

847

WIPER

*Double-Lipped
Polyurethane with Umbrella Design Technology™
and Permanent Pressure Relief for
Heavy-Duty Applications*

DESIGN

The Hallite 847 wiper has been specifically developed for cylinders used in demanding, heavy-duty off-highway applications in dirty environments, such as earth-moving excavators.

This double-lipped wiper incorporates a special venting feature to permanently relieve pressure build-up between the rod seal and wiper. This prevents pressure from ejecting the wiper without the need for an expensive vent hole in the gland.

The flap on the wiping lip is another special feature that covers the gland housing and prevents the water/slurry trap that is common with conventional wipers. The design minimises oil transfer out of the ram on the rod and prevents dirt, contamination, and moisture from entering the cylinder through the gland.

The standard range is made from high-performance Hythane® 371 polyurethane. The wiper is also available in other polyurethane grades, if required, potentially extending the operating conditions.

Hallite recommends this using the 847 wiper with Hallite's 652 or 621 rod seal, 506 bearing, and 653 rod buffer seal.



FEATURES

- Precision trimmed sealing lips
- Sharp wiping lip scrapes heavy contamination from rod protecting sealing system
- Especially effective in vertically mounted cylinders
- Umbrella Wiper Technology™ protects housing from contamination and reduces moisture ingress
- Designed to follow the rod deflection caused by side loads

MATERIALS

This product comes in a number of material options to extend operating conditions. Contact your local Hallite technical team to decide which is best for your application. Use the part designator in the table below as the last digit of the part number to specify material choice when ordering. For further material details, please refer to the Hallite Material Table.

MATERIAL OPTIONS	Name	Type	Colour	Part Designator
Standard	Hythane® 371	TPU-AU	Dark Green	7
Optional	Hythane® 181	TPU-EU	Blue	0



TECHNICAL DETAILS

OPERATING CONDITIONS	METRIC	INCH
Maximum Speed	4.0 m/sec	12.0 ft/sec
Temperature Range	-40°C +100°C	-40°F +212°F

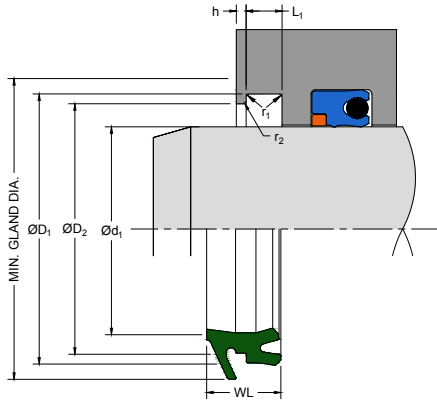
NOTE

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 ØD_1	0.1 - 0.4	1.6 max	4 max	4 - 16	63 max	157 max
Static Sealing Face Ød_1	1.6 max	6.3 max	10 max	63 max	250 max	394 max
Static Housing Faces L_1	3.2 max	10 max	16 max	125 max	394 max	630 max

RADII				
Rod Diameter Ød_1 , mm	≤ 50	≤ 90	≤ 200	> 200
Max Fillet Rad r_1 , mm	0.40	0.40	0.40	0.80
Max Fillet Rad r_2 , mm	0.20	0.40	0.60	0.80

TOLERANCES	Ød_1	ØD_1	ØD_2	L_1	h
mm	f9	H11	H11	+0.20 - 0	+0.20 - 0



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PART NUMBER RANGE

METRIC										
Ød ₁	TOL f ₉	ØD ₁	TOL H11	ØD ₂	TOL H11	L ₁ +0.20 -0	h +0.20 -0	WL	MIN GLAND DIA.	PART No.
80.00	-0.03 -0.10	92.60	+0.22 0.00	88.40	+0.22 0.00	7.00	2.00	14.00	100.00	4797507
90.00	-0.04 -0.12	102.60	+0.22 0.00	98.40	+0.22 0.00	7.00	2.00	14.00	110.00	4883307
100.00	-0.04 -0.12	112.60	+0.22 0.00	108.40	+0.22 0.00	7.00	2.00	14.00	120.00	4886707
160.00	-0.04 -0.14	175.00	+0.25 0.00	170.00	+0.25 0.00	9.50	2.50	17.40	184.00	4861707