

Features

- ☆ 1.5 bellow vacuum pad
- ☆ The vacuum pad can be horizontal adjustment. It is suitable for transferring objects with height difference
- ☆ It is particularly good for use on curved surface and for separating thin sheets of materials.

Applications

- ◇ Veneer sheet
- ◇ Steel plate
- ◇ Carton box
- ◇ Thin sheet
- ◇ Electronic components



How to Order

SB12 N F – 18F EH – KE1820–A16 –BH–G1/8

① Model	② Material (Shore hardness)	④ Connection thread
SB5 Φ5	N NBR(55°)	18–F G1/8 Female thread (SB17,SB20,SB30,SB40,SB50,SB75)
SB6X Φ6	S Silicone(50°)	5 × 18F 5 × G1/8 Female thread (SB30,SB40,SB50)
SB8 Φ8	WS White silicone(50°)	15–FL G1/8 Female thread (SB30,SB40)
SB10 Φ10		14–F G1/4 Female thread (SB75)
SB12 Φ12		38–F G3/8 Female thread (SB75)
SB15 Φ15		12–F G1/2 Female thread (SB75,SB110,SB150)
SB17 Φ17		M5–M M5 Male thread (SB5,SB8,SB10,SB12,SB15)
SB20 Φ20		M5/18MF M5 Female thread and G1/8 Male thread (SB17,SB20)
		M5/18–MFL M5 Female thread and G1/8 Male thread (SB17,SB20)
		5 × M5–F 5 × M5 Female thread (SB17,SB20)
		18–M G1/8 Male thread (SB30,SB40)
		14–M G1/4 Male thread (SB30, SB40,SB50)
		38–M G3/8 Male thread (SB50)

③ Filter	⑤ Vacuum efficiency valve
F With filter(PE) (SB30,40,30,50,75,110)	EH Vacuum efficiency valve (SB17,20,30,40, 50)
– No	– No

* Refer to the fittings for vacuum pads on page 208–211
Remark: SB30–150 fittings are including mesh filter, only for silicone material.

Accessories


KE1820–A16 BH–G1/8

*Not available with ball joint.

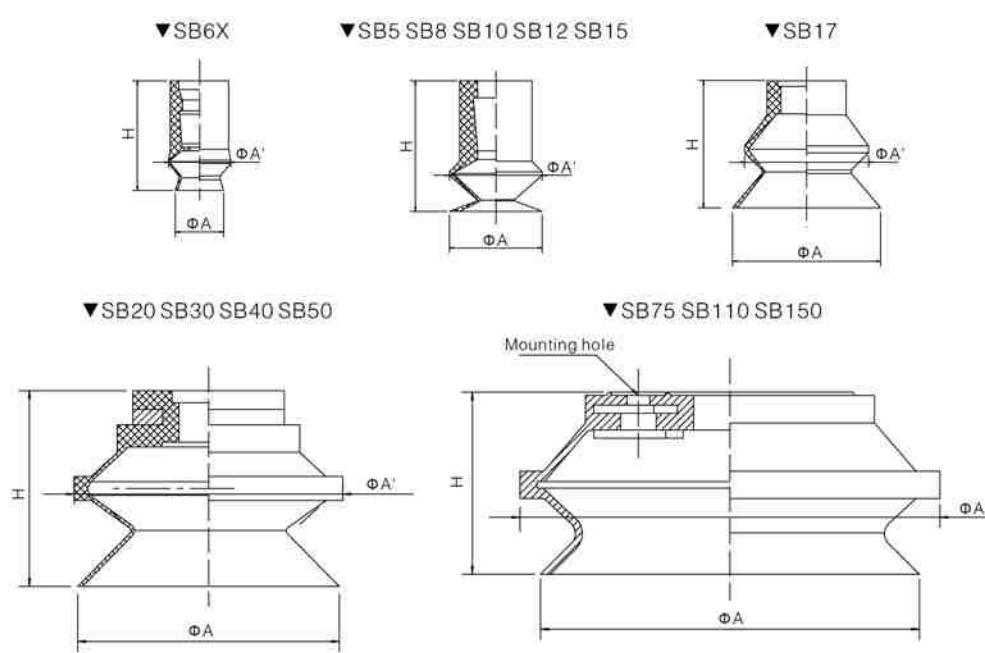
⑥ Spring plunger	⑦ Ball Joint
Model	Buffer stroke(mm)
KE510–A12, KE510–Y–A12	10
KE520–A12, KE20–Y–A12	20
KI506–R–A8, KI506–B–A8, KI506–E–A8, KI506–S–A8	06
KI510–R–A8, KI510–B–A8, KI510–E–A8, KI510–S–A8	10
KI525–R–A8, KI525–B–A8, KI525–E–A8, KI525–S–A8	25
KI507–V–A10	7
KI515–V–A10	15
KI520–V–A10	20
KE1810–A16, KE1810–L–A14, KE1810–V–A16	10
KE1820–A16, KE1820–L–A14, KE1820–V–A16	20
KE1830–A16, KE1830–L–A14, KE1830–V–A16	30
KE1850–A16, KE1850–L–A14, KE1850–V–A16*	50
KI1810–A16, KI1810–L–A16, KI1810–V–A16	10
KI1820, KI1820–L–A16, KI1820–V–A16*	20
KI1830–A16, KI1830–L–A16, KI1830–V–A16	30
KI1850–A16, KI1850–L–A16, KI1850–V–A16*	50
KE1210–L–A20, KE1210–A20	10
KE1220–L–A20, KE1220–A20	20
KE1230–L–A20, KE1230–A20	30
KE1250–L–A20, KE1250–A20	50
KI1210–L–A20, KI1210–A18, KI1210–A22	10
KI1220–L–A20, KI1220–A18, KI1220–A22	20
KI1230–L–A20, KI1230–A18, KI1230–A22	30
KI1250–L–A20, KI1250–A18, KI1250–A22	50

- TXC
- TXM
- SNP
- SOP
- SB
- SBF
- SBL
- SBLP
- SF
- SU
- STC
- SFF
- SOB
- SOF
- SOG
- SFP
- SBP
- SXP
- SGP
- SD
- SH
- SHB
- AZP
- AZPT
- AZPR
- SPAG
- SPCG
- SPFG
- SPJG
- SPJG (No-mark)
- SPS
- SPUG
- SNT
- Spring Plunger
- Fittings for Vacuum Pads
- BH
- Bulkhead Connector
- Ball Joint

Recommended(Max.)lifting force(N)

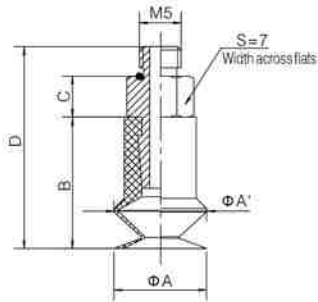
Model	Volume cm ³	Vertical lifting force(N) 		
		-20kPa	-60kPa	-90kPa
SB5	0.05	0.295	0.786	0.99
SB6X	0.09	0.5	1.076	1.375
SB8	0.15	0.786	1.7	2.45
SB10	0.48	1.7	3.5	5.1
SB12	0.59	2.2	4.2	7.2
SB15	1.1	3.3	6	8.9
SB17	1.5	3.93	7.82	9.7
SB20	2.7	5.8	10.6	15
SB30	10	13	25	28
SB40	15	22.5	42	50.2
SB50	32	34	65	83
SB75	110	74	166.4	226
SB110	310	136.5	343	460.5
SB150	650	295	686	883

Dimensions (mm)



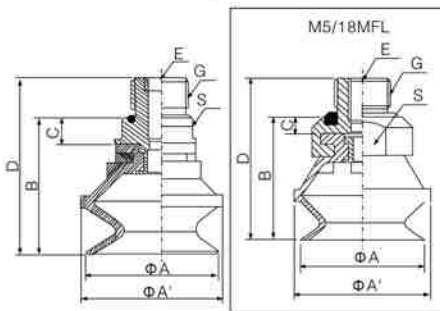
Model	ΦA	ΦA'	H
SB6X	7	9	13.5
SB5	5.8	6.2	9.2
SB8	8.8	9.6	11.9
SB10	11	12	16
SB12	12	14	16.5
SB15	15.5	17.5	19.5
SB17	18.5	16.6	15.6

Model	ΦA	ΦA'	H	Mounting hole
SB20	22	24	19	-
SB30	34	36	26	-
SB40	43	46	28	-
SB50	53	58	35	-
SB75	78	83	37	4-Φ6.5 circle diameter Φ35
SB110	115	124	54	8-Φ6 circle diameter Φ55
SB150	155	166	71	8-Φ6 circle diameter Φ70.5



Male thread connection(mm)

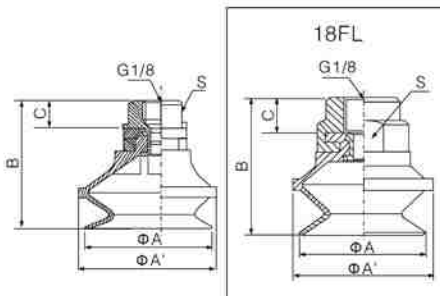
Model	ΦA	ΦA'	B	C	D
SB5-M5	5.6	6.2	9.2	4	16.7
SB8-M5	8.8	9.6	11.9	4	19.4
SB10-M5	11	12	16	5	25
SB12-M5	12	14	16.5	5	25.5
SB15-M5	15.5	17.5	19.5	5	28.5



Male thread connection(mm)

Model	ΦA	ΦA'	B	C	D	E	G	S
SB17-M5/18MF	18.5	16.6	17.1	1.5	23.1	M5	G1/8	S12
SB20-M5/18MF	22	24	20.5	1.5	26.5	M5	G1/8	S12
SB20-M5/18MFL*	22	24	22	3	29	M5	G1/8	S16
SB30-18M	34	36	31	5	38	-	G1/8	S17
SB30-14M	34	36	32	6	41	-	G1/4	S17
SB40-18M	43	46	33	5	40	-	G1/8	S17
SB40-14M	43	46	34	6	43	-	G1/4	S17
SB50-14M	53	58	41	6	50	-	G1/4	S24
SB50-38M	53	58	41	6	51	-	G3/8	S24

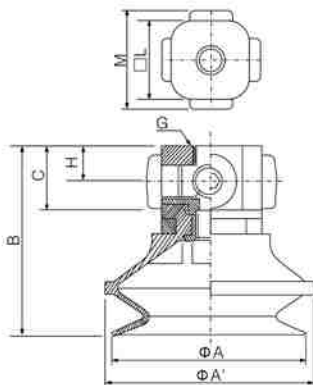
*only for S (Silicone) material



Female thread connection(mm)

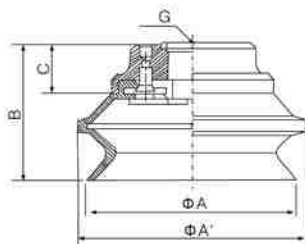
Model	ΦA	ΦA'	B	C	S
SB17-18F	18.5	16.6	23.6	8	S15
SB20-18F	22	24	27	8	S15
SB30-18F	34	36	34	8	S17
SB30-18FL*	34	36	35	9	S21
SB40-18F	43	46	36	8	S17
SB40-18FL*	43	46	37	9	S21
SB50-18F	53	58	44	9	S24

*only for S (Silicone) material



Female thread connection × 5(mm)

Model	ΦA	ΦA'	B	C	G	H	□L	M
SB17-5 × M5F	18.5	16.6	24.6	9	5 × M5	5	15	22
SB20-5 × 5F	22	24	28	9	5 × M5	5	15	22
SB30-5 × 18F	34	36	34	18	5 × G1/8	10	22	30
SB40-5 × 18F	43	46	46	18	5 × G1/8	10	22	30
SB50-5 × 18F	53	58	53	18	5 × G1/8	10	28	36



Female thread connection × 5(mm)

Model	ΦA	ΦA'	B	C	G
SB75-18F	78	83	50	18	G1/8
SB75-14F	78	83	50	18	G1/4
SB75-38F	78	83	50	18	G3/8
SB75-12F	78	83	50	18	G1/2
SB110-12F	115	124	63	15	G1/2
SB150-12F	155	166	78	14	G1/2

TXC

TXM

SNP

SOP

SB

SBF

SBL

SBLP

SF

SU

STC

SFF

SOB

SOF

SOG

SFP

SBP

SXP

SGP

SD

SH

SHB

AZP

AZPT

AZPR

SPAG

SPCG

SPFG

SPJG

SPJG
(No-mark)

SPS

SPUG

SNT

Spring Plunger

Fittings for
Vacuum Pads

BH

Bulkhead
Connector

Ball Joint