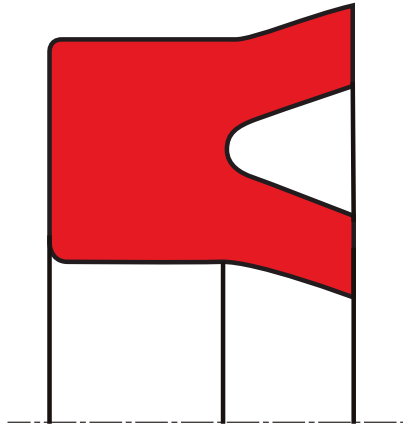


piston seal K06-SA

seal spec



description

piston and piston rod seal with symmetrical sealing lips which are cut straight.

application



not bolded symbols; please consult our technical for application limitations

category of profile

machined or molded/standard/trade product.

single acting

the K06-SA seal is designed for use as a piston seal - either single or double acting where two seals are used 'back to back'

area of application: hydraulics & pneumatics

hydraulics and pneumatics reciprocating movements.

function

the K06-SA is a single function piston seal in the form of a U-ring which can be used as a piston and piston rod seal due to its symmetrical sealing lips. its sealing function is very effective due to the sealing lips being provided with radial self energising which is activated by the system pressure.

operating parameters & material

material	temperature	max. surface speed	max. pressure ¹
s-mart NBR	-30°C ... + 100°C	0.5 m/s	100 bar (10 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.

media

hydraulic oils acc. DIN 51524/51525, lubricating oils, mineral oil based lubricating fats, non-flammable hydraulic fluids HFA, HFB, HFC acc. VDMA 24317.

**gap dimension**

if the housing is provided with a metallic fitting on the side opposite the pressure, the service life of the seal is lengthened. within the operating parameters given above, depending on the pressure, a metallic wedge can be fitted between the cylinder pipe and piston acc. to the following table:

operating pressure (Mpa)	max. permissible gap dimension
5	0,20
10	0,15

the piston diameter d_1 should generally be by factor 0.65 of the profile smaller than the DN diameter provided.

important note:

the above data are maximum value and can't be used at the same time. e.g. the maximum operating speed depend on material type, pressure, temperature and gap value. temperature range also dependent on medium.

surface quality

surface roughness	Ra (μm)
running surface	≤ 0.4
bottom of groove	≤ 1.8
side of groove	≤ 3.0

tolerance recommendation

seal housing tolerances	
$\varnothing d$	h11
$\varnothing D$	H11

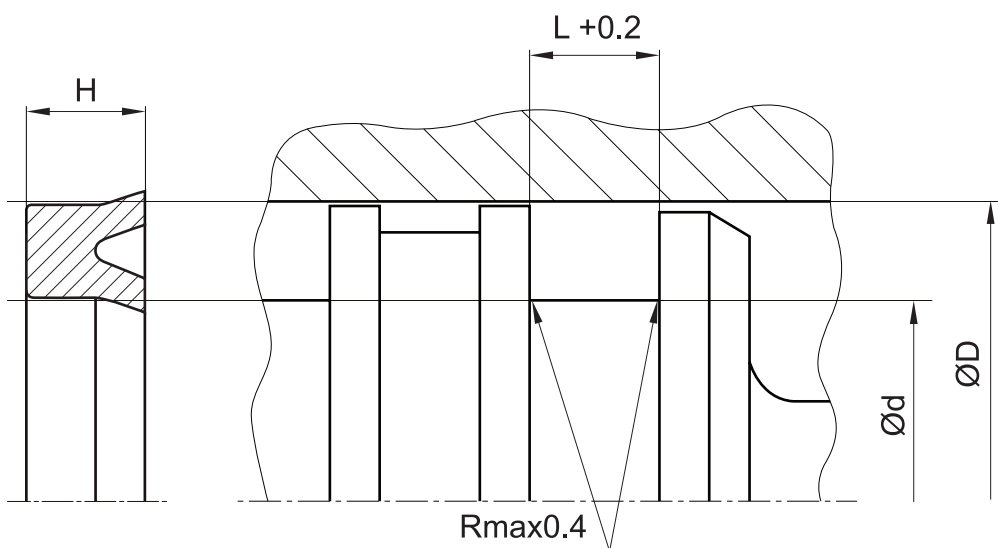
fitting & installation

the K06-SA, with an inner diameter of 25 mm and a thinner profile can always be installed in cut housing. with an inner diameter of less than 25 mm, we recommend axially accessible housing. to push the piston body and seal into the cylinder pipe or over the piston rod without damaging it, a lead-in chamfer C acc. to the following table is required:

profile width (mm)	lead-in chamfer C (mm)
4	2
5	2,5
7,5	4
10	5
12,5	6,5
15	7,5
20	10
25	10

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.