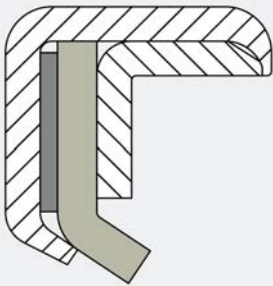# Rotary Seals

OS-PA31

Description

- Pressure loadable radial shaft seal
- Metal OD
- Sealing lip made of PTFE
- Sealing lip with elastomer washer, clamped between 2 metal cases

Special features

- Permits high shaft speeds
- High thermal resistance
- High chemical resistance
- Pressure loadable
- Applicable with insufficient lubrication and dry running
- Very low friction coefficient, stick-slip free running
- Non-moulded processing
- Inside diameter from 31mm possible
- Small runs without mould cost possible
- Short delivery time
- Very firm and exact fit inside the housing due to metal-metal interference fit
- Be careful when using the product in connection with light metal housings, housings with increased surface roughness and applications with overpressure: Apply sealing aid to the outside diameter if necessary.

Applications e.g.:

- Chemical industry
- Mechanical and apparatus engineering
- Drive systems

Materials

Standard material

Sealing lip	PTFE / glass fibre / MoS2
Metal case	Stainless steel 1.4404 (AISI316L)
Elastomer washer	FKM

Special materials

Sealing lip	PTFE / carbon graphite
Metal case	Standard steel
Elastomer washer	Other elastomers on request

Application parameters

for the standard materials combination

Temperature	-90°C to +250°C
Pressure	max. 1 MPa
Shaft speed	max. 40 m/s
Media	Mineral oil based lubricants, synthetic lubricants, many acids and lyes, solvents, water

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 h11
Hardness	min. 50 HRC
Roughness	R_a = 0.2 - 0.8 µm
	R_z = 1 - 5 µm
	R_{max} ≤ 6.3 µm
Surface finish	free of orientation (lead free)

Housing bore

Tolerance	ISO H8
Roughness	R_a = 0.8 - 3,2 µm
	R_z = 6.3 - 16 µm
	R_{max} ≤ 16 µm

Installation

Please read our installation instructions.