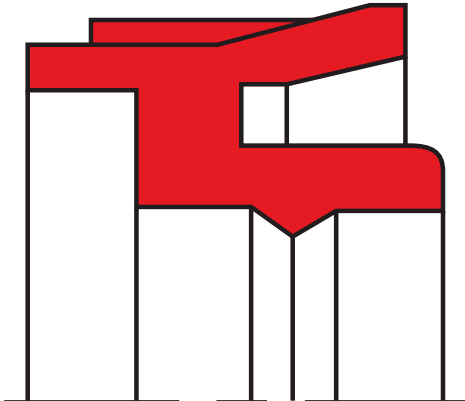


piston seal K63

seal spec



description

this seal is suitable for pneumatic cylinders, principally "K09" short stroke single or double acting, or magnetic pistons.

the guiding element for the piston is in the seal itself which is designed with the proper radial and axial gaps to ensure constant lubrication from the entrapped grease.

the magnet is housed in a groove between the two opposed seals.

application



category of profile

molded/standard/trade product only.

area of application: pneumatics

operating parameters & material

the standard material is a polyurethane with a very high wear resistance and good flexibility at low temperatures.

material		temperature	max. surface speed	max. pressure
s-mart PU (90 Shore A)	standard material	-30°C ... + 80°C	1 m/s	16 bar (1,6 MPa)
s-mart PU (85 Shore A)	alternative material	-30°C ... + 80°C	1 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.

surface quality

surface roughness μm		
parameter	mating surface (polyurethane)	groove surface
Rmax	1.0 - 4.0	≤ 16
Rz DIN	6.3 - 2.5	≤ 10
Ra	0.1 - 0.4	≤ 1.6

the material contact area r_{mr} should be approx. 50 to 70%, determined at a cut depth $c = 0.25 \times R_z$, relative to a reference line of Cref. 5%.

tolerance recommendation

seal housing tolerances	
$\varnothing d$	h7
$\varnothing D$	H10

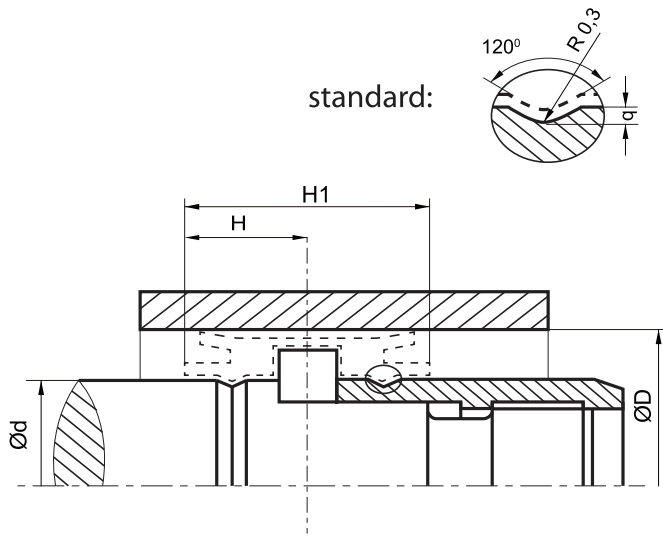
fitting & installation

the installation is done by forced overlapping on the piston diameter, shaped in a proper way, to fit the retainer tooth of the seal. to increase the sliding effect it is advisable to lubricate the seal.



seal & housing recommendations

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.