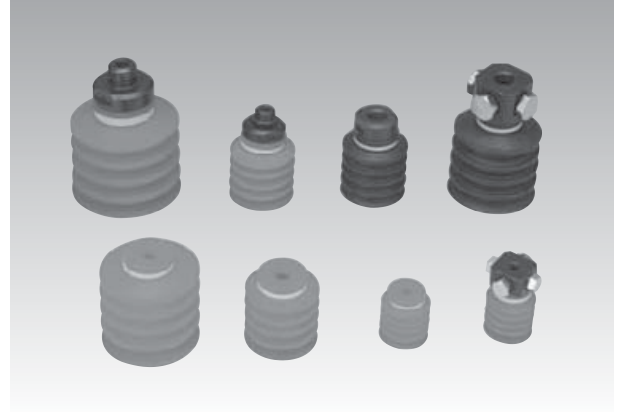


VBL Model (Long Bellows)

Features and Strengths

Similar advantages to that of the normal bellows cups but can cope with an increased degree of height compensation and is particularly good for handling fragile objects.

A note of caution, these cups are not suitable for high level vacuum applications.



Suitable for Handling

- Fragile Objects
- General Food Stuffs
- Glass
- Eggs
- Bread

Order no.

VBL20 **N** - **M518MF** **EV** - **L510T**
 ① ② ③ ④ ⑤

▶ See pages 41, 76-79.

① Vacuum pad Ø

- **VBL20** – Ø20
- VBL30 – Ø30
- VBL35M – Ø35
- VBL40 – Ø40
- VBL50 – Ø50

② Material

- **N** – NBR
- S – Silicon
- CS – C. Silicon
- U – Urethane

③ Thread size

- | | |
|-----------------|---|
| 18M | – G1/8" male (VBL30, VBL40) |
| 14M | – G1/4" male (VBL30, VBL40, VBL50) |
| 38M | – G3/8" male (VBL50) |
| • M518MF | – M5 female and G1/8" male (VBL20) |
| M518MFB* | – M5 female and G1/8" male (VBL20) |
| 18F | – G1/8" female (VBL20, VBL30, VBL40, VBL50) |
| 18FB* | – G1/8" female (VBL30, VBL40) |
| M5X5F | – M5X5 female (VBL20) |
| 18X5F | – G1/8"X5 female (VBL30, VBL40, VBL50) |

* Only for silicon material

④ Valves

- | | |
|-------------|---|
| no mark | – Standard |
| • EV | – Vacuum efficiency valve (See page :26) (VBL20, VBL30) |


Accessories order no.

L510T



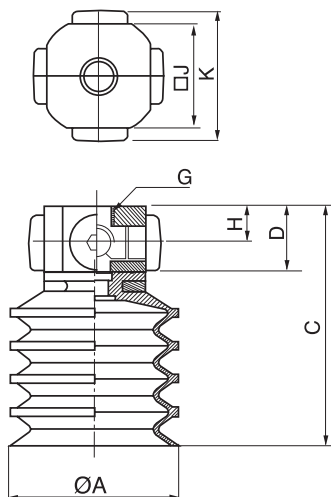
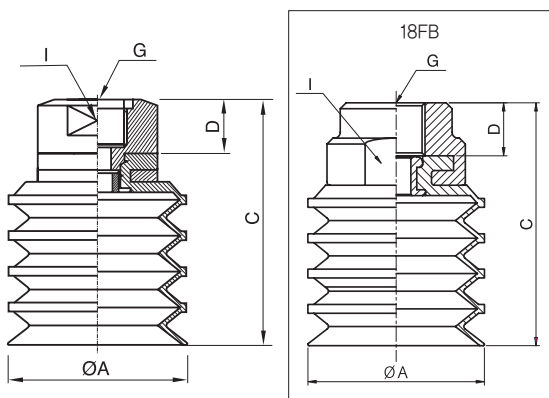
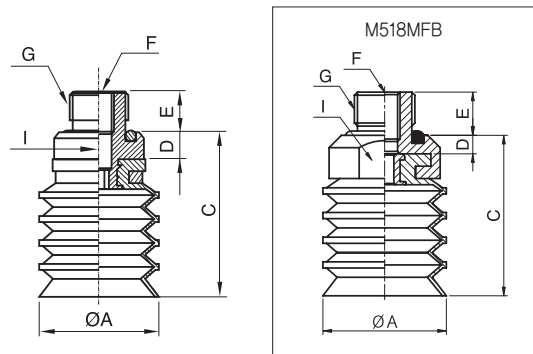
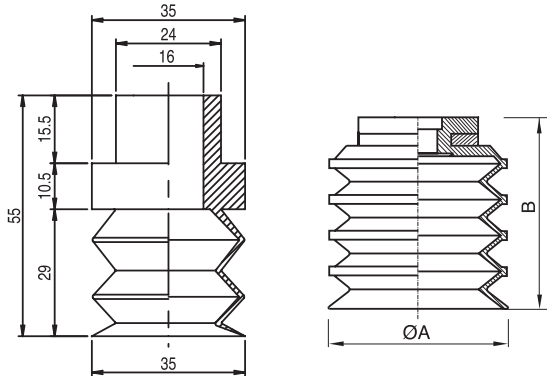
⑤ Level spring	
Model	Stroke
L510	10
● L510T	10
L520	20
L520T	20
L1805F	5
L1805M	5
L1810T	10
L1810TS	10
L1815T	15
L1820T	20
L1820TN	20
L1830	30
L1830T	30
L1850	50
L1850T	50

Recommended (max.) lifting forces when using level springs

Model	Volume (cm ³)	Lifting Force (kg) 		Level spring Model
		-Perpendicular	-60kPa	
VBL20	4	0.03	0.06	L510, L510T, L520, L520T, L1805F, L1805M
VBL30	13	0.06	0.16	L1805M, L1810T(TS), L1815T, L1820T, L1830(T), L1850(T), L1820TN
VBL35M	21	0.08	0.19	-
VBL40	27	0.11	0.22	L1805M, L1810T(TS), L1815T, L1820T, L1830(T), L1850(T), L1820TN
VBL50	55	0.17	0.43	L1805M, L1810T(TS), L1815T, L1820T, L1830(T), L1850(T), L1820TN

Dimensional Information

VBL35M



◀ Ø20 Ø30 Ø40 Ø50

Model	ØA	B
VBL20	20	23
VBL30	30	32
VBL40	40	42
VBL50	50	52

◀ Male thread

Model	ØA	C	D	E	F	G	I
VBL20-M518MF	20	24.5	1.5	6	M5	G1/8"	SW12.2
VBL20-M518MFB*	20	26	3	7	M5	G1/8"	SW16
VBL30-18M	30	37	5	7	-	G1/8"	SW17
VBL30-14M	30	38	6	9	-	G1/4"	SW17
VBL40-18M	40	47	5	7	-	G1/8"	SW17
VBL40-14M	40	48	6	9	-	G1/4"	SW17
VBL50-14M	50	58	6	9	-	G1/4"	SW24
VBL50-38M	50	58	6	10	-	G3/8"	SW24

* Only for silicon material

◀ Female thread

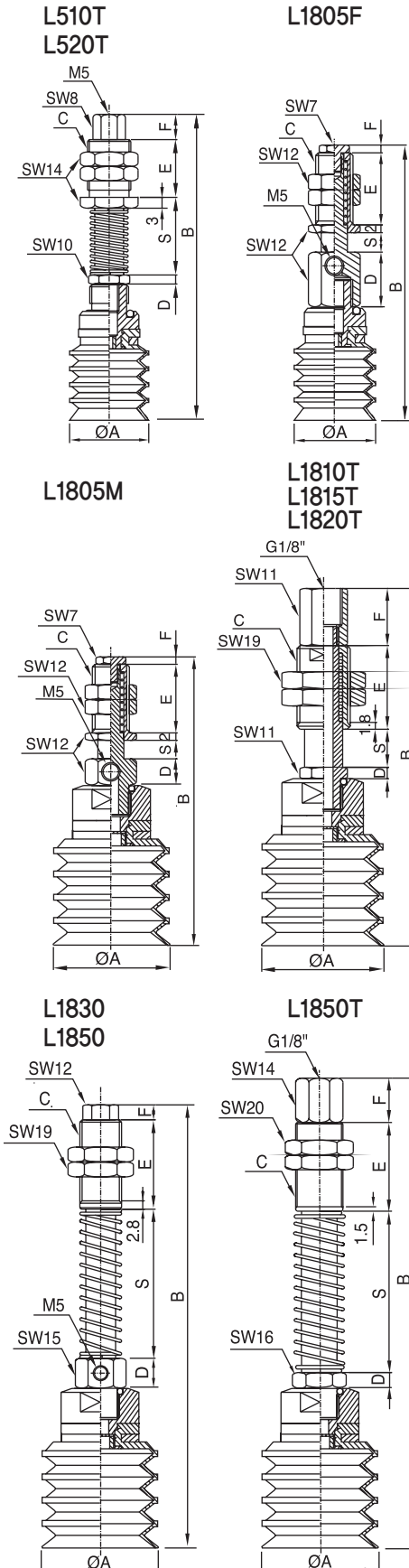
Model	ØA	C	D	G	I
VBL20-18F	20	31	8	G1/8"	SW15
VBL30-18F	30	40	8	G1/8"	SW17
VBL30-18FB*	30	41	9	G1/8"	SW21
VBL40-18F	40	50	8	G1/8"	SW17
VBL40-18FB*	40	51	9	G1/8"	SW21
VBL50-18F	50	60	9	G1/8"	SW24

* Only for silicon material

◀ Female thread

Model	ØA	C	D	G	H	□J	K
VBL20-M5×5F	20	32	9	M5X5	5	15	22
VBL30-18×5F	30	50	18	G1/8"X5	10	22	30
VBL40-18×5F	40	60	18	G1/8"X5	10	22	30
VBL50-18×5F	50	70	18	G1/8"X5	10	28	36

Dimensional information including level spring



Vacuum pad	Level spring Model	ØA	B	C	D	E	F	S (stroke)
VBL20	L510T	20	77[79,5]	M12xP1,0	2,5	16	7	8-18(10)
	L520T	20	87[89,5]	M12xP1,0	2,5	16	7	8-28(20)
	L1805F	20	66[67,5]	M10xP1,0	14	18,5	2	0-5(5)
	L1805M	20	65,5	M10xP1,0	7	18,5	2	0-5(5)

[] Pads material silicon

Vacuum pad	Level spring Model	ØA	B	C	D	E	F	S (stroke)
VBL30		30	76,5[77,5]					
VBL40	L1805M	40	86,5[87,5]	M10XP1,0	8	18,5	2	0-5(5)
VBL50		50	96,5					
VBL30		30	90[91]					
VBL40	L1810T	40	100[101]	M14XP1,5	3	22	15	0-10(10)
VBL50		50	110					
VBL30		30	100[101]					
VBL40	L1815T	40	110[111]	M14XP1,5	3	27	15	0-15(15)
VBL50		50	120					
VBL30		30	113,6[114,6]					
VBL40	L1820T	40	123,6[124,6]	M16XP1,0	3	35	15	0-20(20)
VBL50		50	133,6					
VBL30		30	136[137]					
VBL40	L1830	40	146[147]	M14XP1,5	11	30	5	20-50(30)
VBL50		50	156					
VBL30		30	156[157]					
VBL40	L1850	40	166[167]	M14XP1,5	11	30	5	20-70(50)
VBL50		50	176					
VBL30		30	160[161]					
VBL40	L1850T	40	170[171]	M16XP1,0	5	30	15	20-70(50)
VBL50		50	180					

[] Pads material silicon