

Static Seals

Technical details

Operating conditions

Temperature Range
Maximum Pressure

Temperature Range
Maximum Pressure

Maximum extrusion gap

Pressure bar
Maximum Gap mm
Pressure p.s.i.

Surface roughness

Static Sealing Face $\varnothing d_1$
Static Sealing Face $\varnothing D_1$
Static Housing Faces L1

Chamfers & Radii

Groove Section $\leq S$ mm
Min Chamfer C mm
Max Fillet Rad r1 mm

Tolerances

Metric

HFA Fluids

-0°C + 60°C
500 bar

Mineral Oil

-30°C + 100°C
500 bar

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

400	500	500
0.5	0.4	H8/f7
6000	7500	7500

μmRa	μmRt
1.6	10 max
1.6 max	10 max
3.2 max	16 max

4.0	5.6	6.75
3.0	4.0	5.0
0.2	0.4	0.4

$\varnothing d_1$	$\varnothing d_2 = \varnothing D_1 - 2S$	$\varnothing D_1$	L1 mm
f7	h9	H8	+0.3-0

Inch

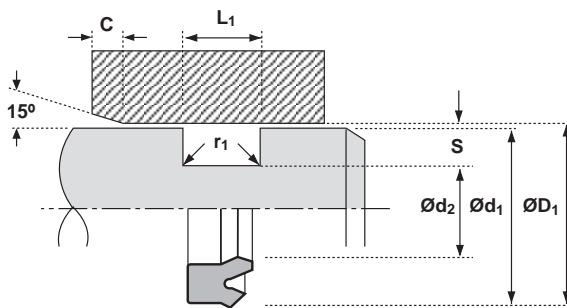
32°F + 140°F
7500 p.s.i.

-22°F + 212°F
7500psi

μinCLA	μinRMS
63 max	70 max
63 max	70 max
125 max	140 max



155



Design

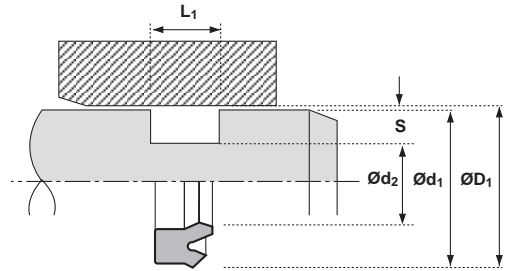
The Hallite 155 U ring is designed as static seal for cylinders. It is used instead of a conventional O ring/back-up ring combination. Through its special design and compound, extrusion gaps up to $F = 0.4\text{mm}$ at 500 bar pressure are allowed.

Every nominal diameter of the Hallite 155 is suitable for diameter ranges of $\varnothing D_1$. (See Table).

Media

This seal was developed for HFA applications, but can also be used with standard mineral oil fluids.

155



ØD ₁ RANGE	L ₁	S	NOMINALS	PART No.
72 - 75	8.2	4.0	72 x 64.0 x 8.2	4543600
90 - 91	8.2	4.0	90 x 82.0 x 8.2	4525900
92 - 100	8.2	4.0	92 x 84.0 x 8.2	4439800
105 - 113	8.2	4.0	105 x 97.0 x 8.2	4788200
112 - 120	8.2	4.0	112 x 104.0 x 8.2	4419500
127 - 135	8.2	4.0	127 x 119.0 x 8.2	4414500
137 - 144	8.2	4.0	137 x 129.0 x 8.2	4383000
145 - 153	8.2	4.0	145 x 137.0 x 8.2	4764700
154 - 164	8.2	4.0	154 x 146.0 x 8.2	4414600
165 - 174	8.2	4.0	165 x 157.0 x 8.2	4777400
175 - 184	8.2	4.0	175 x 167.0 x 8.2	4405400
188 - 197	8.2	4.0	188 x 180.0 x 8.2	4405500
198 - 204	8.2	4.0	198 x 190.0 x 8.2	4759800
205 - 212	8.2	4.0	205 x 197.0 x 8.2	4428300
216 - 225	8.2	4.0	216 x 208.0 x 8.2	4396600
230 - 240	11.2	5.6	230 x 218.8 x 11.2	4432500

ØD ₁ RANGE	L ₁	S	NOMINALS	PART No.
242 - 249	11.2	5.6	242 x 230.8 x 11.2	4402600
250 - 260	8.2	4.0	250 x 242.0 x 8.2	4767500
258 - 270	11.2	5.6	258 x 246.8 x 11.2	4405600
274 - 286	11.2	5.6	274 x 262.8 x 11.2	4732600
290 - 300	11.2	5.6	290 x 278.8 x 11.2	4414700
300 - 311	11.2	5.6	300 x 288.8 x 11.2	4777600
312 - 322	10.3	5.0	312 x 302.0 x 10.3	4712100
320 - 332	11.2	5.6	320 x 308.8 x 11.2	4387000
340 - 350	11.2	5.6	340 x 328.8 x 11.2	4473300
355 - 365	11.2	5.6	355 x 343.8 x 11.2	4756400
370 - 380	11.2	5.6	370 x 358.8 x 11.2	4774700
385 - 394	15.0	6.8	385 x 371.4 x 15.0	4773200
395 - 405	15.0	6.8	395 x 381.4 x 15.0	4732700
405 - 415	15.0	6.8	405 x 391.4 x 15.0	4578100
420 - 430	15.0	6.8	420 x 406.4 x 15.0	4777500