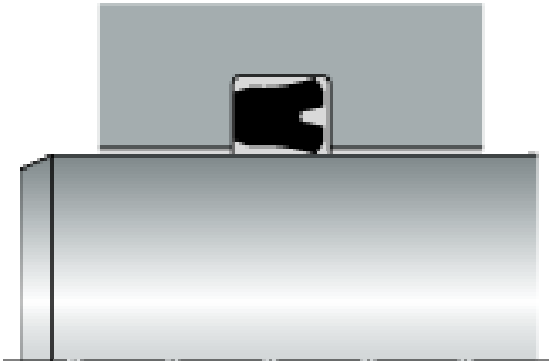


CARCOTEX /U/FR



The rod seal is the seal in the hydraulic cylinder with the most demanding requirement specifications. In addition to normal wear and aging, this seal is directly affected by changes on the rod surface.

Nitrile rubber materials are available with good compression set values at high temperatures and good elasticity in cold operating conditions.

Properties

- Single-acting rod seal for hydraulic cylinders;
- Good media resistance;
- Wide operating temperature range;
- Very good static and dynamic tightness ;
- Use as an individual seal or as a secondary seal in sealing systems possible ;
- Large range of dimensions ;

Seal Material	Maximum Pressure	Maximum Linear Velocity	Temperature Range
NBR	10 MPa	0.5 m/s	-40 – 120 °C

Long experience has shown that the execution of the rod in its entirety, but above all, the execution of the surface coating to provide wear and corrosion resistance has a significant importance for the function and service life of the seal. We suggest the rods always to be cleaned carefully before the assembly, e.g. with solvents or an ordinary washing-up detergent. A well machined, tight chromium layer with a good surface roughness value and smooth characteristics causes less wear of the seal and reduces the risk of axial scratches on the rod. Such surfaces are also more resistant to corrosion. Corrosion damages will almost always result in a disturbed function of the rod seal. For economical reasons, the rods should therefore preferably be hardened before the surface coating with hard chromium or a combination of nickel and hard chromium. Appropriate hardness value is 55 to 60 HRC to a depth of at least 5 mm.

Surface roughness	Ra
Sliding surface	≤0,3 μm
Outside Diameter of seal housing	≤0,8 μm
Other machined surfaces	≤1.6 μm

The housing dimensions and tolerances stated are applicable at pressures of up to 10 MPa.

The relatively low hardness value enables the compact seal to easily retain a good sealing ability against the housing groove at low pressures. Its ability to wipe off the lubrication film is, however, inferior since the soft material cannot provide enough sealing force per area unit.

Carcotex/U/FR is also designed to be installed in applications with lack of space.