

Design

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

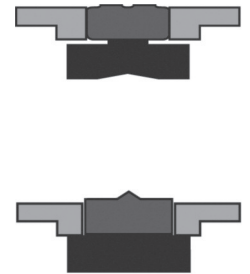
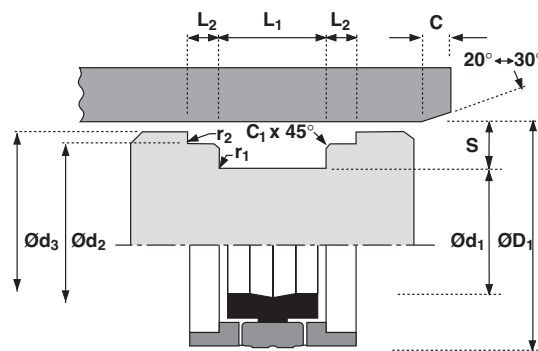
The assembly comprises a wear-resistant polyurethane slip ring which is loaded by an NBR ring. There are split 'L' shaped anti-extrusion bearings made from polyacetal resin on both sides of the seal.

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

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

Features

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



Technical details

Operating conditions

Maximum Speed	0.5 m/sec
Temperature Range	-30°C +100°C
Maximum Pressure	400 bar

Inch

1.5 ft/sec
-22°F +212°F
6000 p.s.i.

Surface roughness

Dynamic Sealing Face ØD ₁	0.1 < > 0.4
Static Sealing Face Ød ₁ Ød ₂	1.6 max
Static Housing Faces Ød ₃ L ₁ L ₂	3.2 max

µmRa

0.1 < > 0.4
1.6 max
3.2 max

µmRt

4 max
10 max
16 max

µinCLA

4 < > 16
63 max
125 max

µinRMS

5 < > 18
70 max
140 max

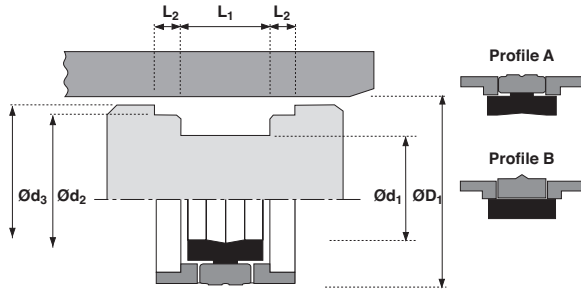
Chamfers & Radii

Groove Section ≤ 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 Chamfer C ₁ mm	0.4	0.4	0.4	0.4	0.8	0.8
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

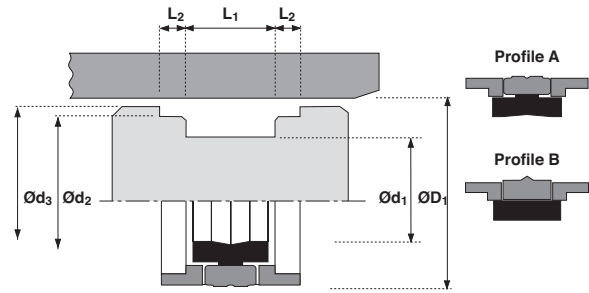
Tolerances

mm	ØD ₁	Ød ₁	Ød ₂	Ød ₃	L ₁	L ₂
	H11	h10	f9	h11	+0.4-0	+0.1 -0





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	96.00	-0.036 -0.123	99.00	+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



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.

