

Piston seals

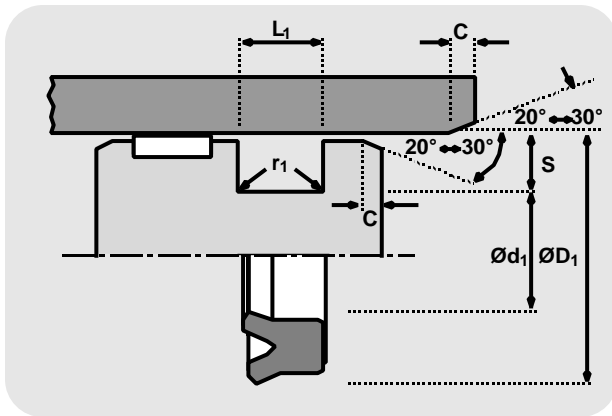
# Hallite



# 606

TECHNICAL DETAILS		METRIC	INCH		
<b>OPERATING CONDITIONS</b>					
MAXIMUM SPEED	1.0 m/sec	3.0 ft/sec			
TEMPERATURE RANGE	-45°C + 110°C	-50°F + 230°F			
MAXIMUM PRESSURE	400 bar*	6,000 p.s.i.*			
<b>MAXIMUM EXTRUSION GAP</b>					
PRESSURE bar	160	250	400		
MAXIMUM GAP mm	0.6	0.5	0.4		
PRESSURE p.s.i.	2400	3750	6000		
MAXIMUM GAP in	0.024	0.020	0.016		
<b>SURFACE ROUGHNESS</b>					
DYNAMIC SEALING FACE $\varnothing D_1$	$\mu\text{mRa}$ 0.1 ↔ 0.4	$\mu\text{mRt}$ 4 max	$\mu\text{inCLA}$ 4 ↔ 16	$\mu\text{inRMS}$ 5 ↔ 18	
STATIC SEALING FACE $\varnothing d_1$	1.6 max	10 max	63 max	70 max	
STATIC HOUSING FACES $L_1$	3.2 max	16 max	125 max	140 max	
<b>CHAMFERS &amp; RADII</b>					
GROOVE SECTION S mm	4.0	5.0	7.5	10.0	
MIN CHAMFER C mm	3.0	3.5	5.0	6.5	
MAX FILLET RAD $r_1$ mm	0.2	0.4	0.8	0.8	
GROOVE SECTION S in	0.125	0.187	0.250	0.312	
MIN CHAMFER C in	0.093	0.093	0.125	0.156	
MAX FILLET RAD $r_1$ in	0.008	0.008	0.016	0.032	
<b>TOLERANCES</b>					
$\varnothing D_1$	H9	$\varnothing d_1$	js11	$L_1$ mm	+0.25 -0
				$L_1$ in	+0.010 -0

\* Pressure rating of seal can be extended to 700 bar /10,000p.s.i. with the use of a back up ring. If this option is required seek advice from your local Hallite Seals sales office.



## DESIGN

The Hallite 606 is an asymmetric piston seal designed to offer effective bore sealing in a wide variety of applications.

The outer *dynamic* lip is shorter and more robust to provide improved sealing and compression set characteristics over conventional U rings.

The seal can be used by itself as a single acting seal or fitted back to back in separate grooves for double acting applications.

Manufactured in Hallite's high performance polyurethane Hythane 181, The Hallite 606 provides the following benefits:

## FEATURES

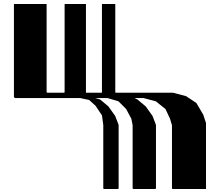
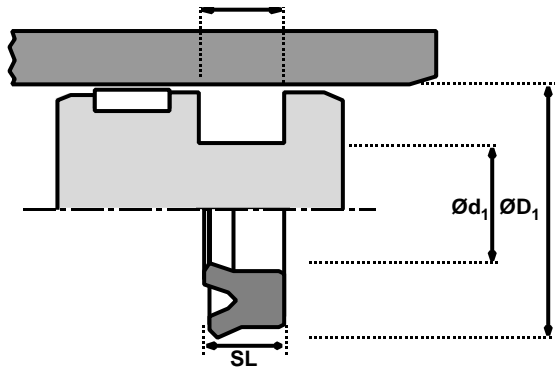
- FLEXIBLE FOR EASY INSTALLATION
- EXCELLENT WEAR RESISTANCE
- HIGH RESISTANCE TO EXTRUSION
- ROBUST DESIGN
- WIDE TEMPERATURE RANGE

**NB:** Part numbers suffixed by “±” indicate housing sizes to meet ISO5597.

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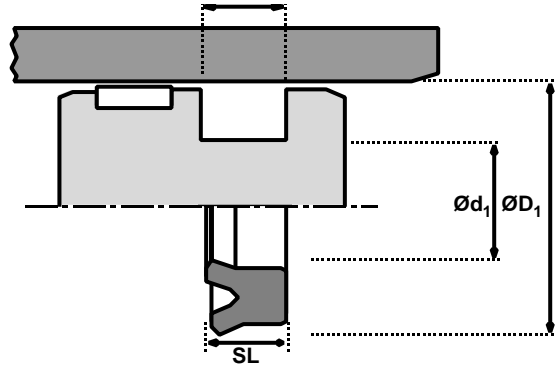
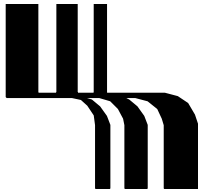
# Hallite 606

metric



ØD <sub>1</sub>	TOL H9	Ød <sub>1</sub>	TOL js11	SL	L <sub>1</sub> +0.25-0	PART No.
25	+0.05 +0.00	15	+0.06 -0.06	8.2	9.0	4390100
25	+0.05 +0.00	17	+0.06 -0.06	5.7	6.3	4418000
30	+0.05 +0.00	20	+0.07 -0.07	8.0	9.0	4354200
32	+0.06 +0.00	24	+0.07 -0.07	5.7	6.3	4351900‡
35	+0.06 +0.00	25	+0.07 -0.07	7.3	8.0	4365700
37	+0.06 +0.00	21	+0.07 -0.07	11.8	13.0	4354100
38	+0.06 +0.00	31	+0.07 -0.07	5.2	6.0	4728000
40	+0.06 +0.00	30	+0.07 -0.07	7.3	8.0	4299500‡
40	+0.06 +0.00	30	+0.07 -0.07	10.0	11.0	4400900
45	+0.06 +0.00	35	+0.08 -0.08	7.3	8.0	4315700
50	+0.06 +0.00	40	+0.08 -0.08	7.3	8.0	4319500‡
55	+0.07 +0.00	45	+0.08 -0.08	7.3	8.0	4380000
60	+0.07 +0.00	45	+0.08 -0.08	10.0	11.0	4407000
63	+0.07 +0.00	48	+0.08 -0.08	11.4	12.5	4383200
63	+0.07 +0.00	53	+0.10 -0.10	7.3	8.0	4341500‡
63	+0.07 +0.00	53	+0.10 -0.10	11.8	13.0	4318800
65	+0.07 +0.00	55	+0.10 -0.10	7.3	8.0	4424100

ØD <sub>1</sub>	TOL H9	Ød <sub>1</sub>	TOL js11	SL	L <sub>1</sub> +0.25-0	PART No.
70	+0.07 +0.00	55	+0.10 -0.10	10.0	11.0	4448000
70	+0.07 +0.00	60	+0.10 -0.10	8.1	9.0	4709500
71	+0.07 +0.00	61	+0.10 -0.10	6.0	7.0	4492600
75	+0.07 +0.00	67	+0.10 -0.10	8.8	9.7	4322300
80	+0.07 +0.00	65	+0.10 -0.10	11.4	12.5	4363800‡
80	+0.07 +0.00	70	+0.10 -0.10	6.8	7.5	4370300
80	+0.07 +0.00	70	+0.10 -0.10	8.0	9.0	4709600
85	+0.07 +0.00	75	+0.10 -0.10	8.0	9.0	4709700
85.7	+0.09 +0.00	70.7	+0.10 -0.10	10.3	11.4	4493400
100	+0.09 +0.00	85	+0.11 -0.11	11.4	12.5	4363900‡
100	+0.09 +0.00	90	+0.11 -0.11	6.8	7.5	4375900
110	+0.09 +0.00	100	+0.11 -0.11	8.0	9.0	4533100
125	+0.10 +0.00	105	+0.11 -0.11	14.5	16.0	4364000‡
150	+0.10 +0.00	130	+0.13 -0.13	14.5	16.0	4390200
150	+0.10 +0.00	140	+0.13 -0.13	13.6	15.0	4390300
160	+0.10 +0.00	140	+0.13 -0.13	18.2	20.0	4364100
200	+0.12 +0.00	180	+0.13 -0.13	14.5	16.0	4392300



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inch

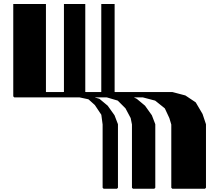
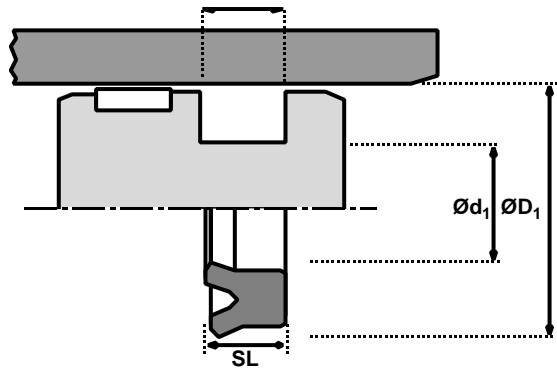
$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL js11	SL	$L_1$ +0.010 -0	PART No.
0.750	+0.002 +0.000	0.375	+0.002 -0.002	0.312	0.344	4707100
1.125	+0.003 +0.000	0.750	+0.003 -0.003	0.312	0.344	4565600
1.500	+0.003 +0.000	1.125	+0.003 -0.003	0.250	0.275	4426700
1.500	+0.003 +0.000	1.250	+0.003 -0.003	0.250	0.275	4426800
2.000	+0.003 +0.000	1.375	+0.003 -0.003	0.500	0.550	4364200
2.000	+0.003 +0.000	1.500	+0.003 -0.003	0.375	0.413	4376000
2.000	+0.003 +0.000	1.625	+0.003 -0.003	0.187	0.206	4426900
2.000	+0.003 +0.000	1.625	+0.003 -0.003	0.312	0.344	4444300
2.000	+0.003 +0.000	1.625	+0.003 -0.003	0.375	0.413	4364400
2.250	+0.003 +0.000	1.750	+0.003 -0.003	0.375	0.413	4476500
2.250	+0.003 +0.000	1.875	+0.003 -0.003	0.375	0.413	4479600
2.500	+0.003 +0.000	1.625	+0.003 -0.003	0.500	0.550	4364500
2.500	+0.003 +0.000	1.875	+0.003 -0.003	0.500	0.550	4376100
2.500	+0.003 +0.000	2.000	+0.004 -0.004	0.250	0.275	4516500
2.500	+0.003 +0.000	2.000	+0.004 -0.004	0.375	0.413	4391900
2.500	+0.003 +0.000	2.125	+0.004 -0.004	0.250	0.275	4427000
2.500	+0.003 +0.000	2.125	+0.004 -0.004	0.312	0.344	4444400
2.500	+0.003 +0.000	2.125	+0.004 -0.004	0.375	0.413	4451300
3.000	+0.003 +0.000	2.250	+0.004 -0.004	0.455	0.500	4375000
3.000	+0.003 +0.000	2.375	+0.004 -0.004	0.500	0.550	4364600
3.000	+0.003 +0.000	2.500	+0.004 -0.004	0.250	0.275	4516600
3.000	+0.003 +0.000	2.500	+0.004 -0.004	0.375	0.413	4364700
3.000	+0.003 +0.000	2.625	+0.004 -0.004	0.375	0.413	4458400

$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL js11	SL	$L_1$ +0.010 -0	PART No.
3.250	+0.003 +0.000	2.625	+0.004 -0.004	0.500	0.550	4376200
3.250	+0.003 +0.000	2.750	+0.004 -0.004	0.250	0.275	4516700
3.250	+0.003 +0.000	2.750	+0.004 -0.004	0.375	0.413	4474400
3.250	+0.003 +0.000	2.875	+0.004 -0.004	0.250	0.275	4427100
3.500	+0.003 +0.000	2.750	+0.004 -0.004	0.500	0.550	4444600
3.500	+0.003 +0.000	2.750	+0.004 -0.004	0.625	0.688	4376300
3.500	+0.003 +0.000	2.875	+0.004 -0.004	0.312	0.344	4571100
3.500	+0.003 +0.000	2.875	+0.004 -0.004	0.500	0.550	4364800
3.500	+0.003 +0.000	3.000	+0.004 -0.004	0.250	0.275	4516800
3.500	+0.003 +0.000	3.000	+0.004 -0.004	0.375	0.413	4364900
3.500	+0.003 +0.000	3.125	+0.004 -0.004	0.275	0.302	4572200
3.500	+0.003 +0.000	3.125	+0.004 -0.004	0.375	0.413	4444500
3.750	+0.003 +0.000	3.250	+0.004 -0.004	0.375	0.413	4444700
4.000	+0.003 +0.000	3.250	+0.004 -0.004	0.375	0.413	4517400
4.000	+0.003 +0.000	3.250	+0.004 -0.004	0.500	0.550	4444900
4.000	+0.003 +0.000	3.250	+0.004 -0.004	0.625	0.688	4376400
4.000	+0.003 +0.000	3.375	+0.004 -0.004	0.500	0.550	4365000
4.000	+0.003 +0.000	3.500	+0.004 -0.004	0.250	0.275	4516900
4.000	+0.003 +0.000	3.500	+0.004 -0.004	0.312	0.344	4427200
4.000	+0.003 +0.000	3.500	+0.004 -0.004	0.375	0.413	4365100
4.000	+0.003 +0.000	3.625	+0.004 -0.004	0.375	0.413	4444800
4.250	+0.003 +0.000	3.750	+0.004 -0.004	0.375	0.413	4445000
4.500	+0.003 +0.000	3.750	+0.004 -0.004	0.625	0.688	4371000

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inch



ØD <sub>1</sub>	TOL H9	Ød <sub>1</sub>	TOL js11	SL	L <sub>1</sub> +0.010 -0	PART No.
4.500	+0.003 +0.000	4.000	+0.004 -0.004	0.375	0.413	4448100
4.750	+0.003 +0.000	4.379	+0.004 -0.004	0.275	0.302	4493600
5.000	+0.004 +0.000	4.250	+0.004 -0.004	0.375	0.413	4517500
5.000	+0.004 +0.000	4.250	+0.004 -0.004	0.500	0.550	4445100
5.000	+0.004 +0.000	4.250	+0.004 -0.004	0.625	0.688	4371100
5.000	+0.004 +0.000	4.500	+0.004 -0.004	0.250	0.275	4517000
5.000	+0.004 +0.000	4.500	+0.004 -0.004	0.375	0.413	4365200
5.000	+0.004 +0.000	4.500	+0.004 -0.004	0.562	0.619	4495900
5.250	+0.004 +0.000	4.500	+0.004 -0.004	0.500	0.550	4445200
5.500	+0.004 +0.000	4.750	+0.005 -0.005	0.625	0.688	4371200
6.000	+0.004 +0.000	5.250	+0.005 -0.005	0.375	0.413	4517600
6.000	+0.004 +0.000	5.250	+0.005 -0.005	0.500	0.550	4445300
6.000	+0.004 +0.000	5.250	+0.005 -0.005	0.625	0.688	4371300
6.000	+0.004 +0.000	5.500	+0.005 -0.005	0.250	0.275	4517100

ØD <sub>1</sub>	TOL H9	Ød <sub>1</sub>	TOL js11	SL	L <sub>1</sub> +0.010 -0	PART No.
6.000	+0.004 +0.000	5.500	+0.005 -0.005	0.375	0.413	4365300
6.000	+0.004 +0.000	5.500	+0.005 -0.005	0.562	0.619	4393400
6.250	+0.004 +0.000	5.750	+0.005 -0.005	0.562	0.619	4458300
7.000	+0.004 +0.000	6.250	+0.005 -0.005	0.375	0.413	4517700
7.000	+0.004 +0.000	6.250	+0.005 -0.005	0.500	0.550	4445500
7.000	+0.004 +0.000	6.250	+0.005 -0.005	0.625	0.688	4371400
7.000	+0.004 +0.000	6.500	+0.005 -0.005	0.250	0.275	4517200
7.000	+0.004 +0.000	6.500	+0.005 -0.005	0.375	0.413	4445400
8.000	+0.005 +0.000	7.250	+0.006 -0.006	0.625	0.688	4371500
8.000	+0.005 +0.000	7.500	+0.006 -0.006	0.250	0.275	4517300
9.000	+0.005 +0.000	8.000	+0.006 -0.006	0.750	0.825	4371600
10.000	+0.005 +0.000	9.000	+0.006 -0.006	0.750	0.825	4536200
10.000	+0.005 +0.000	9.250	+0.006 -0.006	0.375	0.413	4575100