

846

WIPER

*Double-Lipped
Polyurethane with Umbrella Design
Technology™ and Venting Membrane*

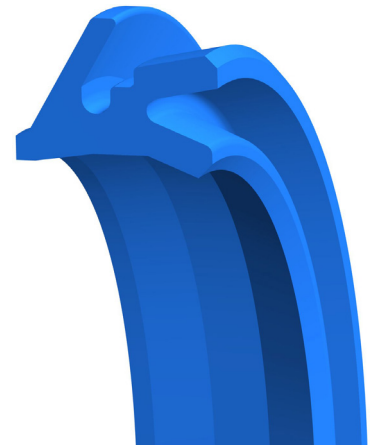
DESIGN

The Hallite 846 double-lipped, snap-in rod wiper is developed specifically for cylinders applications on mechanical handling equipment, particularly those with long stroke, and designed for use with venting U-rings, such as the Hallite 663 or Hallite 673 rod seal. The design minimises the oil transfer out of the ram on the cylinder rod by collecting traces of fluid passing the rod seal.

The unique feature of the Hallite 846 is the Umbrella Wiper Technology, which is a protective debris guard flap on the wiping lip that entirely covers the gland housing and prevents the water/slurry trap that is common with conventional wipers. This feature offers added protection to the integrity of the hydraulic system by reducing corrosion and preventing the ingress of contamination into the wiper housing groove and hydraulic cylinder gland which will result in increased system life.

Another special feature of the Hallite 846 wiper design is the thin membranes which burst when excessive fluid pressure is trapped between the wiper and the rod seal. This prevents pressure from ejecting the wiper out of its housing. After release of this pressure, the membranes close to protect against contamination from the outside without the need for an expensive vent hole in the gland.

The Hallite 846 is moulded in Hythane® 181, Hallite's high-performance polyurethane, for easy installation and excellent low temperature performance and has a textured wiping lip to provide improved dry rod performance, particularly for long stroking cylinder applications.



FEATURES

- Precision trimmed double lips ensure drier sealing system
- Bursting membrane venting feature prevents ejection
- Removes need for expensive vent hole in gland
- Long life and long wear
- Umbrella Wiper Technology™ protects housing from contamination and reduces moisture ingress
- Textured wiper lip for improved leakage control
- Especially effective in vertically mounted cylinders
- Easy to install

MATERIALS

As standard, this product comes in the following material. Contact your local Hallite technical team if you would like to find out if this profile can be made in a custom material to suit your application. For further material details, please refer to the Hallite Material Table.

MATERIAL OPTIONS	Name	Type	Colour
Standard	Hythane® 181	TPU-EU	Blue



TECHNICAL DETAILS

OPERATING CONDITIONS	METRIC	INCH
Maximum Speed	4.0 m/sec	12.0 ft/sec
Temperature Range	-45°C +110°C	-50°F +230°F

NOTE

Not designed to scrape ice

NOTE

Data given are maximum values and can apply depending on specific application. Maximum ratings of temperature, pressure, or operating speeds are dependent on fluid medium, surface, gap value, and other variables such as dynamic or static service. Maximum values are not intended for use together at the same time, e.g. max temperature and max pressure. Please contact your Hallite technical representative for application support.

SURFACE ROUGHNESS	μmRa	μmRz	μmRt	μinRa	μinRz	μinRt
Dynamic Sealing Face $\varnothing d_1$	0.1 - 0.4	1.6 max	4 max	4 - 16	63 max	157 max
Static Sealing Face $\varnothing D_1, \varnothing D_2, L_1, L_2$	1.6 max	6.3 max	10 max	63 max	250 max	394 max

RADII		
Rod Diameter $\varnothing d_1$, mm	≤ 90	> 90
Max Fillet Rad r_1 , mm	0.40	0.40
Max Fillet Rad r_2 , mm	0.20	0.40

NOTE

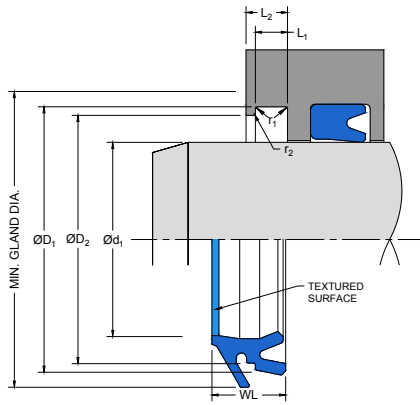
Assembly chamfers are governed by the associated rod seal.

TOLERANCES	$\varnothing d_1$	$\varnothing D_1$	$\varnothing D_2$	L_1	L_2
mm	f9	H11	H11	+0.20 -0	+0.20 -0

846

WIPER

Double-Lipped
Polyurethane with Umbrella Design
Technology™ and Venting Membrane



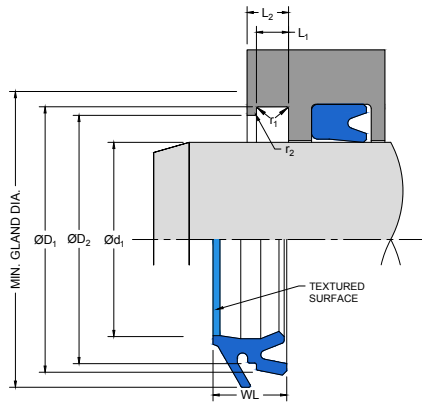
PART NUMBER RANGE

METRIC										
Ød ₁	TOL	ØD ₁	TOL	ØD ₂	TOL	L ₁	L ₂	WL	MIN. GLAND DIA.	PART No.
	f9		H11		H11	+0.20-0	+0.20-0			
24.00	-0.02	32.00	+0.16	30.00	+0.13	4.00	5.00	8.70	37.00	4764400
	-0.07		0.00		0.00					
25.00	-0.02	33.00	+0.16	31.00	+0.16	4.00	5.00	8.70	38.00	4556600
	-0.07		0.00		0.00					
26.00	-0.02	34.00	+0.16	32.00	+0.16	4.00	5.00	8.70	39.00	4588700
	-0.07		0.00		0.00					
28.00	-0.02	36.00	+0.16	34.00	+0.16	4.00	5.00	8.70	41.00	4556700
	-0.07		0.00		0.00					
30.00	-0.02	38.00	+0.16	36.00	+0.16	4.00	5.00	8.70	43.00	4584500
	-0.07		0.00		0.00					
32.00	-0.03	40.00	+0.16	38.00	+0.16	4.00	5.00	8.70	45.00	4568900
	-0.09		0.00		0.00					
36.00	-0.03	44.00	+0.16	42.00	+0.16	4.00	5.00	8.70	49.00	4588800
	-0.09		0.00		0.00					
38.00	-0.03	46.00	+0.16	44.00	+0.16	4.00	5.00	8.70	51.00	4874900
	-0.09		0.00		0.00					
40.00	-0.03	48.00	+0.16	46.00	+0.16	4.00	5.00	8.70	53.00	4549200
	-0.09		0.00		0.00					
45.00	-0.03	53.00	+0.19	51.00	+0.19	4.00	5.00	8.70	58.00	4589900
	-0.09		0.00		0.00					
50.00	-0.03	58.00	+0.19	56.00	+0.19	4.00	5.00	8.70	63.00	4597200
	-0.09		0.00		0.00					
54.00	-0.03	62.00	+0.19	60.00	+0.19	4.00	5.00	8.70	67.00	4803300
	-0.10		0.00		0.00					
56.00	-0.03	64.00	+0.19	62.00	+0.19	4.00	5.00	8.70	69.00	4588900
	-0.10		0.00		0.00					
60.00	-0.03	68.00	+0.19	66.00	+0.19	4.00	5.00	8.70	73.00	4596600
	-0.10		0.00		0.00					
63.00	-0.03	71.00	+0.19	69.00	+0.19	4.00	5.00	8.70	76.00	4749600
	-0.10		0.00		0.00					
65.00	-0.03	73.00	+0.19	71.00	+0.19	4.00	5.00	8.70	78.00	4597500
	-0.10		0.00		0.00					

NOTE

Hallite recommends using the housing length as described by L₂. However, a housing length of 6.00 can also be used except for part number 4723600.





PART NUMBER RANGE

METRIC

Ød ₁	TOL	ØD ₁	TOL	ØD ₂	TOL	L ₁	L ₂	WL	MIN. GLAND DIA.	PART No.
68.00	-0.03 -0.10	76.00	+0.19 0.00	74.00	+0.19 0.00	4.00	5.00	8.70	81.00	4872300
70.00	-0.03 -0.10	78.00	+0.19 0.00	76.00	+0.19 0.00	4.00	5.00	8.70	83.00	4556800
75.00	-0.03 -0.10	83.00	+0.22 0.00	81.00	+0.22 0.00	4.00	5.00	8.70	88.00	4597600
80.00	-0.03 -0.10	88.00	+0.22 0.00	86.00	+0.22 0.00	4.00	5.00	8.70	93.00	4590000
90.00	-0.04 -0.12	98.00	+0.22 0.00	96.00	+0.22 0.00	4.00	5.00	8.70	103.00	4557700
100.00	-0.04 -0.12	110.00	+0.22 0.00	107.00	+0.22 0.00	6.30	8.10	11.70	116.00	4723600

NOTE

Hallite recommends using the housing length as described by L₂. However, a housing length of 6.00 can also be used except for part number 4723600.

