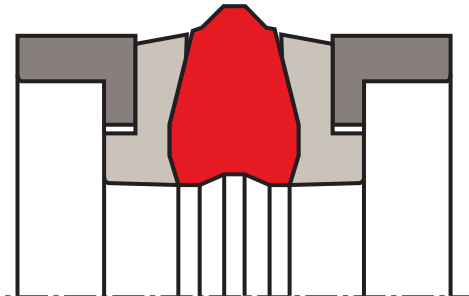


piston seal K09-SJ

seal spec



description

five-piece K09-SJ comprising one profile ring, two back-up rings and two angled bushes.

application



not bolded symbols; please consult our technical for application limitations

category of profile

machined or molded/standard/trade product.

double acting

the K09-SJ seal is designed for use as a piston seal.

area of application: hydraulics

earth moving equipment, agricultural machinery, cranes, standard cylinders.

advantages

the K09-SJ is used for sealing pistons with pressure on both sides. the angled rings guide the piston on the cylinder bore.

- no extrusion into the radial sealing gap.
- suitable for rapid pressure change.
- sealing component protected against twisting.

operating parameters & material

material			temperature	max. surface speed	max. pressure ¹
sealing element	back up ring	guide ring			
s-mart NBR (78 Shore A)	polyester elastomer	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.

² POM up to ø260 mm, PA above ø260 mm

surface quality

surface Roughness	Rtmax [µm]	Ra [µm]
running surface	≤ 2.5	0.05-0.30
bottom of groove	≤ 6.3	≤ 1.6
side of groove	≤ 15	≤ 3.0

**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

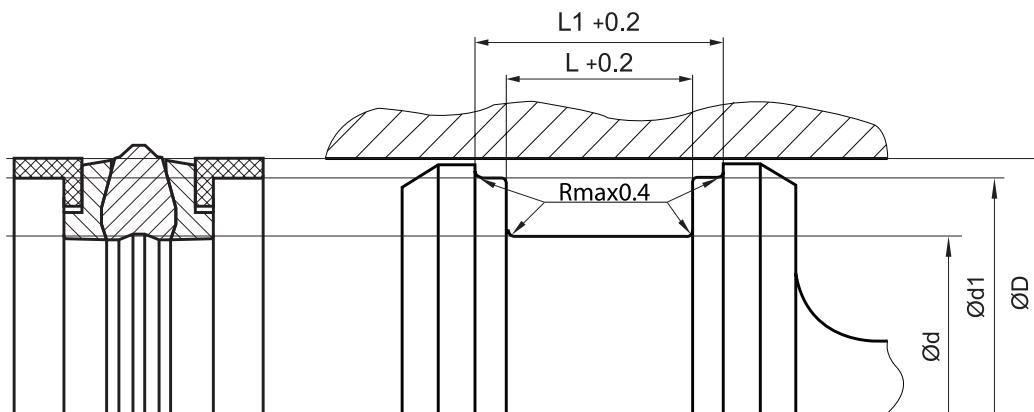
seal housing tolerances	
nominal \varnothing 40-200	
$\varnothing d$	h9
$\varnothing d_1$	h8
$\varnothing D$	H8

fitting & installation

Careful fitting is a prerequisite for the correct function of the seal. Sharp edges and burrs within the installation area of the seal must be removed. When mounting the seals, please adhere to the normal sequence of the individual elements: start assembly with one of the angular guide rings. Ensure that the contact points (gaps) of the guide rings and the anti-extrusion rings are not directly in line, but that these are mounted in a staggered order.

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.