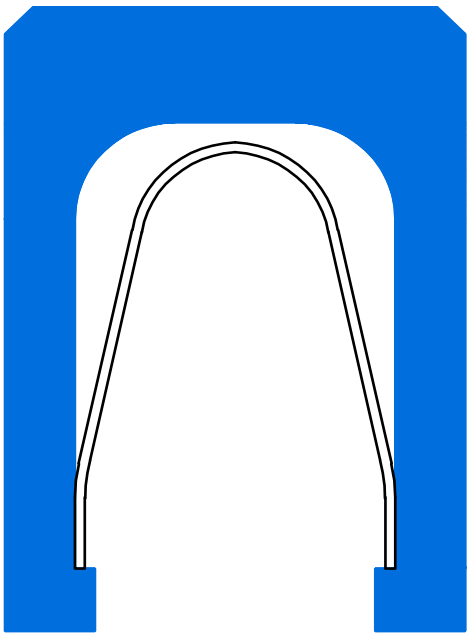
O.L. Seals A/S

Spring Energized Flange Seals

MupuSeal® Type 3051-



MupuSeal® Type 3051-

Is a spring energized flange seal for internal pressure and dynamic applications. MupuSeal® consists of jacket of Kefloy® energized by a V-shaped corrosion resistant steel spring.

The steel spring is available in three different chemical resistant alloys.

• Stainless steel	AISI 301; DIN 1.4310
• Hasteloy™	C-276; EN ISO 15156; NACE MR-01-75
• Elgiloy™	ASTM F1058; EN ISO 15156; NACE MR-01-75

Hasteloy™ is a trademark of Haynes International Inc.
Elgiloy™ is a registered trademark of Elgiloy Specialty Metals

The flexible V-spring gives a good spring force which ensures the sealing capacity. MupuSeal® is designed for dynamic applications at moderate speeds. MupuSeal® can be used with virtually all fluids.
MupuSeal® is pressure responsive.

Working Range

Pressure
Up to 25 MPa in standard execution. For pressures exceeding 25 MPa, please contact your O.L. Seals distributor.

Temperature
-70°C to + 260°C. For temperatures exceeding this temperature range, please contact your O.L. Seals distributor.

Velocity
Rotating speed up to 2 m/sec.

Fluids
Kefloy® is compatible with virtually all fluids – liquids as well as gases. By selecting the right alloy for the spring energizer, it is possible to cover almost all fluids.

Applications

Due to its unique properties MupuSeal® is used in a great variety of applications

- Extreme temperatures
- Aggressive environments
- Food and drug
- Offshore
- Chemical processes
- Refrigeration
- Energy
- Electronic
- Machine tools
- Aviation
- Defence

Spring Energized Flange Seals ID

MupuSeal® Type 3051-

Advantages

- Very good sealing efficiency
- Compatible with virtually all fluids
- Covers a very big thermal range
- No contamination of fluids
- Can be sterilised
- No ageing
- No vulcanisation to mating surface
- Unlimited shelf life
- Simple groove design
- NACE compatible spring alloys available
- Available for all diameters up to 2.500 mm

Material Selection Guide

Fluid	Mating surface	MupuSeal® compound
Water Water hydraulic Steam Non lubricating fluids Air, dry or lubricated	Steel Chrome plated steel Cast iron Aluminium Stainless steel Bronze Soft metals	Kefloy® 11 Kefloy® 25 Kefloy® 28 Kefloy® 40 Kefloy® 90
Hydraulic oil Motor oil Grease Other mineral oils	Steel Chrome plated steel Cast iron	Kefloy® 11 Kefloy® 13 Kefloy® 28 Kefloy® 90
	Aluminium Stainless steel Bronze Soft metals	Kefloy® 11 Kefloy® 25 Kefloy® 28 Kefloy® 40 Kefloy® 90

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

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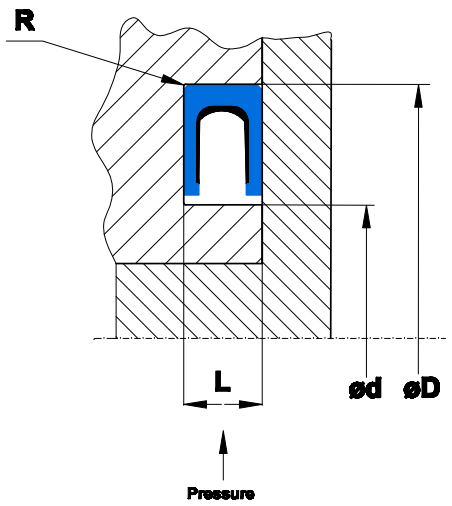
MupuSeal® Type 3051-

Seal Selection Guide

Ordering Example
Groove outside diameter: 213.5 mm

Part no 30513-2135-28-H
MupuSeal® type
Series
Groove dia. x 10
Jacket compound no
Spring material



Installation dimensions

MupuSeal Face Cross section		Outer dia. øD Groove	Inner dia. ød	Groove length L		Radius R	Recomm. dia/cross
Part no.	Series	Min. dia. H11	dia.	+0.15 -0	Toll.	Max.	
30511	100	32.0	øD-7.20	2.25	+0.03/-0	0.4	32 - 44.99
30512	200	45.0	øD-9.60	3.10	+0.05/-0	0.6	45 - 99.99
30513	300	80.0	øD-14.20	4.70	+0.08/-0	0.8	100 - 199.99
30514	400	110.0	øD-19.00	6.10	+0.10/-0	0.8	200 - 999.99
30515	500	400.0	øD-30.00	9.50	+0.20/-0	0.8	1000 -

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.