Design

Claron style CFS flange seal is designed to suit the SAE J518 range of flanges, and common metric flange sizes. The seal is manufactured in Claron's high performance grade of Polyurethane with excellent resistance to extrusion and compression set over a wide temperature range. The design offers many performance advantages over common o-ring, or rubber based flange seals, including the elimination of the 'pumping effect'.

Operating Conditions

Max. Pressure	Temp Range
400 Bar	-40 to 110°C

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

Continuous operating temperature for various Fluids

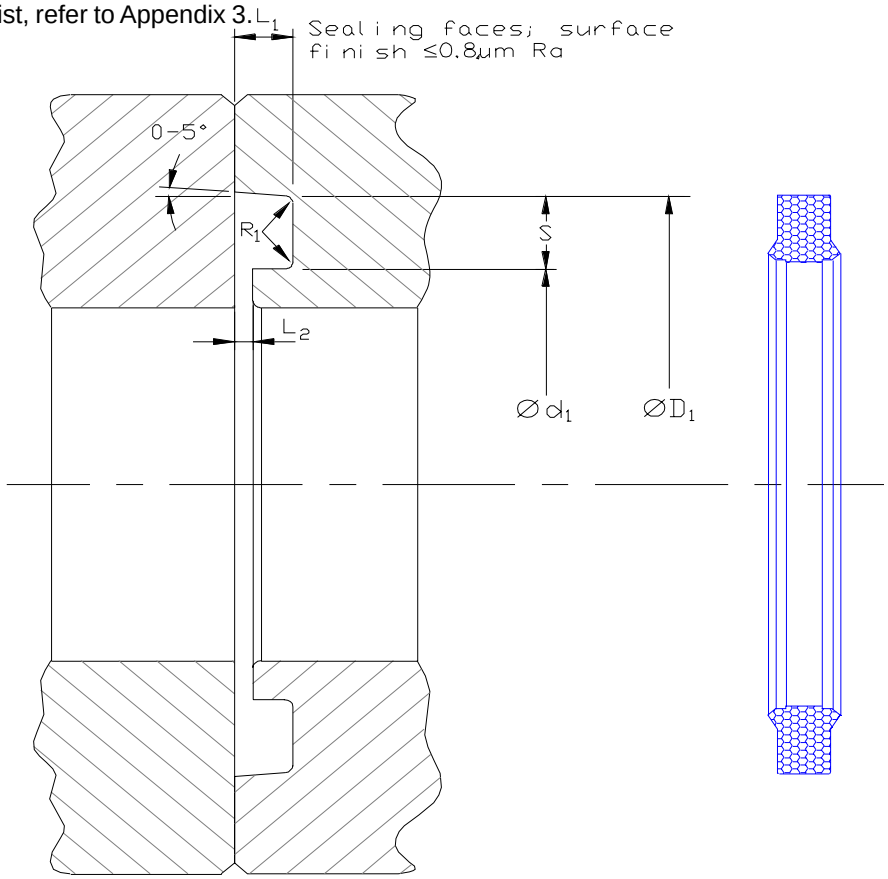
AU Polyurethane		
DIN	Hydraulic Fluid Description	°C
H	Mineral oil without additives	100
H-L	Mineral Fluid with anti corrosion and anti ageing additives	100
H-LP	Mineral oil as HL plus additives reducing wear, raising load	100
H-LPD	Mineral oil as H-LP but with detergents and dispersants	100
H-V	Mineral oil as H-LP plus improved viscosity temp.	100
HFA E	Emulsions of mineral oil in water. Water content 80-95%	40
HFA S	Synthetic oil in water. Water content 80-95%	40
HFB	Emulsions of water in mineral oil. Water content 40%	40
HFC	Aqueous polymer solutions. Water content 35%	ns
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	60

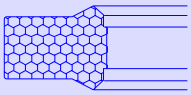
Housing

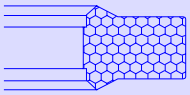
For surface finish and recommended lead in chamfers refer to the illustration below. For housing dimensions and machining tolerances refer to the catalogue page of selected seal.

Fitting

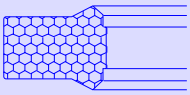
For the seal to function correctly, it is important that care be taken in fitting the seal within its housing. For a detailed checklist, refer to Appendix 3.





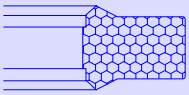


Claron Part Number	Nominal Dimensions & Machining Tolerances						
	Nominal Flange Size	+0.10 -0.10 $ØD_1$	Nominal $Ød_1$	+0.05 -0.05 L_1	+0.00 -0.25 L_2	+0.25 -0.25 S	Max. R_1
CFSM 0335-0263	-	33.5	26.3	2.2	0.25	3.6	0.5
CFSM 0450-0362	-	45.0	36.2	3.3	0.25	4.4	0.5



Static Flange Seal
CFS

Imperial
SAE J518



Claron Part Number	Nominal Dimensions & Machining Tolerances						
	Nominal Flange Size	+0.005 -0.005 $ØD_1$	Nominal $Ød_1$	+0.005 -0.005 L_1	+0.000 -0.010 L_2	+0.010 -0.010 S	Max. R_1
CFS 0500	0.500	1.000	0.670	0.110	0.010	0.165	0.030
CFS 0750	0.750	1.250	0.920	0.110	0.010	0.165	0.030
CFS 1000	1.000	1.560	1.230	0.110	0.010	0.165	0.030
CFS 1250	1.250	1.750	1.420	0.110	0.010	0.165	0.030
CFS 1500	1.500	2.125	1.785	0.110	0.010	0.165	0.030
CFS 2000	2.000	2.500	2.160	0.110	0.010	0.165	0.030