

Rotary Pressure Seals

Technical details

Metric

Inch

Operating conditions

Normal Speed	1.0 m/sec
Temperature Range	-30°C +100°C
Maximum Pressure	300 bar
Maximum Speed	2.0 m/s

3.0 ft/sec
-22°F +212°F
4350 p.s.i.
6.0 ft/sec



Maximum extrusion gap

Pressure bar	100	200	300
Pressure p.s.i	1500	3000	4500
Maximum Gap in			
L ₁ =0.126, 0.165	0.008	0.006	H7/f7 Clearance
L ₁ =0.248	0.012	0.010	H7/f7 Clearance

Surface roughness

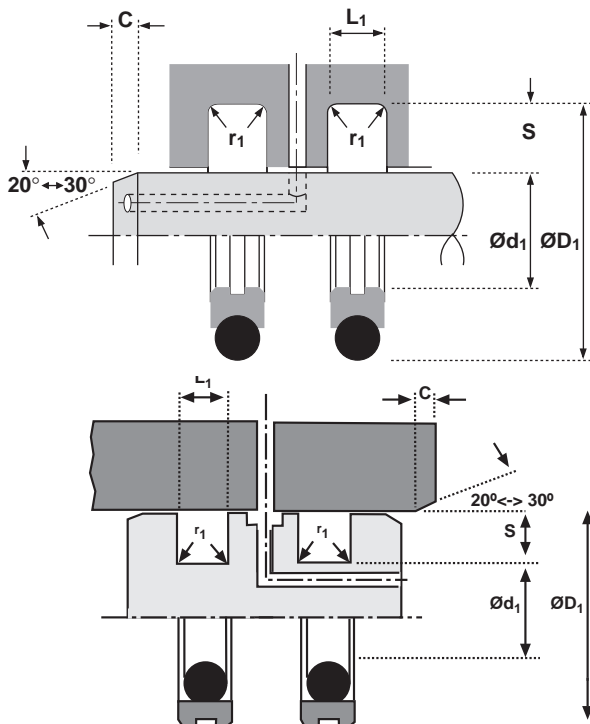
	µmRa	µmRt	µinCLA	µinRMS
Dynamic Sealing Face Ød ₁	0.1 <> 0.4	4 max	4 <> 16	5 <> 18
Static Sealing Face ØD ₁	1.6 max	10 max	63 max	70 max
Static Housing Face L ₁	2.5 max	16 max	125 max	140 max

Chamfers & Radii

Groove Section ≤ L ₁ in	0.126	0.165	0.248
Min Chamfer C in	0.125	0.260	0.325
Max Fillet Rad r ₁ in	0.015	0.025	0.035

Tolerances

Ød ₁	ØD ₁	L ₁
f9	H10	+0.008 -0



Design

The Optiswivel seal is a two-piece assembly consisting of an elastomeric energizer and a PTFE grooved cap ring. Optiswivel seals are used in oscillatory and rotary applications and are available to suit rod or bore sealing arrangements. The two smaller sections have one groove in the contact face.

Features

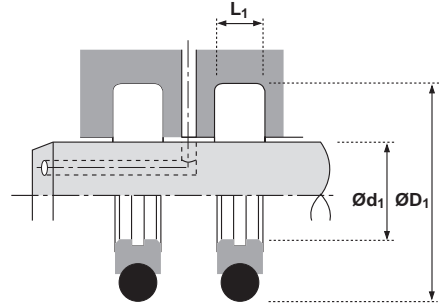
- Proprietary coating minimizes slipping at the energizer/ face ring interface
- Reduced friction
- Wide range of applications- hydraulic and pneumatic

Numbering System

For information contact your local Hallite sales office.

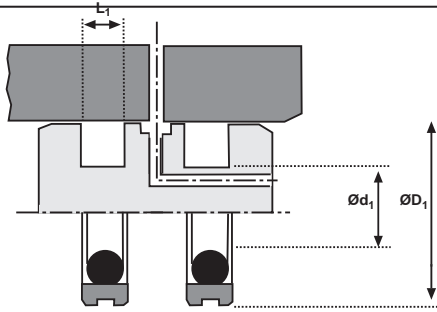
OPTISWIVEL

ID Optiswivel



$\varnothing d_1$ RANGE	$\varnothing D_1$	L_1	S	O RING SERIES
1.000 - 2.250	$\varnothing d_1 + 0.296$	0.126	0.113	100
2.000 - 5.000	$\varnothing d_1 + 0.422$	0.165	0.211	200
4.000 - 9.000	$\varnothing d_1 + 0.614$	0.248	0.307	300

Rotary Pressure Seals Bore Inch



OD Optiswivel

ØD_1 RANGE	Ød_1	L_1	S	O RING SERIES
1.500 - 3.250	$\text{ØD}_1 + 0.296$	0.126	0.113	100
3.250 - 6.000	$\text{ØD}_1 + 0.422$	0.165	0.211	200
5.250 - 10.000	$\text{ØD}_1 + 0.614$	0.248	0.307	300

Optiswivel Seals are available in inch and metric sizes, please consult your local Hallite Sales office for more information.