

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.

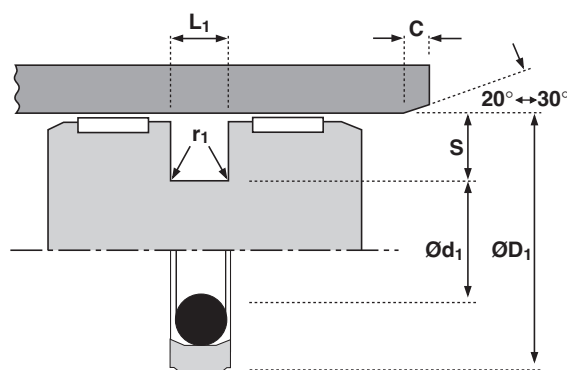
Housing dimensions for use with Hallite 87 and 506 bearing strip are given in the installation details. For further details on bearing strip grooves, please refer to the appropriate data sheets.

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, ideal for use with Hallite 506 or 87
- More tolerant to contamination
- Rapid recovery of face after assembly
- Advanced face geometry provides enhanced dynamic and static sealing
- ISO 7425 housing



Technical details

Operating conditions

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

Inch

3.0 ft/sec
-22°F + 230°F
3600 p.s.i.

Maximum extrusion gap

Pressure bar	100	160	250
Maximum Gap mm	0.6	0.5	0.4

Figures show the maximum permissible gap all on one side using minimum rod Ø and maximum clearance Ø. Refer to Housing Design section.

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 Faces L ₁	3.2 max	16 max	125 max	140 max

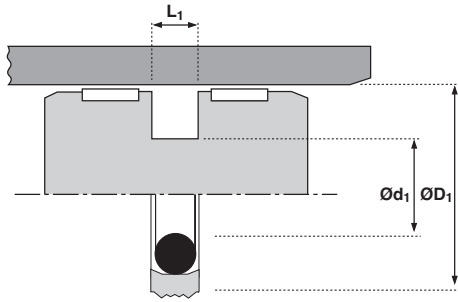
Chamfers & Radii

Groove Section ≤ 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 ≤ 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

ØD ₁	Ød ₁	L ₁ mm	L ₁ in
H9	h9	+0.2 -0	+0.008-0



**metric**

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‡
55	+0.06 +0.00	44.0	-0.000 -0.062	4.20	4845310
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

inch

ØD ₁	TOL H9	Ød 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

ØD ₁	TOL H9	Ød ₁	TOL h9	L ₁ +0.2 -0	PART No.
65	+0.07 +0.00	54.0	-0.000 -0.074	4.20	4845410
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
75	+0.07 +0.00	64.0	-0.000 -0.074	4.20	4845510
80	+0.07 +0.00	64.5	-0.000 -0.074	6.30	4722210‡
80	+0.07 +0.00	69.0	-0.000 -0.074	4.20	4845610
90	+0.09 +0.00	74.5	-0.000 -0.074	6.30	4741510
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
115	+0.09 +0.00	94.0	-0.000 -0.087	8.10	4829910
120	+0.09 +0.00	99.0	-0.000 -0.087	8.10	4812010
125	+0.09 +0.00	109.5	-0.000 -0.087	6.30	4771710‡

ØD ₁	TOL H9	Ød ₁	TOL h9	L ₁ +0.2 -0	PART No.
2.500	+0.003 +0.000	1.890	-0.000 -0.003	0.248	4766810
2.750	+0.003 +0.000	2.318	-0.000 -0.003	0.165	4741410
2.750	+0.003 +0.000	2.140	-0.000 -0.003	0.248	4759710
3.000	+0.003 +0.000	2.390	-0.000 -0.003	0.248	4767110