2999638300

- 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 double

Type Bellow actuator with cover

Functional principle Single-acting, retracted without pressure

Compressed air connection G 3/4 228 mm Cover diameter 20° Max. permissible angle of tilt Max. effective stroke 223 mm Min. radial installation space 355 mm Min. installation height 77 mm 300 mm Max. installation height 20500 N Min. force

Min. working pressure0 barMax. working pressure8 barMin. ambient temperature-40 °CMax. ambient temperature70 °C

Medium Compressed air

Reduced service life at a temperature greater 50 °C

than

Max. force

36800 N

Bellow actuator with cover, series BCP, double, air connection above 3 mounting holes

Series BCP 2024-09-12

2999638300

| Pressure for determining forces | 6 bar |
|---------------------------------|--------|
| Weight | 5.1 kg |

Material

Material bellow caoutchouc/butadiene caoutchouc

Material front cover Steel, chrome-plated

Surface cover galvanized
Part No. 2999638300

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 ≥ Hmax: only permitted upon approval by AVENTICS

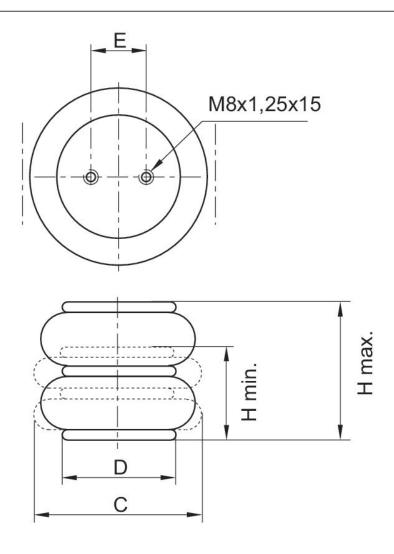
Further information on vibration isolation can be found in the "Technical information" document (available in the MediaCentre).

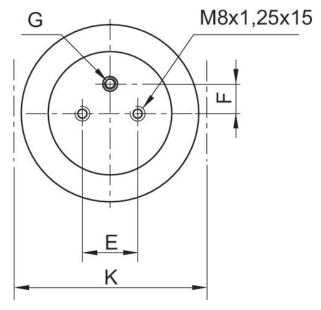
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

2999638300 Dimensions



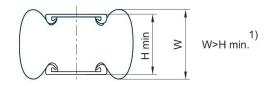


Bellow actuator with cover, series BCP, double, air connection above 3 mounting holes

2999638300

| Part No. | Compressed air con- nection G | H min. mm | H max. mm | C mm | D mm | E ±0,5 [mm] | F ±0,5 [mm] | K mm | Min. return force N |
|------------|-------------------------------------|-----------|-----------|------|------|-------------|-------------|------|------------------------|
| 0822419043 | G 3/4 | 75 | 240 | 250 | 161 | 89 | 38.1 | 250 | 200 |
| R412010042 | G 3/4 | 77 | 260 | 255 | 161 | 89 | 38.1 | 265 | 200 |
| 2999619400 | G 3/4 | 77 | 300 | 260 | 161 | 89 | 38.1 | 275 | 250 |
| 1933181000 | G 3/4 | 75 | 265 | 325 | 228 | 157.5 | 73 | 340 | 300 |
| 2999638300 | G 3/4 | 77 | 300 | 340 | 228 | 157.5 | 73 | 355 | 300 |

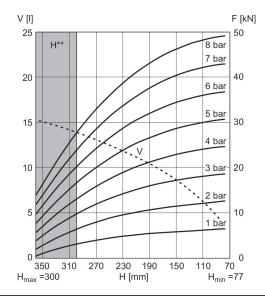
Comment



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 2999638300



V = volume H = height H**= use permitted only upon approval by AVENTICS 1 kN = 1000 N