



Features

- ☆ Standard flat vacuum pad.
- ☆ Suitable for concave and convex objects.
- ☆ Suitable for flat and smooth surface objects.
- ☆ Suitable for a little bending objects.

Applications

- ◇ Steel plate
- ◇ paper box packaging
- ◇ Small semiconductor material

How to Order

SU30 N 18M – EH – KI1810–A16 – BH–G1/8

① Model	② Material (Shore hardness)	③ Connection thread
SU1.5X Φ1.5	N NBR(55°)	M2.5–M M2.5 Male thread (SU2,SU3)
SU2 Φ2	S Silicone(50°)	M5–M M5 Male thread (SU2,SU3,SU4,SU6,SU8,SU10,SU15)
SU2X Φ2	WS White silicone(50°)	18–M G1/8 Male thread (SU40)
SU3 Φ3	CS Conductive(Special mat'l)(50°)	14–M G1/4 Male thread (SU40,SU50)
SU4 Φ4		38–M G3/8 Male thread (SU50)
SU4X Φ4		M5/18–MF M5 Female thread and G1/8 Male thread (SU20,SU25,SU30)
SU6 Φ6		M5/18–MFI* M5 Female thread and G1/8 Male thread (SU20,SU25,SU30)
SU8 Φ8		5xM5F 5 × M5 Female thread (SU20,SU25,SU30)
		18–F G1/8 Female thread (SU30,SU40,SU50,SU80)
		5x18F 5 × G1/8 Female thread (SU40,SU50)
		8 Φ8 Inner hole (SU80)
		18–FA* G1/8 Female thread (SU40)

② Material (Shore hardness)

N	NBR(55°)
S	Silicone(50°)
WS	White silicone(50°)
CS	Conductive(Special mat'l)(50°)

④ Cone Valve

EH	Vacuum efficiency valve (SU20,SU25,SU30,SU40,SU50)
–	No

Accessories

KI1810–A14 BH–G1/8

*Refer to the fittings for vacuum pads on page 208–211.
Remark:SU40 SU50 fittings are including mesh filter.
Only for silicone material.

⑤ Spring plunger	⑥ 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

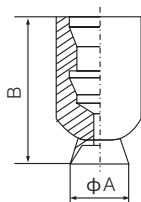
*Not available with ball joint.

Recommended(Max.)lifting force(N)

Model	Volume cm ³	Vertical lifting force(N) 			Parallel lifting force(N) 		
		-20kPa	-60kPa	-90kPa	-20kPa	-60kPa	-90kPa
SU1.5X	0.0015	0.0077	0.029	0.04	—	—	—
SU2	0.0025	0.03	0.97	0.148	—	—	—
SU2X	0.0025	0.03	0.97	0.148	—	—	—
SU3	0.005	0.089	0.395	0.59	—	—	—
SU4	0.03	0.198	0.885	1.275	0.198	0.78	1
SU4X	0.03	0.198	0.885	1.275	0.198	0.78	1
SU6	0.05	0.5	1.68	2.5	0.295	1.48	1.98
SU8	0.1	1	2.55	3.8	1	2.85	3.35
SU10	0.18	1.48	4.4	6.85	1.5	4.4	4.9
SU15	0.5	3.2	8.5	11.5	3.5	5.4	5.9
SU20	1	5.9	12.2	16	5.9	8.8	9.8
SU25	1.5	9	20.2	19.5	6.88	9.2	10.2
SU30	2	13	25	33	7.8	9.8	11
SU40	5.5	20	37.5	60	13.8	22	27.5
SU50	12	35.5	74	95	20	37	44
SU80	32	76	194	247	44	124.5	166

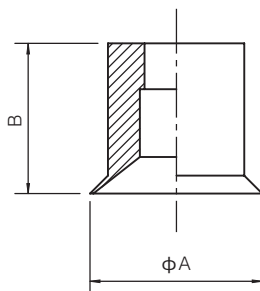
Dimensions (mm)

▼ SU1.5X~ SU4X



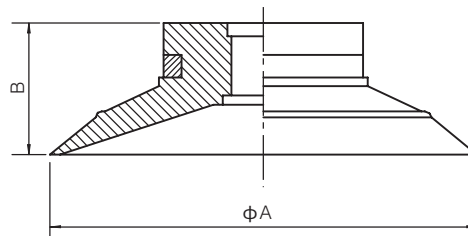
Model	Φ A	B
SU1.5X	1.9	12
SU2X	2.6	12
SU4X	4.6	12

▼ SU2~ SU15



Model	Φ A	B
SU2	2.6	3.5
SU3	3.8	4.5
SU4	5	6.1
SU6	7	6.5
SU8	9	7

▼ SU20~ SU50



Model	Φ A	B
SU10	11	10.5
SU15	16.5	11
SU20	22	8
SU25	27	9
SU30	32	9.5
SU40	42	13
SU50	53	17.5

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

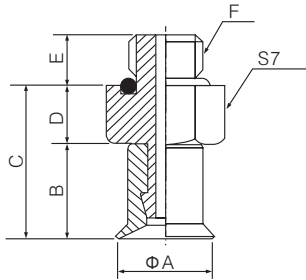
Spring Plunger

Fittings for
Vacuum Pads

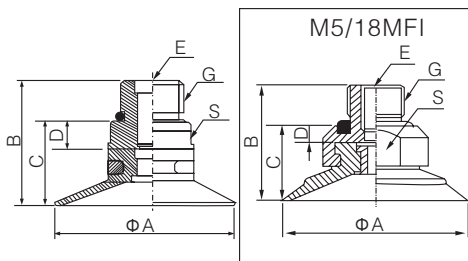
BH

Bulkhead
Connector

Ball Joint

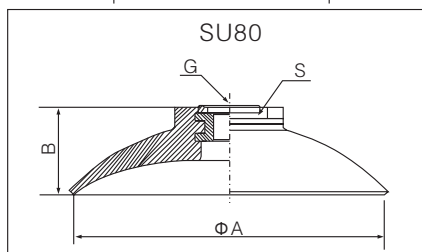
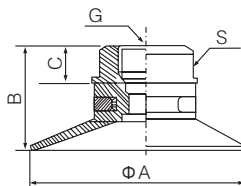
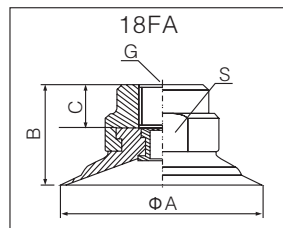

Male thread connection(mm)

Model	ΦA	B	C	D	E	F
SU2-M2.5M/M5M	2.6	3.5	6/8.1	2.5/4.6	3/4.2	M2.5/M5
SU3-M2.5M/M5M	3.8	4.5	7/9.1	2.4/4.6	3/4.2	M2.5/M5
SU4-M5M	5	6.1	10.1	4	3.5	M5
SU6-M5M	7	6.5	10.5	4	3.5	M5
SU8-M5M	9	7	11	4	3.5	M5
SU10-M5M	11	10.5	15.5	5	3.5	M5
SU15-M5M	16.5	11.5	16	5	3.5	M5


Female thread connection(mm)

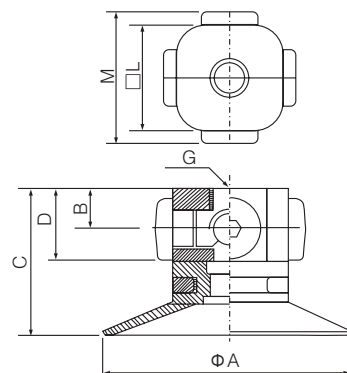
Model	ΦA	B	C	D	E	G	S
SU20-M5/18MF	22	15.5	9.5	1.5	M5	G1/8	S12
SU20-M5/18MFI*	22	18	11	3	M5	G1/8	S16
SU25-M5/18MF	27	16.5	10.5	1.5	M5	G1/8	S12
SU25-M5/18MFI*	27	19	12	3	M5	G1/8	S16
SU30-M5/18M	32	17	11	1.5	M5	G1/8	S12
SU30-M5/18MFI*	32	16.5	12.5	3	M5	G1/8	S16
SU40-18M	42	25	18	5	-	G1/8	S17
SU40-14M	42	28	19	6	-	G1/4	S17
SU50-14M	53	32.5	23.5	6	-	G1/4	S24
SU50-38M	53	33.5	23.5	6	-	G3/8	S24

*only for S (Silicone) material


Female thread connection(mm)

Model	ΦA	B	C	G	S
SU20-18F	22	16	8	G1/8	S15
SU25-18F	27	17	8	G1/8	S15
SU30-18F	32	17.5	8	G1/8	S15
SU40-18F	42	21	8	G1/8	S17
SU40-18FA*	42	22	9	G1/8	S21
SU50-18F	53	26.5	9	G1/8	S24
SU80-18F	78	21.5	-	G1/8	S19
SU80-8	78	21.5	-	Φ8	S19

*only for S (Silicone) material


Female thread connection x5(mm)

Model	ΦA	B	C	D	G	□L	M
SU20-5 × M5F	22	5	17	9	5 × M5	15	22
SU25-5 × M5F	27	5	18	9	5 × M5	15	22
SU30-5 × M5F	32	5	18.5	9	5 × M5	15	22
SU40-5 × 18F	42	10	31	18	5 × G1/8	22	30
SU50-5 × 18F	53	10	35.5	18	5 × G1/8	28	36

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

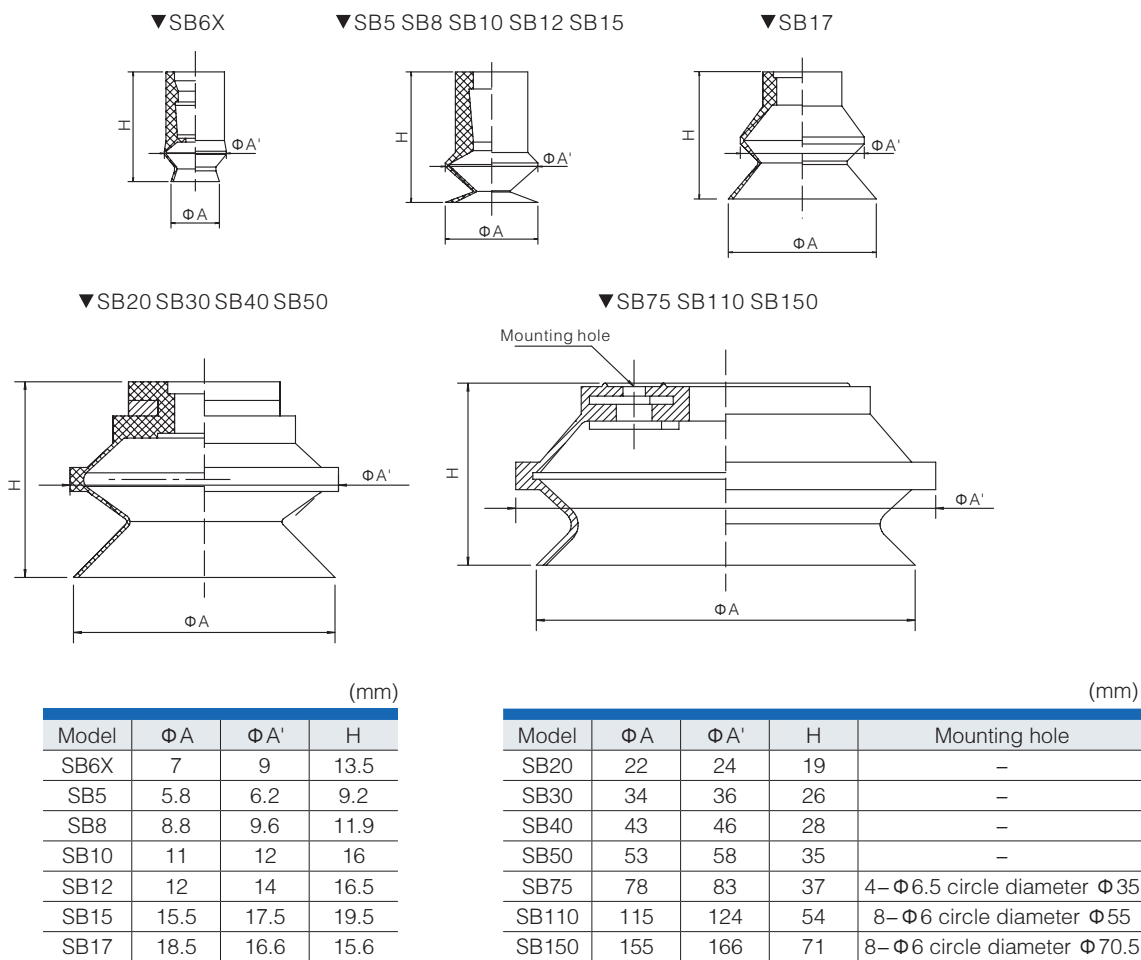
⑥ Spring plunger	⑦ Ball Joint
Model	Buffer stroke(mm)
KE510–A12, KE510–Y–A12	10
KE520–A12, KE20–Y–A12	20
KI506–R–A8, KI506–B–A8, KI506–E–A8, KI506–S–A8	06
KI510–R–A8, KI510–B–A8, KI510–E–A8, KI510–S–A8	10
KI525–R–A8, KI525–B–A8, KI525–E–A8, KI525–S–A8	25
KI507–V–A10	7
KI515–V–A10	15
KI520–V–A10	20
KE1810–A16, 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

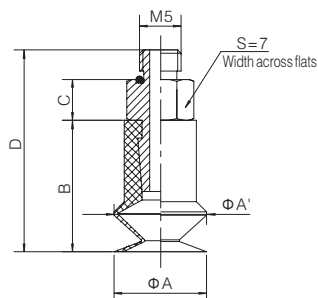
*Not available with ball joint.

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

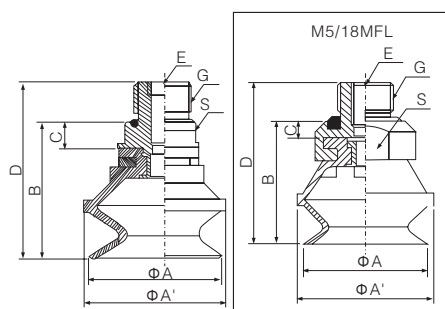
Dimensions (mm)





Male thread connection(mm)

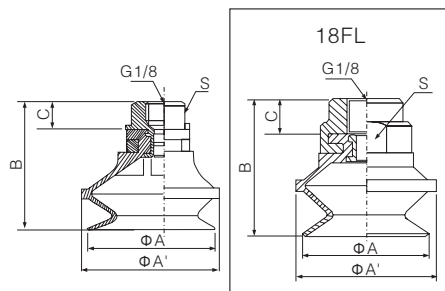
Model	Φ A	Φ A'	B	C	D
SB5-M5	5.6	6.2	9.2	4	16.7
SB8-M5	8.8	9.6	11.9	4	19.4
SB10-M5	11	12	16	5	25
SB12-M5	12	14	16.5	5	25.5
SB15-M5	15.5	17.5	19.5	5	28.5



Male thread connection(mm)

Model	Φ A	Φ A'	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

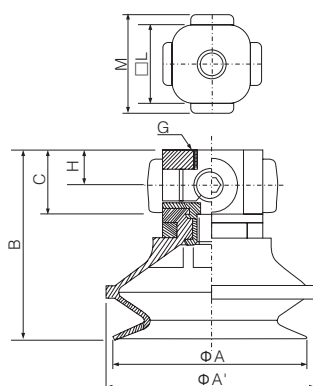
*only for S (Silicone) material



Female thread connection(mm)

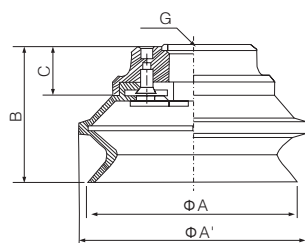
Model	Φ A	Φ A'	B	C	S
SB17-18F	18.5	16.6	23.6	8	S15
SB20-18F	22	24	27	8	S15
SB30-18F	34	36	34	8	S17
SB30-18FL*	34	36	35	9	S21
SB40-18F	43	46	36	8	S17
SB40-18FL*	43	46	37	9	S21
SB50-18F	53	58	44	9	S24

*only for S (Silicone) material



Female thread connection × 5(mm)

Model	Φ A	Φ A'	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	Φ A	Φ A'	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

Features

- ☆ 4.5 bellow vacuum pad.
- ☆ Transferring fragile objects,high safety.
- ☆ Transferring objects with height differences.
- ☆ Transferring foods with plastic package.

Applications

- ◇ Eggs
- ◇ Glass
- ◇ Bread
- ◇ Foods with plastic package



How to Order

SBL40 N – M5/18MF – EH – KE510–A12

①

②

③

④

⑤

① Model

SBL15	Φ 15
SBL20	Φ 20
SBL30	Φ 30
SBL35M	Φ 35
SBL40	Φ 40
SBL40B	Φ 40
SBL50	Φ 50

② Material (Shore hardness)

N	NBR(55°)
S	Silicone(50°)
WS	White silicone(50°)
CS	Conductive(Special mat'l)(50°)

③ Connection thread

M5–M	M5 Male thread (SBL15)
18–M	G1/8 Male thread (SBL30, SBL40)
14–M	G1/4 Male thread (SBL30, SBL40, SBL50)
38–M	G3/8 Male thread (SBL50)
M5/18MF	M5 Female thread G1/8 Male thread (SBL20)
M5/18MFL*	M5 Female thread G1/8 Male thread (SBL20)
5 × M5F	5 × M5 Female thread (SBL20)
18–F	G1/8 Female thread (SBL20, SBL30, SBL40,SBL50)
18–FL	G1/8 Female thread (SBL30, SBL40)
5 × 18F	5 × G18 Female thread (SBL30, SBL40, SBL50)

④ Valve

EH	Vacuum efficiency valve (SBL20,30,40,50)
–	No

Accessories

KE510–A12

⑤

⑤ Spring plunger	
Model	Buffer stroke(mm)
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–A16, 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

*Not available with ball joint.

Recommended(Max.)lifting force(N)

Model	Volume cm ³	Vertical lifting force(N)	
		–20kPa	–60kPa
SBL15	1.95	0.24	0.48
SBL20	4	0.3	0.6
SBL30	13	0.6	1.55
SBL35M	21	0.79	1.87
SBL40	27	1.05	2.15
SBL40B	26	10	20.53
SBL50	55	1.68	4.22

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

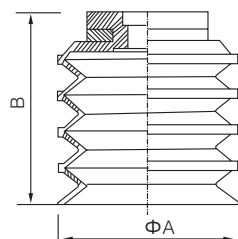
Spring Plunger

Fittings for
Vacuum Pads

BH

Bulkhead
Connector

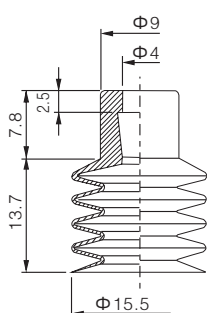
Ball Joint



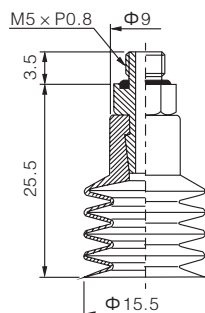
◀ SBL20 SBL30 SBL40 SBL50

Model	ΦA	B
SBL20	20	23
SBL30	30	32
SBL40	40	42
SBL50	50	52

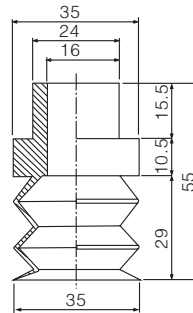
▼ SBL15



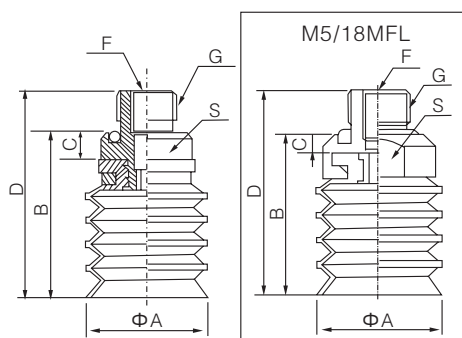
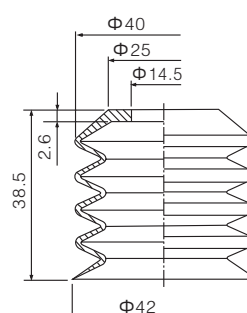
▼ SBL 15M5M



▼ SBL35M



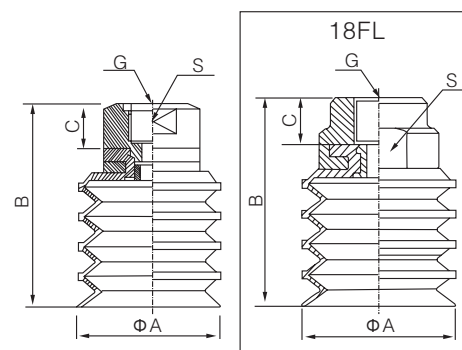
▼ SBL40B



Male thread connection(mm)

Model	ΦA	B	C	D	F	G	S
SBL20-M5/18MF	20	24.5	1.5	30.5	M5	G1/8	S12
SBL20-M5/18MFL*	20	26	3	27	M5	G1/8	S16
SBL30-18M	30	37	5	44	-	G1/8	S17
SBL30-14M	30	38	6	47	-	G1/4	S17
SBL40-18M	40	17	5	24	-	G1/8	S17
SBL40-14M	40	48	6	57	-	G1/4	S17
SBL50-14M	50	58	6	67	-	G1/4	S24
SBL50-38M	50	58	6	68	-	G3/8	S24

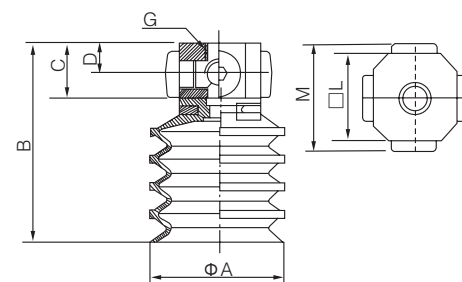
*only for S (Silicone) material



Female thread connection(mm)

Model	ΦA	B	C	G	S
SBL20-18F	20	31	8	G1/8	S15
SBL30-18F	30	40	8	G1/8	S17
SBL30-18FL*	30	41	9	G1/8	S21
SBL40-18F	40	50	8	G1/8	S17
SBL40-18FL*	40	51	9	G1/8	S21
SBL50-18F	50	60	9	G1/8	S24

*only for S (Silicone) material



Female thread connection x5(mm)

Model	ΦA	B	C	D	G	□L	M
SBL20-5 x M5F	20	32	9	5	5 x M5	15	22
SBL30-5 x 18F	30	50	18	10	5 x G1/8	22	30
SBL40-5 x 18F	40	60	18	10	5 x G1/8	22	30
SBL50-5 x 18F	50	70	18	10	5 x G1/8	28	36