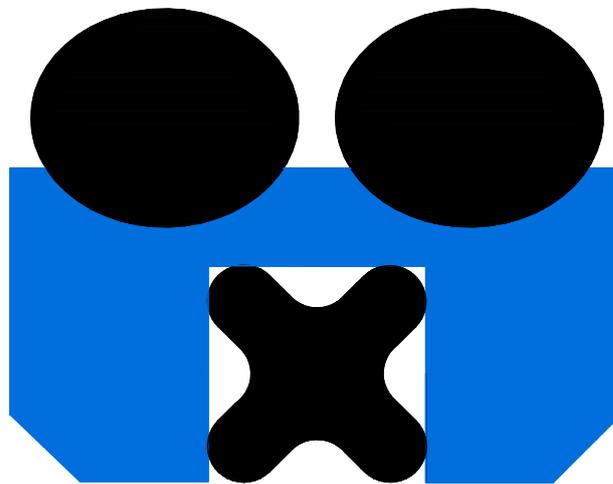




O.L. Seals A/S

## Rod Seals

Kefloy OX-Seal® Type 2603-



Very efficient double acting rod seal for reciprocating applications.

Consists of a rubber Quad ring integrated in a Kefloy SlipRing energized by two O-Rings.

Offers excellent leakage control over the whole pressure range.

Used to seal gases from liquids.



### OX-Seal® Type 2603-

Is a double acting rod seal. It combines the excellent wear resistance of Kefloy® with the sealing capacity of rubber. It consists of a dynamic sliding ring of Kefloy® furnished with a rubber X-Ring and two rubber O-Ring energizing elements. OX-Seal® is pressure responsive.

OX-Seal® can be used with a great variety of fluids. Kefloy® is compatible with virtually all fluids.

The unique design where an X-Ring is integrated in the sliding ring combines the sealing efficiency of rubber with the wear resistance of Kefloy®.



### Working Range

#### Pressure

Up to 60 MPa. For pressures exceeding 40 MPa, please contact your O.L. Seals distributor.

#### Temperature

-30°C to + 200°C. For temperatures exceeding this temperature range, please contact your O.L. Seals distributor.

#### Velocity

Reciprocating up to 3 m/sec. Frequency: Up to 5 HZ. OX-Seal® should not be used for rotating or oscillating applications.

#### Fluids

Kefloy® is compatible with virtually all fluids – liquids as well as gases. By selecting the right compound for the O-Ring energizer, it is possible to cover almost all fluids.

### Advantages

- High sealing efficiency.
- Good wear resistance
- Low friction
- No stick-slip

- Separate fluid / fluid or fluid / gas.
- Small installation space.
- Simple groove design.
- Available for all diameters up to 2.500 mm

### Material Selection Guide

Fluid	Mating surface	OX-Seal® compound
Hydraulic oil	Steel	Kefloy® 13
Motor oil	Steel, hardened	Kefloy® 32
Grease	Chrome plated steel	
Other mineral oils	Cast iron	
Water	Aluminium	Kefloy® 22
Water hydraulic	Stainless steel	Kefloy® 90
Steam	Bronze	
Non lubricating fluids	Soft metals	
Air, dry or lubricated	Steel	Kefloy® 22
	Steel, hardened	Kefloy® 28
	Chrome plated steel	Kefloy® 90
	Cast iron	
	Aluminium	
	Stainless steel	
	Bronze	
	Soft metals	

Fluid	O-Ring compound
Hydraulic oil	
Motor oil	NBR (Buna N) 70 Shore A
Grease	
Other mineral oils	At temperatures above 120°C use Viton O-Rings
Water, cold	
Water hydraulic	
Air, dry or lubricated	
Water, hot	EPDM
Steam	
Synthetic hydraulic fluids	Special compounds

*O-Ring manufacturer's recommendation for the actual fluid should always be followed.*

*For other fluids or sealing surfaces, please consult your O.L. Seals distributor.*



### Seal Selection Guide

#### Standard Series

For most double acting applications the Standard Series is the best choice.

Can be used for single acting applications where the fluid is a gas.

#### Ordering Example

Rod diameter: 550.0 mm

Part no 26034-5500-13N

OX-Seal® Type

Series

Rod dia. x 10

Compound no

O-Ring size 557.66 x 7.00 (2 pcs.)

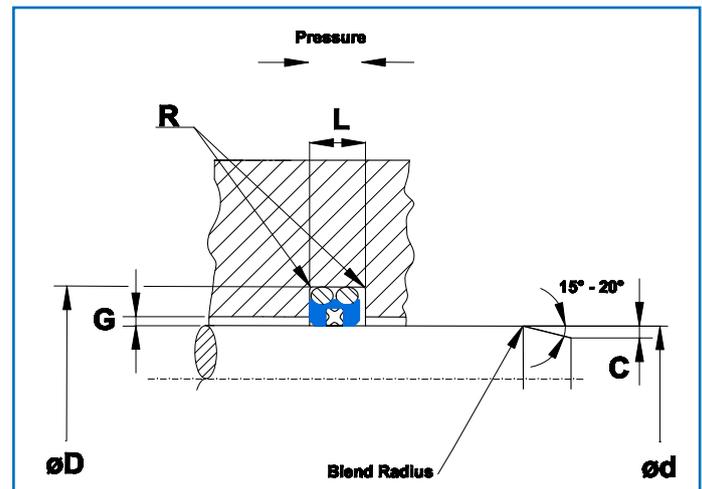
X-Ring size 557.61 x 5.33

O-Ring and X-Ring to be ordered separately

#### Light Duty Series

Where very low friction is required, the Light Duty Series is recommended.

Where space limitations make it necessary the light Duty Series should be chosen.



### Installation dimensions

#### Notches

In systems with rapid pressure changes, e.g. power steering systems, it is necessary to furnish the OX-Seals® with sidewall notches. The notches ensure a quick seal response to pressure changes.

To order OX-Seal® with notches – add suffix “N” behind the compound code.

Example: 26033-2200-13N

Type No.	Standard Series Rod dia.	D Groove diam.	L Groove width	R Radius	G Radial gap			C Chamfer	B O-ring ID	O-ring Cross section	X-ring Cross section
					10MPa (100 bar)	20MPa (200 bar)	40MPa (400 bar)				
	f8/h9	H9	+0.2 -0	Max.	0.3	0.2	0.15	Min.			
26031	40-79.9	d+10.0	6.3	0.6	0.3	0.2	0.15	1.3	d+4.5	2.62	1.78
26032	80-132.9	d+13.0	8.3	1.0	0.4	0.3	0.15	2.0	d+7.0	3.53	2.62
26033	133-462.9	d+18.0	12.3	1.2	0.4	0.3	0.2	2.5	d+9.0	5.33	3.53
26034	463-700.0	d+31.0	16.3	1.8	0.5	0.4	0.3	2.5	d+19.0	6.99	5.33

#### O-Ring Size

O-Ring cross section according to installation dimensions.

O-Ring I.D. as close to dia. B as possible.

O-Ring I.D. not bigger than B +3%

O-Ring I.D. not smaller than B -5%

#### X-Ring Size

X-Ring cross section according to installation dimensions.

X-Ring I.D. not bigger than d+3%

X-Ring I.D. not smaller than d

#### Note

In some countries seals similar to OX-Seals are patented.

Therefore OX-Seals should not be used in these areas.

#### Important Note

The limits of pressure, temperature and velocity are individual maximum values. Heat generated by the friction may cause local increase of temperature. The cooling possibilities for the system determines the combinations of maximum values.