Technical details

	Metric			Inch
Operating conditions				
Maximum Speed	1.0 m/sec			3.0 ft/sec
Temperature Range	-40°C +110°C			-40°F +230°F
Maximum Pressure	350 bar			5000 p.s.i.

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

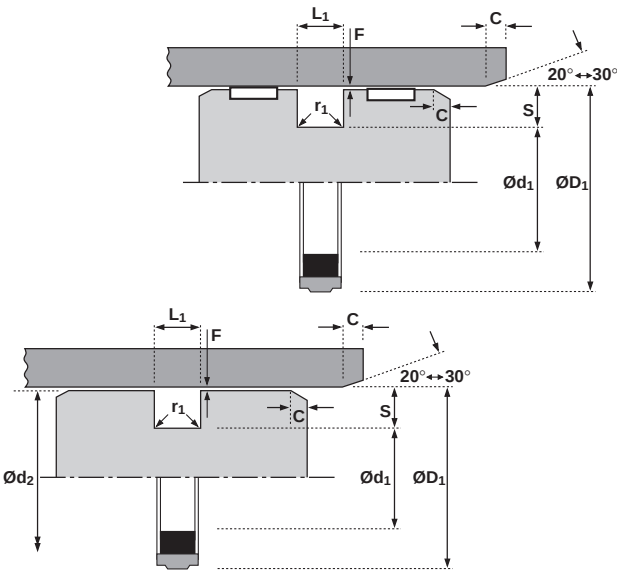
Pressure bar	100	160	250	350
Pressure p.s.i.	1500	2400	3750	5000
Maximum Gap in	0.030	0.025	0.020	0.010

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	0.125	0.187	0.250	
Min Chamfer C in	0.100	0.150	0.200	
Max Fillet Rad r_1 in	0.016	0.016	0.016	

Tolerances	ØD_1	Ød_1	Ød_2	L_1
in	+0.002 -0	+0 -0.002	+0 -0.001	+0.005 -0

770



Features

- **Low break-out and operating friction levels**
- **Rapid recovery of face after assembly. Unlike common PTFE faces, no re-sizing is required**
- **More tolerant to dirt and contamination than common PTFE equivalents**
- **Excellent wear resistance**
- **Operates on a wide range of surface finishes**
- **Ideal for use with Hallite 506 or 533 GFN wear rings**

Design

The Hallite 770 seal is a double acting compact, low friction seal for light to medium duty hydraulic cylinders. It has been designed to fit standard inch O ring housings. It comprises a tough self lubricated elastomeric face which is pre-loaded by a rectangular cross-section expander. It can be used on SG iron pistons or on a piston where there is an adequate remote bearing (see Hallite 506 and 533 bearings).The standard material is only suitable for hydraulic mineral oil applications. Other material options are available for water based (HFA and HFB) fluids and synthetic esters (HEES). In certain sizes a Hythane face material option is available, particularly for intermittent single acting applications.

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

Materials

Standard face material: (Cream 55D)
Lubricated polyester elastomer
Last digit of part no. _ _ _ _ _ _ **2**

Face material options:

Polyester elastomer (Red 55D)
Last digit of part no. _ _ _ _ _ _ **0**

Hydrolysis stabilised
polyester elastomer (Grey 55D)
Last digit of part no. _ _ _ _ _ _ **1**

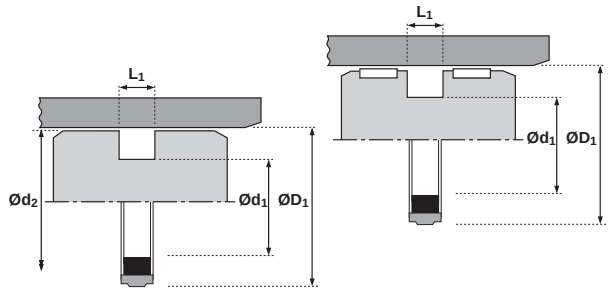
Hydrolysis stabilised
polyester elastomer (Red 72D)
Last digit of part no. _ _ _ _ _ _ **3**

Hythane 181 – A limited number of
sizes are available in this material option
Last digit of part no. _ _ _ _ _ _ **4**

Technical details shown are for standard Cream 55D lubricated polyester elastomer.

Hallite
Fenner Advanced Sealing Technologies

770



$ØD_1$	TOL	$Ød_1$	TOL	$Ød_2$	TOL	L_1	TOL	PART No.
1.250	+0.002 -0.000	1.008	+0.000 -0.002	1.247	+0.000 -0.001	0.187	+0.005 -0.000	455441_
1.375	+0.002 -0.000	1.133	+0.000 -0.002	1.372	+0.000 -0.001	0.187	+0.005 -0.000	4716914*
1.500	+0.002 -0.000	1.258	+0.000 -0.002	1.497	+0.000 -0.001	0.187	+0.005 -0.000	4717014*
1.625	+0.002 -0.000	1.383	+0.000 -0.002	1.622	+0.000 -0.001	0.187	+0.005 -0.000	4717114*
1.750	+0.002 -0.000	1.508	+0.000 -0.002	1.747	+0.000 -0.001	0.187	+0.005 -0.000	4717214*
2.000	+0.002 -0.000	1.630	+0.000 -0.002	1.997	+0.000 -0.001	0.281	+0.005 -0.000	455351_
2.125	+0.002 -0.000	1.755	+0.000 -0.002	2.123	+0.000 -0.001	0.283	+0.005 -0.000	4717314*
2.250	+0.002 -0.000	1.880	+0.000 -0.002	2.247	+0.000 -0.001	0.283	+0.005 -0.000	4717414*
2.500	+0.002 -0.000	2.130	+0.000 -0.002	2.497	+0.000 -0.001	0.281	+0.005 -0.000	449001_
3.000	+0.002 -0.000	2.630	+0.000 -0.002	2.997	+0.000 -0.001	0.281	+0.005 -0.000	434941_
3.250	+0.002 -0.000	2.880	+0.000 -0.002	3.247	+0.000 -0.001	0.281	+0.005 -0.000	434951_
3.500	+0.002 -0.000	3.130	+0.000 -0.002	3.497	+0.000 -0.001	0.281	+0.005 -0.000	434961_
3.750	+0.002 -0.000	3.380	+0.000 -0.002	3.747	+0.000 -0.001	0.281	+0.005 -0.000	434971_
4.000	+0.002 -0.000	3.630	+0.000 -0.002	3.997	+0.000 -0.001	0.281	+0.005 -0.000	434981_
4.250	+0.002 -0.000	3.880	+0.000 -0.002	4.247	+0.000 -0.001	0.281	+0.005 -0.000	434991_
4.500	+0.002 -0.000	4.130	+0.000 -0.002	4.497	+0.000 -0.001	0.281	+0.005 -0.000	435001_
4.750	+0.002 -0.000	4.380	+0.000 -0.002	4.747	+0.000 -0.001	0.281	+0.005 -0.000	435011_
5.000	+0.002 -0.000	4.630	+0.000 -0.002	4.997	+0.000 -0.001	0.281	+0.005 -0.000	435021_