Design

Ideal for light duty one piece piston applications, the Hallite 65 double acting seal is a simple, effective and economical design for pressures up to 160 bar/2500 p.s.i. Its compact dimensions enable the designer to keep the length of the piston to a minimum.

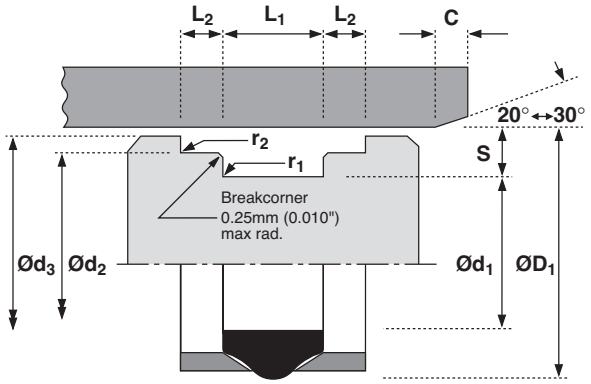
It is an assembly of a continuous rubber seal and two scarf cut bearings.

The nitrile rubber seal is designed to be pre-loaded by the housing to ensure an effective seal at low pressure. The outward thrust of the rubber seal on the bearings as it reacts to increasing pressure prevents any extrusion damage in the sealing area.

The polyacetal bearings are proportioned to support the piston and its side load.

Features

- Compact design
- Easy assembly
- Low wear
- Long life



Technical details

	Metric					Inch	
Operating conditions							
Maximum Speed	0.5 m/sec					1.5 ft/sec	
Temperature Range	-30°C +100°C					-22°F +212°F	
Maximum Pressure	160 bar					2500 p.s.i.	
Surface roughness	µmRa		µmRt			µinCLA	µinRMS
Dynamic Sealing Face $ØD_1$	0.1 < > 0.4		4 max			4 < > 16	5 < > 18
Static Sealing Face $Ød_1$ $Ød_2$	1.6 max		10 max			63 max	70 max
Static Housing Faces $Ød_3$ L_1 L_2	3.2 max		16 max			125 max	140 max
Chamfers & Radii							
Groove Section ≤ S mm	3.75		5.00		6.50	8.00	10.00
Min Chamfer C mm	2.00		2.50		4.00	5.00	5.00
Max Fillet Rad r_1 mm	0.40		0.40		0.40	0.80	0.80
Max Fillet Rad r_2 mm	0.20		0.20		0.20	0.40	0.40
Groove Section ≤ S in	0.156		0.187		0.250	0.312	0.375
Min Chamfer C in	0.078		0.093		0.125	0.156	0.187
Max Fillet Rad r_1 in	0.016		0.016		0.016	0.032	0.032
Max Fillet Rad r_2 in	0.008		0.008		0.008	0.016	0.016

Tolerances	$ØD_1$	$Ød_1$	$Ød_2$	$Ød_3$	L_1	L_2
mm	H10	h9	h9	h11	+0.4 +0.13	0 -0.13
in	H10	h9	h9	h11	+0.015 +0.005	0 -0.005