

## Piston seals

# Hallite



# 753

### TECHNICAL DETAILS

METRIC

INCH

#### OPERATING CONDITIONS

MAXIMUM SPEED 0.5 m/sec  
 TEMPERATURE RANGE -30°C + 100°C  
 MAXIMUM PRESSURE 400 bar

1.5 ft/sec  
 -22°F + 212°F  
 5000 p.s.i.

#### SURFACE ROUGHNESS

DYNAMIC SEALING FACE  $\text{Ø}d_1$  0.1 ↔ 0.4  $\mu\text{mRa}$  4 max  $\mu\text{mRt}$   
 STATIC SEALING FACE  $\text{Ø}d_1$   $\text{Ø}d_2$  1.6 max 10 max  
 STATIC HOUSING FACES  $\text{Ø}d_3$   $L_1$   $L_2$  3.2 max 16 max

$\mu\text{inCLA}$   $\mu\text{inRMS}$   
 4 ↔ 16 5 ↔ 18  
 63 max 70 max  
 125 max 140 max

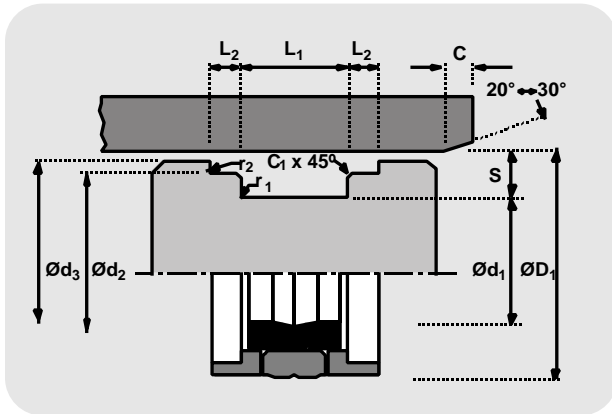
#### CHAMFERS & RADII

GROOVE SECTION	S	5.0	7.5	8.0	10.0	12.5	15.0
MIN CHAMFER	$C_1$	4.0	4.0	5.0	5.0	6.5	7.5
MAX FILLET RAD	$r_1$	0.2	0.2	0.4	0.4	0.4	0.8
MAX FILLET RAD	$r_2$	0.2	0.2	0.2	0.2	0.2	0.4

#### TOLERANCES

mm

$\text{Ø}d_1$	$\text{Ø}d_1$	$\text{Ø}d_2$	$\text{Ø}d_3$	$L_1$	$L_2$
H11	h10	f9	h11	+0.4	+0.1 -0



### DESIGN

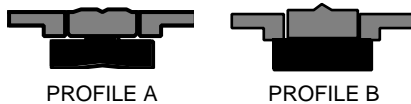
The Hallite 753 is a compact assembly designed and developed specifically for one piece pistons.

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

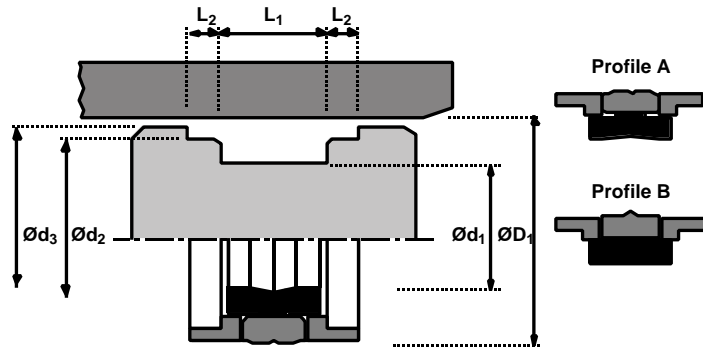


Hallite 753 is manufactured using two different profiles as illustrated above. The parts list clearly indicates which profile is used for each size.

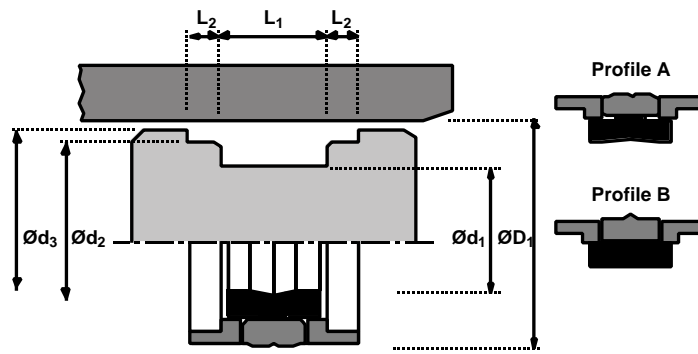
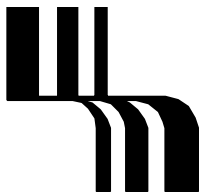
Piston seals

# Hallite 753

metric



ØD <sub>1</sub>	TOL H11	Ød <sub>1</sub>	TOL h10	Ød <sub>2</sub>	TOL f9	Ød <sub>3</sub>	TOL h11	L <sub>1</sub> + 0.4	L <sub>2</sub> + 0.1 - 0	PROFILE	PART No.
40	+0.16 +0.00	26	+0.00 -0.08	39.00	-0.025 -0.087	36.00	+0.00 -0.16	15.5	2.60	B	6916500
40	+0.16 +0.00	30	+0.00 -0.08	36.50	-0.025 -0.087	39.00	+0.00 -0.16	10.0	5.00	A	6915100*
50	+0.16 +0.00	34	+0.00 -0.10	46.00	-0.025 -0.087	49.00	+0.00 -0.16	20.5	3.10	B	6916600
50	+0.16 +0.00	34	+0.00 -0.10	45.40	-0.025 -0.087	48.50	+0.00 -0.16	18.4	6.35	A	6915200
60	+0.19 +0.00	44	+0.00 -0.10	56.00	-0.030 -0.104	58.50	+0.00 -0.19	20.5	3.10	A	6916300
60	+0.19 +0.00	44	+0.00 -0.10	55.40	-0.030 -0.104	58.50	+0.00 -0.19	18.4	6.35	A	8672110
63	+0.19 +0.00	47	+0.00 -0.10	58.40	-0.030 -0.104	61.50	+0.00 -0.19	18.4	6.35	A	6915300
63	+0.19 +0.00	47	+0.00 -0.06	59.00	-0.030 -0.104	62.00	+0.00 -0.19	20.5	3.10	A	6916100
65	+0.19 +0.00	49	+0.00 -0.10	61.00	-0.030 -0.104	64.00	+0.00 -0.19	20.5	3.10	B	6916700
70	+0.19 +0.00	50	+0.00 -0.10	64.20	-0.030 -0.104	68.30	+0.00 -0.19	22.4	6.35	A	6915400
70	+0.19 +0.00	54	+0.00 -0.12	66.00	-0.030 -0.104	69.00	+0.00 -0.19	20.5	3.10	B	6916800
80	+0.19 +0.00	60	+0.00 -0.12	74.15	-0.030 -0.104	78.30	+0.00 -0.19	22.4	6.35	A	6915500
80	+0.19 +0.00	62	+0.00 -0.12	76.00	-0.030 -0.104	79.00	+0.00 -0.19	22.4	3.60	B	6916400
80	+0.19 +0.00	62	+0.00 -0.12	76.00	-0.030 -0.104	79.00	+0.00 -0.19	22.5	3.60	A	6916000
90	+0.22 +0.00	70	+0.00 -0.12	84.15	-0.036 -0.123	88.30	+0.00 -0.22	22.4	6.35	A	6915600
90	+0.22 +0.00	72	+0.00 -0.12	86.00	-0.036 -0.123	89.00	+0.00 -0.22	22.5	3.60	B	6916900
100	+0.22 +0.00	75	+0.00 -0.12	93.15	-0.036 -0.123	98.00	+0.00 -0.22	22.4	6.35	A	6915700
110	+0.22 +0.00	85	+0.00 -0.14	103.10	-0.036 -0.123	108.00	+0.00 -0.22	22.4	6.35	A	6915800
125	+0.25 +0.00	100	+0.00 -0.14	118.10	-0.036 -0.123	123.00	+0.00 -0.25	25.4	6.35	A	6915900
125	+0.25 +0.00	103	+0.00 -0.14	121.00	-0.042 -0.143	124.00	+0.00 -0.25	26.5	5.10	B	6917000
125	+0.25 +0.00	103	+0.00 -0.14	121.00	-0.042 -0.143	124.00	+0.00 -0.25	26.5	5.10	A	6919800
140	+0.25 +0.00	118	+0.00 -0.14	136.00	-0.042 -0.143	139.00	+0.00 -0.25	26.5	5.10	A	2356010
150	+0.25 +0.00	128	+0.00 -0.14	146.00	-0.042 -0.143	149.00	+0.00 -0.25	26.5	5.10	A	2349910



Piston seals  
**Hallite**  
**753**  
 metric

ØD <sub>1</sub>	TOL H11	Ød <sub>1</sub>	TOL h10	Ød <sub>2</sub>	TOL f9	Ød <sub>3</sub>	TOL h11	L <sub>1</sub> + 0.4	L <sub>2</sub> + 0.1 - 0	PROFILE	PART No.
160	+0.25 +0.00	138	+0.00 -0.14	156.00	-0.042 -0.143	159.00	+0.00 -0.25	26.5	5.10	A	2349810
165	+0.25 +0.00	143	+0.00 -0.14	161.00	-0.042 -0.143	164.00	+0.00 -0.25	26.5	5.10	A	2362310
180	+0.25 +0.00	158	+0.00 -0.16	176.00	-0.042 -0.143	179.00	+0.00 -0.25	26.5	5.10	A	2349510
200	+0.29 +0.00	175	+0.00 -0.16	196.00	-0.050 -0.165	199.00	+0.00 -0.29	31.5	6.60	A	2347010
250	+0.29 +0.00	220	+0.00 -0.18	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

# Notes

