Double Acting Rod Wiper Seal PWE Imperial

Design

Claron **Style PWE** double acting Rod wiper is designed to remove potential system contaminants from a reciprocating rod during the negative stroke and to assist sealing by collecting the fluid film on the positive stroke. It is classified as a medium to heavy duty wiper and is precision moulded in Nitrile 90° rubber. The wiper is machine trimmed to provide a precise wiping lip. The wipers ability to assist sealing make it ideal for use where zero leakage is required. Claron Wiper Seals Style PWE should not be utilised in combination with double-acting Rod seals unless the housing design allows for pressure relief between the wiper and the seal.

Operating Conditions

Temp. range	-30°C to 100°C
Max Linear Speed m/sec	3.0

Optimum service conditions are affected by temperature, speed and surface finish.
Refer to Appendix 1 for further information.

Continuous operating temperature for various Fluids

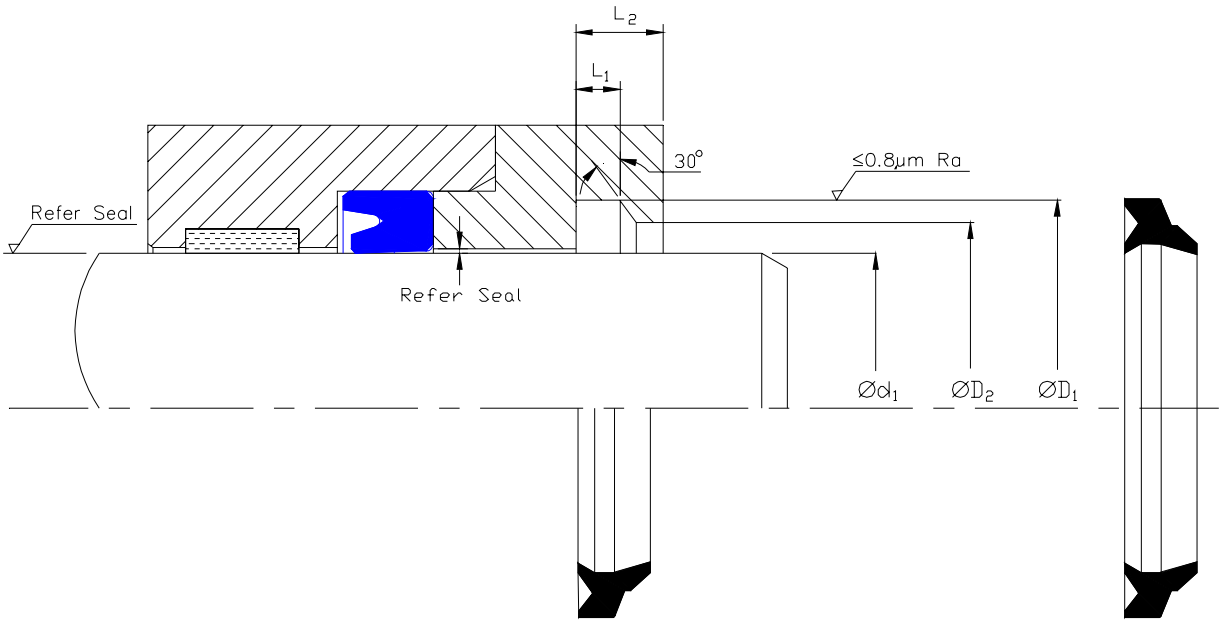
NBR Rubber		
DIN	**Hydraulic Fluid Description**	**°C**
H	Mineral oil without additives	100
H-L	Mineral Fluid with anti corrosion and anti ageing additives	100
H-LP	Mineral oil as HL plus additives reducing wear, raising load	100
H-LPD	Mineral oil as H-LP but with detergents and dispersants	100
H-V	Mineral oil as H-LP plus improved viscosity temp.	100
HFA E	Emulsions of mineral oil in water. Water content 80-95%	55
HFA S	Synthetic oil in water. Water content 80-95%	55
HFB	Emulsions of water in mineral oil. Water content 40%	60
HFC	Aqueous polymer solutions. Water content 35%	60
HFD R	Phosphoric acid ester based	NS
HFD S	Chlorinated hydrocarbon based	NS
HFD T	Mixtures of HFD R and HFD S	NS
HEPG	Polyglycol based	NS
HETG	Vegetable Oil based	60
HEES	Fully synthetic ester based	NS

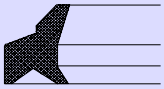
Housing

For surface finish and recommended lead in chamfers refer to the illustration below. For housing dimensions and machining tolerances refer to the catalogue page of selected seal.
Refer to Appendix 4 for value of tolerance symbols.

Fitting

Style PWE may be deformed and fitted into a closed groove housing as shown below. For the seal to function correctly, it is important that care be taken in fitting the seal within its housing.
For a detailed checklist, refer to Appendix 3.





Double Acting rod Wiper Seal

PWE

Imperial

Nominal Dimensions & Machining Tolerances

Claron Part Number	Refer Seal Selection $Ød_1$	+0.005 -0.000 $ØD_1$	+0.005 -0.000 $ØD_2$	+0.005 - 0.000 L_1	Nominal L_2
PWE 100137	1.000	1.385	1.082	0.195	0.343
PWE 125162	1.250	1.635	1.332	0.195	0.343
PWE 137175	1.375	1.760	1.457	0.195	0.343
PWE 150187	1.500	1.885	1.582	0.195	0.343
PWE 162200	1.625	2.010	1.707	0.195	0.343
PWE 175212	1.750	2.135	1.832	0.195	0.343
PWE 200237	2.000	2.385	2.082	0.195	0.343
PWE 250287	2.500	2.885	2.582	0.195	0.343
PWE 300350	3.000	3.510	3.157	0.255	0.468
PWE 362412	3.625	4.135	3.782	0.255	0.468
PWE 400450	4.000	4.510	4.157	0.255	0.468
PWE 475525	4.750	5.260	4.907	0.255	0.468