### **AVENTICS Series BCR Bellow actuators**

The AVENTICS Series BCR bellow cylinders are designed for applications that require very high forces with a mounting ring (no covers) and bellows made of natural rubber elastomer for direct mounting to suitable connection surfaces in the system. Therefore, the connection geometry is freely configurable.





### Technical data

Industry Industrial Bellows double

Type Bellow actuator with mounting ring

Functional principle Single-acting, retracted without pressure

50 °C

Cover diameter 384 mm Max. permissible angle of tilt 25 °

Max. effective stroke 226.06 mm Min. radial installation space 309.88 mm Min. installation height 83.82 mm Max. installation height 309.88 mm 44000 N Min. force 80000 N Max. force Min. working pressure 0 bar Max. working pressure 8 bar -40 °C Min. ambient temperature Max. ambient temperature 70 °C

Medium Compressed air

Reduced service life at a temperature greater

than

Pressure for determining forces 6 bar



Weight 8.6 kg

# Material

Material bellow Natural rubber
Material mounting ring Aluminum
Material clamping ring Aluminum
Part No. R432039304

## **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

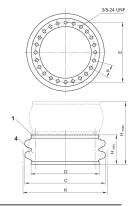
Further information on vibration isolation can be found in the "Technical information" document (available in the MediaCentre).

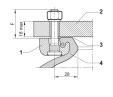
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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).

#### Dimensions





section of mounted bead ring with staybolt 1. mounting ring 2. machine part 3. sealing surface \*) 4. bellow \* recommendation for surface finish: if

the surface is turned or cylindrically ground: Ra 6 if the surface is milled or surface ground: Ra 0,8 max torque: 30 lbf ft

| Part No.   | H min. mm | H max. mm | C mm | D mm | E ±2  | F    | α°    | K      | Min. return<br>force N |
|------------|-----------|-----------|------|------|-------|------|-------|--------|------------------------|
| R432039304 | 83.82     | 309.88    | 450  | 384  | 13.78 | 1.25 | 20    | 309.88 | 200                    |
| R432039306 | 84        | 330.2     | 525  | 451  | 16.5  | 1.25 | 15    | 575    | 200                    |
| R432039309 | 83.82     | 335.28    | 590  | 517  | 18.98 | 1.25 | 15    | 673.1  | 439.95                 |
| R432039312 | 88.9      | 355.6     | 720  | 638  | 23.46 | 1.25 | 11.25 | 770    | 700                    |
| R432039316 | 106.68    | 391.16    | 950  | 890  | 32.68 | 1.06 | 9     | 1000   | 5500                   |