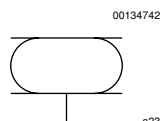


Rodless cylinders ▶ Bellow actuator

Series BCP

▶ single ▶ Stroke: 34 - 107 mm



Version	Bellow actuator with cover
Functional principle	Single-acting, retracted without pressure
Permissible angle of tilt	10 ° - 20 °
Working pressure min./max.	0 bar / 8 bar
Ambient temperature min./max.	-40 °C / +70 °C
Medium	Compressed air
Pressure for determining forces	6 bar
Materials:	
Bellow	caoutchouc/butadiene caoutchouc
Front cover	Steel, galvanized
End cover	Steel, galvanized

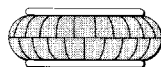
Technical Remarks

- Compliance with the minimum height H min. as well as the maximum height H max. must be ensured with end stops.
- Use at operating height $\geq H_{max}$: only permitted upon approval by AVENTICS
- For information on vibration insulators, see "Technical Information"
- reduced service life at a temperature greater than: 50 °C

	Compressed air connection G	Max. effective stroke	Cover diameter	Min. radial installation space	Weight	Force min./max.	Fig.	Note	Part No.
		[mm]	[mm]	[mm]	[kg]	[kN]			
	G 1/8	50	90	160	0.9	2.5 - 5.5	Fig. 1	-	0822419001
	G 1/4	34	108	165	1.2	3.5 - 6.9	Fig. 2	-	R412010198
	G 1/4	54	108	180	1.2	4.5 - 7.5	Fig. 2	-	0822419002
	G 1/4	79	114	225	1.4	4.3 - 10.9	Fig. 2	-	R412010199
	G 3/4	75	141	230	2	6.1 - 13.6	Fig. 2	-	0822419003
	G 3/4	107	141	250	1.9	7 - 14	Fig. 2	1)	R412010197
	G 3/4	74	161	265	2.3	9.3 - 17.3	Fig. 3	-	0822419004
	G 3/4	89	228	340	4.1	19.4 - 33.3	Fig. 3	-	1933091000
	G 3/4	104	287	400	5.9	26.1 - 50	Fig. 4	-	1938091000

1) Once the minimum height H min. is reached, the bead height W can fall below the lower limit. If, for these products, level mounting surfaces greater than the cover diameter are selected, the return force and force output at the start of stroke increase. In the process, the rubber bellows is also compressed by the mounting surfaces. These products require more space upward, which can, in rare cases, present a hindrance. In any case, the specifications of the data sheets apply when using mounting surfaces in the size of the bellows actuator cover.

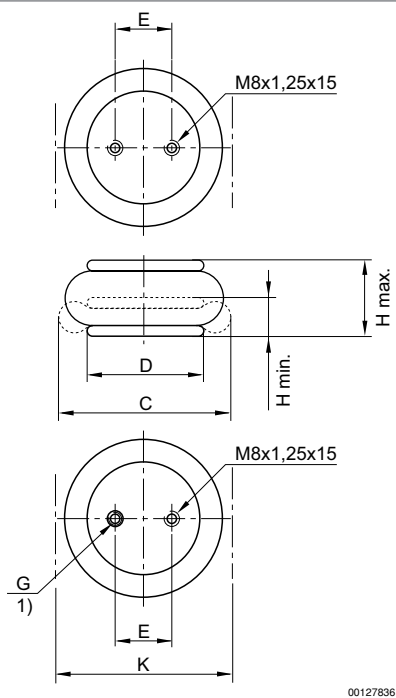
bellow type



00133710

Series BCP
 ▶ single ▶ Stroke: 34 - 107 mm

Fig. 1



1) air connection in the mounting hole

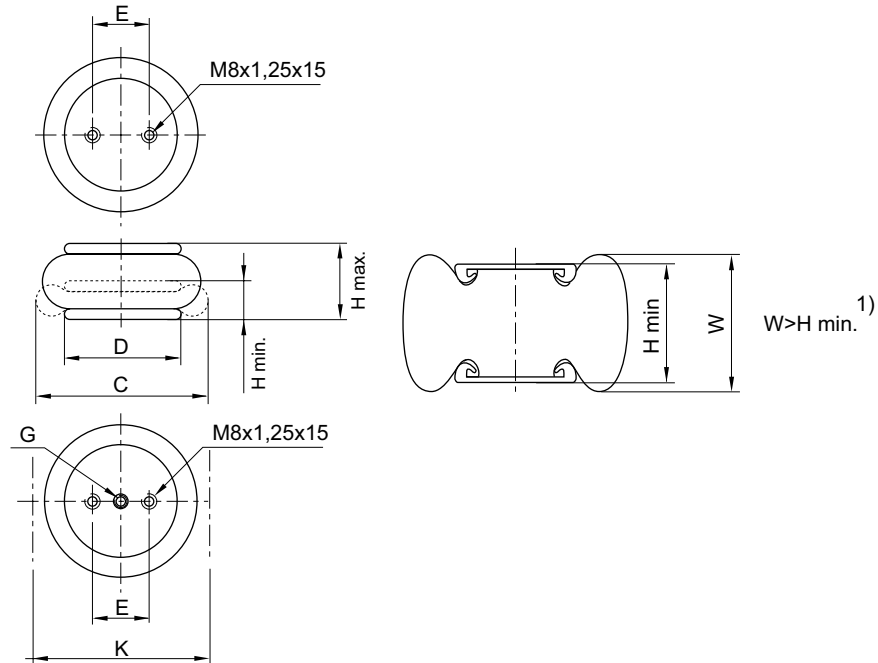
Part No.	Compressed air connection G	H min. [mm]	H max. [mm]	C [mm]	D [mm]	E ±0,5 [mm]	K [mm]	Return force, min. [N]
0822419001	G 1/8	50	100	145	90	20	160	120

Rodless cylinders ▶ Bellow actuator

Series BCP

▶ single ▶ Stroke: 34 - 107 mm

Fig. 2



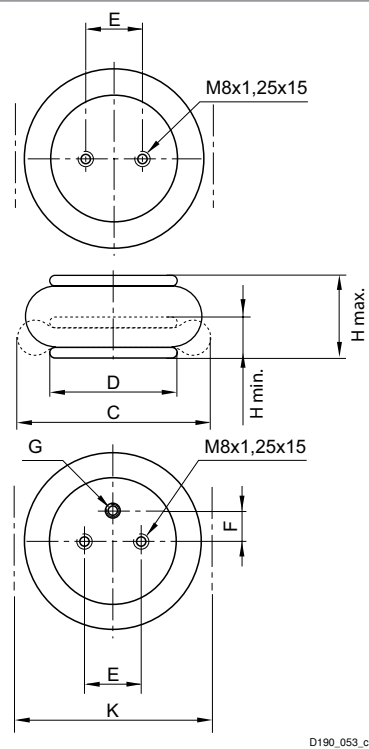
D190_053_b

Part No.	Compressed air connection G	H min. [mm]	H max. [mm]	C [mm]	D [mm]	E ±0,5 [mm]	K [mm]	Return force, min. [N]
R412010198	G 1/4	51	85	150	108	44.5	165	250
0822419002	G 1/4	51	105	165	108	44.5	180	200
R412010199	G 1/4	51	130	210	114	44.5	225	45
0822419003	G 3/4	50	125	215	141	70	230	200
R412010197	G 3/4	51	158	235	141	70	250	200

Series BCP

▶ single ▶ Stroke: 34 - 107 mm

Fig. 3



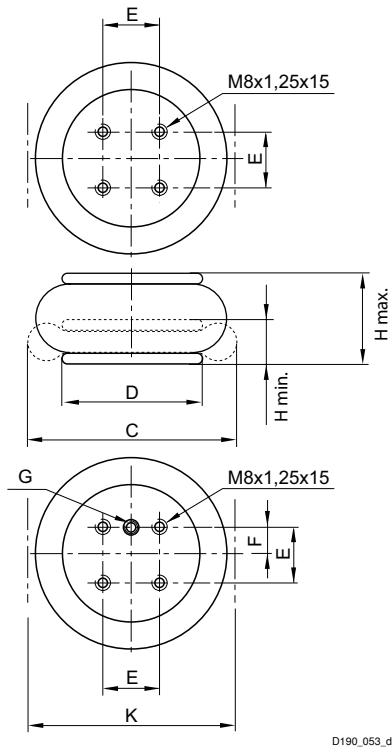
Part No.	Compressed air connection G	H min. [mm]	H max. [mm]	C [mm]	D [mm]	E ±0,5 [mm]	F ±0,5 [mm]	K [mm]
0822419004	G 3/4	51	125	250	161	89	38.1	265
1933091000	G 3/4	51	140	325	228	157.5	73	340

Part No.	Return force, min. [N]										
0822419004	200										
1933091000	300										

Rodless cylinders ▶ Bellow actuator

Series BCP
▶ single ▶ Stroke: 34 - 107 mm

Fig. 4



D190_053_d

Part No.	Compressed air connection G	H min. [mm]	H max. [mm]	C [mm]	D [mm]	E ±0,5 [mm]	F ±0,5 [mm]	K [mm]
1938091000	G 3/4	51	155	385	287	158.8	79.4	400

Part No.	Return force, min. [N]									
1938091000	300									

force-displacement diagram for simple bellow actuators



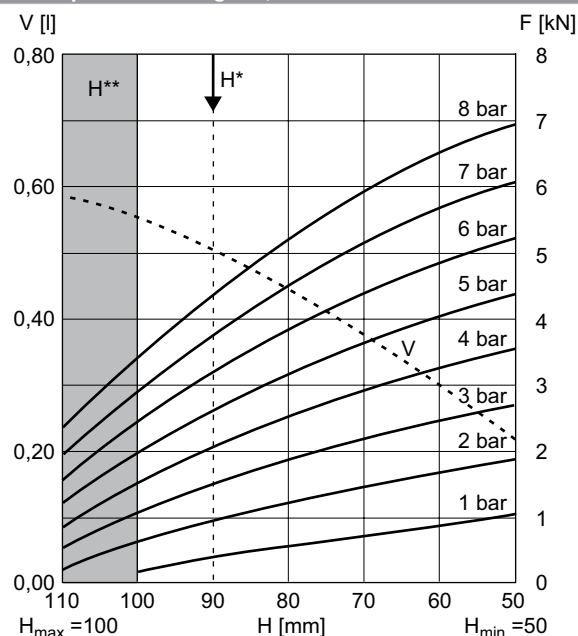
00106842_b

max. permissible parallel movement between the covers: 10 mm

Series BCP

▶ single ▶ Stroke: 34 - 107 mm

force-displacement diagram, 0822419001



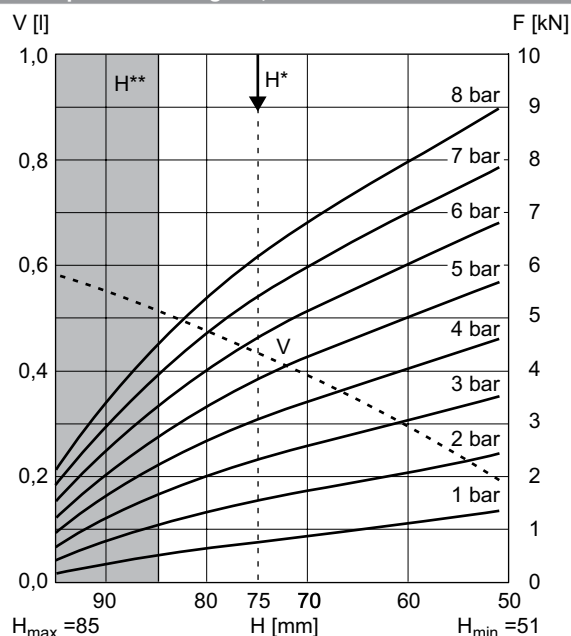
V = volume

H = height

H* = recommended operating height for vibration isolation

H** = use permitted only upon approval by AVENTICS

force-displacement diagram, R412010198



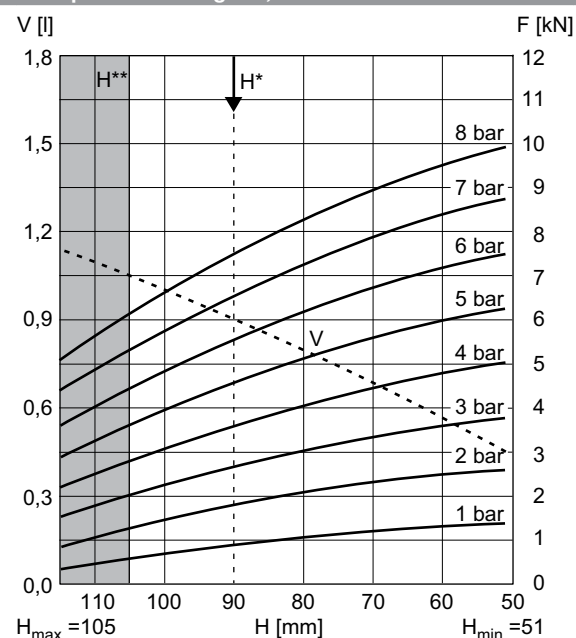
V = volume

H = height

H* = recommended operating height for vibration isolation

H** = use permitted only upon approval by AVENTICS

force-displacement diagram, 0822419002



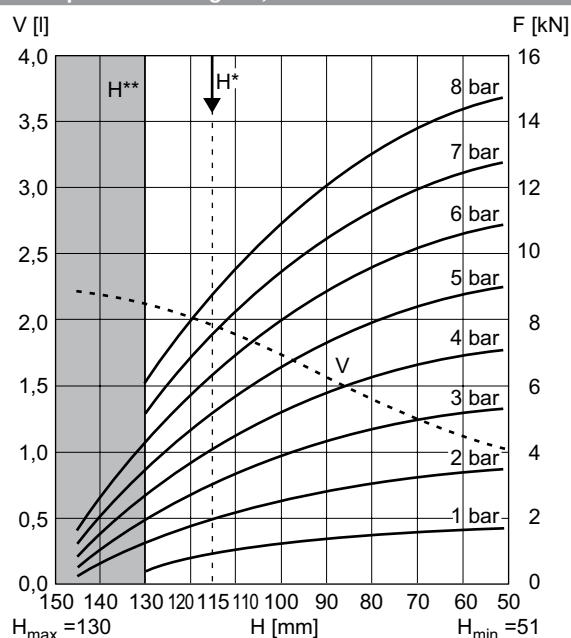
V = volume

H = height

H* = recommended operating height for vibration isolation

H** = use permitted only upon approval by AVENTICS

force-displacement diagram, R412010199



V = volume

H = height

H* = recommended operating height for vibration isolation

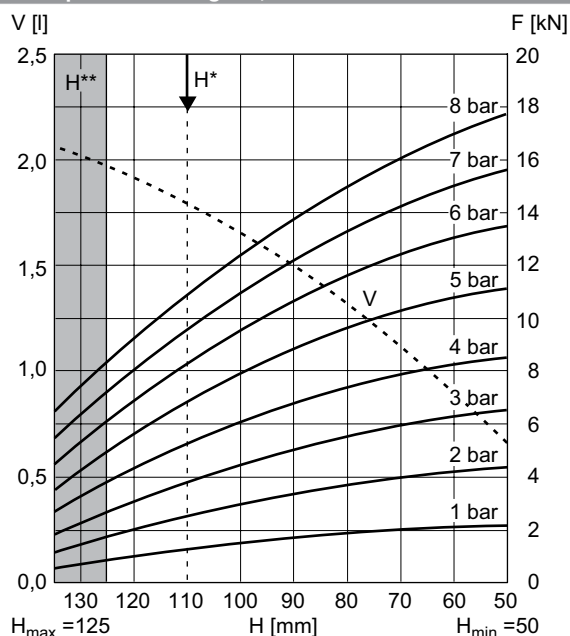
H** = use permitted only upon approval by AVENTICS

Rodless cylinders ▶ Bellow actuator

Series BCP

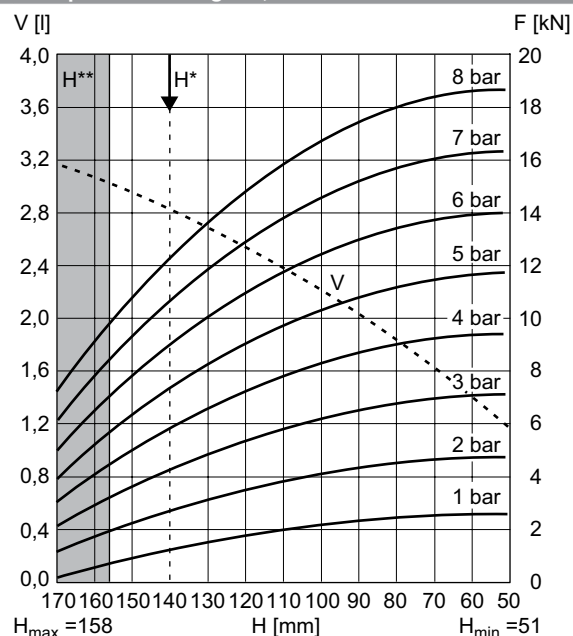
▶ single ▶ Stroke: 34 - 107 mm

force-displacement diagram, 0822419003



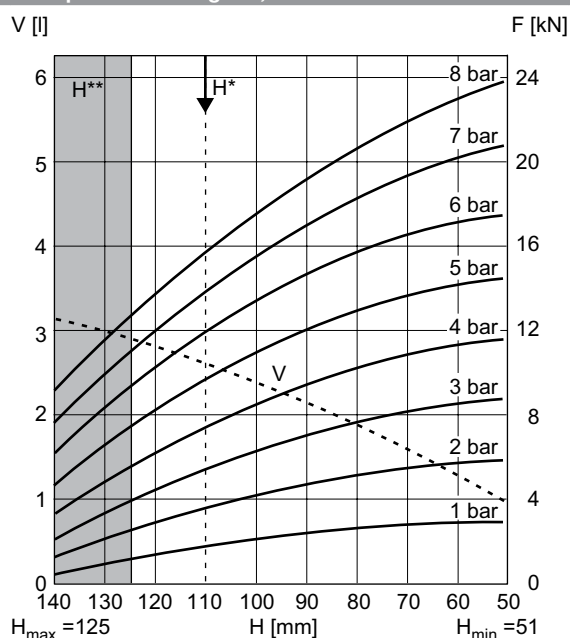
V = volume
H = height
H* = recommended operating height for vibration isolation
H** = use permitted only upon approval by AVENTICS

force-displacement diagram, R412010197



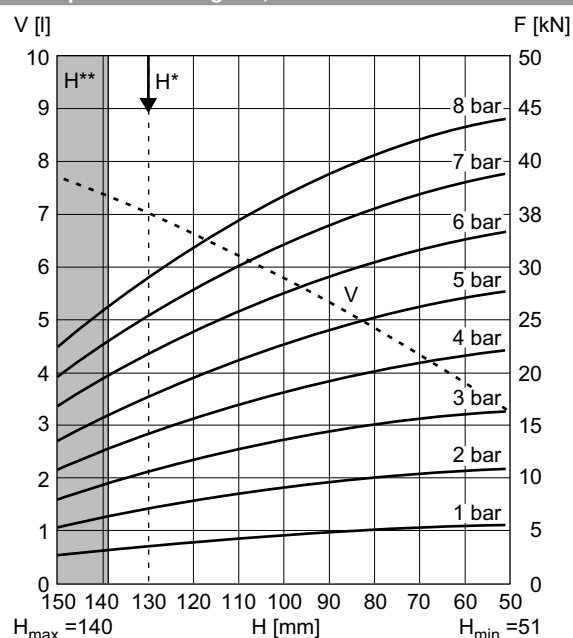
V = volume
H = height
H* = recommended operating height for vibration isolation
H** = use permitted only upon approval by AVENTICS

force-displacement diagram, 0822419004



V = volume
H = height
H* = recommended operating height for vibration isolation
H** = use permitted only upon approval by AVENTICS

force-displacement diagram, 1933091000

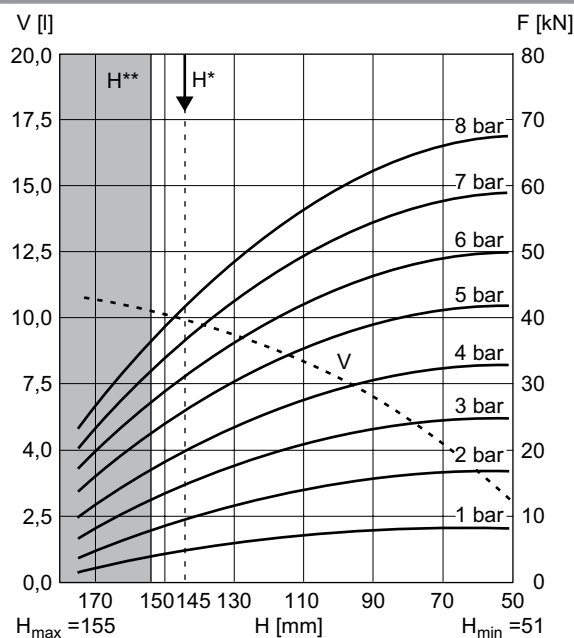


V = volume
H = height
H* = recommended operating height for vibration isolation
H** = use permitted only upon approval by AVENTICS

Series BCP

► single ► Stroke: 34 - 107 mm

force-displacement diagram, 1938091000



V = volume

H = height

H^* = recommended operating height for vibration isolation

H^{**} = use permitted only upon approval by AVENTICS