

Piston Seals

Technical details

Metric

Inch

Operating conditions

Maximum Speed	1.0 m/sec
Temperature Range	-30°C + 110°C
Maximum Pressure	250 bar

3.0 ft/sec
-22°F + 230°F
3600 p.s.i.



Maximum extrusion gap

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

Pressure bar	100	160	250
Maximum Gap mm	0.6	0.5	0.4

Surface roughness

	μmRa	μmRt	μinCLA	μinRMS
Dynamic Sealing Face $\varnothing D_1$	0.1 < > 0.4	4 max	4 < > 16	5 < > 18
Static Sealing Face $\varnothing d_1$	1.6 max	10 max	63 max	70 max
Static Housing Faces L_1	3.2 max	16 max	125 max	140 max

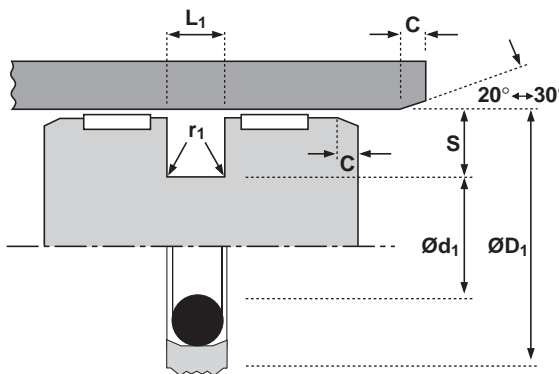
Chamfers & Radii

	3.75	5.50	7.75	10.50
Groove Section $\leq S$ mm	3.75	5.50	7.75	10.50
Min Chamfer C mm	2.0	2.5	5.0	5.0
Max Fillet Rad r_1 mm	0.4	0.8	1.2	1.6
Groove Section $\leq S$ in	0.150	0.220	0.310	0.410
Min Chamfer C in	0.080	0.100	0.200	0.200
Max Fillet Rad r_1 in	0.016	0.032	0.047	0.063

Tolerances

$\varnothing D_1$	$\varnothing d_1$	L_1 mm	L_1 in
H9	h9	+0.2 -0	+0.008-0

764



Design

The Hallite 764 is a compact seal for light to medium duty hydraulic cylinders. It is a double acting piston seal with single acting capabilities. This makes it an excellent choice for double acting applications where minimal dynamic leakage is required.

The Hallite 764 comprises of a tough elastomeric face that is pre-loaded by an O ring. The housing width allows a narrow width piston to be used, but it is recommended that an adequate bearing is mounted on one or both sides of the seal.

Housing dimensions for use with Hallite 87 and 506 bearing strip are given in the installation details. For further details on bearing strip grooves, please refer to the appropriate data sheets.

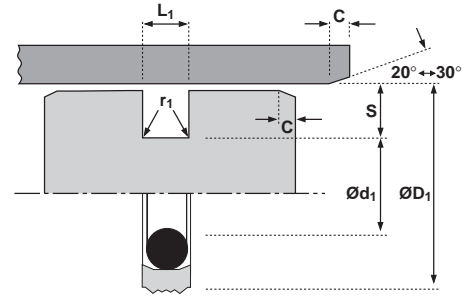
NB: Part numbers suffixed by "‡" indicate housing sizes to meet ISO 7425-1.

For full details and availability please contact your local Hallite Sales office.

Features

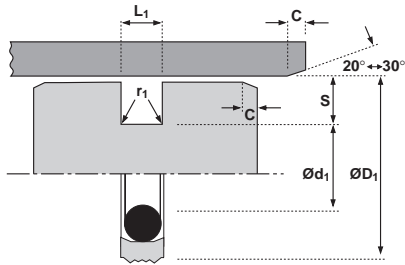
- Double acting seal with single acting capabilities
- Excellent wear resistance
- High extrusion resistance makes it ideal for use with remote wear rings such as the Hallite 506 or 87
- Advanced face geometry provides enhanced dynamic and static sealing
- More tolerant to dirt and contamination than common PTFE faces
- Rapid recovery after assembly, no resizing required
- ISO 7425 housings

764



$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL h9	L_1 + 0.008-0	PART No.
1.250	+0.002 +0.000	0.817	-0.000 -0.002	0.165	4751210
1.375	+0.002 +0.000	0.942	-0.000 -0.002	0.165	4764110
1.500	+0.002 +0.000	1.067	-0.000 -0.002	0.165	4764210
2.000	+0.003 +0.000	1.390	-0.000 -0.003	0.248	4764810
2.125	+0.003 +0.000	1.515	-0.000 -0.003	0.248	4765410
2.500	+0.003 +0.000	1.890	-0.000 -0.003	0.248	4766810
3.000	+0.003 +0.000	2.390	-0.000 -0.003	0.248	4767110

764



ØD ₁	TOL H9	Ød ₁	TOL h9	L ₁ + 0.2 - 0	PART No.
22	+0.05 +0.00	14.5	-0.000 -0.043	3.20	4763610
32	+0.06 +0.00	24.5	-0.000 -0.052	3.20	4741010‡
32	+0.06 +0.00	21.0	-0.000 -0.052	4.20	4751210‡
35	+0.06 +0.00	24.0	-0.000 -0.052	4.20	4764110
40	+0.06 +0.00	29.0	-0.000 -0.052	4.20	4741110‡
45	+0.06 +0.00	34.0	-0.000 -0.062	4.20	4744510
50	+0.06 +0.00	39.0	-0.000 -0.062	4.20	4741210‡
50	+0.06 +0.00	34.5	-0.000 -0.062	6.30	4775810‡
60	+0.07 +0.00	49.0	-0.000 -0.062	4.20	4741310
60	+0.07 +0.00	44.5	-0.000 -0.062	6.30	4739910
63	+0.07 +0.00	47.5	-0.000 -0.062	6.30	4766810‡
63	+0.07 +0.00	52.0	-0.000 -0.074	4.20	4740810
70	+0.07 +0.00	59.0	-0.000 -0.074	4.20	4741410
70	+0.07 +0.00	54.5	-0.000 -0.074	6.30	4759710
80	+0.07 +0.00	64.5	-0.000 -0.074	6.30	4722210‡
100	+0.09 +0.00	84.5	-0.000 -0.087	6.30	4741610‡
115	+0.09 +0.00	99.5	-0.000 -0.087	6.30	4761610
125	+0.09 +0.00	109.5	-0.000 -0.087	6.30	4771710‡