Single Acting Rod Seal
PDS

Metric
Imperial

Design

Claron Style PDS rod seal is a 3 piece assembly consisting of a Nitrile Rubber sealing element which is backed up by a tough Thermoplastic elastomer header complete with an Acetal anti-extrusion ring on the I.D. The complete assembly forms a highly robust sealing unit for use in high pressure applications where shock loads and pressure spikes are present. This seal is widely used in the mobile plant industry and is also a modern replacement for common veepac seals.

Operating Conditions

Maximum Pressure	
Max Speed	Temp. Range
m/s	-30°C to 100°C
0.50	325 Bar
0.15	600 Bar

These range perameters are Maximum simultaneous conditions. Optimum service conditions are affected by temperature, speed, pressure, surface finish and extrusion gaps. Refer to Appendix 1 for further information.

Continuous operating temperature for various Fluids

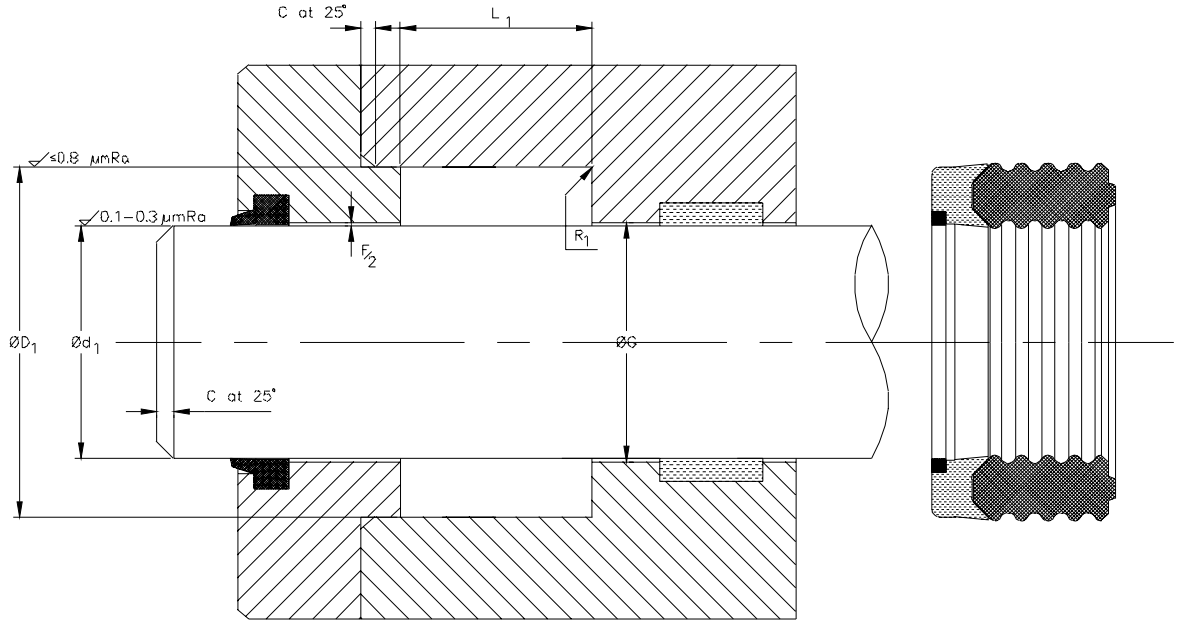
NBR Rubber		
DIN	**Hydraulic Fluid Description**	**°C**
H	Mineral oil without additives	100
H-L	Mineral Fluid with anti corrosion and anti ageing additives	100
H-LP	Mineral oil as HL plus additives reducing wear, raising load	100
H-LPD	Mineral oil as H-LP but with detergents and dispersants	100
H-V	Mineral 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 PDS is designed to be fitted into a split gland as shown in the illustration below. The seal can be supplied split to ease fitting if required. 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.



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Nominal Dimensions & Machining Tolerances

Claron Part Number	f8 H9 Ød$_1$ ØG	Js11 ØD$_1$	+0.25 -0.00 L$_1$	Nominal Section S	Min. C	Max. R$_1$
PDS 169118	30	43	20.0	6.5	3	0.4
PDS 204157	40	52	22.5	6.0	3	0.4
PDS 216157	40	55	22.5	7.5	4	0.4
PDS 248196	50	63	20.0	6.5	3	0.4
PDS 255196	50	65	22.5	7.5	4	0.4
PDS 295236	60	75	22.5	7.5	4	0.4

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Nominal Dimensions & Machining Tolerances

Claron Part Number	f8 H9 Ød$_1$ ØG	Js11 ØD$_1$	+0.010 -0.000 L$_1$	Nominal S	Min. C	Max. R$_1$
PDS 175125	1.250	1.750	0.750	0.250	0.125	0.015
PDS 200150	1.500	2.000	0.748	0.250	0.125	0.015
PDS 237175	1.750	2.375	1.060	0.312	0.156	0.015
PDS 250200	2.000	2.500	0.850	0.250	0.125	0.015
PDS 262200	2.000	2.625	1.000	0.312	0.156	0.015
PDS 325250	2.500	3.250	1.230	0.375	0.187	0.032