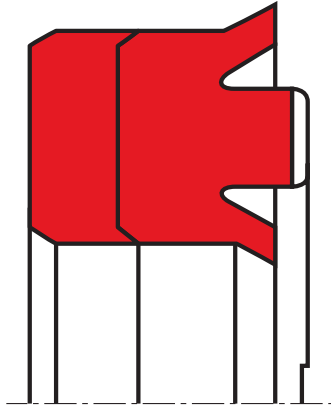


piston seal K65

seal spec



description

the profile K65 cylinder sealing set is manufactured in two parts and consists of a fabric reinforced symmetrical lip ring and a back-up ring made of fabric reinforced hard rubber. the lip ring has an integral support thus obviating the necessity for a separate header rings as found in normal seal ring arrangements. the header ring prevents extrusion damage to the lip ring occurring in the clearance between the piston and the cylinder wall.

the sealing set offers the following advantages in heavy hydraulic equipment:

- high resistance to extrusion through a massive fabric reinforced header ring
- due to the favorable profile design there is no dynamic pressure build-up between the sealing elements in double-acting cylinders.
- through the choice of suitable materials the seal is adapted for various working media.
- excellent sealing function at high surface speeds or under high pressures.
- long working life keeps maintenance costs down.

application



not bolded symbols; please consult our technical for application limitations

category of profile

molded/standard/trade product or machined with minor design change.

single acting

the K65 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

fitting & installation

groove dimensions agree with those for the profile K65 series. it should be noted that the sealing set must not be drawn over sharp edges or threads during assembly. this avoids damage to the lips.

operating parameters & material

material		temperature	max. surface speed	max. pressure ¹
sealing element	back up ring			
NBR-based hard fabric reinforced rubber (NBR (fabric))	NBR-based hard fabric reinforced rubber (NBR (fabric))	-40°C ... + 100°C	1,0 m/s	500 bar (50 MPa)

important note:

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

¹ pressure ratings are dependent on the size of the extrusion gap.

surface quality

surface roughness	Rtmax (µm)	Ra (µm)
sliding surface	≤2,5	≤ 0.6
bottom of groove	≤6,3	≤ 1.6
groove face	≤15	≤ 4.0



tolerance recommendation

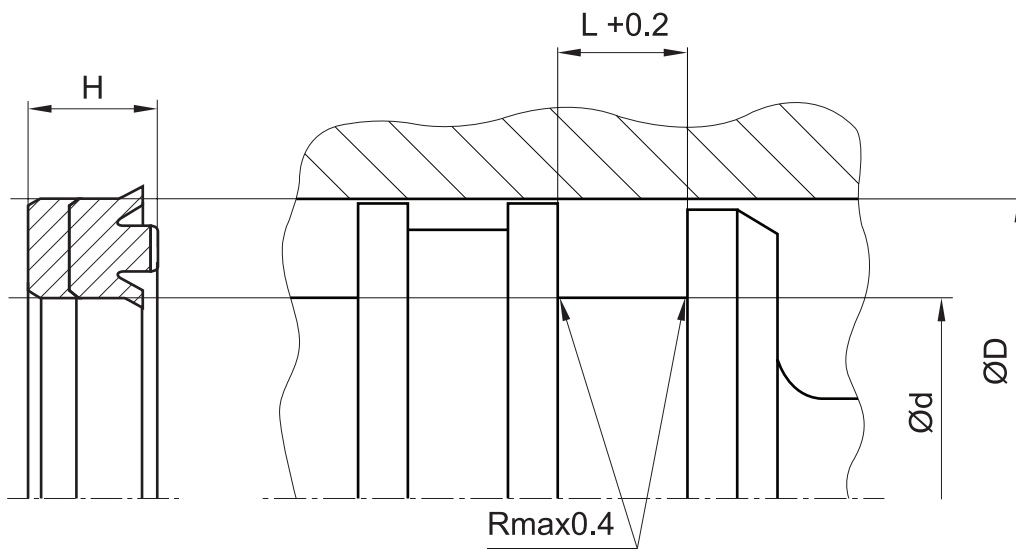
seal housing tolerances

$\varnothing d$ h11

$\varnothing D$ H9

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.