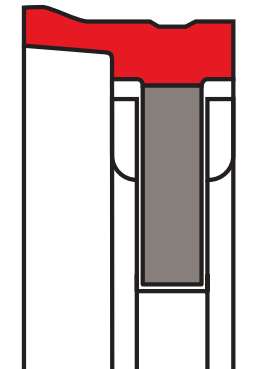


piston seal K69

seal spec



description

the profile K69 is a complete pneumatic piston with a cup seal and a vulcanized metal disc support. it performs two functions: sealing and guiding.

application



not bolded symbols; please consult our technical for application limitations

category of profile

molded/standard/trade product only.

single acting

the K69 seal is designed for use as a piston seal.

complete piston for single-acting pneumatic cylinders with and without cushioning, provided that no excessive lateral guidance loads will occur (long strokes and buckling).

area of application: pneumatic

medium: lubricated air as well as dry air and oil-free air (after initial lubrication on assembly).

advantages

- simple attachment to the piston rod without additional sealing elements.
- no corrosion thanks to complete polymer covering.
- immediate response (full pressure load) thanks to integrated venting channels.
- low friction and smooth running thanks to sealing lip geometry retaining the lubrication film.
- can be used in lubricated air as well as in oil-free air (after initial lubrication on assembly).

operating parameters & material

material		temperature	max. surface speed	max. pressure ¹
sealing element	base plate			
s-mart NBR	metal (mild steel)	-30 °C ... +80 °C	1,0 m/s	16 bar (1,6 MPa)
s-mart PU	metal (mild steel)	-35 °C ... +80 °C	1,0 m/s	16 bar (1,6 MPa)

the stated operation conditions represent general indications. it is recommended not to use all maximum values simultaneously. surface speed limits apply only to the presence of adequate lubrication film.

¹ pressure ratings are dependent on the size of the extrusion gap.

surface quality

surface roughness	Rtmax (µm)	Ra (µm)
cylinder barrel	≤ 4.0	≤ 0.5
bottom of groove	≤ 10.0	≤ 0.5

**tolerance recommendation****seal housing tolerances**

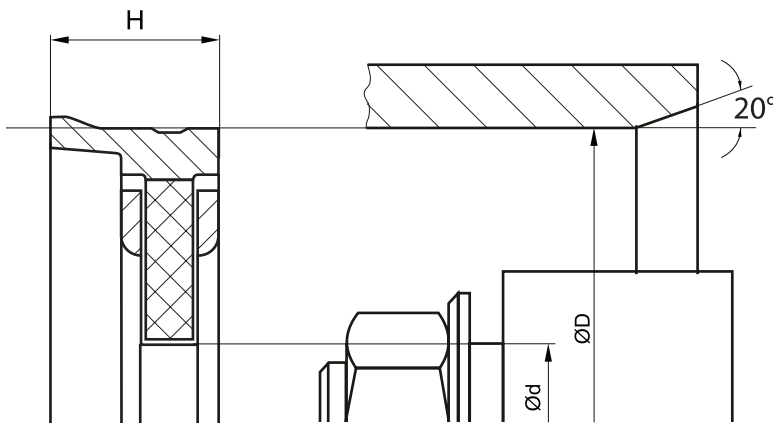
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fitting & installation

the profile K69 complete piston is fixed to the piston rod with a locknut to avoid loosening. for use with dry and oil-free air, the piston and cylinder tube must be prelubricated with a suitable long-life lubricant.
care should be taken that the sealing lips have sufficient freedom of movement at the end positions of the stroke (see also dimension.

seal & housing recommendations

for detail measurements, please see seal-mart catalog...



don't hesitate to contact our technical department for further information or for special requirements (temperature, speed etc.), so that suitable materials and/or designs can be recommended.