

Piston Seals

Technical details

Operating conditions

	Metric	Inch
Maximum Speed	0.5 m/sec	1.5 ft/sec
Temperature Range	-30°C +100°C	-22°F +212°F
Maximum Pressure	400 bar	6000 p.s.i.

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 $\varnothing d_1$ $\varnothing d_2$	1.6 max	10 max	63 max	70 max
Static Housing Faces $\varnothing d_3$ L ₁ L ₂	3.2 max	16 max	125 max	140 max

Chamfers & Radii

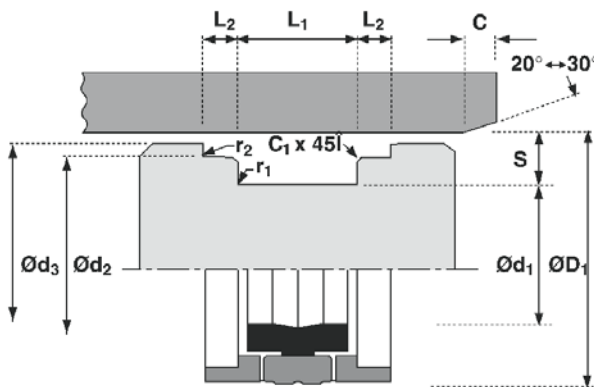
	5.0	7.5	8.0	10.0	12.5	15.0
Groove Section \leq S mm	5.0	7.5	8.0	10.0	12.5	15.0
Min Chamfer C mm	4.0	4.0	5.0	5.0	6.5	7.5
Max Fillet Rad r ₁ mm	0.2	0.2	0.4	0.4	0.4	0.8
Max Fillet Rad r ₂ mm	0.2	0.2	0.2	0.2	0.2	0.4

Tolerances

	$\varnothing D_1$	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	L ₁	L ₂
mm	H11	h10	f9	h11	+0.4-0	+0.1 -0



753



Hallite 753 is manufactured using two different profiles as illustrated above. The parts list clearly indicates which profile is used for each size.

Design

The Hallite 753 is a compact assembly designed and developed specifically for one piece pistons.

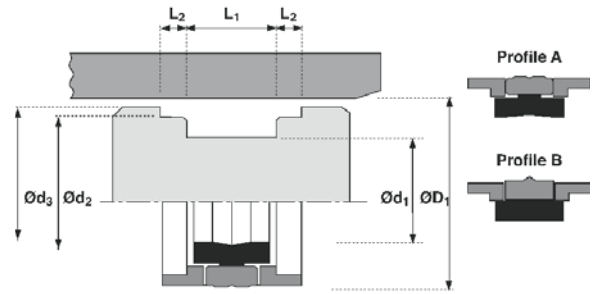
The assembly comprises a wear-resistant polyurethane slip ring which is loaded by an NBR ring. There are split 'L' shaped anti-extrusion bearings made from polyacetal resin on both sides of the seal.

The proportions of the range have been determined to give a satisfactory performance when used with the recommended operating conditions.

Features

- Long life – due to the wear-resistant polyurethane slip rings
- Easy installation

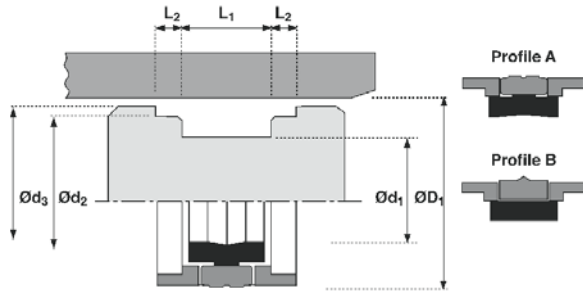
753



ØD ₁	TOL H11	Ød ₁	TOL h10	Ød ₂	TOL f9	Ød ₃	TOL h11	L ₁ + 0.4	L ₂ + 0.1 - 0	PROFILE	PART No.
40	+0.16 +0.00	26	+0.000 -0.084	36.00	-0.025 -0.087	39.00	+0.00 -0.16	15.5	2.60	B	6916500
40	+0.16 +0.00	30	+0.000 -0.084	36.50	-0.025 -0.087	39.00	+0.00 -0.16	10.0	5.00	A	6915100*
45	+0.16 +0.16	31	+0.000 -0.100	41.00	-0.025 -0.087	44.00	+0.00 -0.16	15.5	2.60	B	6914500
50	+0.16 +0.00	34	+0.000 -0.100	46.00	-0.025 -0.087	49.00	+0.00 -0.16	20.5	3.10	B	6916600
50	+0.16 +0.00	34	+0.000 -0.100	45.40	-0.025 -0.087	48.50	+0.00 -0.16	18.4	6.35	A	6915200
55	+0.19 +0.00	39	+0.000 -0.100	51.00	-0.030 -0.104	54.00	+0.00 -0.19	20.5	3.10	B	6914600
60	+0.19 +0.00	44	+0.000 -0.100	56.00	-0.030 -0.104	58.50	+0.00 -0.19	20.5	3.10	A	6916300
60	+0.19 +0.00	44	+0.000 -0.100	55.40	-0.030 -0.104	58.50	+0.00 -0.19	18.4	6.35	A	8672110
63	+0.19 +0.00	47	+0.000 -0.100	58.40	-0.030 -0.104	61.50	+0.00 -0.19	18.4	6.35	A	6915300
63	+0.19 +0.00	47	+0.000 -0.100	59.00	-0.030 -0.104	62.00	+0.00 -0.19	20.5	3.10	A	6916100
65	+0.19 +0.00	49	+0.000 -0.100	61.00	-0.030 -0.104	64.00	+0.00 -0.19	20.5	3.10	B	6916700
70	+0.19 +0.00	50	+0.000 -0.100	64.20	-0.030 -0.104	68.30	+0.00 -0.19	22.4	6.35	A	6915400
70	+0.19 +0.00	54	+0.000 -0.120	66.00	-0.030 -0.104	69.00	+0.00 -0.19	20.5	3.10	B	6916800
75	+0.19 +0.00	59	+0.000 -0.120	71.00	-0.030 -0.104	74.00	+0.00 -0.19	20.5	3.10	B	6918650
80	+0.19 +0.00	60	+0.000 -0.120	74.15	-0.030 -0.104	78.30	+0.00 -0.19	22.4	6.35	A	6915500
80	+0.19 +0.00	62	+0.000 -0.120	76.00	-0.030 -0.104	79.00	+0.00 -0.19	22.5	3.60	B	6916400
90	+0.22 +0.00	70	+0.000 -0.120	84.15	-0.036 -0.123	88.30	+0.00 -0.22	22.4	6.35	A	6915600
90	+0.22 +0.00	72	+0.000 -0.120	86.00	-0.036 -0.123	89.00	+0.00 -0.22	22.5	3.60	B	6916900
100	+0.22 +0.00	75	+0.000 -0.120	93.15	-0.036 -0.123	98.00	+0.00 -0.22	22.4	6.35	A	6915700
100	+0.22 +0.00	82	+0.000 -0.120	93.15	-0.036 -0.123	98.00	+0.00 -0.22	22.5	3.60	B	6918660
110	+0.22 +0.00	85	+0.000 -0.140	103.10	-0.036 -0.123	108.00	+0.00 -0.22	22.4	6.35	A	6915800
110	+0.22 +0.00	92	+0.000 -0.140	106.00	-0.036 -0.123	109.00	+0.00 -0.22	22.5	3.60	B	6914700
125	+0.25 +0.00	100	+0.000 -0.140	118.10	-0.036 -0.123	123.00	+0.00 -0.25	25.4	6.35	A	6915900

Piston Seals metric

753



ØD ₁	TOL H11	Ød ₁	TOL h10	Ød ₂	TOL f9	Ød ₃	TOL h11	L ₁ + 0.4	L ₂ + 0.1 - 0	PROFILE	PART No.
125	+0.25 +0.00	103	+0.000 -0.140	121.00	-0.043 -0.143	124.00	+0.00 -0.25	26.5	5.10	B	6917000
140	+0.25 +0.00	118	+0.000 -0.140	136.00	-0.043 -0.143	139.00	+0.00 -0.25	26.5	5.10	A	2356010
150	+0.25 +0.00	128	+0.000 -0.160	146.00	-0.043 -0.143	149.00	+0.00 -0.25	26.5	5.10	A	2349910
160	+0.25 +0.00	138	+0.000 -0.160	156.00	-0.043 -0.143	159.00	+0.00 -0.25	26.5	5.10	A	2349810
165	+0.25 +0.00	143	+0.000 -0.160	161.00	-0.043 -0.143	164.00	+0.00 -0.25	26.5	5.10	A	2362310
180	+0.25 +0.00	158	+0.000 -0.160	176.00	-0.043 -0.143	179.00	+0.00 -0.25	26.5	5.10	A	2349510
200	+0.29 +0.00	175	+0.000 -0.160	196.00	-0.050 -0.165	199.00	+0.00 -0.29	31.5	6.60	A	2347010
250	+0.29 +0.00	220	+0.000 -0.185	242.90	-0.050 -0.165	247.85	+0.00 -0.29	35.4	6.35	A	2340710

* OWING TO THE SEAL SECTION, DIAMETER 40 IS MANUFACTURED USING ONLY 3 PARTS