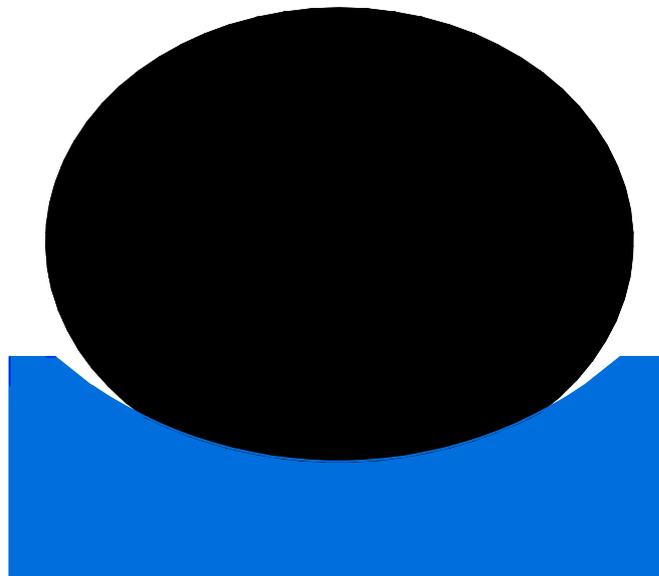




O.L. Seals A/S

## Rod Seals

Kefloy O-Cap® Type 2551-



Double acting rod seal for reciprocating movements.

Consists of a thin ring of Kefloy energized by a rubber O-ring.

Eliminates frictional problems of O-rings.

Designed for Swedish Standard and Japanese Standard O-ring grooves.



### O-Cap® Type 2551-

O-Cap® type 2551- is a double acting rod seal. It uses the same groove dimensions as O-Rings according to Swedish and Japanese standard. It consists of a Kefloy® ring energized by a rubber O-Ring. The O-Cap® is designed to eliminate the frictional - and wear problems, which may occur with rubber O-Rings.

O-Cap® is pressure responsive.

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

O-Cap® is designed to replace rubber O-Rings where they cause frictional - or wear problems.

O-Caps® should not be used for new designs.



### Working Range

#### Pressure

Up to 35 MPa. For pressures exceeding 35 MPa, please contact your O.L. Seals distributor.

#### Temperature

-50°C to + 200°C, though limited by O-ring. For temperatures exceeding this temperature range, please contact your O.L. Seals distributor.

#### Velocity

Reciprocating up to 15 m/sec. Frequency: Up to 5 HZ. 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

- Fits Swedish standard O-Ring grooves
- Small installation dimensions
- Good wear resistance
- Low friction

- No stick-slip
- Simple groove design
- Available for all diameters up to 2.500 mm
- Compatible with virtually all fluids

### Material Selection Guide

Fluid	Mating surface	O-Cap® compound
Hydraulic oil	Steel	Kefloy® 32
Motor oil	Chrome plated steel	
Grease	Cast iron	
Other mineral oils	Aluminium	Kefloy® 25
Water	Stainless steel	Kefloy® 90
Water hydraulic	Bronze	
Steam	Soft metals	
Non lubricating fluids	Steel	Kefloy® 25 Kefloy® 28 Kefloy® 90
Air, dry or lubricated	Chrome plated steel	
	Cast iron	
	Aluminium	
	Stainless steel	
	Bronze	
	Soft metals	

Fluid	O-Ring compound
Hydraulic oil	NBR (Buna N)
Motor oil	
Grease	
Other mineral oils	
Water, cold	
Water hydraulic	At temperatures above 120°C use Viton O-Rings
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.

#### 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.

#### Ordering Example

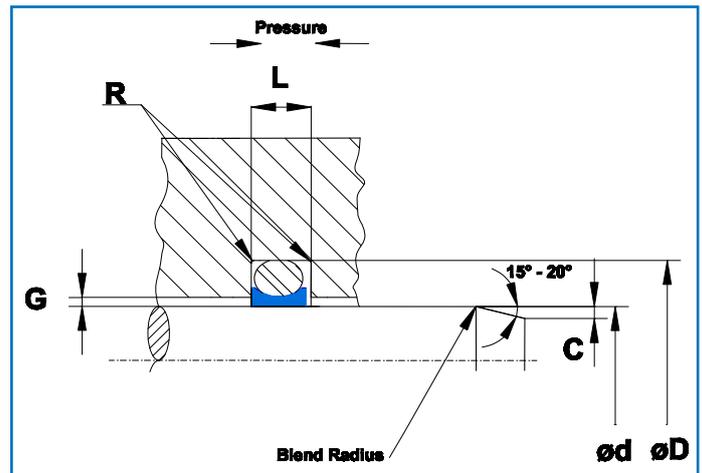
O-Cap for Swedish standard O-Ring groove for O-Ring with no back-up ring

Rod diameter: 45.0 mm

Part no 25511-0450-11  
 O-Cap® Type \_\_\_\_\_  
 Series \_\_\_\_\_  
 Rod dia. x 10 \_\_\_\_\_  
 Compound no \_\_\_\_\_  
 O-Ring size 44.2 x 3.0  
 O-Ring to be ordered separately

#### Heavy Duty Series

Where a very long service life is required the Heavy 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 O-Cap® with sidewall notches. The notches ensure a quick seal response to pressure changes.

To order O-Cap® with notches – add suffix “N” behind the compound code.  
Example: 25511-0450-11.

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
					2MPa (20 bar)	10MPa (100 bar)	20MPa (200 bar)	35MPa (350 bar)			
	f8/h9	H9	+0.2 -0	Max.					Min.		
25510	4-19.9	d+4.00	3.20	0.4	0.10	0.10	0.08	0.05	0.70	d+0.0	2.40
25511	20-45.9	d+5.00	4.00	0.4	0.15	0.15	0.10	0.07	1.00	d+0.5	3.00
25512	46-145.9	d+10.00	7.50	0.6	0.25	0.20	0.15	0.08	1.30	d+1.0	5.70
25513	146-250.9	d+15.00	11.00	0.8	0.35	0.25	0.20	0.10	2.00	d+1.5	8.40

#### O-Ring Size

O-Ring cross section according to installation dimensions.  
 O-Ring I.D. as close to dia. d as possible.  
 O-Ring I.D. not bigger than d+3%  
 O-Ring I.D. not smaller than d-5%

#### 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.