

## Design

The Hallite 601 is a high performance general purpose seal suitable for rod and piston use.

Manufactured in Hythane® 181 – Hallite’s 601 is engineered to effect a good seal in most industrial cylinder applications.

The sealing lips are accurately machine trimmed to ensure good low pressure sealing while the material resists extrusion at high pressures.

**NB:** Hallite 606 is a preferred option for back to back piston applications.

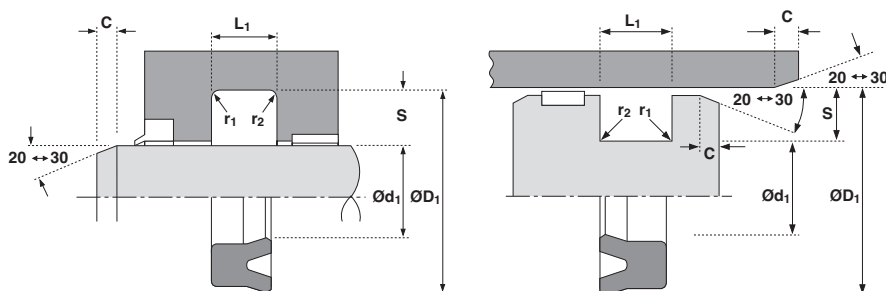
Part numbers commencing 46 . . . . are designed to suit popular Asian housings.

Part numbers suffixed by “#” indicate housing sizes to meet ISO5597.

Size lists give “on line” tolerances for rod applications.

### Features

- General purpose seal
- Excellent temperature resistance
- Easy to install



### Technical details

#### Operating conditions

Maximum Speed	1.0 m/sec
Temperature Range	-45°C +110°C
Maximum Pressure	400 bar*

3.0 ft/sec
-50°F +230°F
6,000 p.s.i.*

#### Maximum extrusion gap

Figures show the maximum permissible gap all on one side, for rod seals using minimum rod Ø and maximum clearance Ø and for piston seals using the minimum clearance Ø and maximum bore Ø. Refer to Housing Design section.

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

#### Surface roughness

	µmRa	µmRt	µinCLA	µinRMS
Dynamic Sealing Face – Rod Ød <sub>1</sub>	0.1 < > 0.4	4 max	4 < > 16	5 < > 18
Static Sealing Face – Rod ØD <sub>1</sub>	1.6 max	10 max	63 max	70 max
Dynamic Sealing Face – Piston ØD <sub>1</sub>	0.1 < > 0.4	4 max	4 ÷ 16	5 < > 18
Static Sealing Face – Piston 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	20.0
Groove Section < S mm	4.0	5.0	7.5	10.0	12.5	15.0	20.0
Min Chamfer C mm	3.0	3.5	5.0	6.5	7.0	8.0	10.0
Max Fillet Rad r <sub>1</sub> mm	0.2	0.4	0.8	0.8	1.2	1.6	1.6
Max Fillet Rad r <sub>2</sub> mm	0.4	0.8	1.2	1.2	1.6	2.4	2.4
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	0.032	0.032	0.032	
Max Fillet Rad r <sub>2</sub> in	0.016	0.016	0.032	0.047	0.047	0.047	

#### Tolerances

Rod	Ød <sub>1</sub>	ØD <sub>1</sub>	L <sub>1</sub> mm	L <sub>1</sub> in
Piston	f9	Js11	+0.25 -0	+0.010 -0
	js11	H9	+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.

