



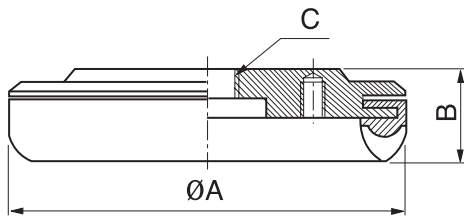
### Recommended (max.) lifting forces when using level springs

Model	Volume (cm <sup>3</sup> )	Lifting Force (kg) -Perpendicular			Level spring model
		- 20kPa	- 60kPa	- 90kPa	
VS35	6	2,04	5,1	7,14	L1805M, L1810T(TS), L1815T, L1820T(TN), L1830(T), L1850(T)
VS60	20	6,12	15,3	22,44	L1805M, L1810T(TS), L1815T, L1820T(TN), L1830(T), L1850(T)
VS100	55	18,36	45,9	67,34	L1230, L1230T, L1250, L1250T
VS150	125	38	97	138	L1230, L1230T, L1250, L1250T
VS200	543	76,53	193,87	275,51	L1230, L1230T, L1250, L1250T
VS300	1285	163,26	438,77	653,06	-
VS400	2285	326	876	1300	-

### Dimensional Information

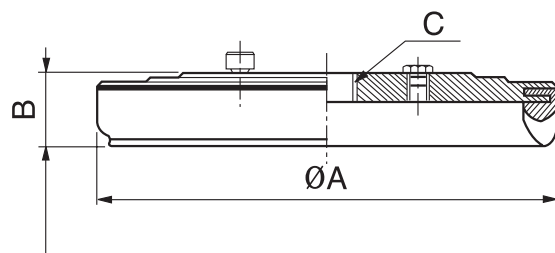
#### Female thread

VS35, 60, 100, 150



Model	ØA	B	C
VS35	42,5	15,5	G1/8"
VS60	67,5	15,5	G1/8"
VS100	107,5	19,5	G1/2"
VS150	157,5	19,5	G1/2"

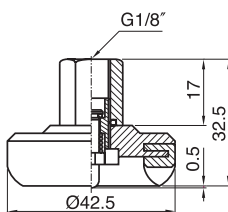
VS200, 300, 400



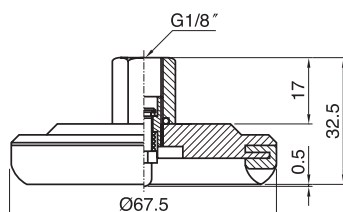
Model	ØA	B	C
VS200	215	34	G1/2", G3/4"
VS300	315	34	G3/4"
VS400	415	34	G3/4"

### Button valve dimensional Information

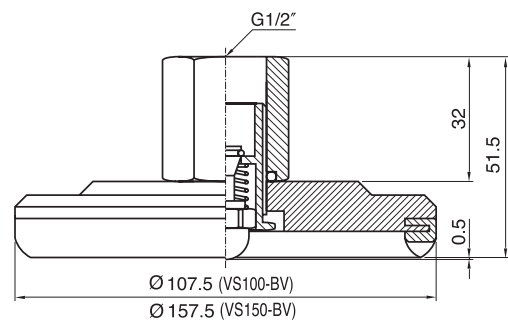
VS35-BV



VS60-BV

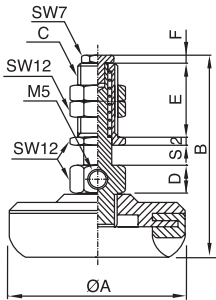


VS100-BV  
VS150-BV

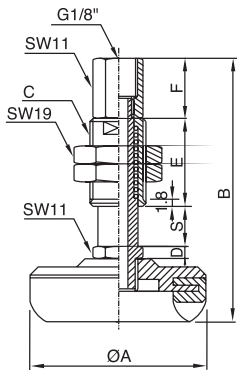


### Dimensional information including level spring

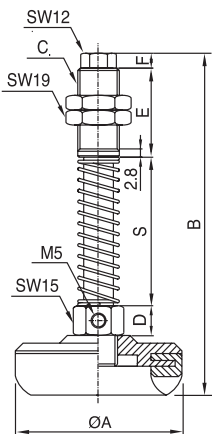
L1805M



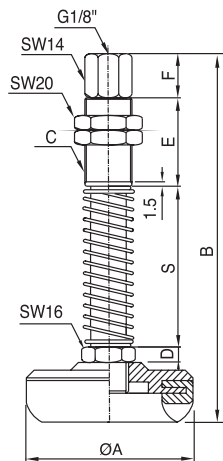
L1810T  
L1815T  
L1820T



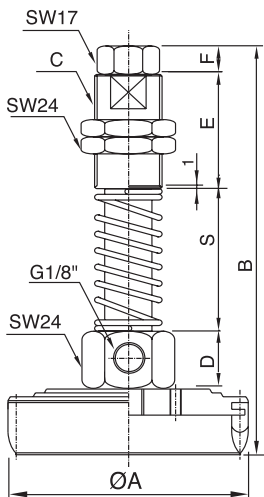
L1830  
L1850



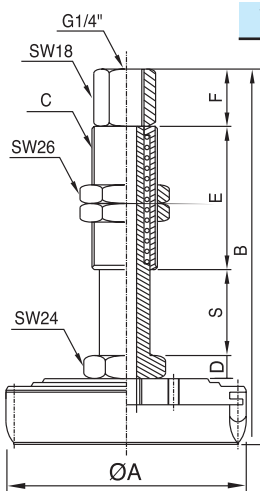
L1850T



L1230  
L1250



L1230T



Vacuum pad	Level spring Model	ØA	B	C	D	E	F	S (stroke)
VS35	L1805M	42,5	52	M10XP1,0	9	18,5	2	0-5 (5)
VS60		67,5						
VS35	L1810T	42,5	65,5	M14XP1,5	3	22	15	0-10 (10)
VS60		67,5						
VS35	L1815T	42,5	75,5	M14XP1,0	3	27	15	0-15 (15)
VS60		67,5						
VS35	L1820T	42,5	89,1	M16XP1,0	3	35	15	0-20 (20)
VS60		67,5						

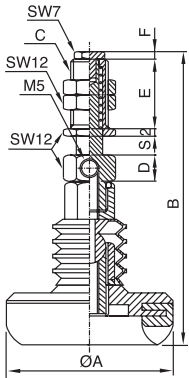
Vacuum pad	Level spring Model	ØA	B	C	D	E	F	S (stroke)
VS35	L1830	42,5	111,5	M14XP1,5	11	30	5	20-50 (30)
VS60		67,5						
VS35	L1850	42,5	131,5	M14XP1,5	11	30	5	20-50 (30)
VS60		67,5						
VS35	L1850T	42,5	135,5	M16XP1,0	5	50	15	20-70 (50)
VS60		67,5						

Vacuum pad	Level spring Model	ØA	B	C	D	E	F	S (stroke)
VS100	L1230	107,5	139,5	M20XP1,5	20	40	10	20-50 (30)
VS150		157,5	139,5					
VS200		215	154					
VS100	L1250	107,5	179,5	M20XP1,5	20	40	10	40-90 (50)
VS150		157,5	179,5					
VS200		215	194					
VS100	L1230T	107,5	127,5	M22XP1,5	8	50	20	0-30 (30)
VS150		157,5	127,5					
VS200		215	142					

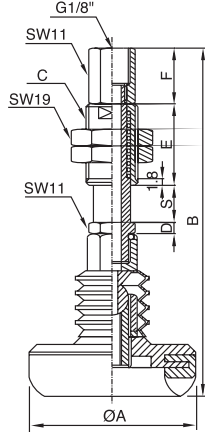
### Dimensional information including level spring & Ball joint

VACUUM PAD

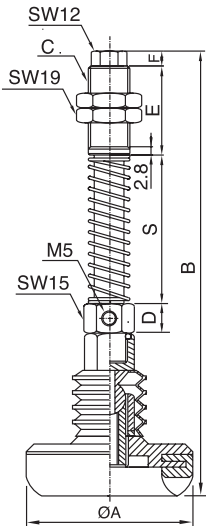
L1805M-BJ18



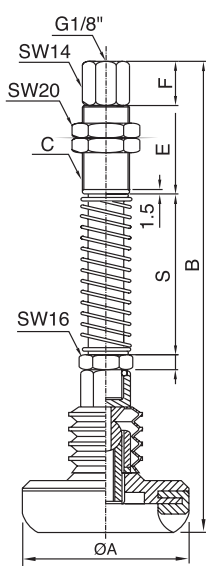
L1810T-BJ18  
L1815T-BJ18  
L1820T-BJ18



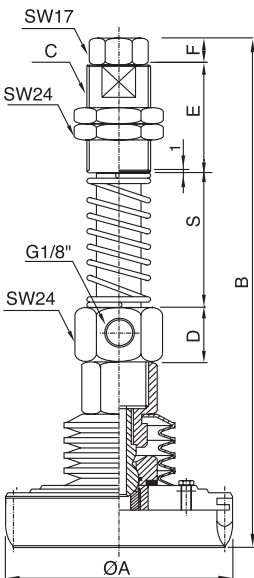
L1830-BJ18  
L1850-BJ18



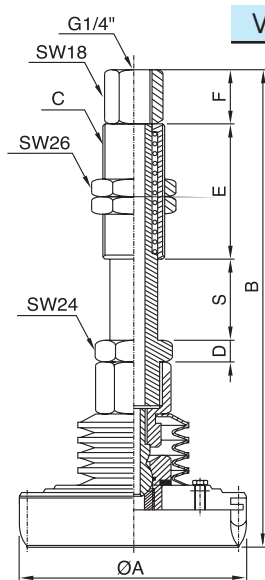
L1850T-BJ18



L1230-BJ12  
L1250-BJ12



L1230T-BJ12



Vacuum pad	Level spring-Ball joint Model	ØA	B	C	D	E	F	S (stroke)
VS35	L1805M-BJ18	42.5	80	M10XP1,0	9	18,5	2	0-5 (5)
VS60	L1805M-BJ18	67.5	80	M10XP1,0	9	18,5	2	0-5 (5)
VS35	L1810T-BJ18	42.5	93,5	M14XP1,5	3	22	15	0-10 (10)
VS60	L1810T-BJ18	67.5	93,5	M14XP1,5	3	22	15	0-10 (10)
VS35	L1815T-BJ18	30	103,5	M14XP1,0	3	27	15	0-15 (15)
VS60	L1815T-BJ18	40	103,5	M14XP1,0	3	27	15	0-15 (15)
VS35	L1820T-BJ18	42.5	117,1	M16XP1,0	3	35	15	0-20 (20)
VS60	L1820T-BJ18	67.5	117,1	M16XP1,0	3	35	15	0-20 (20)

Vacuum pad	Level spring-Ball joint Model	ØA	B	C	D	E	F	S (stroke)
VS35	L1830-BJ18	42.5	139,5	M14XP1,5	11	30	5	20-50 (30)
VS60	L1830-BJ18	67.5	139,5	M14XP1,5	11	30	5	20-50 (30)
VS35	L1850-BJ18	42.5	159,5	M14XP1,5	11	30	5	20-70 (50)
VS60	L1850-BJ18	67.5	159,5	M14XP1,5	11	30	5	20-70 (50)
VS35	L1850T-BJ18	42.5	163,5	M16XP1,0	5	50	15	20-70 (50)
VS60	L1850T-BJ18	67.5	163,5	M16XP1,0	5	50	15	20-70 (50)

Vacuum pad	Level spring-Ball joint Model	ØA	B	C	D	E	F	S (stroke)
VS100	L1230-BJ12	107,5	183,5	M20XP1,5	20	40	10	20-50 (30)
VS150		157,5	183,5					
VS200		215	198					
VS100	L1250-BJ12	107,5	223,5	M20XP1,5	20	40	10	40-90 (50)
VS150		157,5	223,5					
VS200		215	238					
VS100	L1230T-BJ12	107,5	171,5	M22XP1,5	8	50	20	0-30 (30)
VS150		157,5	171,5					
VS200		215	186					