M-ST5	SPC30, 40, 60
	PJS-G1M-ST8	SPC90

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC**
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPC Series

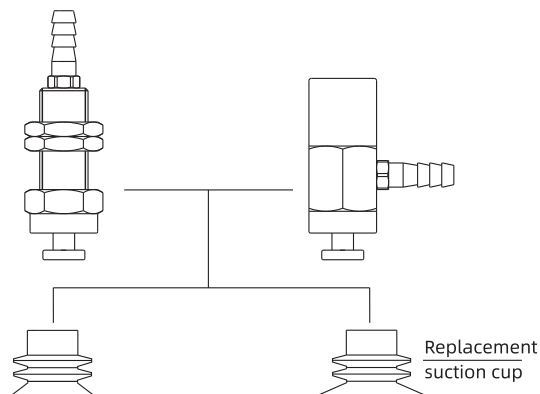
Suction Cup with Locking Fitting



Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cups of diameter 5mm-25mm
- ◇ Fitting with hexagon socket mounting hole for suction cups of diameter 30mm-60mm
- ◇ Vertical vacuum port, pagoda fitting for connection, male thread for mounting
- ◇ Lateral vacuum port, pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPC10N - L B6 - M4F
① ② ③ ④

① Model	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread
SPC10N	Nil - Vertical direction L - Lateral direction	B6 - Pagoda fitting ϕ 6 hose	M4F - M4x0.7 female thread M6F - M6x1 female thread M8M - M8x1 male thread M10M - M10x1 male thread

◇ Please refer to page 296 for suction cup selection

Selection

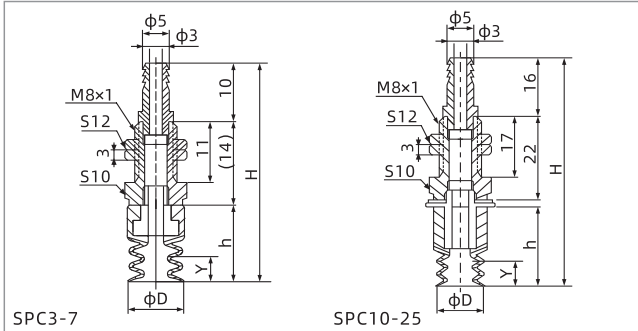
Model	Vacuum port direction Vertical-Pagoda fitting	Lateral-Pagoda fitting
SPC3□	SPC3□-B6-M8M	SPC3□-LB6-M4F
SPC5□	SPC5□-B6-M8M	SPC5□-LB6-M4F
SPC7□	SPC7□-B6-M8M	SPC7□-LB6-M4F
SPC10□	SPC10□-B6-M8M	SPC10□-LB6-M4F
SPC12□	SPC12□-B6-M8M	SPC12□-LB6-M4F
SPC15□	SPC15□-B6-M8M	SPC15□-LB6-M4F
SPC18□	SPC18□-B6-M8M	SPC18□-LB6-M4F
SPC20□	SPC20□-B6-M8M	SPC20□-LB6-M4F
SPC25□	SPC25□-B6-M8M	SPC25□-LB6-M4F
SPC30□	SPC30□-B6-M10M	SPC30□-LB6-M6F
SPC40□	SPC40□-B6-M10M	SPC40□-LB6-M6F
SPC60□	SPC60□-B6-M10M	SPC60□-LB6-M6F

SPC Series

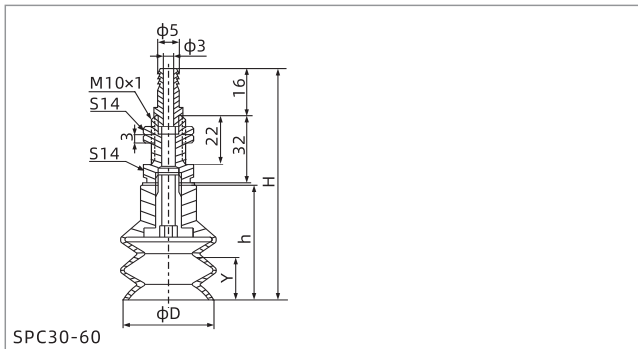
Suction Cup with Locking Fitting



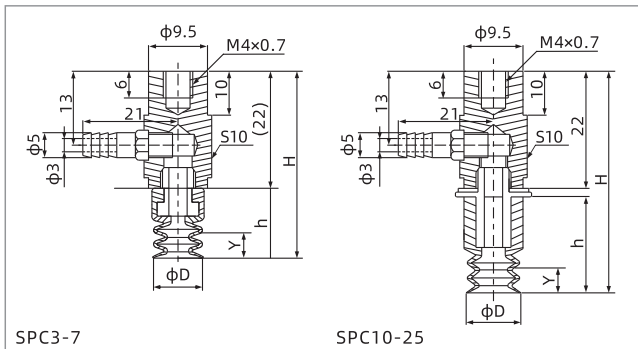
Dimensions(mm)



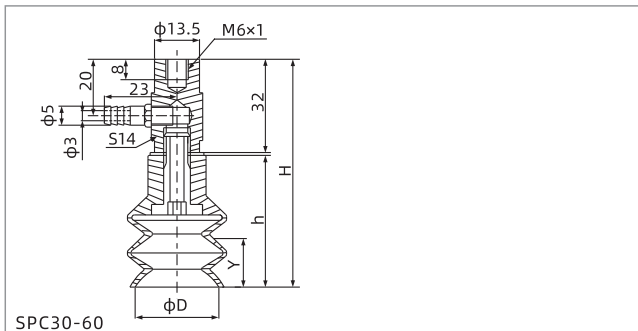
Vertical-Pagoda fitting



Vertical-Pagoda fitting



Lateral-Pagoda fitting



Lateral-Pagoda fitting

Model/Size	D	H	h	Y
SPC3□-B6-M8M	3	30	6	2.5
SPC5□-B6-M8M	5	33.5	9.5	4
SPC7□-B6-M8M	7	34	10	5
SPC10□-B6-M8M	10	55	15	6
SPC12□-B6-M8M	13	63.6	21.6	9
SPC15□-B6-M8M	15.2	62.8	22.8	13.8
SPC18□-B6-M8M	18.6	63	23	14
SPC20□-B6-M8M	20.6	63	23	14
SPC25□-B6-M8M	24	76	34	25.5

Model/Size	D	H	h	Y
SPC30□-B6-M10M	32	85.5	37.5	30.5
SPC40□-B6-M10M	42	94	46	29
SPC60□-B6-M10M	62	103	55	37

Model/Size	D	H	h	Y
SPC3□-LB6-M4F	3	28	6	2.5
SPC5□-LB6-M4F	5	31.5	9.5	4
SPC7□-LB6-M4F	7	32	10	5
SPC10□-LB6-M4F	10	39	15	6
SPC12□-LB6-M4F	13	47.6	21.6	9
SPC15□-LB6-M4F	15.2	46.8	22.8	13.8
SPC18□-LB6-M4F	18.6	47	23	14
SPC20□-LB6-M4F	20.6	47	23	14
SPC25□-LB6-M4F	24	60	34	25.5

Model/Size	D	H	h	Y
SPC30□-LB6-M6F	32	69.5	37.5	20.5
SPC40□-LB6-M6F	42	78	46	29
SPC60□-LB6-M6F	62	87	55	37

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPJ Series

Bellows Suction Cup

AIRBEST



PACKAGING



PLASTIC



Features

- ◇ 1.5 bellows
- ◇ Soft and tapered lips
- ◇ Mark free plug optional
- ◇ Available in various sizes

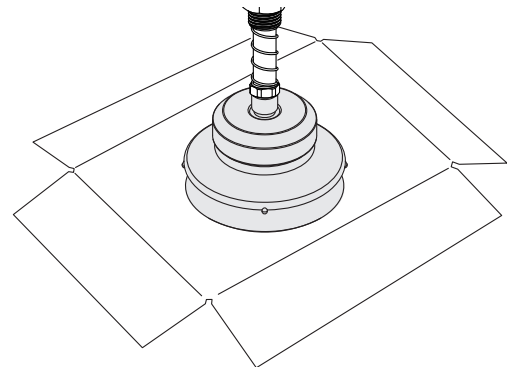
Advantages

- ◇ Compensate the height difference and good buffer when have contact with workpieces
- ◇ Good sealing for handling of workpieces with uneven surface
- ◇ Available in various sizes



Applications

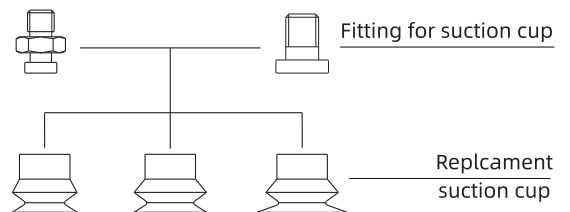
- ◇ Handling workpieces with uneven surface such as cartons, paper board and sheet, workpieces with curved surface
- ◇ Handling fragile workpieces such as electronic components and injection molding parts
- ◇ Suction cup with mark free plug is suitable for handling sensitive electronic material or display screen. It is suitable for occasions with high requirements for mark on adsorption surface



Structure

- ◇ 1.5 bellows, long compressed stroke
- ◇ Suction cups with diameter less than 50mm adopt split structure for easy replacement
- ◇ One-piece structure for suction cup with diameter 60mm-80mm

In the same series, replacement suction cup and fitting can be combined as required



SPJ Series

Bellows Suction Cup

How to order

SPJ 15 N - M5M - PK

① ② ③ ④ ⑤

① Series	② Diameter	③ Material & Hardness		④ Connection thread	⑤ Plug
SPJ	4 - φ4mm	30 - φ30mm	N - NBR	55 Nil	Nil - Suction cup only
	6 - φ6mm	35 - φ35mm	WS - White silicone	50 M3M	PK - With mark free plug
	8 - φ8mm	40 - φ40mm	CN - Conductive NBR	55 M5M	M5M - M5×0.8 male thread
	10 - φ10mm	50 - φ50mm	CS - Conductive silicone	55 M8M	M8M - M8×1.25 male thread
	15 - φ15mm	60 - φ60mm	HP - Mark free rubber	55 M10F	M10F - M10×1.25 female thread
	20 - φ20mm	70 - φ70mm			
	25 - φ25mm	80 - φ80mm			

◇ Note: HP material is not for all sizes. Please contact AIRBEST if need

Selection

Model	Connection thread M - Male thread		Model	Connection thread M - Male thread	
SPJ4□	SPJ4□-M3M		SPJ30□	SPJ30□-PK	SPJ30□-M5M SPJ30□-M5M-PK
SPJ6□	SPJ6□-M5M		SPJ35□	SPJ35□-PK	SPJ35□-M5M SPJ35□-M5M-PK
SPJ8□	SPJ8□-PK	SPJ8□-M5M SPJ8□-M5M-PK	SPJ40□	SPJ40□-PK	SPJ40□-M5M SPJ40□-M5M-PK
SPJ10□	SPJ10□-PK	SPJ10□-M5M SPJ10□-M5M-PK	SPJ50□	SPJ50□-PK	SPJ50□-M8M SPJ50□-M8M-PK
SPJ15□	SPJ15□-PK	SPJ15□-M5M SPJ15□-M5M-PK	SPJ60□		-
SPJ20□	SPJ20□-PK	SPJ20□-M5M SPJ20□-M5M-PK	SPJ70□		-
SPJ25□	SPJ25□-PK	SPJ25□-M5M SPJ25□-M5M-PK	SPJ80□		-

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Min. Curve radius of workpiece mm	Weight g	Recommended hose dia. mm	MPQ pcs
SPJ4	0.6	<0.1	4	0.1	4	10
SPJ6	1.2	<0.1	6	0.2	4	10
SPJ8	2.2	<0.1	8	0.3	4	10
SPJ10	3.5	0.2	12	0.8	4	10
SPJ15	8	0.5	20	1.0	6	10
SPJ20	15	1.1	27	1.8	6	5
SPJ25	24	2.2	40	3.0	6	5
SPJ30	32	3	55	5.3	6	5
SPJ35	43	4.5	65	8.0	6	5
SPJ40	60	6	80	10.5	6	1
SPJ50	92	11.7	95	21.0	8	1
SPJ60	127	20	125	35.6	8	1
SPJ70	173	30	150	52.5	8	1
SPJ80	226	40	140	63.0	8	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

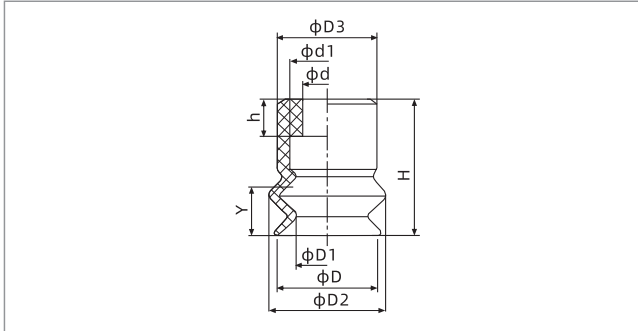
- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SGP
- SBPF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- [SPJ](#)
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPJ Series

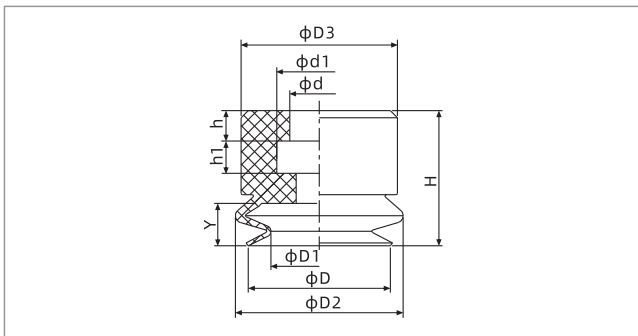
Bellows Suction Cup



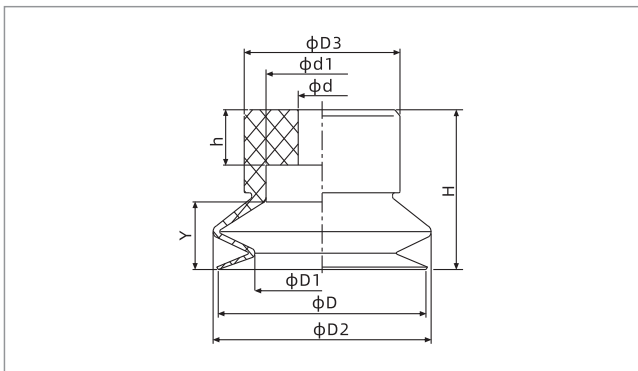
Dimensions(mm) - Suction cup only



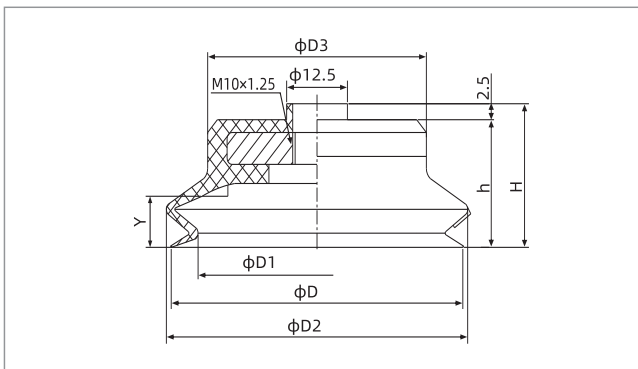
SPJ4-8



SPJ10-15



SPJ20-50



SPJ60-80

Model/Size	D	H	D1	D2	D3	d	h	d1	Y
SPJ4□	4	5.5	2.5	4.6	4	2	1.5	3	2.3
SPJ6□	6	9	3.3	7.8	7.5	4	2	6	4.2
SPJ8□	8	9	5.3	9.8	8	4	2	6	4

Model/Size	D	H	D1	D2	D3	d	h	d1	h1	Y
SPJ10□	10	9.5	6.8	11.8	11	4	2	6	2	3
SPJ15□	15	11	9.7	15.8	12	4	2	6	2	3.3

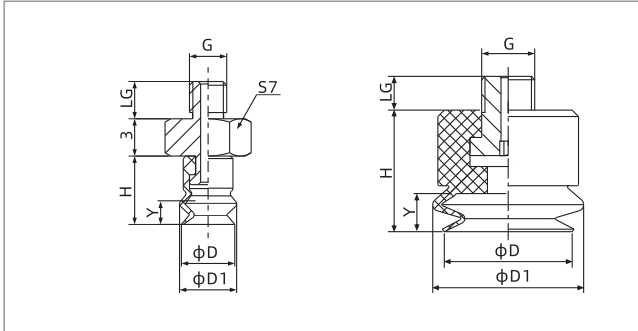
Model/Size	D	H	D1	D2	D3	d	h	d1	Y
SPJ20□	20	13	13	21	15	4.6	4.5	10.8	5.5
SPJ25□	25	15.5	14.5	26	17.5	4.6	4.5	10.8	6.5
SPJ30□	30	18	16	31	20	5.8	7	10.8	7
SPJ35□	35	18	20.5	36	25	5.8	7	10.8	7
SPJ40□	40	18	25	40	30	5.8	7	10.8	7.2
SPJ50□	50	20	32	53	40	7.8	7	19.8	9

Model/Size	D	H	h	D1	D2	D3	Y
SPJ60□-M10F	60	22.5	20	45	62	45	8
SPJ70□-M10F	70	23.5	21	52	74	55	9.5
SPJ80□-M10F	80	23.5	21	61	82	68	9.5

SPJ Series

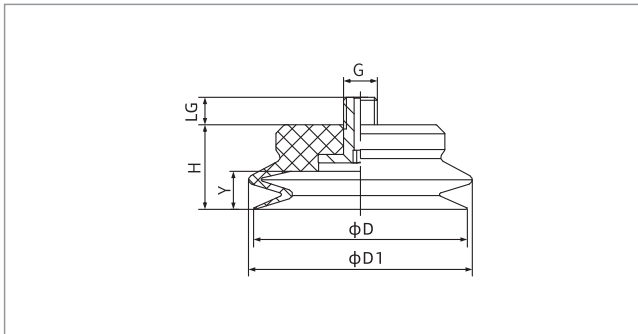
Bellows Suction Cup

Dimensions(mm)



SPJ4

SPJ6-15



SPJ20-50

Model/Size	D	H	D1	G	LG	Y
SPJ4□-M3M	4	5.5	4.6	M3×0.5	3.5	2.3
SPJ6□-M5M	6	9	7.8	M5×0.8	4.5	4.2
SPJ8□-M5M	8	9	9.8	M5×0.8	4.5	4
SPJ10□-M5M	10	9.5	11.8	M5×0.8	4.5	3
SPJ15□-M5M	15	11	15.8	M5×0.8	4.5	3.3

Model/Size	D	H	D1	G	LG	Y
SPJ20□-M5M	20	13	21	M5×0.8	5	5.5
SPJ25□-M5M	25	15.5	26	M5×0.8	5	6.5
SPJ30□-M5M	30	18	31	M5×0.8	5	7
SPJ35□-M5M	35	18	36	M5×0.8	5	7
SPJ40□-M5M	40	18	40	M5×0.8	5	7.2
SPJ50□-M8M	50	20	53	M8×1.25	6.5	9

◇ Note: The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Mounting parts

Item	Model M - Male thread	Applicable suction cup
Fitting for suction cup	PJS-M3M-ST1	SPJ4
	PJS-M5M-ST2	SPJ6, 8, 10, 15
	PJS-M5M-ST3	SPJ20, 25
	PJS-M5M-ST4	SPJ30, 35, 40
	PJS-M8M-ST6	SPJ50

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOE
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ**
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPJ Series

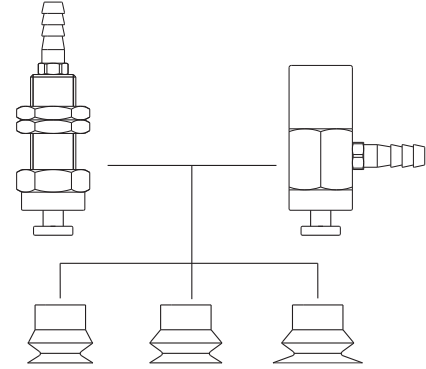
Suction Cup with Locking Fitting



Structure

- ◇ Consisting of replacement suction cup and locking fitting
- ◇ Plug-in fitting for suction cups
- ◇ Vertical vacuum port, pagoda fitting or one-touch fitting for connection, male thread for mounting
- ◇ Lateral vacuum port, pagoda fitting for connection, female thread for mounting

In the same series, replacement suction cup and locking fitting can be combined as required



How to order

SPJ10N - L B6 - M4F

① ② ③ ④

① Series	② Vacuum port direction	③ Vacuum port connection	④ Mounting thread	
SPJ10N	Nil - Vertical	B6 - Pagoda fitting $\phi 6$ hose	M4F - M4x0.7 female thread	M8M - M8x1 male thread
	L - Lateral	R1 - Rc1/8 female thread	M6F - M6x1 female thread	M10M - M10x1 male thread
			M8F - M8x1.25 female thread	M16M - M16x1.5 male thread

◇ Please refer to page 302 for suction cup selection

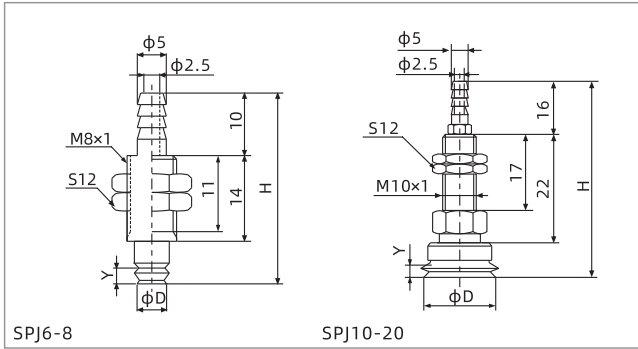
Selection

Model	Vacuum port direction Vertical-Pagoda fitting	Lateral-Pagoda fitting
SPJ6□	SPJ6□-B6-M8M	SPJ6□-LB6-M4F
SPJ8□	SPJ8□-B6-M8M	SPJ8□-LB6-M4F
SPJ10□	SPJ10□-B6-M8M	SPJ10□-LB6-M4F
SPJ15□	SPJ15□-B6-M8M	SPJ15□-LB6-M4F
SPJ20□	SPJ20□-B6-M8M	SPJ20□-LB6-M4F
SPJ25□	SPJ25□-B6-M10M	SPJ25□-LB6-M6F
SPJ30□	SPJ30□-B6-M10M	SPJ30□-LB6-M6F
SPJ35□	SPJ35□-B6-M10M	SPJ35□-LB6-M6F
SPJ40□	SPJ40□-B6-M10M	SPJ40□-LB6-M6F
SPJ50□	SPJ50□-B6-M10M	SPJ50□-LB6-M6F
SPJ60□	SPJ60□-R1-M16M	SPJ60□-LR1-M8F
SPJ70□	SPJ70□-R1-M16M	SPJ70□-LR1-M8F
SPJ80□	SPJ80□-R1-M16M	SPJ80□-LR1-M8F

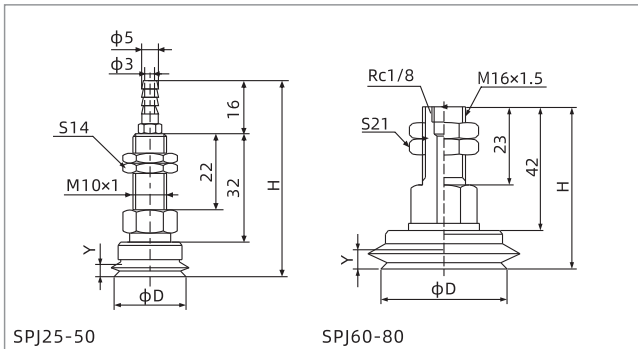
SPJ Series

Suction Cup with Locking Fitting

Dimensions(mm)

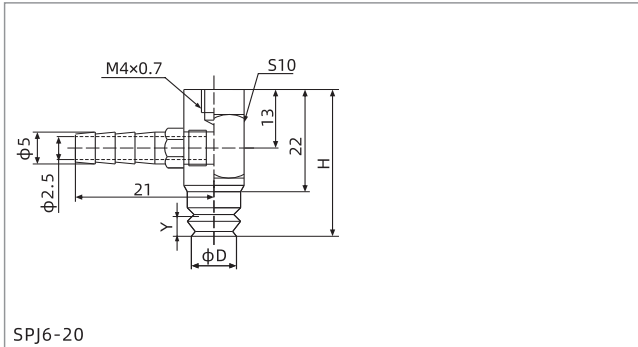


Vertical-Pagoda fitting

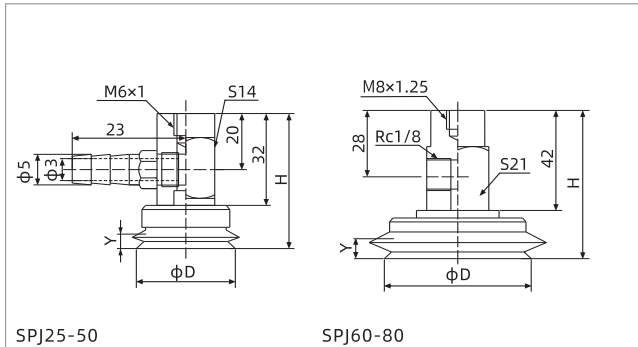


Vertical-Pagoda fitting

Vertical-Female thread connection



Lateral-Pagoda fitting



Lateral-Pagoda fitting

Lateral-Female thread connection

Model/Size	D	H	Y
SPJ6□-B6-M8M	6	33	4.2
SPJ8□-B6-M8M	8	33	4
SPJ10□-B6-M8M	10	47.5	3
SPJ15□-B6-M8M	15	49	3.3
SPJ20□-B6-M8M	20	51	5.5

Model/Size	D	H	Y
SPJ25□-B6-M10M	25	63.5	6.5
SPJ30□-B6-M10M	30	66	7
SPJ35□-B6-M10M	35	66	7
SPJ40□-B6-M10M	40	66	7.2
SPJ50□-B6-M10M	50	68	9
SPJ60□-R1-M16M	60	62	8
SPJ70□-R1-M16M	70	63	9.5
SPJ80□-R1-M16M	80	63	9.5

Model/Size	D	H	Y
SPJ6□-LB6-M4F	6	31	4.2
SPJ8□-LB6-M4F	8	31	4
SPJ10□-LB6-M4F	10	31.5	3
SPJ15□-LB6-M4F	15	33	3.3
SPJ20□-LB6-M4F	20	35	5.5

Model/Size	D	H	Y
SPJ25□-LB6-M6F	25	47.5	6.5
SPJ30□-LB6-M6F	30	50	7
SPJ35□-LB6-M6F	35	50	7
SPJ40□-LB6-M6F	40	50	7.2
SPJ50□-LB6-M6F	50	52	9
SPJ60□-LR1-M8F	60	62	8
SPJ70□-LR1-M8F	70	63	9.5
SPJ80□-LR1-M8F	80	63	9.5

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ**
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SPJ Series

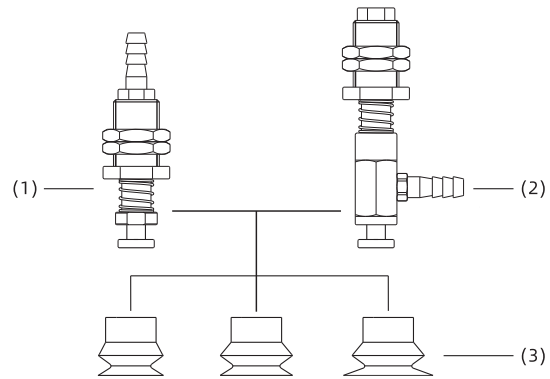
Suction Cup with Level Compensator



Structure

- ◇ Consisting of replacement suction cup(3) and level compensator
- ◇ Plug-in fitting for suction cup
- ◇ Vertical vacuum port(1), male thread for mounting
- ◇ Lateral vacuum port(2), male thread for mounting

In the same series, replacement suction cup and level compensator can be combined as required



How to order

SPJ10N - F E 10 LB6 - M11

① ② ③ ④ ⑤ ⑥

① Model	② Level compensator type	③ Buffer type	④ Buffer stroke	⑤ Vacuum port connection	⑥ Mounting thread
SPJ10N	F - PSPF Series	E - External spring	3 10 4 15 6 30	B6 - Vertical, Pagoda fitting φ6 hose LB6 - Lateral, Pagoda fitting φ6 hose LR1 - Lateral, Rc1/8 Female thread	M9 - M9×1 M11 - M11×1 M14 - M14×1 M16 - M16×1.5

Selection

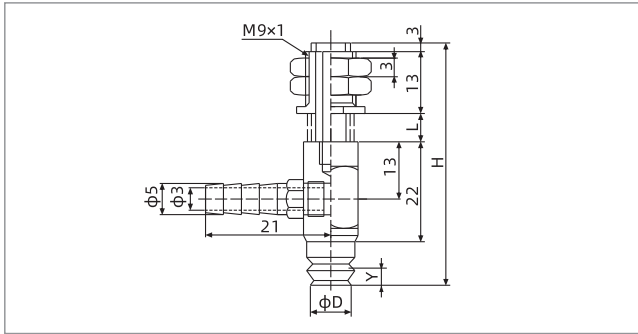
Model	Vacuum port direction Vertical-Pagoda fitting		Lateral-Pagoda fitting	
SPJ6□	SPJ6□-FE3B6-M9	SPJ6□-FE10B6-M9	SPJ6□-FE3LB6-M9	SPJ6□-FE10LB6-M9
SPJ8□	SPJ8□-FE3B6-M9	SPJ8□-FE10B6-M9	SPJ8□-FE3LB6-M9	SPJ8□-FE10LB6-M9
SPJ10□	SPJ10□-FE4B6-M11	SPJ10□-FE10B6-M11	SPJ10□-FE4LB6-M11	SPJ10□-FE10LB6-M11
SPJ15□	SPJ15□-FE4B6-M11	SPJ15□-FE10B6-M11	SPJ15□-FE4LB6-M11	SPJ15□-FE10LB6-M11
SPJ20□	SPJ20□-FE4B6-M11	SPJ20□-FE10B6-M11	SPJ20□-FE4LB6-M11	SPJ20□-FE10LB6-M11
SPJ25□	SPJ25□-FE6B6-M14	SPJ25□-FE15B6-M14	SPJ25□-FE6LB6-M14	SPJ25□-FE15LB6-M14
SPJ30□	SPJ30□-FE6B6-M14	SPJ30□-FE15B6-M14	SPJ30□-FE6LB6-M14	SPJ30□-FE15LB6-M14
SPJ35□	SPJ35□-FE6B6-M14	SPJ35□-FE15B6-M14	SPJ35□-FE6LB6-M14	SPJ35□-FE15LB6-M14
SPJ40□	SPJ40□-FE6B6-M14	SPJ40□-FE15B6-M14	SPJ40□-FE6LB6-M14	SPJ40□-FE15LB6-M14
SPJ50□	SPJ50□-FE6B6-M14	SPJ50□-FE15B6-M14	SPJ50□-FE6LB6-M14	SPJ50□-FE15LB6-M14
SPJ60□	-	-	SPJ60□-FE10LR1-M16	SPJ60□-FE30LB6-M16
SPJ70□	-	-	SPJ70□-FE10LR1-M16	SPJ70□-FE30LB6-M16
SPJ80□	-	-	SPJ80□-FE10LR1-M16	SPJ80□-FE30LB6-M16

SPJ Series

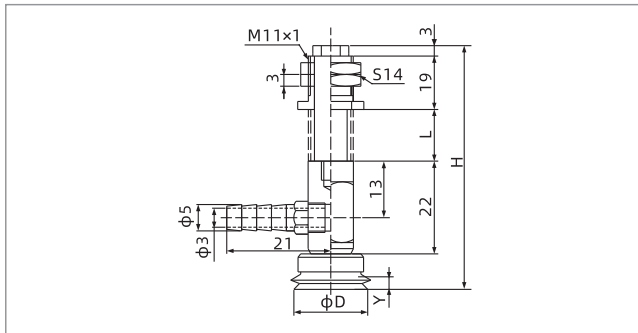
Suction Cup with Level Compensator



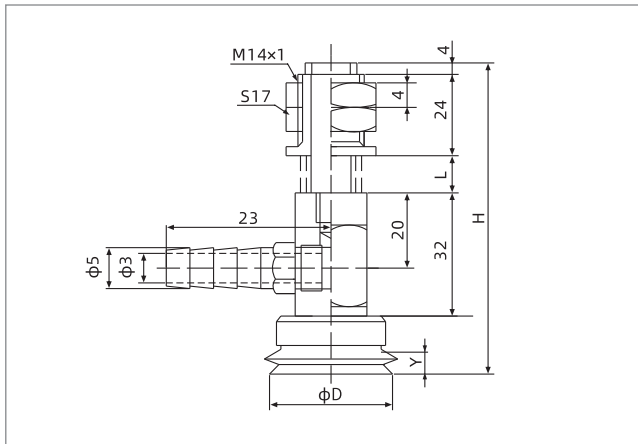
Dimensions(mm)



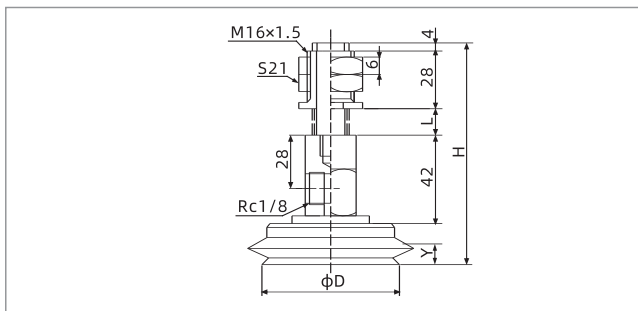
SPJ6-8 Lateral-Pagoda fitting



SPJ10-20 Lateral-Pagoda fitting



SPJ25-50 Lateral-Pagoda fitting



SPJ60-80 Lateral-Female thread connection

Model/Size	D	H	L	Y	Buffer stroke
SPJ6□-FE3LB6-M9	6	53	6	4.2	3
SPJ6□-FE10LB6-M9	6	67	20	4.2	10
SPJ8□-FE3LB6-M9	8	53	6	4	3
SPJ8□-FE10LB6-M9	8	67	20	4	10

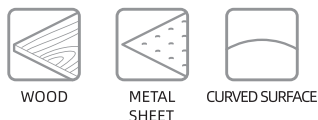
Model/Size	D	H	L	Y	Buffer stroke
SPJ10□-FE4LB6-M11	10	61.5	8	3	4
SPJ10□-FE10LB6-M11	10	73.5	20	3	10
SPJ15□-FE4LB6-M11	15	63	8	3.3	4
SPJ15□-FE10LB6-M11	15	75	20	3.3	10
SPJ20□-FE4LB6-M11	20	65	8	5.5	4
SPJ20□-FE10LB6-M11	20	77	20	5.5	10

Model/Size	D	H	L	Y	Buffer stroke
SPJ25□-FE6LB6-M14	25	88.5	13	6.5	6
SPJ25□-FE15LB6-M14	25	105.5	30	6.5	15
SPJ30□-FE6LB6-M14	30	91	13	7	6
SPJ30□-FE15LB6-M14	30	108	30	7	15
SPJ35□-FE6LB6-M14	35	91	13	7	6
SPJ35□-FE15LB6-M14	35	108	30	7	15
SPJ40□-FE6LB6-M14	40	91	13	7.2	6
SPJ40□-FE15LB6-M14	40	108	30	7.2	15
SPJ50□-FE6LB6-M14	50	93	13	9	6
SPJ50□-FE15LB6-M14	50	110	30	9	15

Model/size	D	H	L	Y	Buffer stroke
SPJ60□-FE10LR1-M16	10	61.5	8	8	10
SPJ60□-FE30LR1-M16	10	73.5	20	8	30
SPJ70□-FE10LR1-M16	15	63	8	9.5	10
SPJ70□-FE30LR1-M16	15	75	20	9.5	30
SPJ80□-FE10LR1-M16	20	65	8	9.5	10
SPJ80□-FE30LR1-M16	20	77	20	9.5	30

SPU Series

Swivel Flat Suction Cup



Suction Cup

Features

- ◇ With support structure at the bottom
- ◇ Small inner volume
- ◇ Available in various sizes

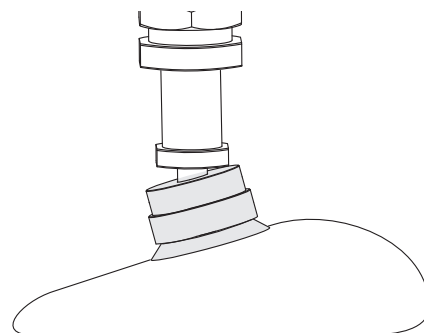
Advantages

- ◇ Be able to prevent thin walled workpieces from permanent deformation
- ◇ Suitable for workpieces of various sizes and shapes



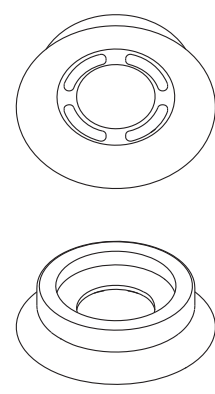
Applications

- ◇ Suitable for handling of workpieces with inclined surface. Its mounting inner cavity is large and it can be connected with swivel joint
- ◇ Suitable for handling sheet metal or wood plate. During handling process, when it is depressed in the middle or dooping at both ends, suction cup with swivel joint can have good contact with workpiece and prevent workpiece from falling off



Structure

- ◇ Split structure design for easy replacement of wearing parts



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ**
- SPU**
- SH
- SHB
- SBB
- SOP
- SNP

SPU Series

Swivel Flat Suction Cup



How to order

SPU 30 N

① ② ③

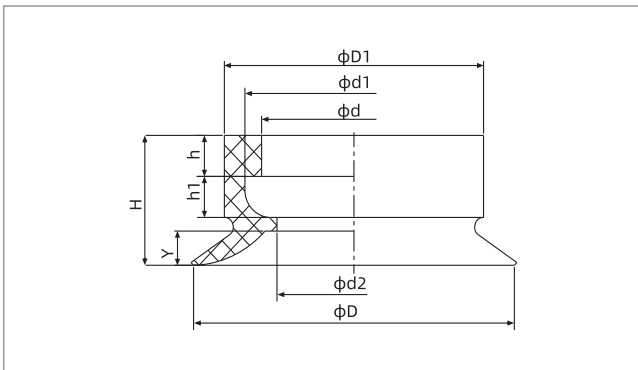
① Series	② Diameter		③ Material & Hardness	
SPU	10 - ϕ 10mm	40 - ϕ 40mm	N - NBR	55
	15 - ϕ 15mm	50 - ϕ 50mm	WS - White silicone	50
	20 - ϕ 20mm	60 - ϕ 60mm		
	25 - ϕ 25mm	80 - ϕ 80mm		
	30 - ϕ 30mm	100 - ϕ 100mm		
	35 - ϕ 35mm			

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SPU10	3.5	< 0.1	0.2	4	10
SPU15	8	0.2	0.3	6	10
SPU20	15	0.5	1.3	6	5
SPU25	24	1.1	1.5	6	5
SPU30	32	1	1.9	6	5
SPU35	43	2.4	2.5	6	5
SPU40	60	3.4	3.8	6	1
SPU50	92	5.7	5.1	8	1
SPU60	127	11	12.4	8	1
SPU80	226	25.3	24.2	8	1
SPU100	355	38	40.2	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



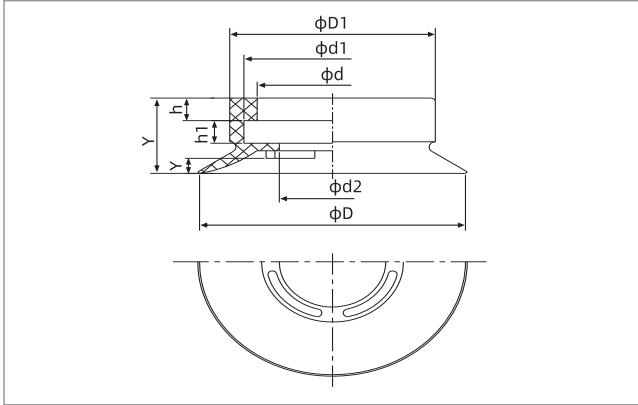
Model/Size	D	H	D1	d	h	d1	h1	d2	γ
SPU10□	10	3.5	10.5	6.5	1.5	8	0.5	4	1
SPU15□	15	4.5	10.5	6.5	1.5	8	0.5	4	1.4
SPU20□	20	9	20.2	14.4	3	17	3	12	2
SPU25□	25	9.5	20.2	14.4	3	17	3	12	2.5

SPU10-25

SPU Series

Swivel Flat Suction Cup

Dimensions(mm)



SPU30-100

◇ Note: The dimensional tolerance conforms to GB/T 3672.1-2002-1 M3 rubber product dimensional tolerance standard

Model/Size	D	H	D1	d	h	d1	h1	d2	Y
SPU30□	30	10	23.2	17	3	20	3	12	2
SPU35□	35	11	23.2	17	3	20	3	12	3
SPU40□	40	10.5	32.2	24.5	3.5	28	2	16	3
SPU50□	50	11.5	32.2	24.5	3.5	28	2	16	4
SPU60□	60	16.2	46.2	38.5	5.2	42	3	10	5
SPU80□	80	18.2	60.2	49	5.2	54	3	10	6
SPU100□	100	18.2	78.2	66	5.2	72	3	10	6

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

SXP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

SNP

SH Series

Heavy Load Flat Suction Cup

AIRBEST

RoHS



METAL SHEET



WOOD



HEAVY LOAD

Features

- ◇ Large area support structure at the bottom
- ◇ Flat and short compressed stroke
- ◇ Split structure design
- ◇ Available in various sizes

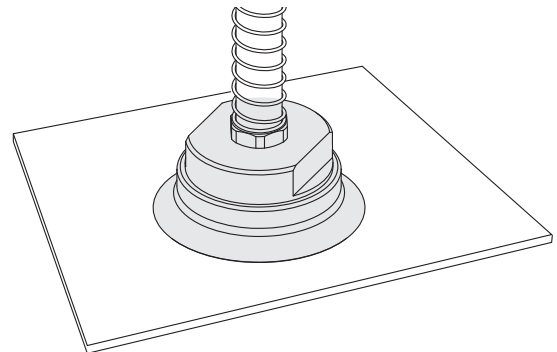
Advantages

- ◇ Be able to prevent permanent deformation of workpieces
- ◇ Handling of workpieces with flat surface and short working cycle
- ◇ Wearing parts can be replaced, and suction cup can be recycled to highly reduce cost
- ◇ Suitable for various workpieces

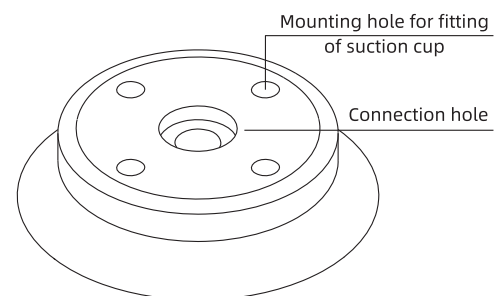


Applications

- ◇ Handling of large workpieces with flat or slightly rough surface, such as wood boards, steel plates and heavy workpieces



Structure



SH Series

Heavy Load Flat Suction Cup

How to order

SH 40 N

① ② ③

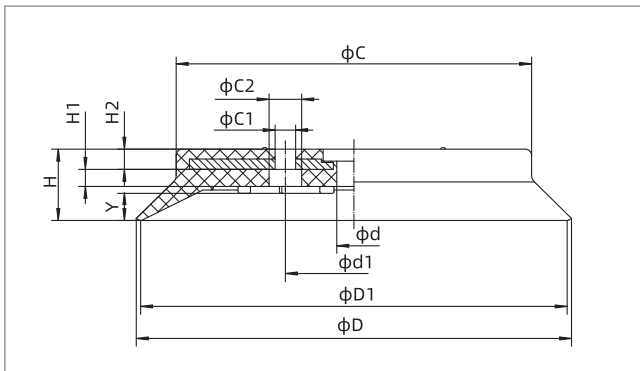
① Series	② Diameter	③ Material & Hardness
SH	40 - ϕ 40mm	80 - ϕ 80mm
	50 - ϕ 50mm	100 - ϕ 100mm
	63 - ϕ 63mm	125 - ϕ 125mm
		N - NBR 55 WS - White silicone 50

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SH40	56	4	13.5	8	1
SH50	88	6.9	25.1	8	1
SH63	140	11.5	47.9	8	1
SH80	226	24	75.4	8	1
SH100	353	55	149.7	10	1
SH125	552	85	263.6	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SH40-125

Model/Size	D	D1	d	d1	H	H1	H2	C	C1	C2	Y
SH40□	42	40	6	18	11.5	3.5	3.5	32	3- ϕ 4	3- ϕ 6.5	3.5
SH50□	52	50	6	18	11.5	3.5	3.5	42	3- ϕ 4	3- ϕ 6.5	3.5
SH63□	65	63	8	34	14.5	4.5	4.5	51	4- ϕ 5	4- ϕ 8	3.5
SH80□	82	80	8	34	16.5	4.5	4.5	68	4- ϕ 5	4- ϕ 8	4.5
SH100□	103	100	10	40	21	5	6	80	4- ϕ 6	4- ϕ 9.5	7.5
SH125□	127	125	10	40	21	5	6	104	4- ϕ 6	4- ϕ 9.5	7.5

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SH Series

Suction Cup with Locking Fitting



Structure

- ◇ Consisting of suction cup and locking fitting, 3 types of connection
- ◇ FIG.1: Vertical vacuum port, female thread connection
- ◇ FIG.2: Vertical vacuum port, male thread connection
- ◇ FIG.3: Lateral vacuum port, female thread connection



How to order

SH50N - LR1 - M10F

① ② ③

① Model	② Vacuum port direction	③ Connection thread
SH50N	Nil - Vertical, female thread connection R1 - Vertical, male thread connection LR1 - Lateral, female thread connection	M10F - M10×1.5 female thread M12F - M12×1.75 female thread G2F - G1/4 female thread G3F - G3/8 female thread M14M - M14×1 male thread M16M - M16×1.5 male thread

◇ Please refer to page 314 for suction cup selection

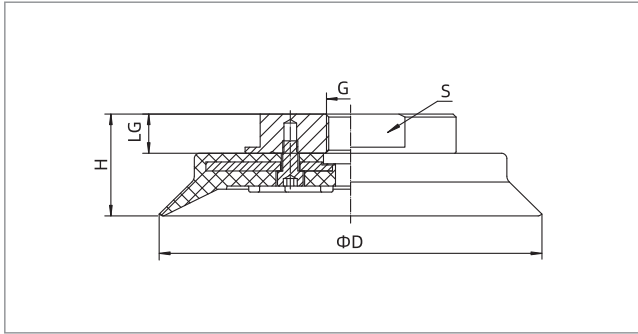
Selection

Model	Vacuum port direction		R1	LR1
	Nil			
SH40□	SH40□-M10F	SH40□-G2F	SH40□-R1-M14M	SH40□-LR1-M10F
SH50□	SH50□-M10F	SH50□-G2F	SH50□-R1-M14M	SH50□-LR1-M10F
SH63□	SH63□-M10F	SH63□-G2F	SH63□-R1-M16M	SH63□-LR1-M10F
SH80□	SH80□-M10F	SH80□-G2F	SH80□-R1-M16M	SH80□-LR1-M10F
SH100□	SH100□-M12F	SH100□-G3F	SH100□-R1-M16M	SH100□-LR1-M10F
SH125□	SH125□-M12F	SH125□-G3F	SH125□-R1-M16M	SH125□-LR1-M10F

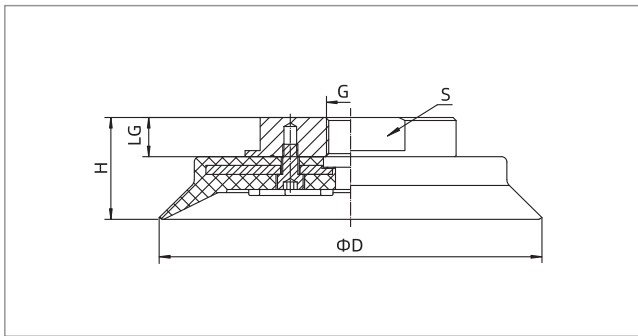
SH Series

Suction Cup with Locking Fitting

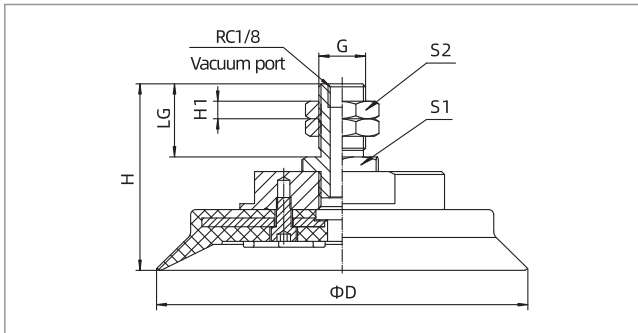
Dimensions(mm)



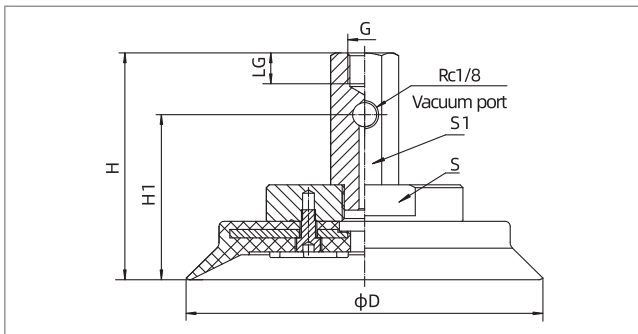
SH40-125 Vertical, female thread connection



SH40-125 Vertical, female thread connection



SH40-125 Vertical, male thread connection



SH40-125 Lateral, female thread connection

Model/Size	D	H	G	LG	S
SH40□-G2F	42	23	G1/4	11.5	24
SH50□-G2F	52	23	G1/4	11.5	24
SH63□-G2F	65	26	G1/4	11.5	37
SH80□-G2F	82	28	G1/4	11.5	37
SH100□-G3F	103	34	G3/8	13	60
SH125□-G3F	127	34	G3/8	13	60

Model/Size	D	H	G	LG	S
SH40□-M10F	42	23	M10×1.5	11.5	24
SH50□-M10F	52	23	M10×1.5	11.5	24
SH63□-M10F	65	26	M10×1.5	11.5	37
SH80□-M10F	82	28	M10×1.5	11.5	37
SH100□-M12F	103	34	M12×1.75	13	60
SH125□-M12F	127	34	M12×1.75	13	60

Model/Size	D	H	H1	G	LG	S1	S2
SH40□-R1-M14M	42	53	5	M14×1	25	19	19
SH50□-R1-M16M	52	53	5	M14×1	25	19	19
SH63□-R1-M16M	65	56	6	M16×1.5	25	24	22
SH80□-R1-M16M	82	58	6	M16×1.5	25	24	22
SH100□-R1-M16M	103	64	6	M16×1.5	25	24	22
SH125□-R1-M16M	127	64	6	M16×1.5	25	24	22

Model/Size	D	H	H1	G	LG	S1	S2
SH40□-LR1-M10F	42	60	38	M10×1.5	11	24	21
SH50□-LR1-M10F	52	60	38	M10×1.5	11	24	21
SH63□-LR1-M10F	65	63	41	M10×1.5	11	37	21
SH80□-LR1-M10F	82	65	43	M10×1.5	11	37	21
SH100□-LR1-M10F	103	71	49	M10×1.5	11	60	21
SH125□-LR1-M10F	127	71	49	M10×1.5	11	60	21

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SH Series

Suction Cup with Level Compensator



Structure

- ◇ Consisting of suction cup and level compensator, 2 types of vacuum connection
- ◇ External spring and 2pcs mounting nuts
- ◇ Vacuum port connection: Rc1/8 female thread
- ◇ FIG.1 vertical vacuum port, FIG.2 lateral vacuum port



FIG.1

FIG.2

How to order

SH50N - E 25 LR1 - M18

① ② ③ ④ ⑤

① Model	② Buffer type	③ Buffer stroke	④ Vacuum port direction	⑤ Mounting thread
SH50N	E - External spring	25	Nil - Vertical	M18 - M18×1.5
		50	LR1 - Lateral	M22 - M22×1.5
		75		
		100		

◇ Please refer to page 314 for suction cup selection

Selection-Vertical direction

Model	Buffer stroke			
	25	50	75	100
SH40□	SH40□-E25-M18	SH40□-E50-M18	SH40□-E75-M18	-
SH50□	SH50□-E25-M18	SH50□-E50-M18	SH50□-E75-M18	-
SH63□	SH63□-E25-M18	SH63□-E50-M18	SH63□-E75-M18	-
SH80□	SH80□-E25-M18	SH80□-E50-M18	SH80□-E75-M18	-
SH100□	SH100□-E25-M22	SH100□-E50-M22	SH100□-E75-M22	SH100□-E100-M22
SH125□	SH125□-E25-M22	SH125□-E50-M22	SH125□-E75-M22	SH125□-E100-M22

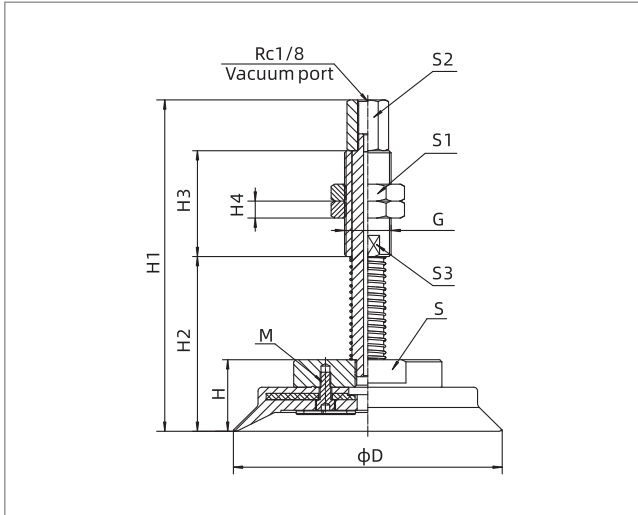
Selection-Lateral direction

Model	Buffer stroke			
	25	50	75	100
SH40□	SH40□-E25LR1-M18	SH40□-E50LR1-M18	SH40□-E75LR1-M18	-
SH50□	SH50□-E25LR1-M18	SH50□-E50LR1-M18	SH50□-E75LR1-M18	-
SH63□	SH63□-E25LR1-M18	SH63□-E50LR1-M18	SH63□-E75LR1-M18	-
SH80□	SH80□-E25LR1-M18	SH80□-E50LR1-M18	SH80□-E75LR1-M18	-
SH100□	SH100□-E25LR1-M22	SH100□-E50LR1-M22	SH100□-E75LR1-M22	SH100□-E100LR1-M22
SH125□	SH125□-E25LR1-M22	SH125□-E50LR1-M22	SH125□-E75LR1-M22	SH125□-E100LR1-M22

SH Series

Suction Cup with Level Compensator

Dimensions(mm)



SH40-125 Vertical direction

Model/Size	D	H	H1	H2	H3	H4	G	M	S	S1	S2	S3
SH40□-E25-M18	42	23	118.5	63	35	6	M18×1.5	3-M3	24	27	14	16
SH40□-E50-M18	42	23	153.5	98	35	6	M18×1.5	3-M3	24	27	14	16
SH40□-E75-M18	42	23	189.5	134	35	6	M18×1.5	3-M3	24	27	14	16
SH50□-E25-M18	52	23	118.5	63	35	6	M18×1.5	3-M3	24	27	14	16
SH50□-E50-M18	52	23	153.5	98	35	6	M18×1.5	3-M3	24	27	14	16
SH50□-E75-M18	52	23	189.5	134	35	6	M18×1.5	3-M3	24	27	14	16
SH63□-E25-M18	65	26	121.5	66	35	6	M18×1.5	4-M4	37	27	14	16
SH63□-E50-M18	65	26	156.5	101	35	6	M18×1.5	4-M4	37	27	14	16
SH63□-E75-M18	65	26	192.5	137	35	6	M18×1.5	4-M4	37	27	14	16
SH80□-E25-M18	82	28	123.5	68	35	6	M18×1.5	4-M4	37	27	14	16
SH80□-E50-M18	82	28	158.5	103	35	6	M18×1.5	4-M4	37	27	14	16
SH80□-E75-M18	82	28	194.5	139	35	6	M18×1.5	4-M4	37	27	14	16
SH100□-E25-M22	103	34	152	78	50	8	M22×1.5	4-M5	60	30	17	19
SH100□-E50-M22	103	34	188	114	50	8	M22×1.5	4-M5	60	30	17	19
SH100□-E75-M22	103	34	228	154	50	8	M22×1.5	4-M5	60	30	17	19
SH100□-E100-M22	103	34	263	189	50	8	M22×1.5	4-M5	60	30	17	19
SH125□-E25-M22	127	34	152	78	50	8	M22×1.5	4-M5	60	30	17	19
SH125□-E50-M22	127	34	188	114	50	8	M22×1.5	4-M5	60	30	17	19
SH125□-E75-M22	127	34	228	154	50	8	M22×1.5	4-M5	60	30	17	19
SH125□-E100-M22	127	34	263	189	50	8	M22×1.5	4-M5	60	30	17	19

SZ

SP3

SUF

SAN

SAO

SOFA

STP

SFT

SFA

SBL

SBLP

SBS

SFP

SBP

XP

SGP

SBOF

STC

SFF

SOB

SOF

SOG

SFM

SOM

SBF

SDM

SFU

SFK

SHT

SDL

SFG

SFD

SB

SBA

SF

SU

SPA

SPF

SPC

SPJ

SPU

SH

SHB

SBB

SOP

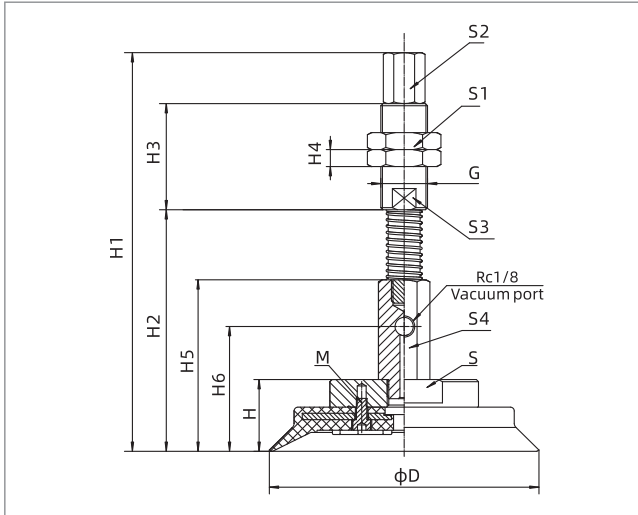
SNP

SH Series

Suction Cup with Level Compensator



Dimensions(mm)



SH40-125 Lateral direction

Model/Size	D	H	H1	H2	H3	H4	H5	H6	G	M	S	S1	S2	S3	S4
SH40□-E25LR1-M18	42	23	151	100	35	6	60	38	M18×1.5	3-M3	24	27	14	16	21
SH40□-E50LR1-M18	42	23	186	135	35	6	60	38	M18×1.5	3-M3	24	27	14	16	21
SH40□-E75LR1-M18	42	23	222	171	35	6	60	38	M18×1.5	3-M3	24	27	14	16	21
SH50□-E25LR1-M18	52	23	151	100	35	6	60	38	M18×1.5	3-M3	24	27	14	16	21
SH50□-E50LR1-M18	52	23	186	135	35	6	60	38	M18×1.5	3-M3	24	27	14	16	21
SH50□-E75LR1-M18	52	23	222	171	35	6	60	38	M18×1.5	3-M3	24	27	14	16	21
SH63□-E25LR1-M18	65	26	154	103	35	6	63	41	M18×1.5	4-M4	37	27	14	16	21
SH63□-E50LR1-M18	65	26	189	136	35	6	63	41	M18×1.5	4-M4	37	27	14	16	21
SH63□-E75LR1-M18	65	26	225	172	35	6	63	41	M18×1.5	4-M4	37	27	14	16	21
SH80□-E25LR1-M18	82	28	156	105	35	6	63	41	M18×1.5	4-M4	37	27	14	16	21
SH80□-E50LR1-M18	82	28	191	138	35	6	63	41	M18×1.5	4-M4	37	27	14	16	21
SH80□-E75LR1-M18	82	28	227	174	35	6	63	41	M18×1.5	4-M4	37	27	14	16	21
SH100□-E25LR1-M22	103	34	186	115	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH100□-E50LR1-M22	103	34	222	151	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH100□-E75LR1-M22	103	34	262	191	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH100□-E100LR1-M22	103	34	297	226	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH125□-E25LR1-M22	127	34	186	115	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH125□-E50LR1-M22	127	34	222	151	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH125□-E75LR1-M22	127	34	262	191	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21
SH125□-E100LR1-M22	127	34	297	226	50	8	71	49	M22×1.5	4-M5	60	30	17	19	21

SHB Series

Heavy Load Bellows Suction Cup



METAL SHEET



WOOD



HEAVY LOAD



CURVED SURFACE

Features

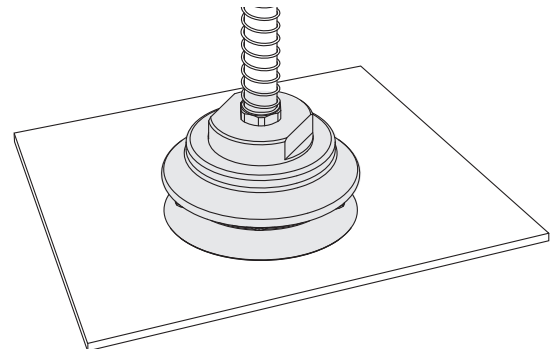
- ◇ 1.5 bellows
- ◇ Split structure design
- ◇ Available in various sizes

Advantages

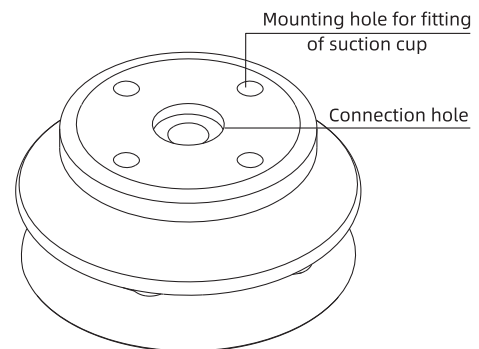
- ◇ Contacting perfectly with unven surface of workpieces and good buffering
- ◇ Wearing parts can be replaced, and suction cup can be recycled to highly reduce cost
- ◇ Suitable for workpieces of various sizes and shapes

Applications

- ◇ Handling of large workpieces with unven and irregular surface, such as wood boards, steel plates and heavy workpieces



Structure



Suction Cup

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH**
- SHB**
- SBB
- SOP
- SNP

SHB Series

Heavy Load Bellows Suction Cup



How to order

SHB 40 N

① ② ③

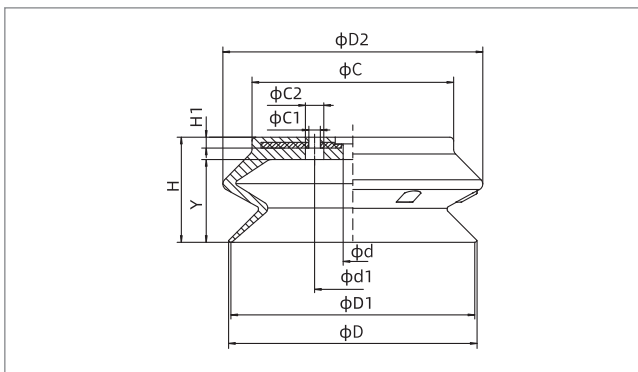
① Series	② Diameter		③ Material & Hardness	
SHB	40 - ϕ 40mm	80 - ϕ 80mm	N - NBR	55
	50 - ϕ 50mm	100 - ϕ 100mm	WS - White silicone	50
	63 - ϕ 63mm	125 - ϕ 125mm		

Technical parameters

Model	Pull-out force N	Inner volume cm ³	Weight g	Recommended hose dia. mm	MPQ pcs
SHB40	56	15	16.1	8	1
SHB50	88	27	30	8	1
SHB63	140	45	57.9	8	1
SHB80	226	98	75.3	8	1
SHB100	353	240	197.9	10	1
SHB125	552	384	379.6	10	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SHB40-125

Model/Size	D	D1	D2	d	d1	H	H1	C	C1	C2	Y
SHB40□	41.5	40	43.2	6	18	20.5	3.5	30	3- ϕ 4	3- ϕ 6.5	13
SHB50□	52	50	54	6	18	24	3.5	40.5	3- ϕ 4	3- ϕ 6.5	16.5
SHB63□	65	63	67.5	8	34	31.5	4.5	50	4- ϕ 5	4- ϕ 8	21.5
SHB80□	83	80	85	8	34	37	5	64	4- ϕ 5	4- ϕ 8	27.5
SHB100□	103	100	106.5	10	40	47.5	6	80	4- ϕ 6	4- ϕ 9.5	35.5
SHB125□	128.5	125	135	10	40	56	6	105	4- ϕ 6	4- ϕ 9.5	44

◇ Note: The dimensional tolerance conforms to the GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SHB Series

Suction Cup with Locking Fitting



- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- SXP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SFK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB**
- SBB
- SOP
- SNP

Structure

- ◇ Consisting of suction cup and locking fitting, 3 types of connection
- ◇ FIG.1: Vertical vacuum port, female thread connection
- ◇ FIG.2: Vertical vacuum port, male thread connection
- ◇ FIG.3: Lateral vacuum port, female thread connection



How to order

SHB50N - LR1 - M10F

① ② ③

① Model	② Vacuum port direction	③ Connection thread
SHB50N	Nil - Vertical, female thread connection R1 - Vertical, male thread connection LR1 - Lateral, female thread connection	M10F - M10×1.5 female thread M12F - M12×1.75 female thread G2F - G1/4 female thread G3F - G3/8 female thread M14M - M14×1 male thread M16M - M16×1.5 male thread

◇ Please refer to page 321 for suction cup selection

Selection

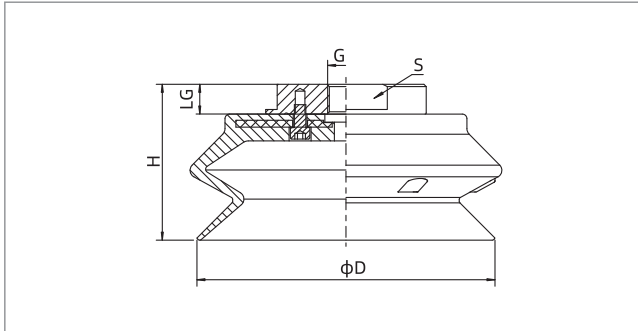
Model	Vacuum port direction			
	Nil		R1	LR1
SHB40□	SHB40□-M10F	SHB40□-G2F	SHB40□-R1-M14M	SHB40□-LR1-M10F
SHB50□	SHB50□-M10F	SHB50□-G2F	SHB50□-R1-M14M	SHB50□-LR1-M10F
SHB63□	SHB63□-M10F	SHB63□-G2F	SHB63□-R1-M16M	SHB63□-LR1-M10F
SHB80□	SHB80□-M10F	SHB80□-G2F	SHB80□-R1-M16M	SHB80□-LR1-M10F
SHB100□	SHB100□-M12F	SHB100□-G3F	SHB100□-R1-M16M	SHB100□-LR1-M10F
SHB125□	SHB125□-M12F	SHB125□-G3F	SHB125□-R1-M16M	SHB125□-LR1-M10F

SHB Series

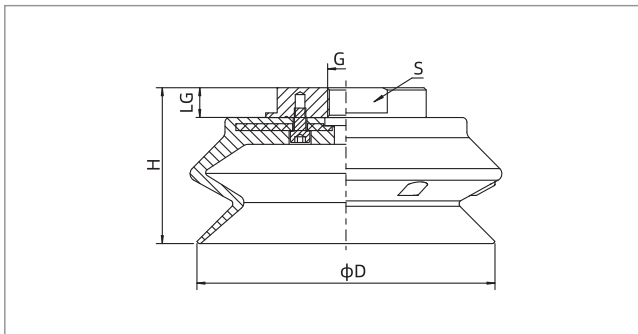
Suction Cup with Locking Fitting



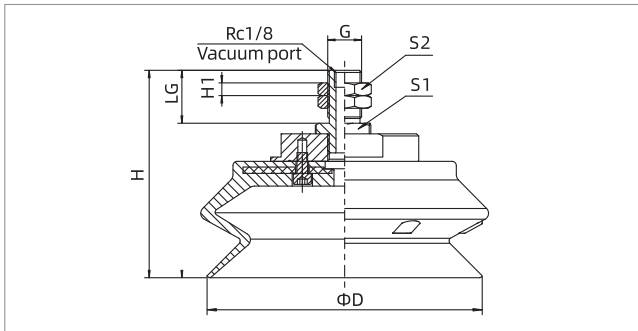
Dimensions(mm)



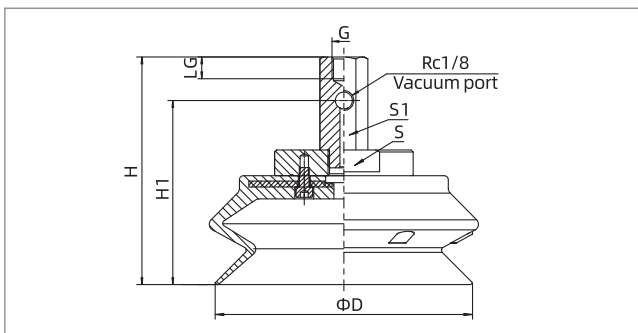
SHB40-125 Vertical, female thread connection



SHB40-125 Vertical, female thread connection



SHB40-125 Vertical, male thread connection



SHB40-125 Lateral, female thread connection

Model/Size	D	H	G	LG	S
SHB40□-G2F	41.5	32	G1/4	11.5	24
SHB50□-G2F	52	35.5	G1/4	11.5	24
SHB63□-G2F	65	43	G1/4	11.5	37
SHB80□-G2F	83	48.5	G1/4	11.5	37
SHB100□-G3F	103	60.5	G3/8	13	60
SHB125□-G3F	128.5	69	G3/8	13	60

Model/Size	D	H	G	LG	S
SHB40□-M10F	41.5	32	M10×1.5	11.5	24
SHB50□-M10F	52	35.5	M10×1.5	11.5	24
SHB63□-M10F	65	43	M10×1.5	11.5	37
SHB80□-M10F	83	48.5	M10×1.5	11.5	37
SHB100□-M12F	103	60.5	M12×1.75	13	60
SHB125□-M12F	128.5	69	M12×1.75	13	60

Model/Size	D	H	H1	G	LG	S1	S2
SHB40□-R1-M14M	41.5	62	5	M14×1	25	19	19
SHB50□-R1-M16M	52	65.5	5	M14×1	25	19	19
SHB63□-R1-M16M	65	73	6	M16×1.5	25	24	22
SHB80□-R1-M16M	83	78.5	6	M16×1.5	25	24	22
SHB100□-R1-M16M	103	90.5	6	M16×1.5	25	24	22
SHB125□-R1-M16M	128.5	99	6	M16×1.5	25	24	22

Model/Size	D	H	H1	G	LG	S	S1
SHB40□-LR1-M10F	41.5	69	47	M10×1.5	11	24	21
SHB50□-LR1-M10F	52	72.5	50.5	M10×1.5	11	24	21
SHB63□-LR1-M10F	65	80	58	M10×1.5	11	37	21
SHB80□-LR1-M10F	83	85.5	63.5	M10×1.5	11	37	21
SHB100□-LR1-M10F	103	97.5	75.5	M10×1.5	11	60	21
SHB125□-LR1-M10F	128.5	106	84	M10×1.5	11	60	21

SHB Series

Suction Cup with Level Compensator



Structure

- ◇ Consisting of suction cup and level compensator, 2 types of vacuum connection
- ◇ External spring and 2pcs mounting nuts
- ◇ Vacuum port connection: Rc1/8 female thread
- ◇ FIG.1 vertical vacuum port, FIG.2 lateral vacuum port



FIG.1

FIG.2

How to order

SHB50N - E 25 LR1 - M18

① ② ③ ④ ⑤

① Model	② Buffer type	③ Buffer stroke	④ Vacuum port direction	⑤ Mounting thread
SHB50N	E - External spring	25	Nil - Vertical	M18 - M18×1.5
		50	LR1 - Lateral	M22 - M22×1.5
		75		
		100		

◇ Please refer to page 321 for suction cup selection

Selection - Vertical direction

Model	Buffer stroke			
	25	50	75	100
SHB40□	SHB40□-E25-M18	SHB40□-E50-M18	SHB40□-E75-M18	-
SHB50□	SHB50□-E25-M18	SHB50□-E50-M18	SHB50□-E75-M18	-
SHB63□	SHB63□-E25-M18	SHB63□-E50-M18	SHB63□-E75-M18	-
SHB80□	SHB80□-E25-M18	SHB80□-E50-M18	SHB80□-E75-M18	-
SHB100□	SHB100□-E25-M22	SHB100□-E50-M22	SHB100□-E75-M22	SHB100□-E100-M22
SHB125□	SHB125□-E25-M22	SHB125□-E50-M22	SHB125□-E75-M22	SHB125□-E100-M22

Selection - Lateral direction

Model	Buffer stroke			
	25	50	75	100
SHB40□	SHB40□-E25LR1-M18	SHB40□-E50LR1-M18	SHB40□-E75LR1-M18	-
SHB50□	SHB50□-E25LR1-M18	SHB50□-E50LR1-M18	SHB50□-E75LR1-M18	-
SHB63□	SHB63□-E25LR1-M18	SHB63□-E50LR1-M18	SHB63□-E75LR1-M18	-
SHB80□	SHB80□-E25LR1-M18	SHB80□-E50LR1-M18	SHB80□-E75LR1-M18	-
SHB100□	SHB100□-E25LR1-M22	SHB100□-E50LR1-M22	SHB100□-E75LR1-M22	SHB100□-E100LR1-M22
SHB125□	SHB125□-E25LR1-M22	SHB125□-E50LR1-M22	SHB125□-E75LR1-M22	SHB125□-E100LR1-M22

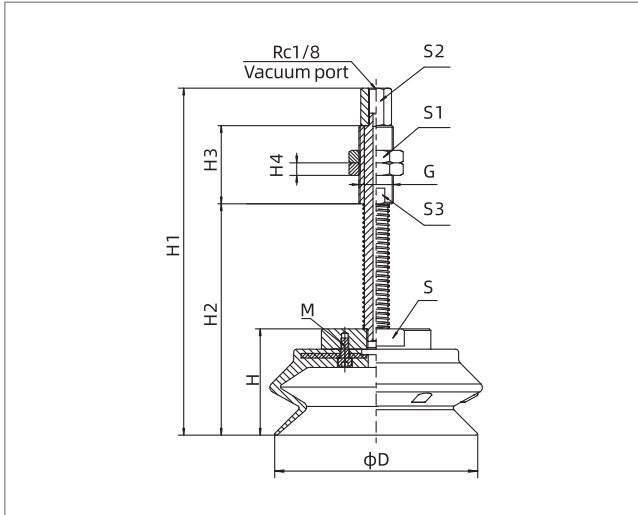
SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFD
SB
SBA
SF
SU
SPA
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP

SHB Series

Suction Cup with Level Compensator



Dimensions(mm)



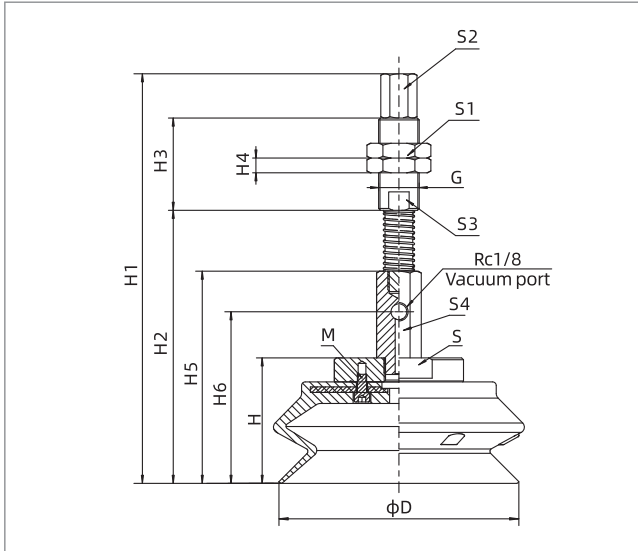
SHB40-125 Vertical direction

Model/Size	D	H	H1	H2	H3	H4	G	M	S	S1	S2	S3
SHB40□-E25-M18	41.5	32	127.5	70	35	6	M18×1.5	3-M3	24	27	14	16
SHB40□-E50-M18	41.5	32	162.5	107	35	6	M18×1.5	3-M3	24	27	14	16
SHB40□-E75-M18	41.5	32	198.5	143	35	6	M18×1.5	3-M3	24	27	14	16
SHB50□-E25-M18	52	35.5	131	75.5	35	6	M18×1.5	3-M3	24	27	14	16
SHB50□-E50-M18	52	35.5	166	110.5	35	6	M18×1.5	3-M3	24	27	14	16
SHB50□-E75-M18	52	35.5	202	146.5	35	6	M18×1.5	3-M3	24	27	14	16
SHB63□-E25-M18	65	43	138.5	83	35	6	M18×1.5	4-M4	37	27	14	16
SHB63□-E50-M18	65	43	173.5	118	35	6	M18×1.5	4-M4	37	27	14	16
SHB63□-E75-M18	65	43	209.5	154	35	6	M18×1.5	4-M4	37	27	14	16
SHB80□-E25-M18	83	48.5	144	88.5	35	6	M18×1.5	4-M4	37	27	14	16
SHB80□-E50-M18	83	48.5	179	123.5	35	6	M18×1.5	4-M4	37	27	14	16
SHB80□-E75-M18	83	48.5	215	159.5	35	6	M18×1.5	4-M4	37	27	14	16
SHB100□-E25-M22	103	60.5	178.5	104.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB100□-E50-M22	103	60.5	214.5	140.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB100□-E75-M22	103	60.5	254.5	180.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB100□-E100-M22	103	60.5	289.5	215.5	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E25-M22	128.5	69	187	113	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E50-M22	128.5	69	223	149	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E75-M22	128.5	69	263	189	50	8	M22×1.5	4-M5	60	30	17	19
SHB125□-E100-M22	128.5	69	298	224	50	8	M22×1.5	4-M5	60	30	17	19

SHB Series

Suction Cup with Level Compensator

Dimensions(mm)



SHB40-125 Lateral direction

Model/Size	D	H	H1	H2	H3	H4	H5	H6	G	M	S	S1	S2	S3	S4
SHB40□-E25LR1-M18	41.5	32	160	109	35	6	69	47	M18×1.5	3-M3	24	27	14	16	21
SHB40□-E50LR1-M18	41.5	32	195	144	35	6	69	47	M18×1.5	3-M3	24	27	14	16	21
SHB40□-E75LR1-M18	41.5	32	231	180	35	6	69	47	M18×1.5	3-M3	24	27	14	16	21
SHB50□-E25LR1-M18	52	35.5	163.5	112.5	35	6	72.5	50.5	M18×1.5	3-M3	24	27	14	16	21
SHB50□-E50LR1-M18	52	35.5	198.5	147.5	35	6	72.5	50.5	M18×1.5	3-M3	24	27	14	16	21
SHB50□-E75LR1-M18	52	35.5	234.5	183.5	35	6	72.5	50.5	M18×1.5	3-M3	24	27	14	16	21
SHB63□-E25LR1-M18	65	43	171	120	35	6	80	58	M18×1.5	4-M4	37	27	14	16	21
SHB63□-E50LR1-M18	65	43	206	155	35	6	80	58	M18×1.5	4-M4	37	27	14	16	21
SHB63□-E75LR1-M18	65	43	242	191	35	6	80	58	M18×1.5	4-M4	37	27	14	16	21
SHB80□-E25LR1-M18	83	48.5	176.5	125.5	35	6	85.5	63.5	M18×1.5	4-M4	37	27	14	16	21
SHB80□-E50LR1-M18	83	48.5	211.5	160.5	35	6	85.5	63.5	M18×1.5	4-M4	37	27	14	16	21
SHB80□-E75LR1-M18	83	48.5	247.5	196.5	35	6	85.5	63.5	M18×1.5	4-M4	37	27	14	16	21
SHB100□-E25LR1-M22	103	60.5	212.5	141.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB100□-E50LR1-M22	103	60.5	248.5	177.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB100□-E75LR1-M22	103	60.5	288.5	217.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB100□-E100LR1-M22	103	60.5	323.5	252.5	50	8	97.5	75.5	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E25LR1-M22	128.5	69	221	150	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E50LR1-M22	128.5	69	257	186	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E75LR1-M22	128.5	69	297	226	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21
SHB125□-E100LR1-M22	128.5	69	332	261	50	8	106	84	M22×1.5	4-M5	60	30	17	19	21

- SZ
- SP3
- SUF
- SAN
- SAO
- SOFA
- STP
- SFT
- SFA
- SBL
- SBLP
- SBS
- SFP
- SBP
- XP
- SGP
- SBOF
- STC
- SFF
- SOB
- SOF
- SOG
- SFM
- SOM
- SBF
- SDM
- SFU
- SK
- SHT
- SDL
- SFG
- SFD
- SB
- SBA
- SF
- SU
- SPA
- SPF
- SPC
- SPJ
- SPU
- SH
- SHB
- SBB
- SOP
- SNP

SBB Series

1.5 Bellows Big Suction Cup

AIRBEST



HEAVY LOAD

RoHS

Features

- ◇ 1.5 Bellows
- ◇ Large area pattern support structure at bottom
- ◇ Rubber parts and metal connection plate are one-piece structure
- ◇ Suction cups with large diameter

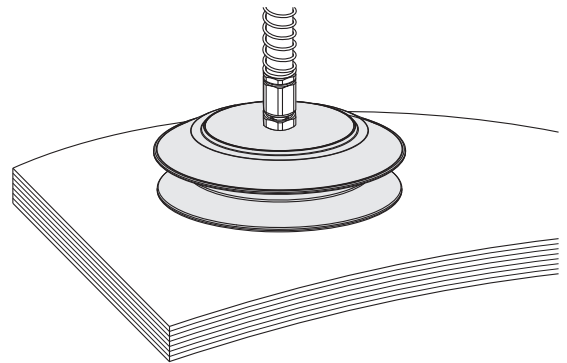
Advantages

- ◇ Easy to fit uneven surface of workpiece, and had buffer effect
- ◇ Handling thin workpiece without permanent deformation
- ◇ It will be more reliable and stable during heavy load handling
- ◇ Suitable for handling large, heavy and vulnerable workpieces



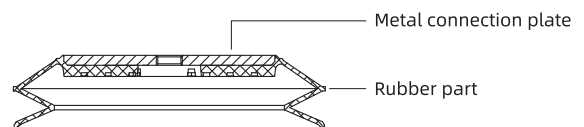
Applications

- ◇ Handling paper, metal sheet, wood plate, ceramic, etc.
- ◇ Handling workpieces with uneven surface



Structure

- ◇ One-piece structure design of suction cup and fitting
- ◇ Metal connection plate of SBB200 is with G1/2 female thread connection port
- ◇ Metal connection plate of SBB250-SBB300 is without thread hole, and it is flange plate connection structure



SBB Series

1.5 Bellows Big Suction Cup

- SZ
-
- SP3
-
- SUF
-
- SAN
-
- SAO
-
- SOFA
-
- STP
-
- SFT
-
- SFA
-
- SBL
-
- SBLP
-
- SBS
-
- SFP
-
- SBP
-
- SXP
-
- SGP
-
- SBOF
-
- STC
-
- SFF
-
- SOB
-
- SOF
-
- SOG
-
- SFM
-
- SOM
-
- SBF
-
- SDM
-
- SFU
-
- SFK
-
- SHT
-
- SDL
-
- SFG
-
- SFD
-
- SB
-
- SBA
-
- SF
-
- SU
-
- SPA
-
- SPF
-
- SPC
-
- SPJ
-
- SPU
-
- SH
-
- SHB
-
- SBB**
-
- SOP
-
- SNP

How to order

SBB 200 N - G4F

① ② ③ ④

① Series	② Diameter	③ Material & Hardness	④ Connection thread
SBB	200 - ϕ 200mm	N - NBR 60	Nil - 4- ϕ 7 flange hole G4F - G1/2 female thread
	250 - ϕ 250mm		
	300 - ϕ 300mm		

Selection

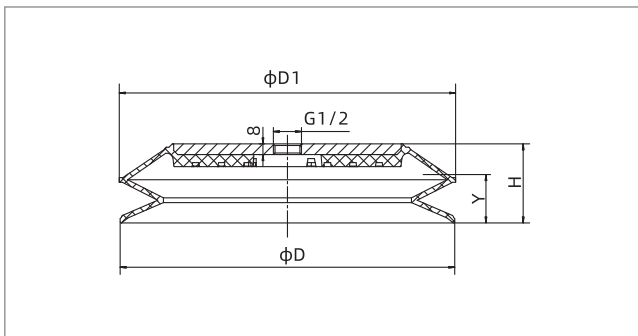
Model/Connection thread Nil - 4- ϕ 7 flange hole	F - Female thread
-	SBB200N-G4F
SBB250N	-
SBB300N	-

Technical parameters

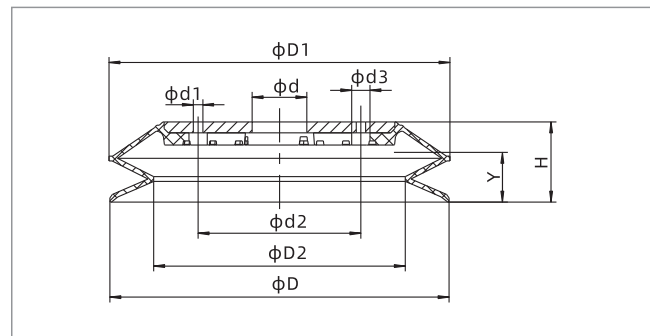
Model	Pull-out force N	Inner volume cm ³	Min. curve radius of workpiece mm	Weight g	Recommend hose dia. mm	MPQ pcs
SBB200	850	790	350	860	12	1
SBB250	1,620	1,677	480	1,012	12	1
SBB300	2,390	2,950	580	1,650	12	1

◇ Note: Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.

Dimensions(mm)



SBB200N-G4F



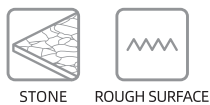
SBB□N

Model/Size	D	D1	H	d	d1	d2	d3	Y
SBB200□-G4F	200	206	57	-	-	-	-	40
SBB250□	250	251	60	40	4-7	120	4-13.5	43
SBB300□	300	306	77	40	4-7	120	4-13.5	57

◇ Note: The dimensional tolerance conforms to GBT3672.1-2002-1 M3 rubber product dimensional tolerance standard

SOP Series

Circular Foam Rubber Suction Cup



Features

- ◇ Annular foam rubber
- ◇ Metal support plate
- ◇ NF(black) for Neoprene foam rubber, OF(orange) for Geranium foam rubber
- ◇ Available in various sizes

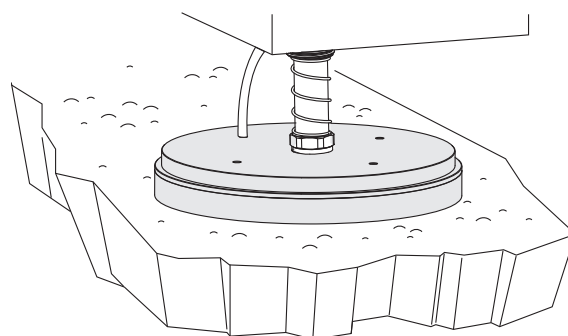
Advantages

- ◇ Long lifetime, good sealing and large suction force
- ◇ Large area support plate, light weight and high load
- ◇ NF and OF material optional for different working conditions
- ◇ Suitable for workpieces of various sizes and shapes



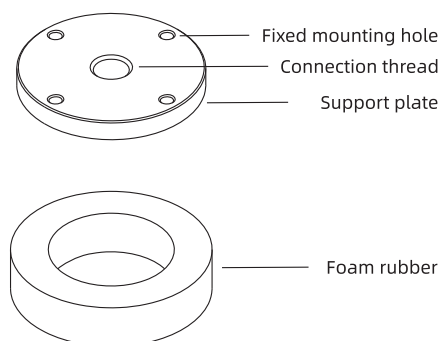
Applications

- ◇ Handling of workpieces with very rough or uneven surface such as buckle plate, embossed plate, marble, tile, cement board and grid metal plate
- ◇ NF for workpieces with rough surface and outdoor use. Good weather and ozone resistance, but poor in yield elasticity and not suitable for food industry.
- ◇ OF for workpieces with very rough surface. Good yield elasticity, wear resistance, tear resistance, high cut resistance and good ductility, but poor in oil resistance, heat resistance and aging resistance, not suitable for food industry.



Structure

- ◇ Consisting of metal support plate and foam rubber. Foam rubber is with gum, which can stick to the support plate directly. Foam rubber is consumable, which can be ordered separately for replacement



SOP Series

Circular Foam Rubber Suction Cup



Suction Cup

How to order

SOP 64 NF - G2F

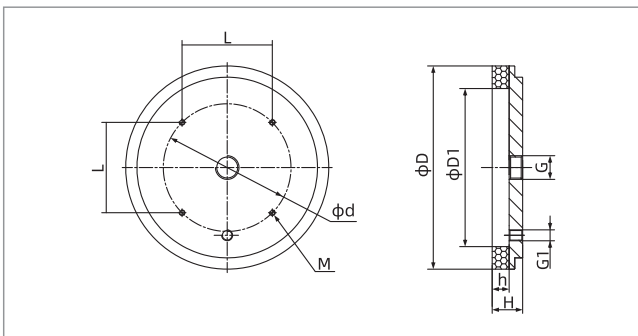
① ② ③ ④

① Series	② Diameter	③ Material	④ Connection thread
SOP	40 - ϕ 40mm	127 - ϕ 127mm	NF - Neoprene foam rubber
	64 - ϕ 64mm	180 - ϕ 180mm	OF - Geranium foam rubber
	92 - ϕ 92mm	220 - ϕ 220mm	
			Nil - Foam rubber only G2F - G1/4 female thread G3F - G3/8 female thread G4F - G1/2 female thread

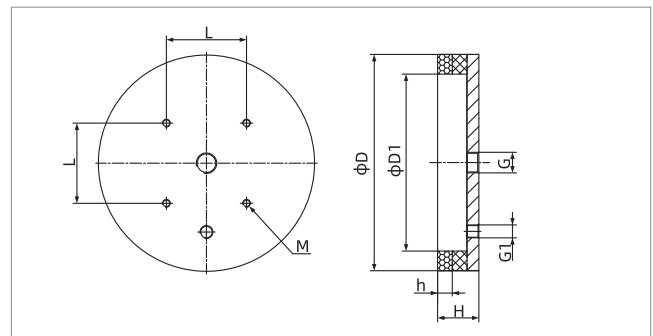
Selection

Model	Connection thread			MPQ pcs
	G2F	G3F	G4F	
SOP40□	SOP40□-G2F	-	-	1
SOP64□	SOP64□-G2F	-	-	1
SOP92□	-	SOP92□-G3F	-	1
SOP127□	-	-	SOP127□-G4F	1
SOP180□	-	-	SOP180□-G4F	1
SOP220□	-	-	SOP220□-G4F	1

Dimensions(mm)



SOP40-180



SOP220

Model/Size	D	D1	H	h	G	G1	d	L	M	Weight g	Pull-out force N
SOP40□-G2F	40	20	25	15	G1/4	-	-	-	-	34.9	7.8
SOP64□-G2F	64	40	25	15	G1/4	-	40	-	-	82.1	35
SOP92□-G3F	92	64	26	15	G3/8	-	70	-	4-M5×0.8depth6	191.1	85
SOP127□-G4F	127	92	30	15	G1/2	G1/8	-	70	4-M5×0.8depth6	482.1	175
SOP180□-G4F	180	127	27	15	G1/2	G1/8	-	80	4-M5×0.8depth6	754.1	385
SOP220□-G4F	220	180	42	15	G1/2	G1/4	-	85	4-M8×1.25depth6	1570.9	635

◇ Note: 1. Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.
2. The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFD
SB
SBA
SF
SU
SPA
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP

SNP Series

Rectangular Foam Rubber Suction Cup



STONE



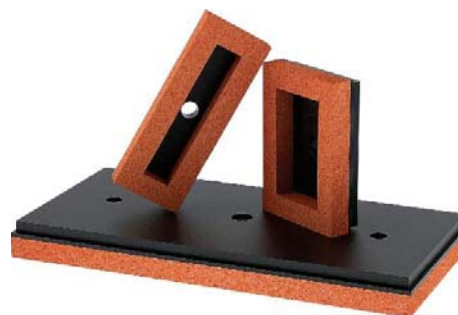
ROUGH SURFACE

Features

- ◇ Annular foam rubber
- ◇ Metal support plate
- ◇ NF(black) for Neoprene foam rubber, OF(orange) for Geranium foam rubber
- ◇ Available in various sizes

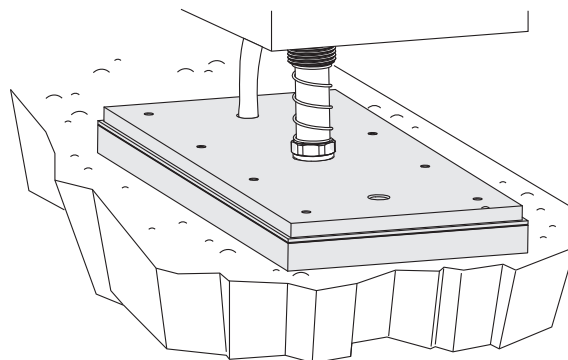
Advantages

- ◇ Long lifetime, good sealing and large suction force
- ◇ Large area support plate with light weight and high load
- ◇ NF and OF material optional for different working conditions
- ◇ Suitable for workpieces of various sizes and shapes



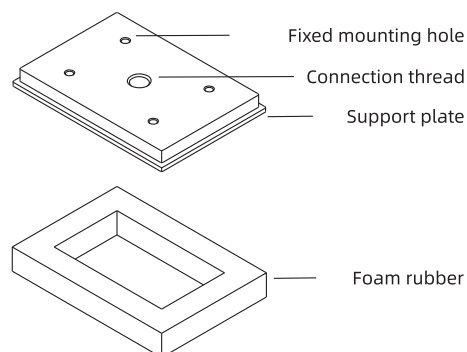
Applications

- ◇ Handling of workpieces with very rough or uneven surface such as buckle plate, embossed plate, marble, tile, cement board and grid metal plate
- ◇ NF for workpieces with rough surface and outdoor use. Good weather and ozone resistance, but poor in yield elasticity and storage stability, not suitable for food industry
- ◇ OF for workpieces with very rough surface. Good yield elasticity, wear resistance, tear resistance, high cut resistance and good ductility, but poor in oil resistance, heat resistance and aging resistance, not suitable for food industry



Structure

- ◇ Consisting of metal support plate and foam rubber. Foam rubber is with gum, which can stick to the support plate directly. Foam rubber is consumable, which can be ordered separately for replacement



SNP Series



Rectangular Foam Rubber Suction Cup

Suction Cup

How to order

SNP 50×135 NF - G2F

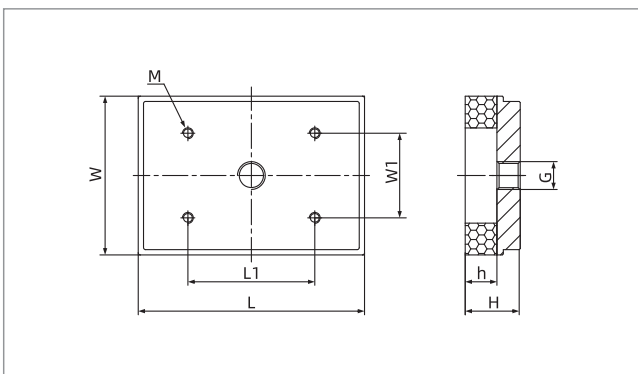
① ② ③ ④

① Series	② Size	③ Material	④ Connection thread
SNP	50×135	NF - Neoprene foam rubber 	Nil - Foam rubber only
	60×135	OF - Geranium foam rubber 	G2F - G1/4 female thread
	75×107		G3F - G3/8 female thread
	68×290		G4F - G1/2 female thread
	140×290		

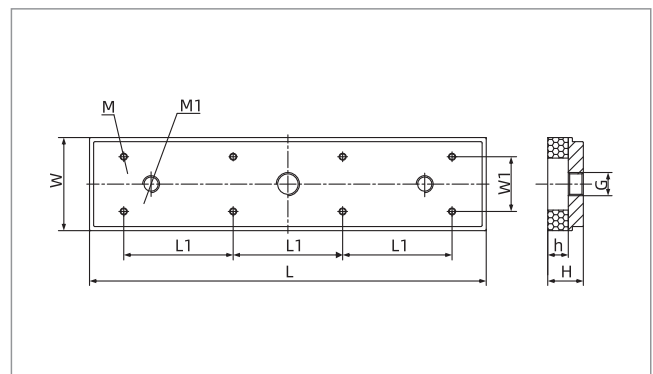
Selection

Model	Connection thread			MPQ pcs
	G2F	G3F	G4F	
SNP50×135□	SNP50×135□-G2F	-	-	1
SNP60×135□	SNP60×135□-G2F	-	-	1
SNP75×107□	SNP75×107□-G2F	-	-	1
SNP68×290□	-	SNP68×290□-G3F	-	1
SNP140×290□	-	-	SNP140×290□-G4F	1

Dimensions(mm)



SNP50×135 SNP60×135 SNP75×107



SNP68×290 SNP140×290

Model/Size	L	W	L1	W1	G	H	h	M	M1	Weight g	Pull-out force N
SNP50×135□-G2F	135	50	80	30	G1/4	26	15	4-M5×0.8depth7	-	202	60
SNP60×135□-G2F	135	60	80	40	G1/4	26	15	4-M5×0.8depth7	-	246	80
SNP75×107□-G2F	107	75	60	40	G1/4	26	15	4-M5×0.8depth7	-	234	90
SNP68×290□-G3F	290	68	80	40	G3/8	26	15	8-M5×0.8depth7	2-M12×1.75	587	250
SNP140×290□-G4F	290	140	80	100	G1/2	26	15	8-M5×0.8depth7	2-M12×1.75	1,235	720

◇ Note: 1. Testing vacuum level -60kPa, workpiece with smooth and clean surface. The data of pull-out force as above are figured out without considering safety factor. The data may be different according to different workpiece surfaces. Recommend the length of vacuum hose to be as short as possible, max 2m.
2. The dimensional tolerance conforms to GBT 3672.1-2002-1 M3 rubber product dimensional tolerance standard

SZ
SP3
SUF
SAN
SAO
SOFA
STP
SFT
SFA
SBL
SBLP
SBS
SFP
SBP
SXP
SGP
SBOF
STC
SFF
SOB
SOF
SOG
SFM
SOM
SBF
SDM
SFU
SFK
SHT
SDL
SFG
SFD
SB
SBA
SF
SU
SPA
SPF
SPC
SPJ
SPU
SH
SHB
SBB
SOP
SNP