

Piston Seals

Technical details

Metric

Inch

Operating conditions

Maximum Speed 2.0 m/sec
 Temperature Range -40°C + 110°C
 Maximum Pressure 500 bar

6.0 ft/sec
 -40°F + 230°F
 7500 p.s.i.



Maximum extrusion gap

Pressure bar
 Maximum Gap $\text{Ø}D_1 \leq 5.000$ in
 Maximum Gap $\text{Ø}D_1 > 5.000$ in
 Pressure p.s.i.

Figures show the maximum permissible gap all on one side using minimum rod Ø and maximum clearance Ø .

500
 0.032
 0.040
 7,500

Surface roughness

Dynamic Sealing Face $\text{Ø}D_1$
 Static Sealing Face $\text{Ø}d_1$
 Static Housing Faces L_1

μmRa μmRt
 0.1 < > 0.4 4 max
 1.6 max 10 max
 3.2 max 16 max

μinCLA μinRMS
 4 < > 16 5 < > 18
 63 max 70 max
 125 max 140 max

Chamfers & Radii

Min Chamfer C in
 Max Fillet Rad r_1 in

0.250
 0.016

Port Diameter

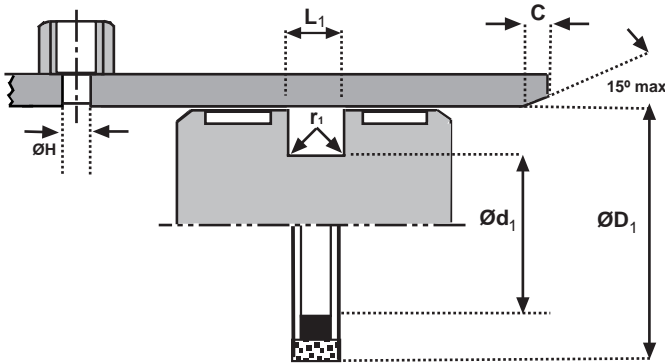
Max $\text{Ø}H$ in

If the seal is to pass over the port
 $L_1 \times 1.167$

Tolerances

in

$\text{Ø}D_1$ $\text{Ø}d_1$ L_1
 +0.005 -0 +0 -0.005 +0.005 -0



Design

The Hallite 714 is a double acting seal capable of passing over ports. The reinforced, heat stabilised, thermoplastic sealing face, expands and contracts to fill the gap between the piston and the cylinder wall and has a step-cut joint for ease of installation.

It will tolerate a considerable extrusion gap, thus reducing the possibility of piston-to-bore contact, and it offers excellent static load holding capability.

The square section nitrile rubber energiser responds quickly to pressure changes, providing excellent sealing characteristics under all pressure conditions.

Features

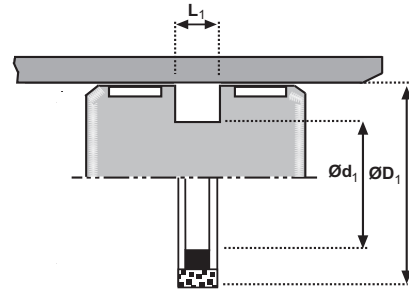
- FACE EXPANDS FOR EASY INSTALLATION
- PASSES OVER PORTS
- EXCELLENT WEAR & ABRASION RESISTANCE
- STATIC LOAD HOLDING CAPABILITY
- REPLACES MULTIPLE PISTON RINGS
- INCREASES CYLINDER EFFECTIVENESS
- IDEAL FOR RE-PHASING CYLINDERS
- INGESTS CONTAMINATION
- COMPACT HOUSING

Material Options

Please contact your local Hallite sales office for additional information



714



ØD_1 +0.005 -0	Ød_1 +0 -0.005	L_1 +0.005 -0	PART No.
2.000	1.462	0.282	7260510
2.250	1.712	0.282	7260710
2.500	1.962	0.282	7261010
2.750	2.212	0.282	7261510
3.000	2.442	0.282	7262010
3.250	2.692	0.282	7262510
3.500	2.942	0.282	7263010
3.750	3.192	0.282	7263510

ØD_1 +0.005 -0	Ød_1 +0 -0.005	L_1 +0.005 -0	PART No.
4.000	3.442	0.282	7264010
4.250	3.692	0.282	7264510
4.500	3.942	0.282	7265010
4.750	4.192	0.282	7265510
5.000	4.442	0.282	7266010
5.250	4.490	0.377	7266510
5.500	4.740	0.377	7267010
6.000	5.240	0.377	7267510