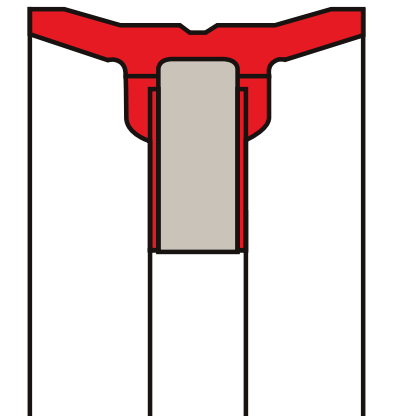


# piston seal K68

## seal spec



### description

the piston K68 is a complete pneumatic piston with a double cup seal and vulcanized metal disc support. it performs two functions: sealing and guiding.

- merkel complete piston with steel base plate and vulcanised sealing lips with special pneumatic sealing edges.
- ready to fit complete piston to which pressure can be applied on both sides with integrated guide.
- easily fastened to the piston rod without additional sealing components.
- the design with radial venting passages on the front sides facilitates reliable pressure application at the end of the stroke.

### application



not bolded symbols; please consult our technical for application limitations

### category of profile

molded/standard/trade product only.

### double acting

complete piston for double-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

- long service life
- low start friction due to optimised sealing lip geometry and supported by additional venting passages
- constant good sealing behaviour over a wide pressure range
- easily fastened to the piston rod
- simple provisioning.

### operating parameters & material

material		temperature	max. surface speed	max. pressure <sup>1</sup>
sealing element	base plate			
s-mart NBR	metal (mild steel)	-20 °C ... +100 °C	1,0 m/s	12 bar (1,2 MPa)
s-mart PU	metal (mild steel)	-35 °C ... +80 °C	1,0 m/s	12 bar (1,2 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.

<sup>1</sup> pressure ratings are dependent on the size of the extrusion gap.

### surface quality

surface roughness	Rtmax (µm)	Ra (µm)
cylinder bore	≤ 4.0	≤ 0.5

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

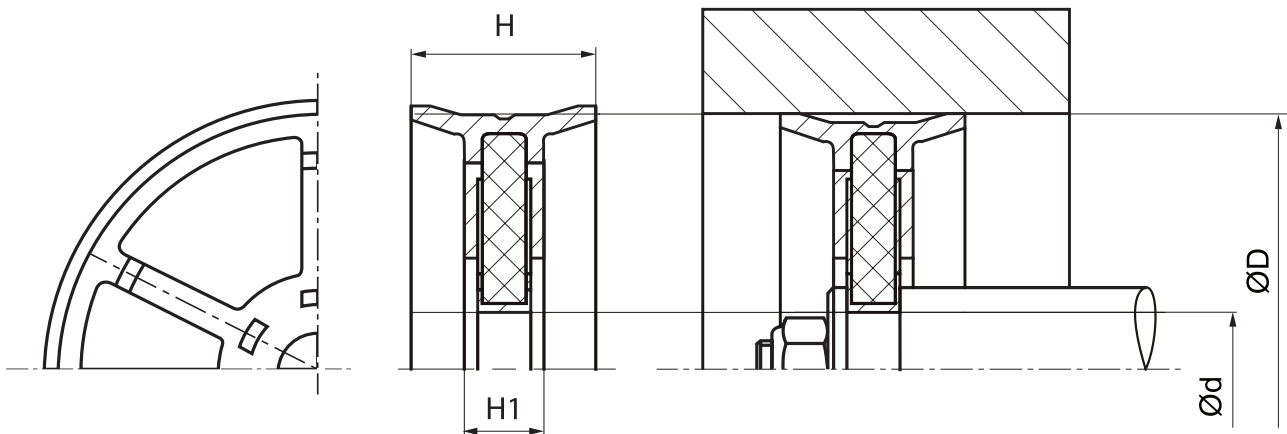
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**fitting & installation**

Careful fitting is a prerequisite for the correct function of the seal. The profile K68 pneumatic 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 (cylinder bottom and cover).

**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.