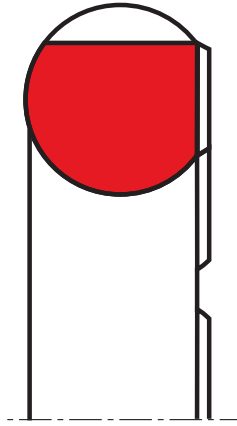


cushioning A72

seal spec



description

the profile A72 pneumatic cushioning seal is specially designed for cushioning spears in pneumatic cylinders.

application



category of profile

machined or molded/standard/trade product.

area of application: pneumatic

- medium; lubricated air as well as dry air and oil-free (after initial lubrication on assembly).
- for pneumatic cylinders with end-position cushioning.

advantages

- as the seal functions as a check valve, no separate valve is necessary.
- housing size nearly equal to that for O-rings
- easy installation
- small housings, simple grooves.
- consistent cushioning properties.

operating parameters & material

material	temperature	max. surface speed	max. operating pressure ¹
s-mart NBR (78 Shore A)	-30°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)
sliding surface	according to seal data	
bottom of groove	≤ 6.3	≤ 1.6
side of groove	≤ 15	≤ 4.0

tolerance recommendation

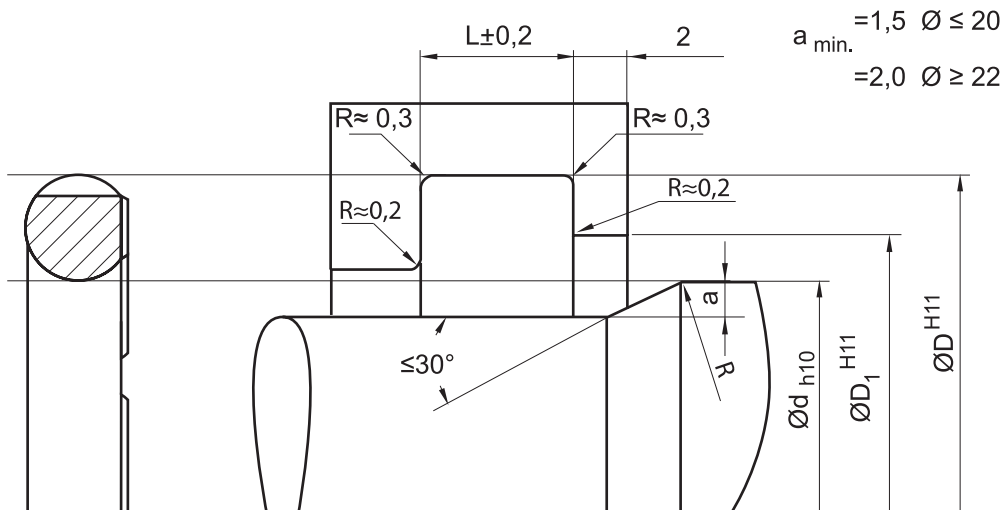
seal housing tolerances		R	
Ød	h10	10<Ød<26	3
ØD	H11	26<Ød<55	4
		55<Ød≤110	5

**fitting & installation**

for the cushioning spear ($\varnothing d$) we recommend a surface finish of $R_a = 2$ to 3 microns with flattened or polished process traces. the groove bottom ($\varnothing DH11$) should not exceed surface finish of 10 microns with flattened or polished traces.

seal & housing recommendations

please note that we are able to produce those profiles to your specific need or any non standard housing. 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.