Single Acting Rod Wiper Seal

PWO Imperial

Design

Claron Style PWO Rod wiper is designed to remove potential system contaminents from a reciprocating rod during the negative stroke. It is classified as a light to medium duty wiper and is precision moulded in Nitrile 90° rubber. The wiper is machine trimmed to provide a precise wiping lip.

Operating Conditions

Temp. Range	-30°C to 100°
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

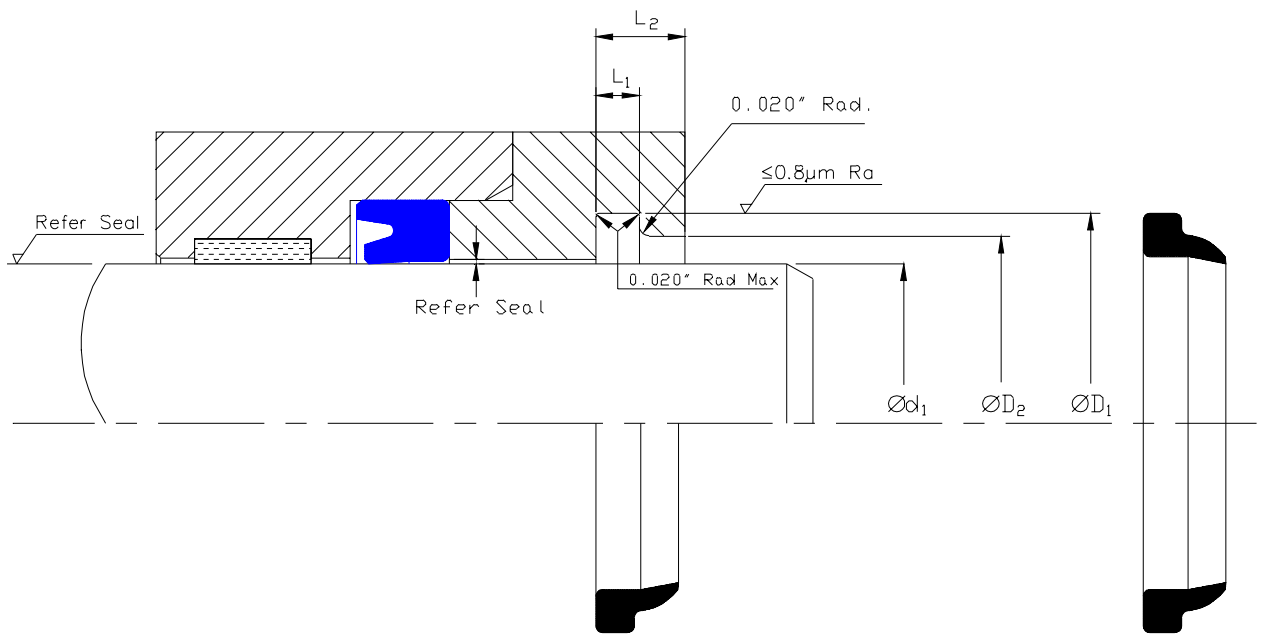
NBR Rubber		
DIN	**Hydraulic Fluid Description**	**°C**
H	Mineral oil without additives	100
H-L	Mineral Fluid with anti corrosion and anti ageing additives	100
H-LP	Mineral oil as HL plus additives reducing wear, raising load	100
H-LPD	Mineral oil as H-LP but with detergents and dispersants	100
H-V	Mineral 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

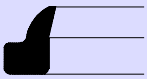
Housing

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

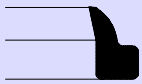
Style PWO may be deformed and fitted into a closed groove housing as shown below. For the seal to function correctly, it is important that care be taken in fitting the seal within its housing.
For a detailed checklist, refer to Appendix 3.





Single Acting Rod Wiper Seal

PWO Imperial



Claron Part Number	Nominal Dimensions & Machining Tolerances				
	Refer Seal Selection $Ød_1$	+0.020 +0.010 $ØD_1$	±0.005 $ØD_2$	+0.020 +0.010 L_1	Nominal L_2
PWO 050090	0.500	0.900	0.700	0.125	0.250
PWO 062102	0.625	1.025	0.825	0.125	0.250
PWO 075115	0.750	1.150	0.950	0.125	0.250
PWO 081121	0.812	1.213	1.013	0.125	0.250
PWO 087127	0.875	1.275	1.075	0.125	0.250
PWO 100140	1.000	1.400	1.200	0.125	0.250
PWO 112162	1.125	1.625	1.425	0.125	0.375
PWO 125175	1.250	1.750	1.550	0.125	0.375
PWO 131187	1.312	1.875	1.675	0.125	0.250
PWO 137187	1.375	1.875	1.675	0.125	0.375
PWO 150200	1.500	2.000	1.800	0.125	0.375
PWO 162212	1.625	2.125	1.925	0.125	0.375
PWO 175225	1.750	2.250	2.050	0.125	0.375
PWO 187237	1.875	2.375	2.175	0.125	0.375
PWO 200250	2.000	2.500	2.300	0.125	0.375
PWO 212262	2.125	2.625	2.425	0.125	0.375
PWO 225275	2.250	2.750	2.550	0.125	0.375
PWO 237287	2.375	2.875	2.675	0.125	0.375
PWO 250300	2.500	3.000	2.800	0.125	0.375
PWO 275325	2.750	3.250	3.050	0.125	0.375
PWO 300350	3.000	3.500	3.300	0.125	0.375
PWO 325400	3.250	4.000	3.650	0.187	0.500
PWO 350425	3.500	4.250	3.900	0.187	0.500
PWO 375450	3.750	4.500	4.150	0.187	0.500
PWO 400475	4.000	4.750	4.400	0.187	0.500
PWO 425500	4.250	5.000	4.650	0.187	0.500
PWO 450525	4.500	5.250	4.900	0.187	0.500
PWO 500575	5.000	5.750	5.400	0.187	0.500
PWO 600675	6.000	6.750	6.400	0.187	0.500