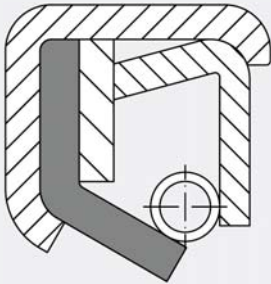# Rotary Seals

sealsupply

OS-W10

Description
- Pressure loadable radial shaft seal
- Metal OD
- Spring-loaded elastomer sealing lip
- Sealing lip is clamped between the metal cases

Special features
- Pressure loadable
- Non-moulded processing
- Inside diameter from 45mm / outside diameter from 65mm to 1220mm possible
- No extra cost for special sizes or special tolerances
- 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.:
- Heavy engineering
- General mechanical engineering

Materials
Standard material
Sealing lip	NBR
Metal case	Carbon steel
Spring	Carbon spring steel

Special materials
Sealing lip	FKM, Silicon, EPDM
Metal case	Stainless steel AISI 316L
Spring	Stainless steel AISI 316L

Application parameters
for the standard materials combination
Temperature	-40°C to +100°C
Pressure	max. 0.5 MPa (optional 1 MPa)
Shaft speed	max. 12 m/s
Media	Mineral oil based lubricants, synthetic lubricants

When synthetic lubricants are used for which there is no empirical experience, test the compatibility in the laboratory or - better even - in practical trials.
The operating temperature should not exceed 80°C.

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. 45 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.