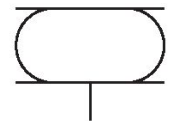


AVENTICS Series BCR Bellow actuators

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
Cover diameter	517 mm
Max. permissible angle of tilt	25 °
Max. effective stroke	251.46 mm
Min. radial installation space	673.1 mm
Min. installation height	83.82 mm
Max. installation height	335.28 mm
Min. force	84000 N
Max. force	141000 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
Pressure for determining forces	6 bar

Weight	12.02 kg
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Material

Material bellow	Natural rubber
Material mounting ring	Aluminum
Material clamping ring	Aluminum
Part No.	R432039309

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

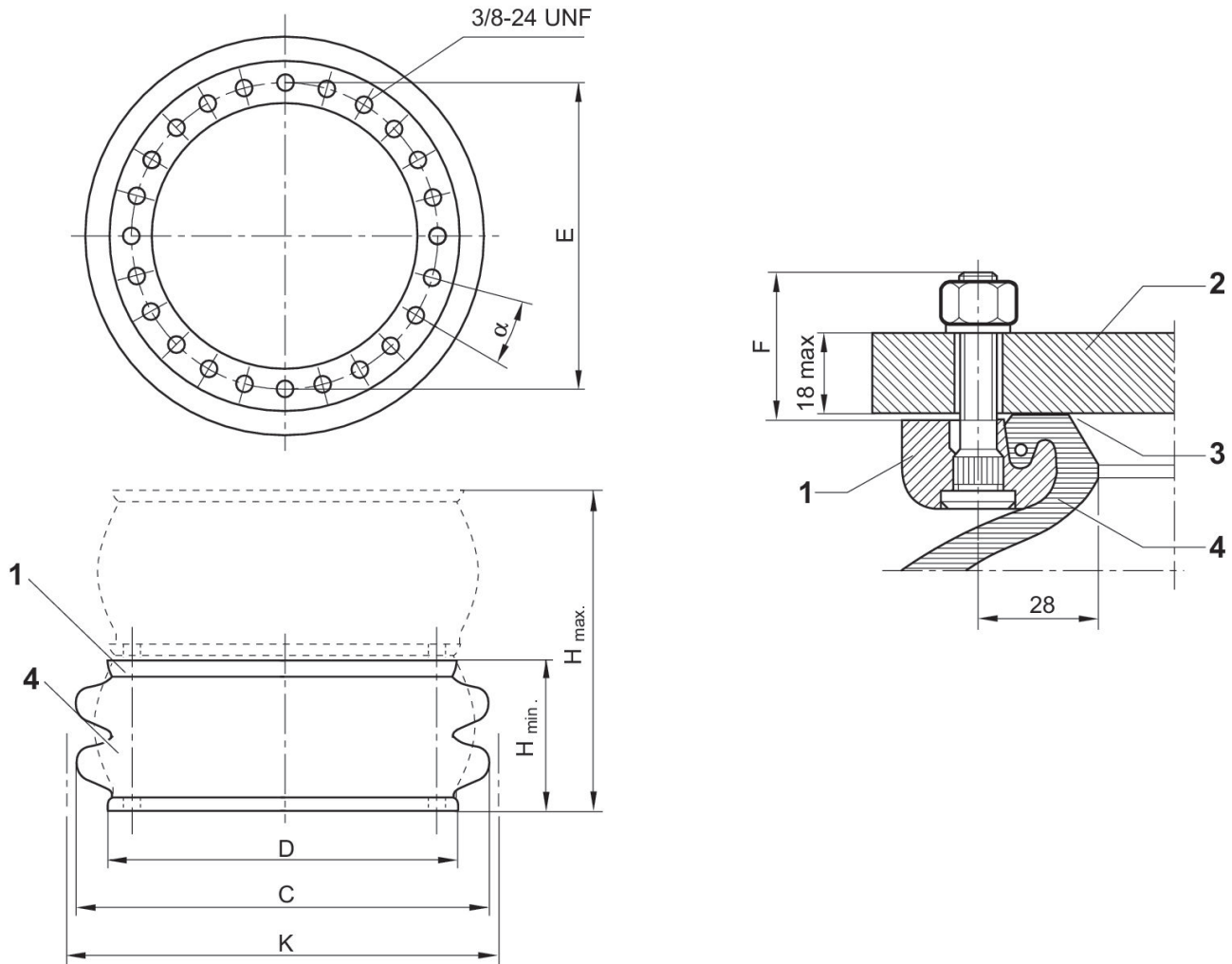
Further information on vibration isolation can be found in the "Technical information" document (available in the MediaCentre).

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>).

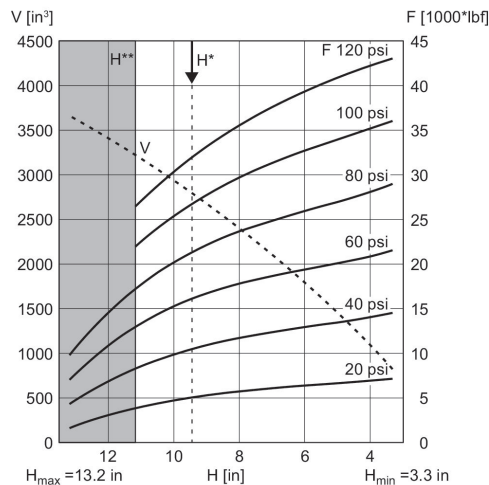
Dimensions



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 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

Force-displacement diagram
R432039309



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