Hallite
Fenner Advanced Sealing Technologies

780

Design

A robust assembly designed specifically for one piece pistons, the Hallite 780 double acting seal uses a rubber sealing element that has proved itself in service to be extremely wear resistant and capable of working most effectively in a wide range of medium duty applications. The seal is also suitable for two piece pistons.

The assembly comprises a rubber sealing element, two split support rings and two split L-shaped bearings, one of each located either side of the seal.

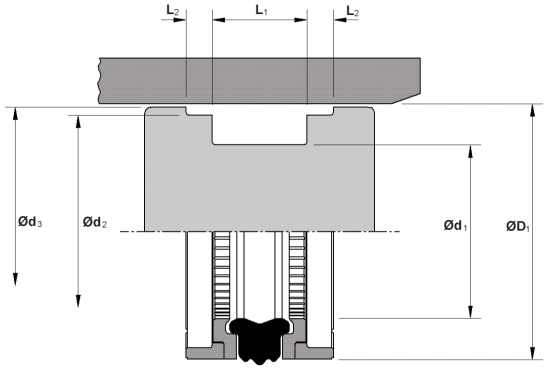
The nitrile rubber sealing element is designed with multi-lips for efficient dynamic sealing with minimal low pressure friction and, when pressurised, be protected from extrusion damage by the extending lips of the support ring. The support ring is manufactured from a tough, flexible polymer and scarf cut for assembly.

Both the L-shaped bearings and support rings are grooved to ensure that the fluid pressure properly energises the sealing element and to prevent the possibility of any pressure trapping within the seal assembly.

NB: Part numbers suffixed by "‡" indicate housing sizes to meet ISO 6547.

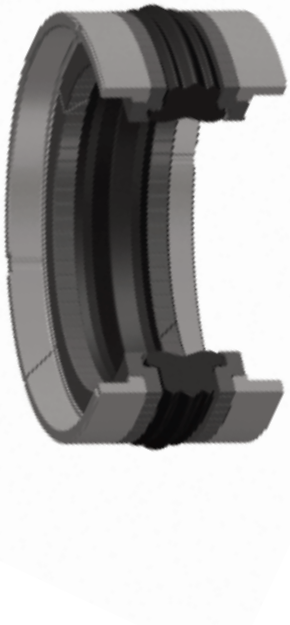
Features

- Well proven design
- 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	400 bar						6000 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	5.0	7.5	8.0		10.0	12.5	15.0	
Min Chamfer C mm	2.4	4.0	5.0		5.0	6.5	7.5	
Max Fillet Rad r_1 mm	0.4	0.4	0.4		0.4	0.8	0.8	
Max Fillet Rad r_2 mm	0.4	0.4	0.4		0.4	0.8	0.8	
Tolerances	$ØD_1$	$Ød_1$	$Ød_2$	$Ød_3$	L_1		L_2	
mm	H9	h9	h9	h11	+0.2 -0		+0.1 -0	



piston seals