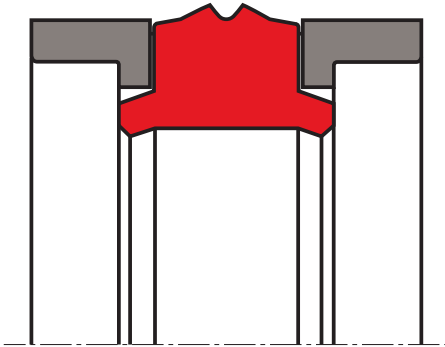


piston seal K17-SA

seal spec



description

the profile K17-SA piston sealing set can be used as a double or single acting piston seal. it consists of a polyurethane sealing element and two integrated angular guide rings which simultaneously act as anti-extrusion rings.

application



not bolded symbols; please consult our technical for application limitations

category of profile

machined or molded/standard/trade product.

double acting

the K17-SA seal is designed for use as a piston seal.

area of application: hydraulics

sealing set for double- and single-acting pistons in control, positioning and supporting cylinders for industrial and mobile hydraulics.

advantages of the profile geometry:

- substantially improved sealing function by comparison with previous profiles of this type: can therefore also be used as a single acting seal.
- KU set provides sealing and guiding.
- suitable for use in mineral oil up to 100 °C (max. 50°C in HFA and HFB fluids).
- simple one-piece piston.
- developed for housings in accordance with ISO 6547/light series (on request can also be produced for housings not conforming to this standard).

advantages of the material:

- extraordinary high abrasion resistance
- unaffected by impact-type loads, e. g. lateral forces, pressure impacts.
- high resistance to extrusion.
- low compression set.

operating parameters & material

material		temperature	max. surface speed	max. pressure ¹
sealing element	guide ring			
s-mart PU (93 Shore A)	s-mart PA ²	-30 °C ... +100 °C	0,5 m/s	400 bar (40 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.

²POM up to ø260 mm, PA above ø260 mm

**surface quality**

surface roughness	Rtmax (µm)	Ra (µm)
running surface	≤ 2.5	≤ 0.6
bottom of groove	≤ 6.3	≤ 1.6
side of groove	≤ 15	≤ 4.0

gap dimension

the largest gap dimension occurring on the non-pressurised side of the seal in operation is of vital importance for the function of the seal.

tolerance recommendation

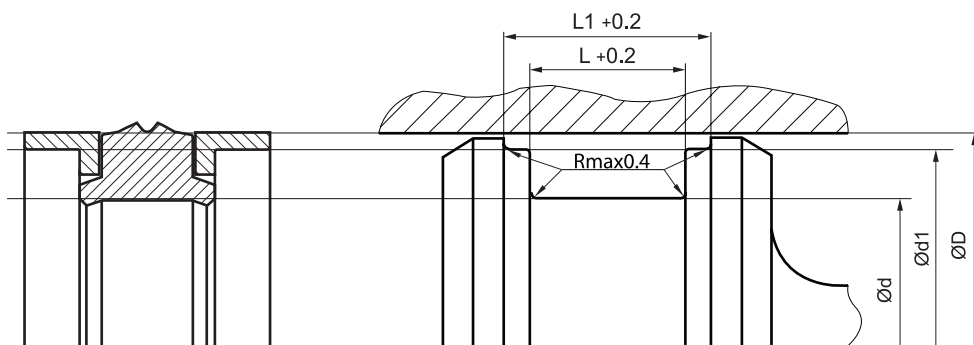
seal housing tolerances	
Ød	h9
Ød1	h9
ØD	H9

fitting & installation

remove all burrs and sharp edges within the seal fitting area and thoroughly clean housing.

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.