

Design

The Hallite 846 wiper is designed to exclude dirt and moisture from entering the cylinder and to collect traces of fluid passing the rod seal.

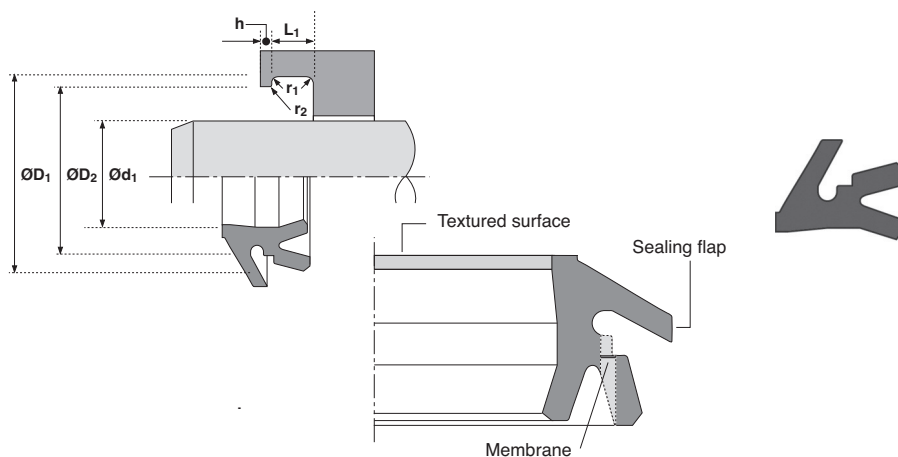
One special feature of the wiper design are the thin membranes which burst when excessive fluid pressure is trapped between the wiper and the rod seal and prevent the wiper being forced out of its housing. After release of this pressure, the membranes close to protect against contamination from the outside. This feature removes the requirement for an expensive vent hole in the gland.

A second feature is the sealing flap on the wiping lip that completely seals the metal housing groove, preventing the ingress of dirt and moisture around the outside diameter of the wiper.

Precision moulded in Hallite's high performance polyurethane, Hythane® 181, for maximum wear resistance and temperature range, the wiper is designed to remove lightly adhered dirt, dust and moisture from the rod.

Features

- Twin lip - no leakage
- Trapped pressure automatically released through bursting membranes
- No push out of wiper through build up of pressure
- No gland vent hole necessary
- Sealing flap protects against ingress of dirt and moisture around the outside diameter



Technical details

Operating conditions
 Maximum Speed
 Temperature Range

Metric

4.0 m/sec
 -45°C +110°C

Surface roughness
 Dynamic Sealing Face $\text{Ø}d_1$
 Static Sealing Face $\text{Ø}D_1$ h
 Static Housing Faces L_1

μmRa	μmRt
0.1 < > 0.4	4 max
1.6 max	10 max
3.2 max	16 max

Inch

12.0 ft/sec
 -50°F +230°F

μinCLA	μinRMS
4 < > 16	5 < > 18
63 max	70 max
125 max	140 max

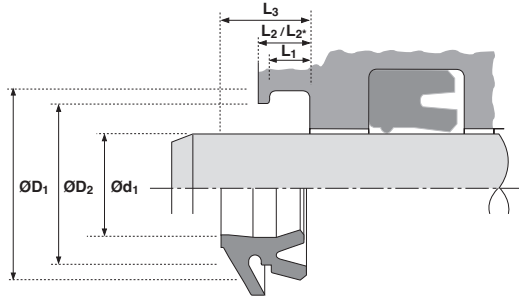
Radii
 Rod Diameter $\text{Ø}d_1$ mm
 Max Fillet Rad r_1 mm
 Max Fillet Rad r_2 mm

≤ 90	> 90
0.4	0.4
0.2	0.4

Tolerances

	$\text{Ø}d_1$	$\text{Ø}D_1$	$\text{Ø}D_2$	L_1	L_2
mm	f9	H11	H11	+0.2 -0	+0.2 -0





Ød ₁	TOL f9	ØD ₁	TOL H11	ØD ₂	TOL H11	L ₁ +0.2 - 0	L ₂ +0.2 - 0	L ₂ * +0.2 - 0	L ₃	PART No.
24	-0.020 -0.072	32.0	+0.16 +0.00	30.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4764400
25	-0.020 -0.072	33.0	+0.16 +0.00	31.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4556600
26	-0.020 -0.072	34.0	+0.16 +0.00	32.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4588700
28	-0.020 -0.072	36.0	+0.16 +0.00	34.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4556700
30	-0.020 -0.072	38.0	+0.16 +0.00	36.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4584500
32	-0.025 -0.087	40.0	+0.16 +0.00	38.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4568900
36	-0.025 -0.087	44.0	+0.16 +0.00	42.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4588800
40	-0.025 -0.087	48.0	+0.16 +0.00	46.0	+0.16 +0.00	4.0	5.0	6.0	8.7	4549200
45	-0.025 -0.087	53.0	+0.19 +0.00	51.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4589900
50	-0.025 -0.087	58.0	+0.19 +0.00	56.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4597200
54	-0.030 -0.104	62.0	+0.19 +0.00	60.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4803300
56	-0.030 -0.104	64.0	+0.19 +0.00	62.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4588900
60	-0.030 -0.104	68.0	+0.19 +0.00	66.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4596600
63	-0.030 -0.104	71.0	+0.19 +0.00	69.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4749600
65	-0.030 -0.104	73.0	+0.19 +0.00	71.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4597500
70	-0.030 -0.104	78.0	+0.19 +0.00	76.0	+0.19 +0.00	4.0	5.0	6.0	8.7	4556800
75	-0.030 -0.104	83.0	+0.22 +0.00	81.0	+0.22 +0.00	4.0	5.0	6.0	8.7	4597600
80	-0.030 -0.104	88.0	+0.22 +0.00	86.0	+0.22 +0.00	4.0	5.0	6.0	8.7	4590000
90	-0.036 -0.123	98.0	+0.22 +0.00	96.0	+0.22 +0.00	4.0	5.0	6.0	8.7	4557700
100	-0.036 -0.123	110.0	+0.22 -0.00	107.0	+0.22 -0.00	6.3	8.1		11.7	4723600

NB - The housing length shows options for L2 and L2* .
L2 is the preferred dimension but either can be used.