

Rotary Seals

Kefloy TurnRing® type 2571-



Rotating double acting seal for rods and shafts. Pressure up to 30 MPa.

High wear resistance. Small installation dimensions.





TurnRing[®] Type 2571-

Is a double acting shaft seal for rotating applications. TurnRing® consists of a dynamic seal ring of Kefloy®; energized by a rubber O-Ring.

The sliding surface of the Kefloy® ring is furnished with one or two grooves (depending on the series). The grooves ensure good lubrication and reduce friction.

The rear face of the Kefloy® ring has a concave shape. This ensures a good contact to the O-Ring and prevents the seal from turning with the shaft. The seal design ensures an efficient leakage control over the entire pressure range from 0 to 30 MPa.

The non stick-slip properties of the Kefloy® compounds ensure a smooth operation. The small installation dimensions allow a compact design of the hardware. This is a major advantage in e.g. swivel joints with many ports.

TurnRing® is pressure responsive and is available in Standard series, Light Duty series and Heavy Duty series.

Working Range

Pressure

Up to 30 MPa. For pressures exceeding 30 MPa, please contact your O.L. Seals distributor.

Temperature

-40°C to +180°C. For temperatures exceeding this temperature range, please contact your O.L. Seals distributor.

Velocity

Continuous up to 2 m/sec. Intermittent up to 5 m/sec.

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.

Application limits

-No vulcanisation to mating surface

-Compatible with virtually all fluids

-Available for all diameters up to 2.500 mm

-Simple groove design -Small installation dimensions

Pressurised rotary seals generate heat. The amount of generated heat depends of pressure, speed and friction. The success of a rotary seal depends of the cooling possibilities. In general a shaft with a big diameter transfers the heat better than a shaft with a small diameter. Therefore it is not possible to make guidelines for acceptable P-V values. It is recommended always to test the seal at the actual application.

Advantages

-High pressure -Very good sealing efficiency -Excellent wear resistance -Moderate friction

-No stick-slip

Material Selection Guide

Fluid	Mating surface	TurnRing® compound	Fluid	O-Ring compound			
Hydraulic oil	Steel	Kefloy® 28	Hydraulic oil				
Motor oil	Chrome plated steel	Kefloy® 66	Motor oil	NBR (Buna N)			
Grease	Cast iron	Kefloy® 85	Grease				
Other mineral oils		Kefloy® 90	Other mineral oils	At temperatures above 120°			
Water	Aluminium	Kefloy® 22	Water, cold	use Viton O-Rings			
Water hydraulic	Stainless steel	Kefloy® 40	Water hydraulic				
Steam	Bronze	Kefloy® 90	Air, lubricated				
Non lubricating fluids	Soft metals		Water, hot	EPDM			
Air, dry or lubricated	Steel	Keflov® 22	Steam				
	Chrome plated steel	Kefloy® 28	Synthetic hydraulic fluids	Special compounds			
	Cast iron	Kefloy® 40	O-Ring manufacturer's recommendation for the actual fluid should always be followed.				
	Aluminium	Kefloy® 90					
	Stainless steel		·····				
	Bronze						
	Soft metals						

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







Seal Selection Guide

Standard Series

For most applications the Standard Series is the best choice.

Light Duty Series

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

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

Heavy Duty Series

Where a very long service life is required the Heavy Duty Series should be chosen.



Ordering Example Shaft diameter:	e 145.6 mm
Part no TurnRing® Type Series Shaft dia. x 10 — Compound no — Side wall notch (co	25713-1456-66N
O-Ring size 151.77	7 x 5.33
O-Ring to be order	ed separately

Installation dimensions

Type No.	Standard Series Rod dia.	Light Series Rod dia	Heavey Series Rod dia.	d groove diam.	L Groove width	R radius	G Radial		C chamfer	B O-ring ID	O-ring Cross section
	f8/h 9	f8/h 9	f8/h 9	H 9	+0.2 -0	max	10MPa (100 bar)	20MPa (200 bar)	Min.		
25710	6-18.9	19-37.9	-	d + 4.9	2.2	0.4	0.15	0.10	0.7	d+2.0	1.78
25711	19-37.9	38-199.9	6-18.9	d + 7.3	3.2	0.6	0.20	0.15	1.0	d+3.4	2.62
25712	38-199.9	200-255.9	19-37.9	d +10.7	4.2	1.0	0.25	0.20	1.3	d+5.1	3.53
25713	200-255.9	256-649.9	38-199.9	d+15.1	6.3	1.3	0.30	0.25	2.0	d+6.9	5.33
25714	256-649.9	650-999.9	200-255.9	d+20.5	8.1	1.8	0.30	0.25	2.5	d+9.5	6.99
25715	650-999.9	-	256-649.9	d+28.0	9.5	2.5	0.45	0.30	3.0	d+14.0	8.40

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%

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 dertermines the combinations of maximum values.