

Bellow actuator with cover, series BCP, single, air connection between 3 mounting holes

Series BCP

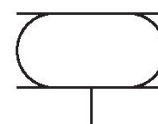
2024-09-12

0822419002

- Bellow cylinder with permanently crimped connecting plates
- Permit high forces in small installation space
- Enables angular movements and axial offset
- High corrosion and temperature resistance
- Tested safety up to 24 bar

AVENTICS Series BCP Bellow actuators

The AVENTICS Series BCP cylinders are bellow actuators with firmly flanged steel covers and bellows made of natural rubber in the standard version. The heat-resistant version is distinguished by bellows made of epichlorohydrin rubber (ECO) and the corrosion-resistant version by stainless steel covers (V2A).



Technical data

| | |
|--|---|
| Industry | Industrial |
| Bellows | single |
| Type | Bellow actuator with cover |
| Functional principle | Single-acting, retracted without pressure |
| Compressed air connection | G 1/4 |
| Cover diameter | 108 mm |
| Max. permissible angle of tilt | 15 ° |
| Max. effective stroke | 54 mm |
| Min. radial installation space | 180 mm |
| Min. installation height | 51 mm |
| Max. installation height | 105 mm |
| Min. force | 4500 N |
| Max. force | 7500 N |
| Min. working pressure | 0 bar |
| Max. working pressure | 8 bar |
| Min. ambient temperature | -40 °C |
| Max. ambient temperature | 70 °C |
| Medium | Compressed air |
| Reduced service life at a temperature greater than | 50 °C |

Bellow actuator with cover, series BCP, single, air connection between 3 mounting holes

Series BCP

2024-09-12

0822419002

Pressure for determining forces

6 bar

Weight

1.2 kg

Material

Material bellow

caoutchouc/butadiene caoutchouc

Material front cover

Steel, chrome-plated

Surface cover

galvanized

Part No.

0822419002

Technical information

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

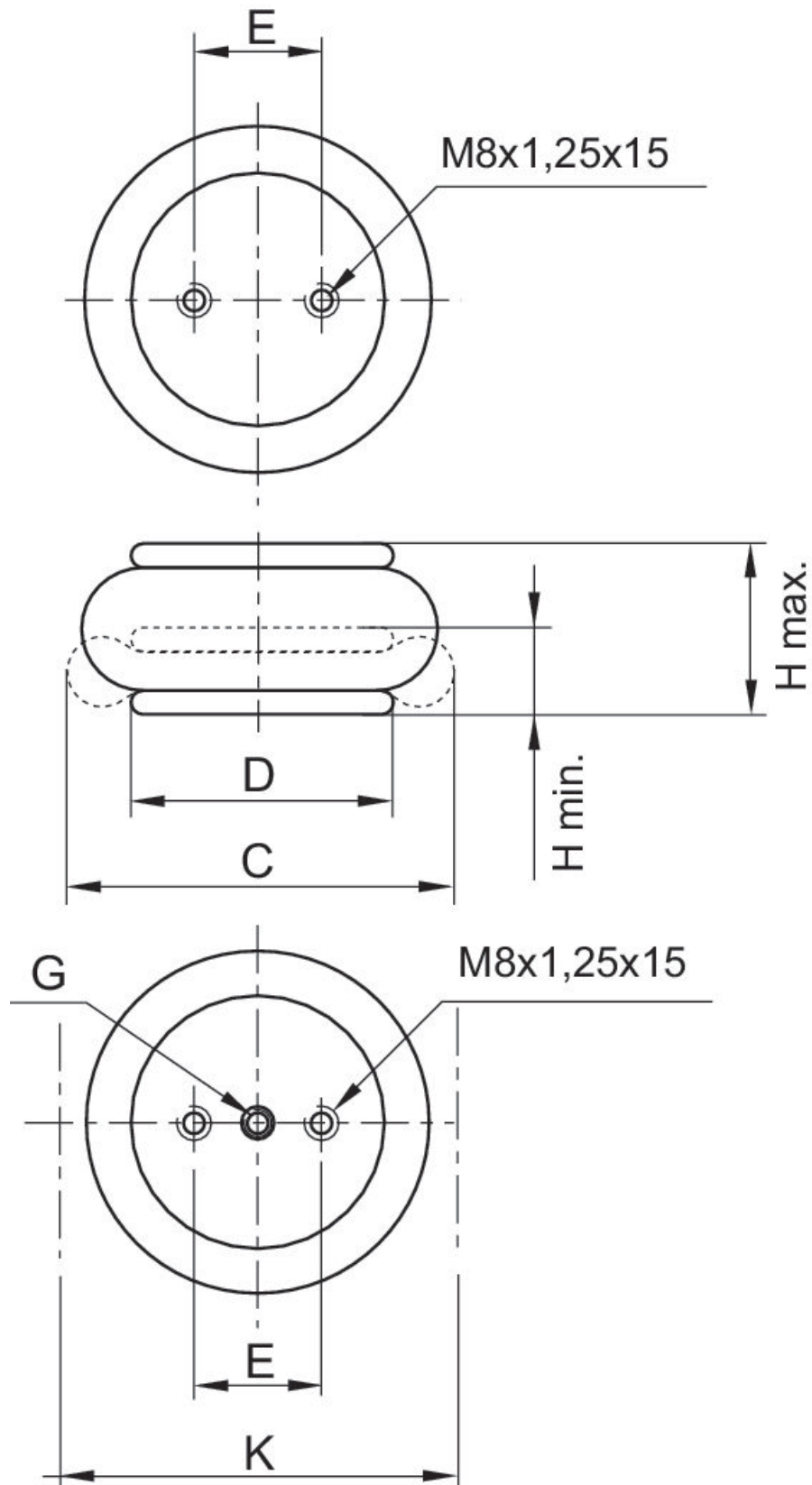
Further information on vibration isolation can be found in the "Technical information" document (available in the MediaCentre).

Bellow actuator with cover, series BCP, single, air connection between 3 mounting holes

Series BCP

2024-09-12

0822419002
Dimensions



Bellow actuator with cover, series BCP, single, air connection between 3 mounting holes

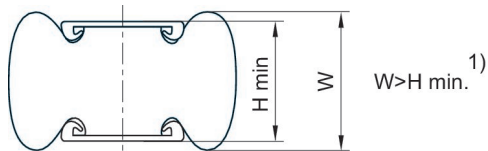
Series BCP

2024-09-12

0822419002

| Part No. | Compressed air connection G | H min. mm | H max. mm | C mm | D mm | E ±0,5 [mm] | K mm | Min. return force 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 |
| 1923061000 | G 3/4 | 51 | 130 | 231 | 141 | 70 | 245 | 200 |
| R412010197 | G 3/4 | 51 | 158 | 235 | 141 | 70 | 250 | 200 |

Comment

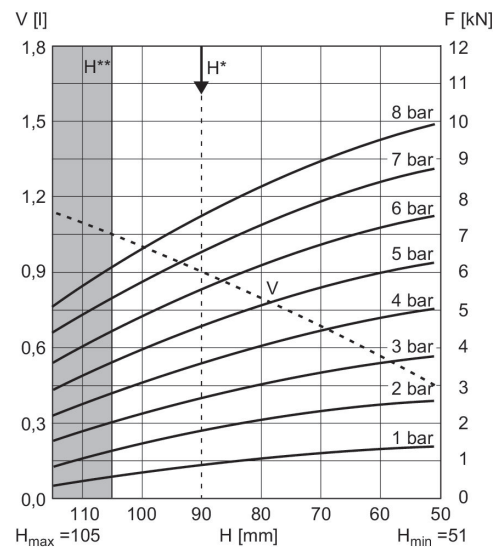


1) Once the minimum height H min. is reached, the bead height W can fall below the lower limit. If, for these products, level mounting surfaces greater than the cover diameter are selected, the return force and force output at the start of stroke increase. In the process, the rubber bellow is also compressed 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.

1 kN = 1000 N

Force-displacement diagram

0822419002



V = volume H = height H* = recommended operating height for vibration isolation H** = use permitted only upon approval by AVENTICS
1 kN = 1000 N