

Single Acting Piston Seals



Technical details

Operating conditions

	Metric	Inch
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.*

Maximum extrusion gap

	Metric	Inch
Pressure bar	160	250
Maximum Gap mm	0.6	0.5
Pressure p.s.i.	2400	3750
Maximum Gap in	0.024	0.020

Figures show the maximum permissible gap all on one side using minimum rod \varnothing and maximum clearance \varnothing .

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 $\varnothing d_1$	1.6 max	10 max	63 max	70 max
Static Housing Faces L_1	3.2 max	16 max	125 max	140 max

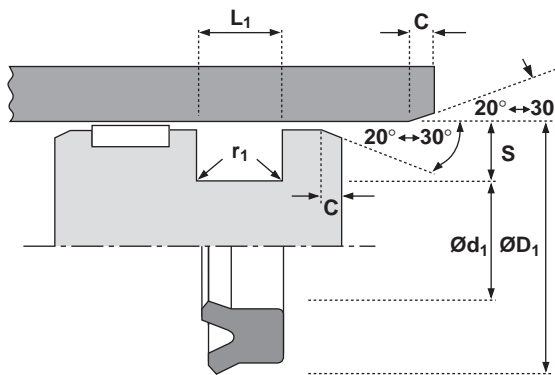
Chamfers & Radii

	4.0	5.0	7.5	10.0		
Groove Section $\leq S$ mm	0.125	0.187	0.250	0.312	0.375	0.500
Min Chamfer C mm	0.093	0.093	0.125	0.156	0.187	0.217
Max Fillet Rad r_1 mm	0.008	0.008	0.016	0.032	0.032	0.032
Groove Section $\leq S$ in						
Min Chamfer C in						
Max Fillet Rad r_1 in						

Tolerances

	$\varnothing D_1$	$\varnothing d_1$	L_1 mm	L_1 in
	H9	js11	+0.25 -0	+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:

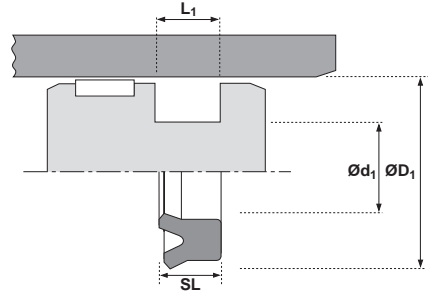
Features

- 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.

Single Acting Piston Seals inch

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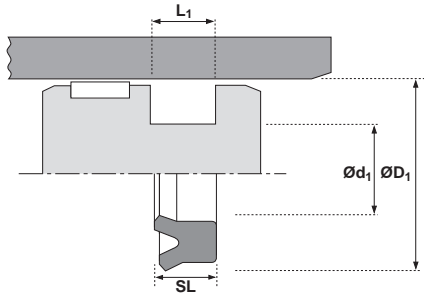


ØD ₁	TOL H9	Ød ₁	TOL js11	SL	L ₁ +0.010 -0	PART No.
0.750	+0.002 +0.000	0.375	+0.002 -0.002	0.312	0.344	4707100
1.125	+0.003 +0.000	0.750	+0.003 -0.003	0.312	0.344	4565600
1.500	+0.003 +0.000	1.125	+0.003 -0.003	0.250	0.275	4426700
1.500	+0.003 +0.000	1.250	+0.003 -0.003	0.250	0.275	4426800
1.750	+0.003 +0.000	1.500	+0.003 -0.003	0.250	0.275	4769800
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	0.207	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

ØD ₁	TOL H9	Ød ₁	TOL js11	SL	L ₁ +0.010 -0	PART No.
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	0.187	0.207	4792800
3.000	+0.003 +0.000	2.625	+0.004 -0.004	0.375	0.413	4458400
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

Single Acting Piston seals inch

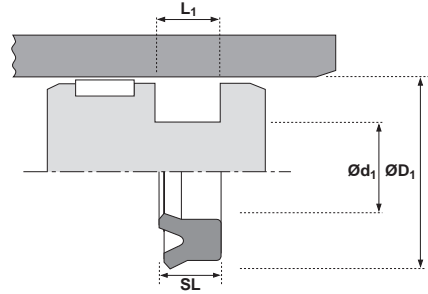
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$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL js11	SL	L_1 +0.010 -0	PART No.
4.000	+0.003 +0.000	3.250	+0.004 -0.004	0.625	0.688	4376400
4.000	+0.003 +0.000	3.375	+0.004 -0.004	0.500	0.550	4365000
4.000	+0.003 +0.000	3.500	+0.004 -0.004	0.250	0.275	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
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

$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL js11	SL	L_1 +0.010 -0	PART No.
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
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
6.500	+0.004 -0.000	5.750	+0.005 -0.000	0.625	0.688	4743900
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

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ØD ₁	TOL H9	Ød ₁	TOL js11	SL	L ₁ +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	+0.06 +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	+0.08 -0.08	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	39	+0.08 -0.08	3.8	4.2	4460700
50	+0.06 +0.00	40	+0.08 -0.08	7.8	8.0	4319500‡
55	+0.07 +0.00	45	+0.08 -0.08	7.3	8.0	4380000
60	+0.07 +0.00	44.9	+0.08 -0.08	5.7	6.3	4739800
60	+0.07 +0.00	45	+0.08 -0.08	10.0	11.0	4407000
60	+0.07 +0.00	50	+0.08 -0.08	9.0	10.0	4762000
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

ØD ₁	TOL H9	Ød ₁	TOL js11	SL	L ₁ +0.25-0	PART No.
65	+0.07 +0.00	55	+0.10 -0.10	7.3	8.0	4424100
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	+0.09 +0.00	75	+0.10 -0.10	8.1	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