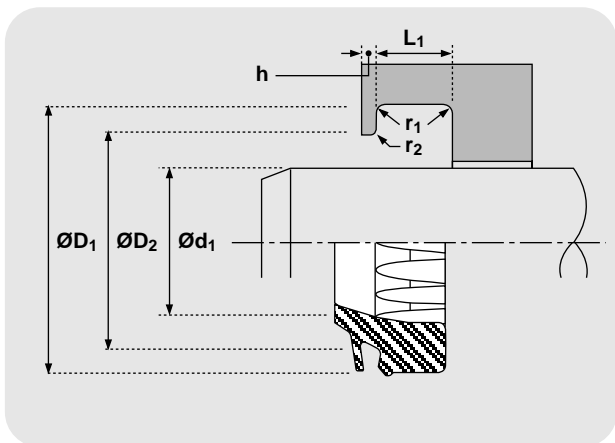


| TECHNICAL DETAILS | | METRIC | INCH | | |
|--|---------------------------|-----------------------|-------------------------------|-----------|-----------|
| OPERATING CONDITIONS | | | | | |
| MAXIMUM SPEED | 4.0 m/sec | 12.0 ft/sec | | | |
| TEMPERATURE RANGE | -45°C + 110°C | -50°F + 230°F | | | |
| SURFACE ROUGHNESS | | | | | |
| DYNAMIC SEALING FACE $\varnothing d_1$ | μmRa 0.1 ↔ 0.4 | μmRt 4 max | μinCLA 4 ↔ 16 | | |
| STATIC SEALING FACE $\varnothing D_1, \varnothing D_2$ | 1.6 max | 10 max | μinRMS 5 ↔ 18 | | |
| STATIC HOUSING FACES L_1 | 3.2 max | 16 max | 63 max 70 max 125 max 140 max | | |
| RADII | | | | | |
| ROD DIAMETER $\varnothing d_1$ | ≤ 50 | ≤ 90 | ≤ 200 > 200 | | |
| MAX FILLET RAD r_1 mm | 0.4 | 0.4 | 0.4 0.8 | | |
| MAX FILLET RAD r_2 mm | 0.2 | 0.4 | 0.6 0.8 | | |
| ROD DIAMETER $\varnothing d_1$ | ≤ 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 | | |
| TOLERANCES | | | | | |
| | $\varnothing d_1$ | $\varnothing D_1$ | $\varnothing D_2$ | L_1 | h |
| mm | f9 | H11 | H11 | +0.2 -0 | +0.10 +0 |
| in | f9 | H11 | H11 | +0.008 -0 | +0.004 +0 |



842
8



DESIGN

The Hallite 842 rod wiper is designed to prevent the ingress of foreign particles and moisture into the cylinder. The profile has been specially developed for harsh environments, in particular the longwall mining industry.

The special feature is the flap on the wiping lip which covers the gland housing, preventing the water/slurry trap so common with conventional wipers and thus ingress of contamination around the outside of the wiper. The internal ribs on the inside diameter prevent the possibility of pressure trapping between the gland seal and the wiper and ensure correct support and guidance of the wiping lip, even in cases of high eccentricity as can occur between the outer stage gland and the inner cylinder of a roof support leg.

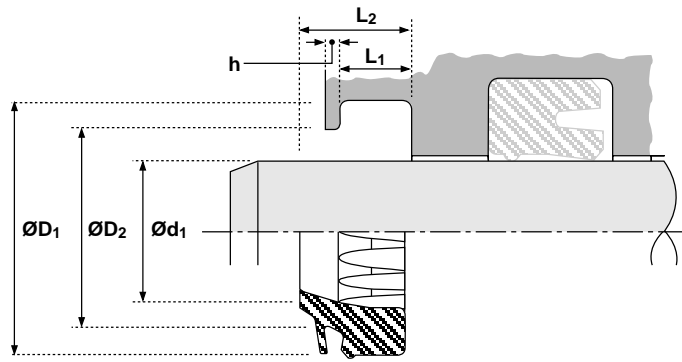
The Hallite 842 is manufactured in Hallite's high performance polyurethane, Hythane 181. The material has excellent compression set characteristics, excellent wear and abrasive resistance, proven compatibility with HFA (95/5) fluids, as used in longwall mining equipment, and with mineral oil.

NB: Part numbers suffixed by "F" indicate housing sizes to meet ISO6195A.

Wipers

842

metric

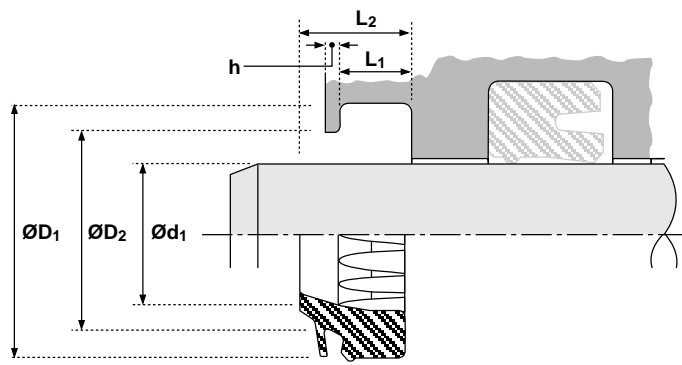


| $\varnothing d_1$ | TOL f9 | $\varnothing D_1$ | TOL H11 | $\varnothing D_2$ | TOL H11 | L_1 +0.2 - 0 | L_2 | h +0.1 - 0 | PART No. |
|-------------------|------------------|-------------------|----------------|-------------------|----------------|-------------------|-------|-----------------|-------------|
| 32 | -0.025 -0.087 | 40.0 | +0.16 +0.00 | 37.5 | +0.16 +0.00 | 5.0 | 8.0 | 1.50 | 4714900‡ |
| 35 | -0.025 -0.087 | 45.0 | +0.16 +0.00 | 42.0 | +0.16 +0.00 | 6.3 | 10.0 | 1.50 | 4515300 |
| 36 | -0.025 -0.087 | 44.0 | +0.16 +0.00 | 41.5 | +0.16 +0.00 | 5.0 | 8.0 | 1.50 | 4715000‡ |
| 38 | -0.025 -0.087 | 46.0 | +0.16 +0.00 | 43.0 | +0.16 +0.00 | 5.3 | 8.0 | 1.50 | 4568700 |
| 40 | -0.025 -0.087 | 48.0 | +0.16 +0.00 | 45.5 | +0.16 +0.00 | 5.0 | 8.0 | 1.50 | 4536500‡ |
| 45 | -0.025 -0.087 | 53.0 | +0.19 +0.00 | 50.5 | +0.19 +0.00 | 5.0 | 8.0 | 1.50 | 4715100‡ |
| 50 | -0.025 -0.087 | 58.0 | +0.19 +0.00 | 55.5 | +0.19 +0.00 | 5.0 | 8.0 | 1.50 | 4533600‡ |
| 56 | -0.030 -0.104 | 66.0 | +0.19 +0.00 | 63.0 | +0.19 +0.00 | 6.3 | 10.0 | 1.50 | 4715200‡ |
| 60 | -0.030 -0.104 | 70.0 | +0.19 +0.00 | 67.0 | +0.19 +0.00 | 6.3 | 10.0 | 1.50 | 4557800 |
| 60 | -0.030 -0.104 | 72.0 | +0.19 +0.00 | 67.0 | +0.19 +0.00 | 4.1 | 10.0 | 2.50 | 4739300 |
| 63 | -0.030 -0.104 | 73.0 | +0.19 +0.00 | 70.0 | +0.19 +0.00 | 6.3 | 10.0 | 1.50 | 4536600‡ |
| 70 | -0.030 -0.104 | 82.6 | +0.22 +0.00 | 78.4 | +0.19 +0.00 | 8.0 | 12.0 | 2.00 | 4480800 |
| 70 | -0.030 -0.104 | 85.0 | +0.22 +0.00 | 78.0 | +0.19 +0.00 | 5.1 | 12.0 | 3.00 | 4739400 |
| 75 | -0.030 -0.104 | 90.0 | +0.22 +0.00 | 83.0 | +0.22 +0.00 | 5.1 | 12.0 | 3.00 | 4744000 |
| 80 | -0.030 -0.104 | 90.0 | +0.22 +0.00 | 87.0 | +0.22 +0.00 | 6.3 | 10.0 | 1.50 | 4715300‡ |
| 80 | -0.030 -0.104 | 95.0 | +0.22 +0.00 | 88.0 | +0.22 +0.00 | 5.1 | 12.0 | 3.00 | 4739500 |
| 85 | -0.036 -0.123 | 97.6 | +0.22 +0.00 | 93.4 | +0.22 +0.00 | 8.0 | 12.0 | 2.00 | 4521800 |
| 85 | -0.036 -0.123 | 100.0 | +0.22 +0.00 | 93.0 | +0.22 +0.00 | 5.1 | 10.0 | 3.00 | 4744100 |
| 90 | -0.036 -0.123 | 102.2 | +0.22 +0.00 | 96.0 | +0.22 +0.00 | 7.1 | 12.4 | 2.80 | 4727300 |
| 90 | -0.036 -0.123 | 102.6 | +0.22 +0.00 | 98.4 | +0.22 +0.00 | 8.0 | 12.0 | 2.00 | 4512500 |
| 90 | -0.036 -0.123 | 105.0 | +0.22 +0.00 | 98.0 | +0.22 +0.00 | 5.1 | 10.0 | 3.00 | 4744600 |
| 95 | -0.036 -0.123 | 110.0 | +0.22 +0.00 | 105.0 | +0.22 +0.00 | 9.5 | 14.0 | 2.80 | 4536900 |
| 100 | -0.036 -0.123 | 112.2 | +0.22 +0.00 | 106.0 | +0.22 +0.00 | 7.1 | 12.4 | 2.80 | 4727400 |

Wipers

842

metric

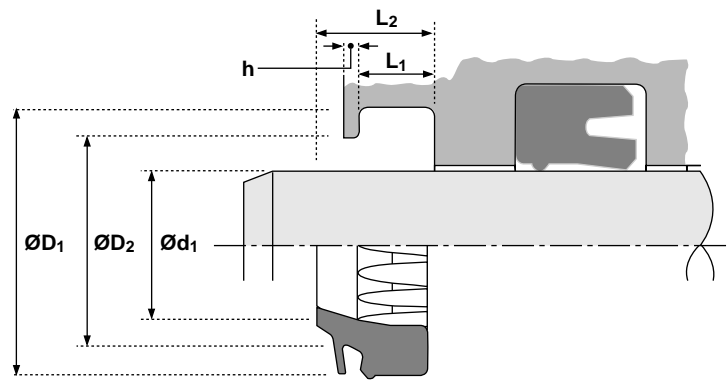


| $\varnothing d_1$ | TOL f9 | $\varnothing D_1$ | TOL H11 | $\varnothing D_2$ | TOL H11 | L_1 +0.2 - 0 | L_2 | h +0.1 - 0 | PART No. |
|-------------------|------------------|-------------------|----------------|-------------------|----------------|-------------------|-------|-----------------|-------------|
| 100 | -0.036 -0.123 | 114.0 | +0.22 +0.00 | 109.9 | +0.22 +0.00 | 8.0 | 12.0 | 1.50 | 4536000 |
| 100 | -0.036 -0.123 | 115.0 | +0.22 +0.00 | 108.0 | +0.22 +0.00 | 5.1 | 12.0 | 3.00 | 4584800 |
| 100 | -0.036 -0.123 | 115.0 | +0.22 +0.00 | 108.4 | +0.22 +0.00 | 9.5 | 14.0 | 2.00 | 4589500‡ |
| 105 | -0.036 -0.123 | 120.0 | +0.22 +0.00 | 115.0 | +0.22 +0.00 | 9.5 | 14.0 | 2.50 | 4532100 |
| 110 | -0.036 -0.123 | 125.0 | +0.25 +0.00 | 118.0 | +0.22 +0.00 | 5.1 | 12.0 | 3.00 | 4739600 |
| 110 | -0.036 -0.123 | 125.0 | +0.25 +0.00 | 120.0 | +0.22 +0.00 | 9.5 | 14.0 | 2.00 | 4715400‡ |
| 120 | -0.036 -0.123 | 135.0 | +0.25 +0.00 | 130.0 | +0.25 +0.00 | 9.5 | 14.0 | 2.00 | 4580800 |
| 125 | -0.043 -0.123 | 137.2 | +0.25 +0.00 | 131.0 | +0.25 +0.00 | 7.6 | 10.6 | 2.80 | 4727500 |
| 125 | -0.043 -0.143 | 140.0 | +0.25 +0.00 | 133.0 | +0.25 +0.00 | 5.1 | 12.0 | 3.00 | 4748300 |
| 125 | -0.043 -0.143 | 140.0 | +0.25 +0.00 | 135.0 | +0.25 +0.00 | 9.5 | 14.0 | 2.00 | 4715500‡ |
| 130 | -0.043 -0.143 | 145.0 | +0.25 +0.00 | 140.0 | +0.25 +0.00 | 9.5 | 14.0 | 2.25 | 4491700 |
| 140 | -0.043 -0.143 | 152.2 | +0.25 +0.00 | 146.0 | +0.25 +0.00 | 7.6 | 12.9 | 2.80 | 4727600 |
| 140 | -0.043 -0.143 | 155.0 | +0.25 +0.00 | 150.0 | +0.25 +0.00 | 9.5 | 14.0 | 2.00 | 4555900‡ |
| 145 | -0.043 -0.143 | 160.0 | +0.25 +0.00 | 155.0 | +0.25 +0.00 | 9.5 | 14.0 | 2.25 | 4570200 |
| 150 | -0.043 -0.143 | 169.0 | +0.25 +0.00 | 159.0 | +0.25 +0.00 | 6.1 | 14.0 | 4.00 | 4748400 |
| 155 | -0.043 -0.143 | 170.0 | +0.25 +0.00 | 165.0 | +0.25 +0.00 | 9.5 | 12.0 | 2.25 | 4535200 |
| 170 | -0.043 -0.143 | 189.0 | +0.29 +0.00 | 179.0 | +0.25 +0.00 | 6.1 | 14.0 | 4.00 | 4749200 |
| 175 | -0.043 -0.143 | 190.0 | +0.29 +0.00 | 185.0 | +0.29 +0.00 | 9.5 | 14.0 | 2.25 | 4552100 |
| 180 | -0.043 -0.143 | 195.0 | +0.29 +0.00 | 190.0 | +0.29 +0.00 | 9.5 | 14.0 | 2.25 | 4491300‡ |
| 190 | -0.050 -0.165 | 209.0 | +0.29 +0.00 | 199.0 | +0.29 +0.00 | 6.1 | 14.0 | 4.00 | 4749300 |
| 200 | -0.050 -0.165 | 223.0 | +0.29 +0.00 | 211.0 | +0.29 +0.00 | 8.3 | 20.0 | 4.80 | 4748700 |
| 215 | -0.050 -0.165 | 230.0 | +0.29 +0.00 | 225.0 | +0.29 +0.00 | 9.5 | 14.0 | 2.00 | 4705500 |
| 230 | -0.050 -0.165 | 250.0 | +0.29 +0.00 | 240.0 | +0.29 +0.00 | 10.2 | 18.0 | 3.80 | 4750500 |
| 250 | -0.050 -0.165 | 270.0 | +0.32 +0.00 | 260.0 | +0.32 +0.00 | 10.2 | 19.0 | 3.80 | 4725100 |

Wipers

842

inch



| $\varnothing d_1$ | TOL f9 | $\varnothing D_1$ | TOL H11 | $\varnothing D_2$ | TOL H11 | L_1 +0.008 - 0 | L_2 | h +0.004 - 0 | PART No. |
|-------------------|--------------------|-------------------|------------------|-------------------|------------------|---------------------|-------|-------------------|-------------|
| 1.750 | -0.0010 -0.0034 | 2.125 | +0.007 +0.000 | 1.995 | +0.007 +0.000 | 0.220 | 0.362 | 0.079 | 4543300 |
| 2.000 | -0.0012 -0.0041 | 2.375 | +0.007 +0.000 | 2.245 | +0.007 +0.000 | 0.220 | 0.362 | 0.079 | 4543200 |
| 2.500 | -0.0012 -0.0041 | 2.875 | +0.007 +0.000 | 2.745 | +0.007 +0.000 | 0.220 | 0.362 | 0.079 | 4708200 |
| 2.750 | -0.0012 -0.0041 | 3.125 | +0.007 +0.000 | 2.995 | +0.007 +0.000 | 0.220 | 0.362 | 0.079 | 4554600 |
| 3.000 | -0.0012 -0.0041 | 3.375 | +0.009 +0.000 | 3.245 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4543400 |
| 3.125 | -0.0012 -0.0041 | 3.500 | +0.009 +0.000 | 3.370 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4543100 |
| 3.250 | -0.0014 -0.0048 | 3.625 | +0.009 +0.000 | 3.495 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4721400 |
| 3.375 | -0.0014 -0.0048 | 3.750 | +0.009 +0.000 | 3.620 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4554700 |
| 3.625 | -0.0014 -0.0048 | 4.000 | +0.009 +0.000 | 3.870 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4543000 |
| 3.750 | -0.0014 -0.0048 | 4.125 | +0.009 +0.000 | 3.995 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4708300 |
| 3.875 | -0.0014 -0.0048 | 4.250 | +0.009 +0.000 | 4.120 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4523600 |
| 4.000 | -0.0014 -0.0048 | 4.375 | +0.009 +0.000 | 4.245 | +0.009 +0.000 | 0.220 | 0.362 | 0.079 | 4708400 |
| 4.375 | -0.0014 -0.0048 | 4.875 | +0.010 +0.000 | 4.715 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4707800 |
| 4.750 | -0.0014 -0.0048 | 5.250 | +0.010 +0.000 | 5.090 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4547300 |
| 5.000 | -0.0016 -0.0056 | 5.500 | +0.010 +0.000 | 5.340 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4708500 |
| 5.250 | -0.0016 -0.0056 | 5.750 | +0.010 +0.000 | 5.590 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4707900 |
| 5.750 | -0.0016 -0.0056 | 6.250 | +0.010 +0.000 | 6.090 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4547400 |
| 6.000 | -0.0016 -0.0056 | 6.500 | +0.010 +0.000 | 6.340 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4708600 |
| 6.250 | -0.0016 -0.0056 | 7.000 | +0.010 +0.000 | 6.745 | +0.010 +0.000 | 0.500 | 0.740 | 0.100 | 4708000 |
| 6.750 | -0.0016 -0.0056 | 7.250 | +0.012 +0.000 | 7.090 | +0.010 +0.000 | 0.312 | 0.472 | 0.080 | 4547500 |
| 7.000 | -0.0020 -0.0065 | 7.500 | +0.012 +0.000 | 7.340 | +0.012 +0.000 | 0.312 | 0.472 | 0.080 | 4708700 |
| 7.000 | -0.0020 -0.0065 | 7.750 | +0.012 +0.000 | 7.495 | +0.012 +0.000 | 0.500 | 0.740 | 0.100 | 4588400 |
| 7.750 | -0.0020 -0.0065 | 8.250 | +0.012 +0.000 | 8.090 | +0.012 +0.000 | 0.312 | 0.472 | 0.080 | 4547600 |
| 8.000 | -0.0020 -0.0065 | 8.500 | +0.012 +0.000 | 8.340 | +0.012 +0.000 | 0.312 | 0.472 | 0.080 | 4708800 |
| 8.750 | -0.0020 -0.0065 | 9.250 | +0.012 +0.000 | 9.090 | +0.012 +0.000 | 0.312 | 0.472 | 0.080 | 4536700 |