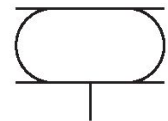


AVENTICS Series BCR Bellow actuators

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	triple
Type	Bellow actuator with mounting ring
Functional principle	Single-acting, retracted without pressure
Cover diameter	451 mm
Max. permissible angle of tilt	30 °
Max. effective stroke	355.6 mm
Min. radial installation space	570 mm
Min. installation height	114.3 mm
Max. installation height	469.9 mm
Min. force	65000 N
Max. force	114000 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	12.5 kg
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Material

Material bellow	Natural rubber
Material mounting ring	Aluminum
Material clamping ring	Aluminum
Part No.	R432039307

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

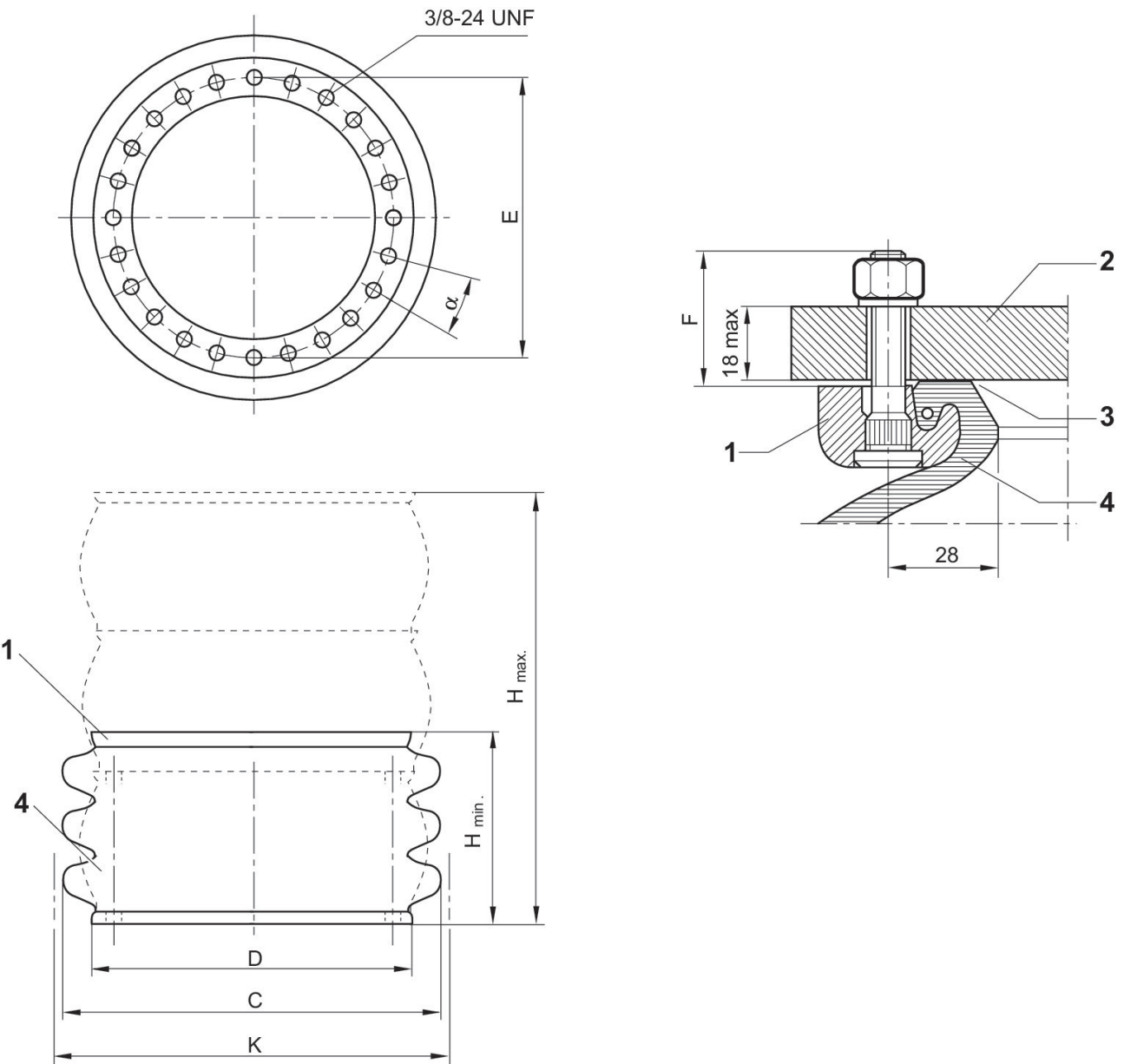
Further information on vibration isolation can be found in the "Technical information" document (available in the MediaCentre).

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>).

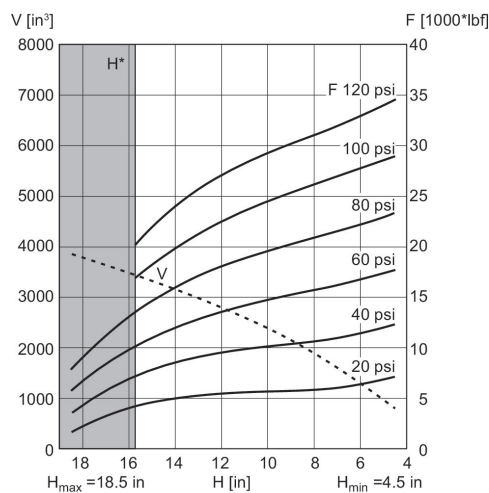
Dimensions



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 mm	Min. re- turn force
R432039305	114	449.58	462	384	13.78	1.25	20	510	600
R432039307	114.3	469.9	521	451	16.5	1.25	15	570	420
R432039317	114.3	469.9	600	517	32.68	1.06	11.25	650	400
R432039314	127	568.96	725	638	23.46	1.25	9	775	800
R432039311	139.7	579.12	950	890	18.98	1.25	15	1000	7500

R432039307Force-displacement
diagram R432039308



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