

842

WIPER

Single-Lipped

Polyurethane with Umbrella Design Technology™

DESIGN

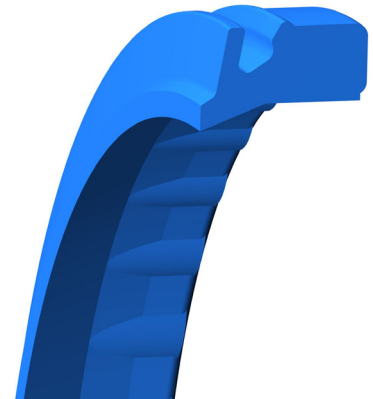
The Hallite 842 single-lipped, snap-in rod wiper is developed specifically for use in harsher environments with heavy contamination, such as in agriculture, off-highway, forestry, and long wall mining equipment.

The unique feature of the Hallite 842 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.

The moulded ribs on the internal diameter provide extra stability to the wiper and help prevent the possibility of blow-out due to pressure trapping between the wiper and the main rod seal.

The standard Hallite 842 is moulded in Hythane® 181, Hallite's high-performance polyurethane, for easy installation and excellent low temperature performance. The Hallite 820 is also offered in a number of other high-performance polyurethanes, such as Hythane® 371, a very aggressive scrapping material with proven track record in forestry, mining, and aggregate industries. The wiper has been proven compatible with HFA (95/5) fluids, as used in longwall mining equipment, and with mineral oil.

A number of sizes, indicated by "*" do not have an interference fit between the outside diameter of the wiper and the wiper housing bore ØD₁. They float on the retaining lip.



FEATURES

- Precision trimmed wiper lips
- Long life and long wear
- Umbrella Wiper Technology™ protects housing from contaminants
- Easy to install

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® 181	TPU-EU	Blue	0
Optional	Hythane® 361	TPU-AU	Orange	6
Optional	Hythane® 371	TPU-AU	Dark Green	7



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

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.

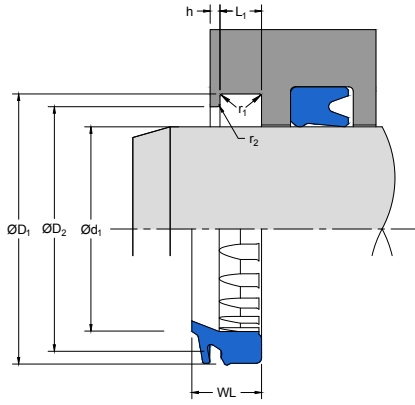
SURFACE ROUGHNESS	μmRa	μmRz	μmRt	μinRa	μinRz	μinRt
Dynamic Sealing Face $\varnothing d_1$	0.1 - 0.4	1.6 max	4 max	4 - 16	63 max	157 max
Static Sealing Face $\varnothing D_1, \varnothing D_2, h$	1.6 max	6.3 max	10 max	63 max	250 max	394 max
Static Housing Faces L_1	3.2 max	10 max	16 max	125 max	394 max	630 max

RADII				
Rod Diameter $\varnothing d_1$, 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
Rod Diameter $\varnothing d_1$, in	≤ 2.000	≤ 3.500	≤ 7.875	> 7.875
Max Fillet Rad r_1 , in	0.016	0.016	0.016	0.032
Max Fillet Rad r_2 , in	0.008	0.016	0.024	0.032

NOTE

Assembly chamfers are governed by the associated rod seal.

TOLERANCES	$\varnothing d_1$	$\varnothing D_1$	$\varnothing D_2$	L_1	h
mm	f9	H11	H11	+0.20 -0	+0.10 +0
in	f9	H11	H11	+0.008 -0	+0.004 +0



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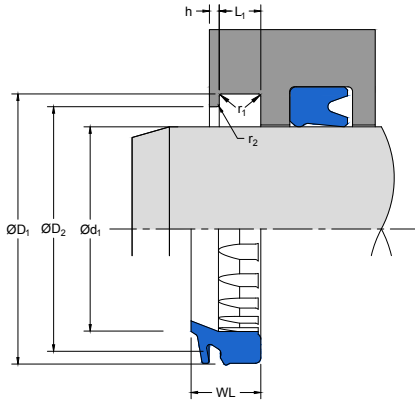
PART NUMBER RANGE

METRIC									
Ød ₁	TOL f ₉	ØD ₁	TOL H11	ØD ₂	TOL H11	L ₁ +0.20-0	h +0.10-0	WL	PART No.
20.00	-0.02 -0.07	26.00	+0.13 0.00	24.00	+0.13 0.00	4.00	1.00	6.00	4787000
32.00	-0.03 -0.09	40.00	+0.16 0.00	37.50	+0.16 0.00	5.00	1.50	8.00	4714900‡
35.00	-0.03 -0.09	45.00	+0.16 0.00	42.00	+0.16 0.00	6.30	1.50	10.00	4515300
36.00	-0.03 -0.09	44.00	+0.16 0.00	41.50	+0.16 0.00	5.00	1.50	8.00	4715000‡
38.00	-0.03 -0.09	46.00	+0.16 0.00	43.00	+0.16 0.00	5.30	1.50	8.00	4568700
40.00	-0.03 -0.09	48.00	+0.16 0.00	45.50	+0.16 0.00	5.00	1.50	8.00	4536500‡
45.00	-0.03 -0.09	53.00	+0.19 0.00	50.50	+0.19 0.00	5.00	1.50	8.00	4715100‡
50.00	-0.03 -0.09	58.00	+0.19 0.00	55.50	+0.19 0.00	5.00	1.50	8.00	4533600‡
55.00	-0.03 -0.10	65.00	+0.19 0.00	62.00	+0.19 0.00	6.30	1.50	10.00	4764600
56.00	-0.03 -0.10	66.00	+0.19 0.00	63.00	+0.19 0.00	6.30	1.50	10.00	4715200‡
60.00	-0.03 -0.10	70.00	+0.19 0.00	67.00	+0.19 0.00	6.30	1.50	10.00	4557800
60.00	-0.03 -0.10	72.00	+0.19 0.00	67.00	+0.19 0.00	4.10	2.50	10.00	4739300*
63.00	-0.03 -0.10	73.00	+0.19 0.00	70.00	+0.19 0.00	6.30	1.50	10.00	4536600‡
70.00	-0.03 -0.10	82.60	+0.22 0.00	78.40	+0.19 0.00	8.00	2.00	12.00	4480800
70.00	-0.03 -0.10	85.00	+0.22 0.00	78.00	+0.19 0.00	5.10	3.00	12.00	4739400*
75.00	-0.03 -0.10	90.00	+0.22 0.00	83.00	+0.22 0.00	5.10	3.00	12.00	4744000*

NOTE

Part numbers suffixed by "‡" indicate housing sizes to meet ISO6195A.
Part numbers suffixed by "*" indicate these wipers float on the retaining lip.



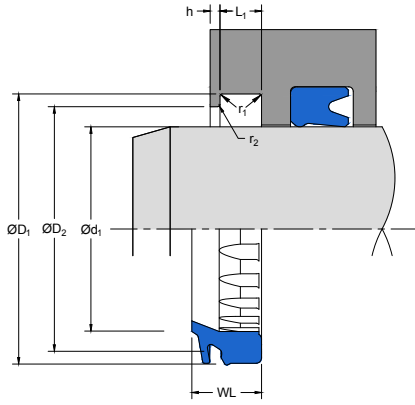


PART NUMBER RANGE

METRIC									
Ød ₁	TOL f ₉	ØD ₁	TOL H11	ØD ₂	TOL H11	L ₁ +0.20-0	h +0.10-0	WL	PART No.
80.00	-0.03 -0.10	90.00	+0.22 0.00	87.00	+0.22 0.00	6.30	1.50	10.00	4715300‡
80.00	-0.03 -0.10	95.00	+0.22 0.00	88.00	+0.22 0.00	5.10	3.00	12.00	4739500*
85.00	-0.04 -0.12	97.60	+0.22 0.00	93.40	+0.22 0.00	8.00	2.00	12.00	4521800
85.00	-0.04 -0.12	100.00	+0.22 0.00	93.00	+0.22 0.00	5.10	3.00	12.00	4744100*
90.00	-0.04 -0.12	102.20	+0.22 0.00	96.00	+0.22 0.00	7.10	2.80	12.40	4727300
90.00	-0.04 -0.12	102.60	+0.22 0.00	98.40	+0.22 0.00	8.00	2.00	12.00	4512500
90.00	-0.04 -0.12	105.00	+0.22 0.00	98.00	+0.22 0.00	5.10	3.00	12.00	4744600‡
95.00	-0.04 -0.12	110.00	+0.22 0.00	105.00	+0.22 0.00	9.50	2.80	14.00	4536900
100.00	-0.04 -0.12	112.20	+0.22 0.00	106.00	+0.22 0.00	7.10	2.80	12.40	4727400
100.00	-0.04 -0.12	114.00	+0.22 0.00	109.90	+0.22 0.00	8.00	1.50	12.00	4536000
100.00	-0.04 -0.12	115.00	+0.22 0.00	108.00	+0.22 0.00	5.10	3.00	12.00	4584800*
100.00	-0.04 -0.12	115.00	+0.22 0.00	110.00	+0.22 0.00	9.50	2.00	14.00	4589500‡
105.00	-0.04 -0.12	120.00	+0.22 0.00	115.00	+0.22 0.00	9.50	2.50	14.00	4532100
110.00	-0.04 -0.12	125.00	+0.25 0.00	118.00	+0.22 0.00	5.10	3.00	12.00	4739600*
110.00	-0.04 -0.12	125.00	+0.25 0.00	120.00	+0.22 0.00	9.50	2.00	14.00	4715400‡
120.00	-0.04 -0.12	135.00	+0.25 0.00	130.00	+0.25 0.00	9.50	2.00	14.00	4580800

NOTE

Part numbers suffixed by "‡" indicate housing sizes to meet ISO6195A..
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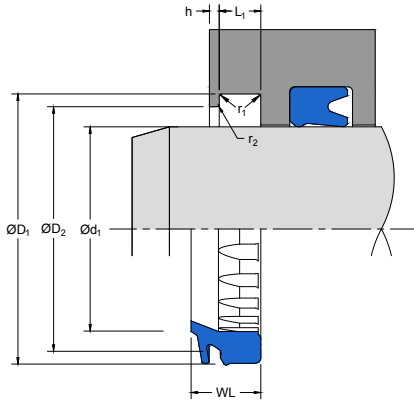
PART NUMBER RANGE

METRIC									
Ød ₁	TOL f ₉	ØD ₁	TOL H ₁₁	ØD ₂	TOL H ₁₁	L ₁ +0.20-0	h +0.10-0	WL	PART No.
125.00	-0.04 -0.14	137.20	+0.25 0.00	131.00	+0.25 0.00	7.60	2.80	12.90	4727500
125.00	-0.04 -0.14	140.00	+0.25 0.00	133.00	+0.25 0.00	5.10	3.00	12.00	4748300*
125.00	-0.04 -0.14	140.00	+0.25 0.00	135.00	+0.25 0.00	9.50	2.00	14.00	4715500‡
130.00	-0.04 -0.14	145.00	+0.25 0.00	140.00	+0.25 0.00	9.50	2.25	14.00	4491700
140.00	-0.04 -0.14	152.20	+0.25 0.00	146.00	+0.25 0.00	7.60	2.80	12.90	4727600
140.00	-0.04 -0.14	155.00	+0.25 0.00	150.00	+0.25 0.00	9.50	2.00	14.00	4555900‡
145.00	-0.04 -0.14	160.00	+0.25 0.00	155.00	+0.25 0.00	9.50	2.25	14.00	4570200
150.00	-0.04 -0.14	169.00	+0.25 0.00	159.00	+0.25 0.00	6.10	4.00	14.00	4748400*
155.00	-0.04 -0.14	170.00	+0.25 0.00	165.00	+0.25 0.00	9.50	2.25	14.00	4535200
170.00	-0.04 -0.14	189.00	+0.29 0.00	179.00	+0.25 0.00	6.10	4.00	14.00	4749200*
175.00	-0.04 -0.14	190.00	+0.29 0.00	185.00	+0.29 0.00	9.50	2.25	14.00	4552100
180.00	-0.04 -0.14	195.00	+0.29 0.00	190.00	+0.29 0.00	9.50	2.25	14.00	4491300‡
190.00	-0.05 -0.17	209.00	+0.29 0.00	199.00	+0.29 0.00	6.10	4.00	14.00	4749300*
200.00	-0.05 -0.17	223.00	+0.29 0.00	211.00	+0.29 0.00	8.30	4.80	20.00	4748700*
215.00	-0.05 -0.17	230.00	+0.29 0.00	225.00	+0.29 0.00	9.50	2.00	14.00	4705500
220.00	-0.05 -0.17	240.00	+0.29 0.00	230.00	+0.29 0.00	10.20	3.80	18.00	4859800

NOTE

Part numbers suffixed by "‡" indicate housing sizes to meet ISO6195A.
Part numbers suffixed by "*" indicate these wipers float on the retaining lip.





PART NUMBER RANGE

METRIC

$\varnothing d_1$	TOL f9	$\varnothing D_1$	TOL H11	$\varnothing D_2$	TOL H11	L_1 +0.20-0	h +0.10-0	WL	PART No.
230.00	-0.05 -0.17	250.00	+0.29 0.00	240.00	+0.29 0.00	10.20	3.80	18.00	4750500
235.00	-0.05 -0.17	255.00	+0.32 0.00	245.00	+0.29 0.00	10.20	3.80	18.00	4773300
250.00	-0.05 -0.17	270.00	+0.32 0.00	260.00	+0.32 0.00	10.20	3.80	18.00	4725100
260.00	-0.06 -0.19	280.00	+0.32 0.00	270.00	+0.32 0.00	10.20	3.80	18.00	4864300
295.00	-0.06 -0.19	315.00	+0.32 0.00	305.00	+0.32 0.00	10.20	3.80	18.00	4851900
320.00	-0.06 -0.20	340.00	+0.36 0.00	330.00	+0.36 0.00	10.20	3.80	18.00	4750400
335.00	-0.06 -0.20	355.00	+0.36 0.00	345.00	+0.36 0.00	10.20	3.80	18.00	4773400
350.00	-0.06 -0.20	370.00	+0.36 0.00	360.00	+0.36 0.00	10.20	3.80	18.00	4725200
380.00	-0.06 -0.20	400.00	+0.36 0.00	393.50	+0.36 0.00	12.50	2.30	18.00	4870000
415.00	-0.07 -0.22	435.00	+0.40 0.00	425.00	+0.40 0.00	10.20	3.80	18.00	4851800

NOTE

Part numbers suffixed by “+” indicate housing sizes to meet ISO6195A..
 Part numbers suffixed by “*” indicate these wipers float on the retaining lip.