- R412010199
- 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 114 mm
Max. permissible angle of tilt 15 °
Max. effective stroke 79 mm
Min. radial installation space 225 mm
Min. installation height 51 mm

Max. installation height

Min. force

Max. force

Min. working pressure

Max. working pressure

Min. ambient temperature

130 mm

4300 N

10900 N

6 bar

8 bar

40 °C

Min. ambient temperature -40 °C

Max. ambient temperature 70 °C

Medium Compressed air

Reduced service life at a temperature greater 50 °C

than

Series BCP 2024-09-12

R412010199

Pressure for determining forces	6 bar
Weight	1.4 kg

#### Material

Material bellow caoutchouc/butadiene caoutchouc

Material front cover Steel, chrome-plated

Surface cover galvanized
Part No. R412010199

#### Technical information

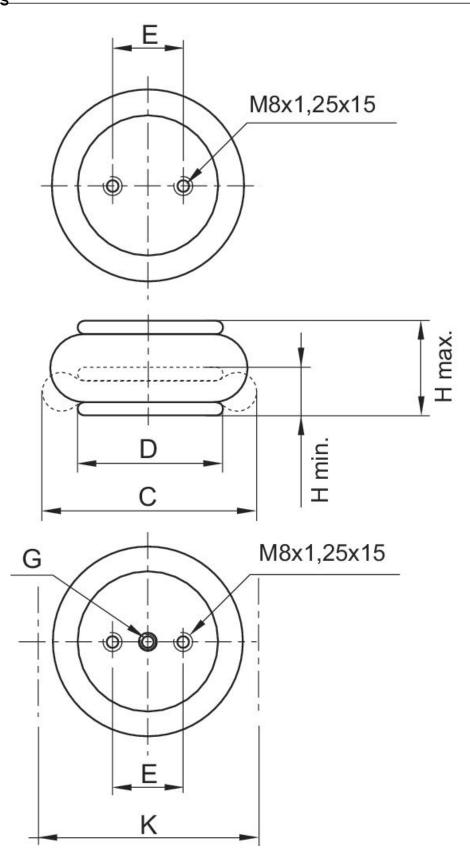
Compliance with the minimum height H min. as well as the maximum height H max. must be ensured with end stops.

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).



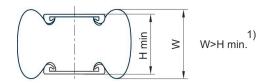
R412010199 Dimensions



R412010199

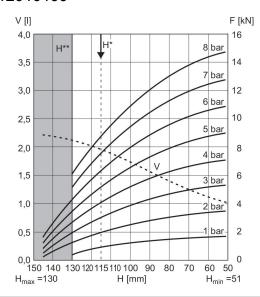
Part No.	Compressed air con- nection G	H min. mm	H max. mm	C mm	D mm	E ±0,5 [mm]	K mm	Min. return force N
R412010198	G 1/4	51	85	150	108	44.5	165	250
0822419002	G 1/4	51	105	165	108	44.5	180	200
R412010199	G 1/4	51	130	210	114	44.5	225	45
0822419003	G 3/4	50	125	215	141	70	230	200
1923061000	G 3/4	51	130	231	141	70	245	200
R412010197	G 3/4	51	158	235	141	70	250	200

#### Comment



<sup>1)</sup> 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.

### Force-displacement diagram R412010199



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

<sup>1</sup> kN = 1000 N