

Design

Claron Style PWS Rod wiper is designed to remove potential system contaminants from a reciprocating rod during the negative 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 addition of sealing beads on this wiper provide positive sealing in the housing preventing moisture/contaminants from passing the outside of the wiper.

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

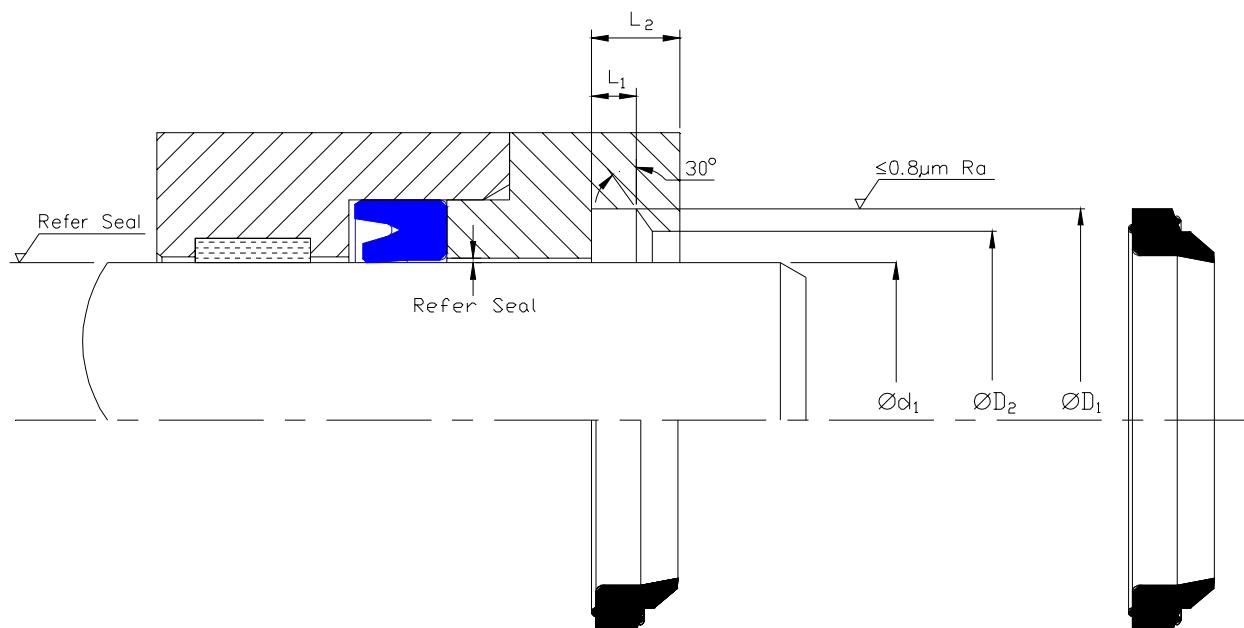
For surface finish and recommended lead in chamfers refer to the illustration below. For housing dimensions and machining tolerances refer to the catalogue page of selected seal.

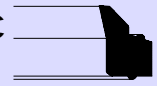
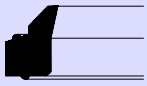
Refer to Appendix 4 for value of tolerance symbols.

Fitting

Style PWS 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.





Nominal Dimensions & Machining Tolerances

| Claron Part Number | Refer Seal Selection Ød ₁ | +0.20 -0.00 ØD ₁ | +0.20 -0.00 ØD ₂ | +0.20 -0.00 L ₁ | Nominal L ₂ |
|--------------------|---|-----------------------------------|-----------------------------------|----------------------------------|---------------------------|
| PWS 074106 | 19.00 | 27.00 | 23.00 | 3.40 | 7.00 |
| PWS 098148 | 25.00 | 37.70 | 31.40 | 5.30 | 8.90 |
| PWS 118168 | 30.00 | 42.70 | 36.40 | 5.30 | 8.90 |
| PWS 125157 | 32.00 | 40.00 | 36.00 | 3.40 | 7.00 |
| PWS 137187 | 35.00 | 47.70 | 41.40 | 5.30 | 8.90 |
| PWS 157207 | 40.00 | 52.70 | 46.40 | 5.30 | 8.90 |
| PWS 196228 | 50.00 | 58.00 | 54.00 | 3.40 | 7.00 |
| PWS 220270 | 56.00 | 68.70 | 62.40 | 5.30 | 8.90 |
| PWS 236286 | 60.00 | 72.70 | 66.40 | 5.30 | 8.90 |
| PWS 248298 | 63.00 | 75.70 | 69.40 | 5.30 | 8.90 |
| PWS 255305 | 65.00 | 77.70 | 71.40 | 5.30 | 8.90 |
| PWS 295345 | 75.00 | 87.70 | 81.40 | 5.30 | 8.90 |
| PWS 315365 | 80.00 | 92.70 | 86.40 | 5.30 | 8.90 |
| PWS 334384 | 85.00 | 97.70 | 91.40 | 5.30 | 8.90 |
| PWS 393443 | 100.00 | 112.70 | 106.40 | 5.30 | 8.90 |

PWS

Nominal Dimensions & Machining Tolerances

| Claron Part Number | Refer Seal Selection Ød_1 | +0.008 -0.000 ØD_1 | +0.008 -0.000 ØD_2 | +0.008 -0.000 L_1 | Nominal L_2 |
|-----------------------|--|-----------------------------------|-----------------------------------|---------------------------|------------------|
| PWS 100150 | 1.000 | 1.500 | 1.250 | 0.208 | 0.350 |
| PWS 112162 | 1.125 | 1.625 | 1.375 | 0.208 | 0.350 |
| PWS 125175 | 1.250 | 1.750 | 1.500 | 0.208 | 0.350 |
| PWS 137187 | 1.375 | 1.875 | 1.625 | 0.280 | 0.350 |
| PWS 150200 | 1.500 | 2.000 | 1.750 | 0.208 | 0.350 |
| PWS 162212 | 1.625 | 2.125 | 1.875 | 0.208 | 0.350 |
| PWS 175225 | 1.750 | 2.250 | 2.000 | 0.208 | 0.350 |
| PWS 187237 | 1.875 | 2.375 | 2.125 | 0.208 | 0.350 |
| PWS 200250 | 2.000 | 2.500 | 2.250 | 0.208 | 0.350 |
| PWS 212262 | 2.125 | 2.625 | 2.375 | 0.208 | 0.350 |
| PWS 225275 | 2.250 | 2.750 | 2.500 | 0.208 | 0.350 |
| PWS 250300 | 2.500 | 3.000 | 2.750 | 0.208 | 0.350 |
| PWS 275325 | 2.750 | 3.250 | 3.000 | 0.208 | 0.350 |
| PWS 300350 | 3.000 | 3.500 | 3.250 | 0.208 | 0.350 |
| PWS 325375 | 3.250 | 3.750 | 3.500 | 0.208 | 0.350 |
| PWS 337387 | 3.375 | 3.875 | 3.625 | 0.208 | 0.350 |
| PWS 350400 | 3.500 | 4.000 | 3.750 | 0.208 | 0.350 |
| PWS 362412 | 3.625 | 4.125 | 3.875 | 0.208 | 0.350 |
| PWS 400450 | 4.000 | 4.500 | 4.250 | 0.208 | 0.350 |
| PWS 437487 | 4.375 | 4.875 | 4.625 | 0.208 | 0.350 |
| PWS 450500 | 4.500 | 5.000 | 4.750 | 0.208 | 0.350 |
| PWS 462512 | 4.625 | 5.125 | 4.875 | 0.208 | 0.350 |
| PWS 475525 | 4.750 | 5.250 | 5.000 | 0.208 | 0.350 |
| PWS 512562 | 5.125 | 5.625 | 5.375 | 0.208 | 0.350 |
| PWS 537587 | 5.375 | 5.875 | 5.625 | 0.208 | 0.350 |
| PWS 562612 | 5.625 | 6.125 | 5.875 | 0.208 | 0.350 |