

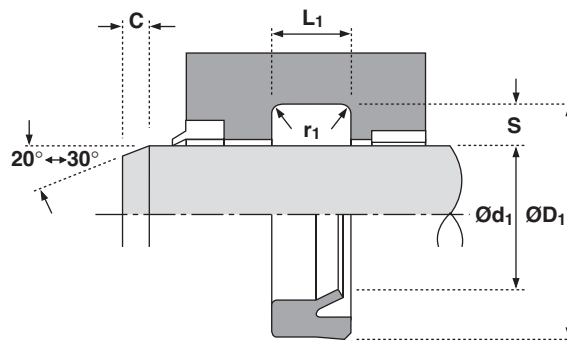
## Design

The result of many years testing and development, the Hallite 609 rod seal is truly a breakthrough in pneumatic sealing. The Hythane® 181 material and the profile of the dynamic sealing lip combine to offer both ultra low friction - significantly less than that of rubber - and ultra long life.

The Hallite 609 has been developed to give significant improvements in cylinder performance in low lube air conditions and be used in long and short stroke applications.

### Features

- Effective sealing
- Low friction
- Easy installation
- Excellent temperature range



### Technical details

#### Operating conditions

	Metric	Inch
Maximum Speed	1.0 m/sec	3.0 ft/sec
Temperature Range	-45°C +80°C	-50°F +180°F
Maximum Pressure	16 bar	230 p.s.i.

#### Surface roughness

	µmRa	µmRt	µinCLA	µinRMS
Dynamic Sealing Face ØD <sub>1</sub>	0.1 > 0.4	4 max	4 > 16	5 > 18
Static Sealing Face Ød <sub>1</sub>	1.6 max	10 max	63 max	70 max
Static Housing Faces L <sub>1</sub>	3.2 max	16 max	125 max	140 max

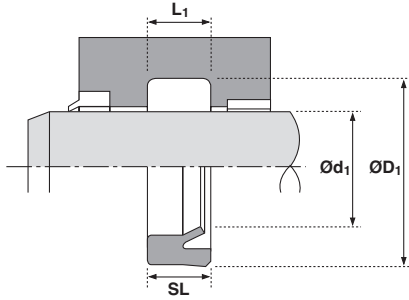
#### Chamfers & Radii

	4.0	5.0	7.5	10.0	12.5	15.0
Groove Section ≤ S mm	4.0	5.0	7.5	10.0	12.5	15.0
Min Chamfer C mm	3.0	3.5	5.0	6.5	7.0	8.0
Max Fillet Rad r <sub>1</sub> mm	0.2	0.4	0.8	0.8	1.2	1.6
Groove Section ≤ S in	0.125	0.187	0.250	0.312	0.375	0.500
Min Chamfer C in	0.093	0.093	0.125	0.156	0.187	0.217
Max Fillet Rad r <sub>1</sub> in	0.008	0.008	0.016	0.016	0.032	0.032

#### Tolerances

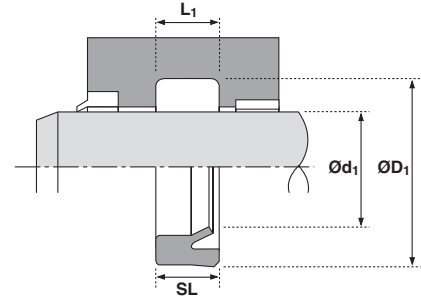
	ØD <sub>1</sub>	Ød <sub>1</sub>	L <sub>1</sub>
mm	f9	Js11	+0.25
in	f9	Js11	+0.010





Ød <sub>1</sub>	TOL f9	ØD <sub>1</sub>	TOL Js11	SL	L <sub>1</sub> +0.25-0	PART No.
12	-0.016 -0.059	19	+0.06 -0.06	4.50	5.00	4510100
16	-0.016 -0.059	22	+0.06 -0.06	4.00	4.50	4510200
20	-0.020 -0.072	28	+0.07 -0.07	5.50	6.00	4484300

Ød <sub>1</sub>	TOL f9	ØD <sub>1</sub>	TOL Js11	SL	L <sub>1</sub> +0.25-0	PART No.
25	-0.020 -0.072	35	+0.08 -0.08	7.50	8.00	4510300
32	-0.025 -0.087	42	+0.08 -0.08	7.00	7.50	4510400



Ød <sub>1</sub>	TOL f <sub>9</sub>	ØD <sub>1</sub>	TOL Js11	SL	L <sub>1</sub> +0.010-0	PART No.
0.625	-0.0006 -0.0023	0.875	+0.003 -0.003	0.250	0.275	4490200
0.750	-0.0008 -0.0028	1.000	+0.003 -0.003	0.250	0.275	4541700
1.000	-0.0008 -0.0028	1.240	+0.003 -0.003	0.187	0.211	4541800
1.000	-0.0008 -0.0028	1.250	+0.003 -0.003	0.250	0.275	4471000
1.125	-0.0008 -0.0028	1.375	+0.003 -0.003	0.187	0.211	4598300
1.250	-0.0010 -0.0034	1.500	+0.003 -0.003	0.250	0.275	4541900
1.375	-0.0010 -0.0034	1.625	+0.003 -0.003	0.250	0.275	4542000

Ød <sub>1</sub>	TOL f <sub>9</sub>	ØD <sub>1</sub>	TOL Js11	SL	L <sub>1</sub> +0.010-0	PART No.
1.500	-0.0010 -0.0034	1.875	+0.003 -0.003	0.250	0.275	4542100
1.750	-0.0010 -0.0034	2.125	+0.003 -0.003	0.312	0.344	4542200
2.000	-0.0010 -0.0034	2.250	+0.003 -0.003	0.250	0.275	4543800
2.000	-0.0012 -0.0041	2.375	+0.003 -0.003	0.312	0.344	4483200
2.000	-0.0012 -0.0041	2.625	+0.003 -0.003	0.312	0.344	4499200
2.500	-0.0012 -0.0041	3.000	+0.003 -0.003	0.284	0.312	4542300

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