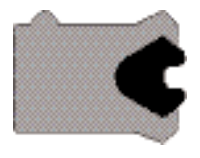


Piston Seals

Technical details

	Metric	Inch
Operating conditions		
Maximum Speed	1.0 m/sec	3.0 ft/sec
Temperature Range	-45°C +110°C	-50°F +230°F
Maximum Pressure	400 bar	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 .

	160	250	400
Pressure bar			
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

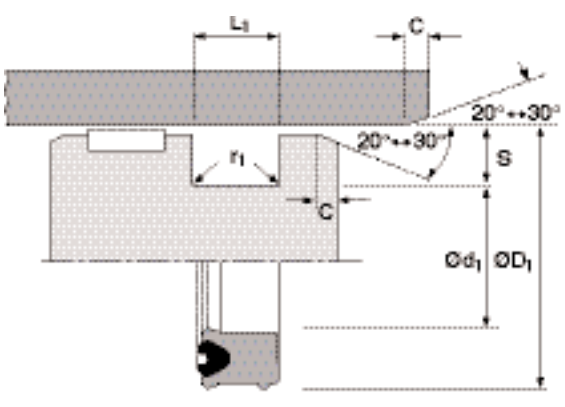
Chamfers & Radii

	0.125	0.187	0.250	0.312	0.375	0.500
Groove Section $\leq S$ in						
Min Chamfer C in	0.093	0.093	0.125	0.156	0.187	0.217
Max Fillet Rad r_1 in	0.008	0.008	0.016	0.032	0.032	0.032

Tolerances

	$\varnothing D_1$	$\varnothing d_1$	L_1
in	H9	js11	+0.010 -0

656



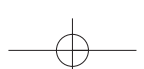
Design

Hallite's 656 is an asymmetric single acting piston seal. Similar in design to the Hallite 621 rod seal, Hallite's 656 offers excellent sealing in light, medium and heavy duty single acting applications.

Manufactured in Hallite's high performance polyurethane Hythane® 181, Hallite 656 is an extremely flexible seal making installation easy.

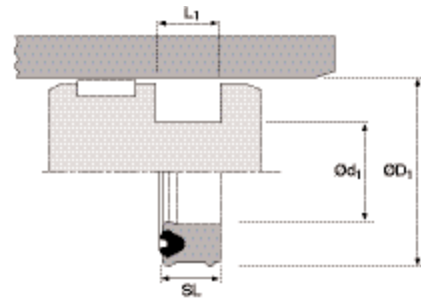
Features

- **Twin lip design offering:**
Lower friction,
Improved sealing,
Primary lip protection.



Piston Seals inch

656



$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL js11	SL	L_1 + 0.010 -0	PART No.
2.000	+0.003 +0.000	1.625	+0.003 -0.003	0.273	0.300	4579200
2.500	+0.003 +0.000	1.875	+0.003 -0.003	0.500	0.550	4522700
2.625	+0.003 +0.000	2.250	+0.003 -0.003	0.273	0.300	4579100
3.250	+0.003 +0.000	2.500	+0.004 -0.004	0.625	0.687	4456700
3.500	+0.003 +0.000	2.750	+0.004 -0.004	0.625	0.687	4461300
4.000	+0.003 +0.000	3.250	+0.004 -0.004	0.625	0.687	4522800

$\varnothing D_1$	TOL H9	$\varnothing d_1$	TOL js11	SL	L_1 + 0.010 -0	PART No.
4.500	+0.003 +0.000	3.750	+0.004 -0.004	0.625	0.687	4461400
5.000	+0.004 +0.000	4.250	+0.004 -0.004	0.625	0.687	4522900
5.500	+0.004 +0.000	4.750	+0.005 -0.005	0.625	0.687	4461500
6.000	+0.004 +0.000	5.250	+0.005 -0.005	0.625	0.687	4523000
6.500	+0.004 +0.000	5.750	+0.005 -0.005	0.625	0.687	4523100

