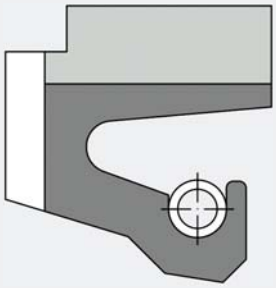
Rotary Seals

OS-Q13



Description

- Fabric-reinforced OD
- Spring-loaded elastomer sealing lip
- Radial and annual lubricating grooves at the bottom side
- Relubrication is possible if 2 seals are installed back-to-back

Special features

- Modern sealing lip design for high dynamic sealing action
- Robust, fabric-reinforced outer diameter (no metal case)
- High resistance to wear
- For housings with increased surface roughness
- Simple installation and replacement of the seal possible
- All components of the seal are corrosion-resistant
- Split design available, can be replaced without deinstallation of the shaft
- Relubrication possible due to radial and annular grooves

Applications e.g.:

- Heavy machinery
- Marine applications
- Rolling mills
- Wind power systems
- Large gearboxes

Materials

Standard material

Sealing lip	NBR 80
OD layer	NBR-impregnated cotton fabric
Spring	Stainless steel 1.4310

Special materials

Sealing lip	FKM 80
OD layer	FKM- impregnated cotton fabric
Spring	Stainless steel 1.4310

Application parameters

for the standard materials combination

Temperature	-30°C to +100°C
Pressure	max. 0.05 MPa
Shaft speed	max. 20 m/s
Media	Mineral oil based lubricants

The different permitted maximum values should always be seen in connection with all application parameters. The total load on the seal is the combination of individual values.

Design information

Shaft

Tolerance	ISO h9
Hardness	60 HRC
Roughness	R_a = 0.2 - 0.8 µm R_{max} ≤ 2,5 µm
Surface finish	free of orientation (lead free)

Housing bore

Tolerance	D ≤ 500mm: ISO H8 D > 500mm: $D^{+0.0004} \times D$
Roughness	R_a = 1.6 - 4 µm R_{max} ≤ 15 µm

Installation

The radial shaft seal is installed in an axially accessible housing. The outer diameter and the height of the seal are slightly oversized. The outer diameter is somewhat compressed during installation. Tightening the flange cover also causes slight axial compression of the seal height. The types OS-Q12 and OS-Q13 are installed in pairs back to back, as a rule.

Please read our installation instructions.