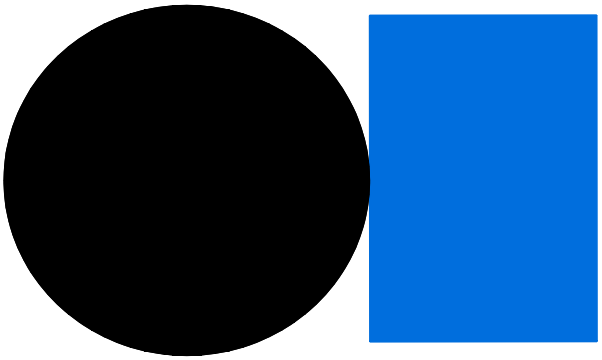
O.L. Seals A/S

Back-Up Rings

Kefloy Uncut BakRing® Type U-



Uncut BakRing® Type U-

Uncut BakRing® is used to prevent extrusion of rubber O-Rings and rubber X-Rings. It is a solid ring with a rectangular cross section. It can be used for static as well as for reciprocating and rotating applications.

Working Range

The values should be considered as recommendations. A combination of maximum values should be avoided. Values stated below are related to the BakRings and not to the rubber seal they back up.

Pressure
Static up to 300 MPa depending on temperature, gap and BakRing® Compound.
Dynamic up to 60 MPa depending on temperature, gap and BakRing® Compound.

Temperature
-200°C to + 260°C depending on compound.

Velocity
Reciprocating or rotating up to 2 m/sec. depending on pressure and compounds.

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

Compounds

Uncut BakRings are normally made in the very extrusion resistant Kefloy® 60, which is a blue, glass fibre filled modified PTFE.

Where the BakRing® is in direct contact with food or drugs, Kefloy 11 is recommended.

Compound	Materials	Static applications	Dynamic applications
		Pressure MPa	Pressure MPa
Kefloy® 11	Virgin PTFE	220	40
Kefloy® 13	PTFE / Bronze	270	60
Kefloy® 22	PTFE / Carbon / Graphite	270	60
Kefloy® 60	PTFE / Glass fibre Light blue	270	60
Kefloy® 72	PTFE / Glass fibre White	270	60

A range of other compounds are available on request.

do O-Ring Cross Sec. BS	do O-Ring Cross Sec. SMS	d Internal diameter.	D External diameter.	L1 Groove width	L2 Groove width	R Radius	G Radial gab	C Cham-fer	W Bak Ring thickness	T Bak Ring Width
		h9	H9	+0.2/-0	+0.2/-0	Max.	Max.	Min.		
	1.6	D - 2.6	d + 2.6	3.00	4.00	0.2	0.05	0.5	1.30	1.0
1.78		D - 2.9	d + 2.9	3.80	5.30	0.3	0.06	0.6	1.45	1.4
	2.4	D - 4.0	d + 4.0	4.60	6.00	0.3	0.06	0.6	2.00	1.4
2.62		D - 4.5	d + 4.5	4.60	6.20	0.3	0.07	1.0	2.25	1.4
	3.0	D - 5.0	d + 5.0	5.40	6.80	0.3	0.07	1.0	2.50	1.4
3.53		D - 6.2	d + 6.2	5.70	7.70	0.5	0.08	1.3	3.10	1.4
5.33		D - 9.4	d + 9.4	8.50	10.80	0.5	0.10	2.0	4.70	1.7
	5.7	D-10.0	d+10.0	9.30	11.10	0.5	0.10	2.0	5.00	1.7
7.0		D-12.2	d+12.2	11.20	14.70	0.6	0.13	2.5	6.10	2.5
	8.4	D-15.0	d+15.0	13.20	15.40	0.6	0.13	3.0	7.50	2.5

Advantages

- Available for all diameters up to 2.500 mm

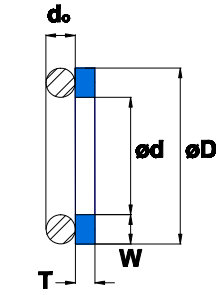
Seal Selection Guide

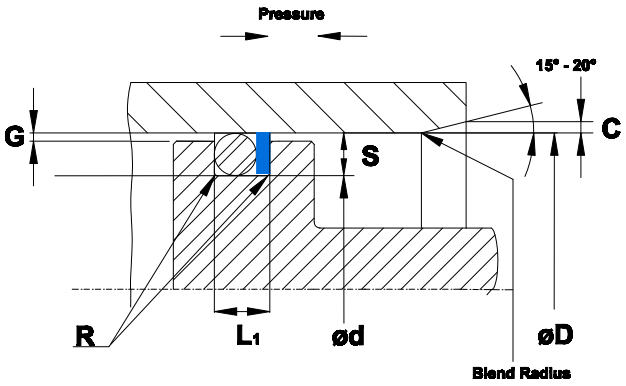
Ordering Example

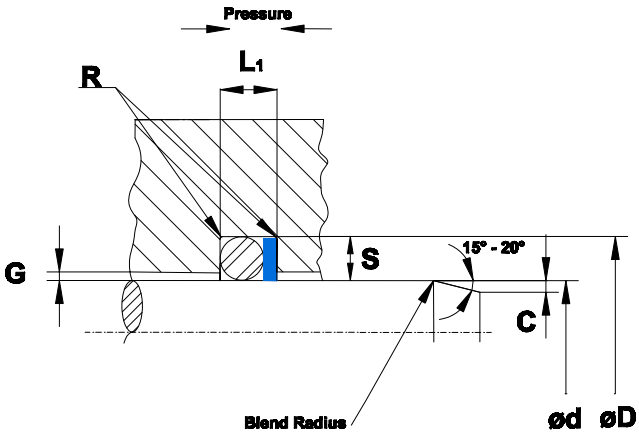
External groove diameter: 395.0 mm
Internal groove diameter: 382.8 mm
O-Ring cross section: 7.00 mm

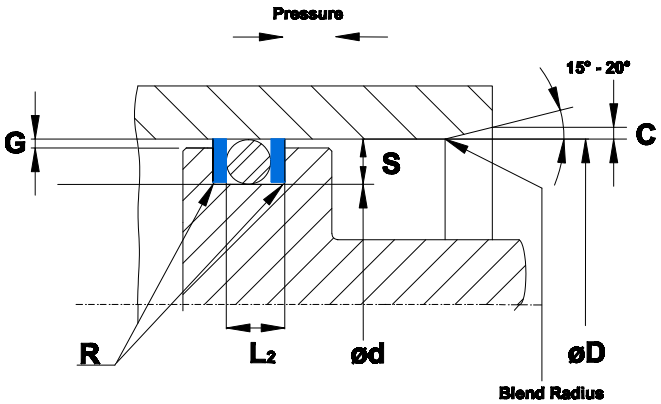
Part no U-3828-3950-25-13
BakRing® Type
Internal groove diameter x 10
External groove diameter x 10
BakRing® width x 10
Compound no

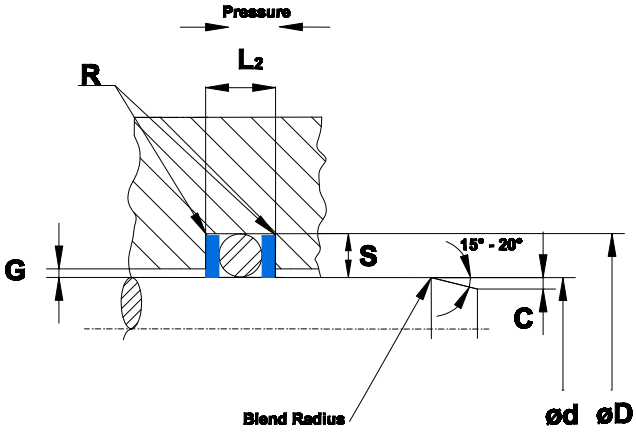
Type "U" Uncut











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 +5%
O-Ring I.D. not smaller than d -10%

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.