

Rod Seals

Technical details

Metric

Inch

Operating conditions

| | |
|-------------------|--------------|
| Maximum Speed | 1.0 m/sec |
| Temperature Range | -45°C +110°C |
| Maximum Pressure | 400 bar |

| |
|--------------|
| 3.0 ft/sec |
| -50°F +230°F |
| 6000 p.s.i. |



Maximum extrusion gap

Figures show the maximum permissible gap all on one side using minimum rod \varnothing and maximum clearance \varnothing .

| | | | |
|-----------------|-------|-------|-------|
| Pressure bar | 160 | 250 | 400 |
| Maximum Gap in | 0.024 | 0.020 | 0.016 |
| Pressure p.s.i. | 2400 | 3750 | 6000 |

Surface roughness

| | μmRa | μmRt | μinCLA | μinRMS |
|--|-----------------|-----------------|-------------------|-------------------|
| Dynamic Sealing Face $\varnothing d_1$ | 0.1 <-> 0.4 | 4 max | 4 <-> 16 | 5 <-> 18 |
| Static Sealing Face $\varnothing D_1$ | 1.6 max | 10 max | 63 max | 70 max |
| Static Housing Faces L_1 | 3.2 max | 16 max | 125 max | 140 max |

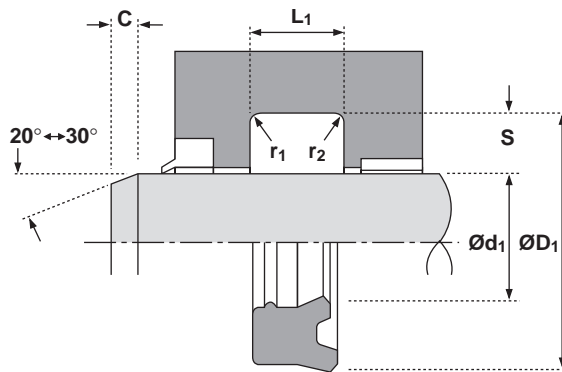
Chamfers & Radii

| | | | |
|----------------------------|-------|-------|--------|
| Groove Section $\leq S$ in | 0.125 | 0.187 | 0.250 |
| Min Chamfer C in | 0.093 | 0.093 | 0.125 |
| Max Fillet Rad r_1 in | 0.008 | 0.008 | 0.016 |
| Max Fillet Rad r_2 in | 0.016 | 0.016 | 0.0325 |

Tolerances

| | | |
|-------------------|-------------------|-----------|
| $\varnothing d_1$ | $\varnothing D_1$ | L_1 |
| f9 | Js11 | +0.010 -0 |

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Design

The Hallite 658 is an asymmetric seal designed specifically to replace an O ring and one back up sealing arrangement.

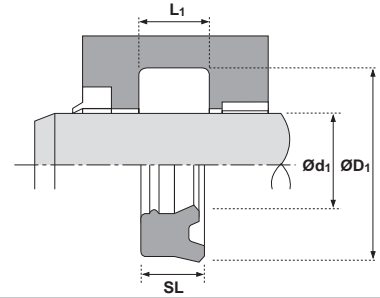
Manufactured in Hallite's high performance polyurethane - Hythane® 181, the Hallite 658 is an extremely flexible seal making installation very easy.

See Hallite 605 for more details.

Features

- **Twin lip design offering:**
Lower friction,
Improved sealing,
Primary lip protection,
Increased seal stability.
- Easy installation

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| Ød ₁ | TOL f9 | ØD ₁ | TOL Js11 | SL | L ₁ +0.010 -0 | PART No. |
|-----------------|--------------------|-----------------|------------------|-------|-----------------------------|-------------|
| 0.750 | -0.0008 -0.0028 | 0.937 | +0.003 -0.003 | 0.156 | 0.172 | 4472400 |
| 0.875 | -0.0008 -0.0028 | 1.125 | +0.003 -0.003 | 0.187 | 0.207 | 4527500 |
| 1.000 | -0.0008 -0.0028 | 1.250 | +0.003 -0.003 | 0.187 | 0.207 | 4569000 |
| 1.062 | -0.0008 -0.0028 | 1.302 | +0.003 -0.003 | 0.187 | 0.207 | 4549400 |
| 1.125 | -0.0010 -0.0034 | 1.368 | +0.003 -0.003 | 0.187 | 0.207 | 4466200 |
| 1.250 | -0.0010 -0.0034 | 1.491 | +0.003 -0.003 | 0.197 | 0.217 | 4359610 |
| 1.250 | -0.0010 -0.0034 | 1.625 | +0.003 -0.003 | 0.375 | 0.413 | 4747600 |
| 1.375 | -0.0010 -0.0034 | 1.616 | +0.003 -0.003 | 0.197 | 0.217 | 4392210 |

| Ød ₁ | TOL f9 | ØD ₁ | TOL Js11 | SL | L ₁ +0.010 -0 | PART No. |
|-----------------|--------------------|-----------------|------------------|-------|-----------------------------|-------------|
| 1.375 | -0.0010 -0.0034 | 1.750 | +0.003 -0.003 | 0.375 | 0.413 | 4747700 |
| 1.500 | -0.0010 -0.0034 | 1.743 | +0.003 -0.003 | 0.187 | 0.207 | 4480600 |
| 1.500 | -0.0010 -0.0034 | 1.872 | +0.003 -0.003 | 0.295 | 0.324 | 4386020 |
| 1.500 | -0.0010 -0.0034 | 1.875 | +0.003 -0.003 | 0.375 | 0.413 | 4747800 |
| 1.750 | -0.0010 -0.0034 | 2.119 | +0.004 -0.004 | 0.281 | 0.311 | 4456200 |
| 1.875 | -0.0010 -0.0034 | 2.246 | +0.004 -0.004 | 0.281 | 0.311 | 4576700 |
| 2.000 | -0.0012 -0.0041 | 2.371 | +0.004 -0.004 | 0.281 | 0.311 | 4466300 |
| 2.500 | -0.0012 -0.0041 | 2.871 | +0.004 -0.004 | 0.281 | 0.311 | 4576800 |