Design

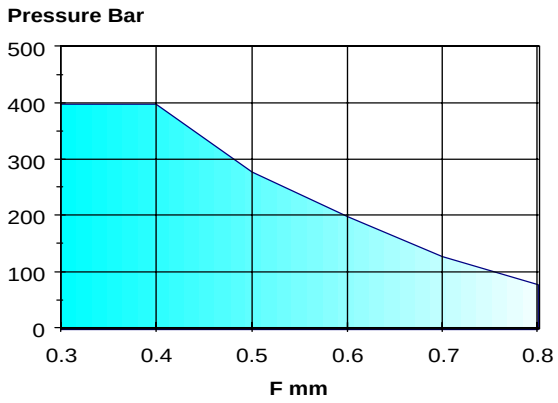
The Claron style CPG is an asymmetrical profiled lip seal designed for medium duty rod applications. Features include an outside diameter specifically designed for static face sealing and a robust inner lip with a secondary supporting sealing edge for high performance sealing. Manufactured in a high performance grade of Polyurethane for outstanding abrasion and extrusion resistance combined with flexibility for ease of installation.

Operating Conditions

Maximum Pressure		
Max Speed	Temp. Range	Temp. Range
m/s	-40°C to 80°C	-40°C to 110°C
0.50	280 Bar	250 Bar
0.15	400 Bar	350 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.

Maximum Diametral Clearance F



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

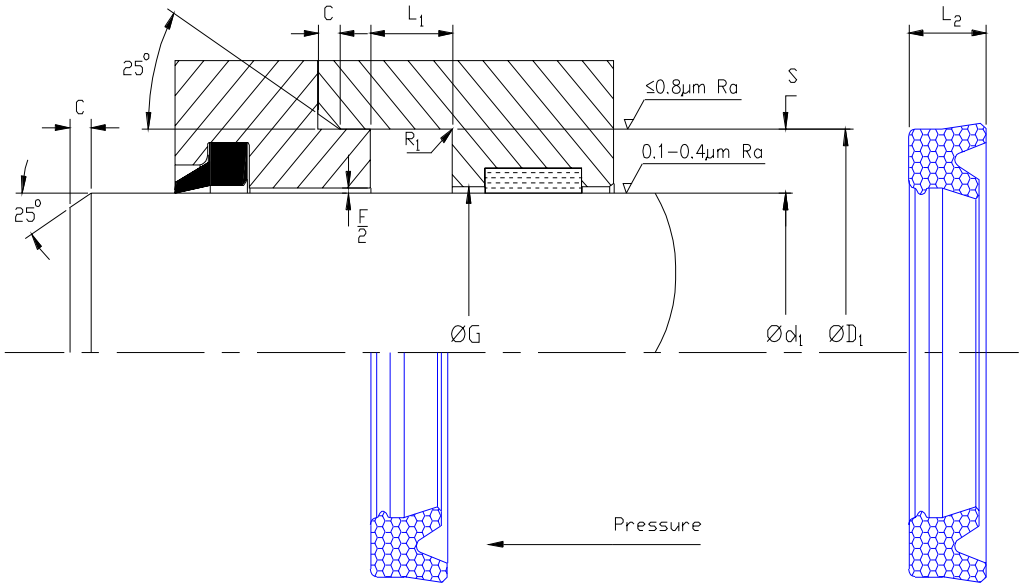
Note: Clearance gap F is the maximum permissable. i.e. gap completely on one side, in the temperature range of -30°C to 80°C
The use of a suitably selected Claron bearing ring will effectively reduce the clearance gap F max. to a value closer to F/2 thus increasing the pressure capability of the seal.

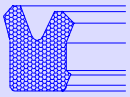
Housing

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

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.

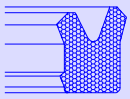




Single Acting Rod Seal

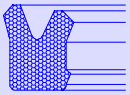
CPG

Metric



Nominal Dimensions & Machining Tolerances

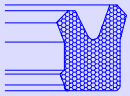
Claron Part Number	f8 H9 $Ød_1$ ØG	Js 11 $ØD_1$	+0.25 -0.00 L_1	Nominal L_2	Nominal S	Min C	Max. R_1
CPG 014024	14	24	8.0	7.3	5.0	2.5	0.3
CPG 016022	16	22	5.0	4.5	3.0	2.5	0.3
CPG 022030	22	30	6.3	5.7	4.0	2.5	0.3
CPG 025033	25	33	7.5	6.8	4.0	2.5	0.3
CPG 028040	28	40	9.0	8.0	6.0	2.5	0.3
CPG 030040	30	40	11.0	10.0	5.0	2.5	0.3
CPG 030040/1	30	40	7.5	7.0	5.0	2.5	0.3
CPG 032040	32	40	7.5	6.5	4.0	2.5	0.3
CPG 032042	32	42	11.0	10.0	5.0	2.5	0.3
CPG 035045	35	45	11.0	10.0	5.0	2.5	0.3
CPG 040050	40	50	11.0	10.0	5.0	2.5	0.3
CPG 040055	40	55	11.0	10.0	7.5	4.0	0.4
CPG 045055	45	55	8.0	7.3	5.0	2.5	0.3
CPG 045055/1	45	55	7.5	6.5	4.0	2.5	0.3
CPG 045055/2	45	55	11.0	10.0	5.0	2.5	0.3
CPG 050060	50	60	8.0	7.3	5.0	2.5	0.3
CPG 050060/1	50	60	11.0	10.0	5.0	2.5	0.3
CPG 050065	50	65	12.0	10.9	7.5	4.0	0.3
CPG 055065/1	55	65	9.0	8.2	5.0	2.5	0.3
CPG 060075	60	75	11.0	10.0	7.5	4.0	0.4
CPG 065085	65	85	12.5	11.4	10.0	4.0	0.4
CPG 070085	70	85	12.5	11.4	7.5	4.0	0.4



Single Acting Rod Seal

CPG

Imperial



Nominal Dimensions & Machining Tolerances

Claron Part Number	f8 H9 $Ød_1$ ØG	Js 11 $ØD_1$	+0.010 -0.000 L_1	Nominal L_2	Nominal S	Min C	Max. R_1
CPG 10001250	1.000	1.250	0.207	0.187	0.125	0.093	0.010
CPG 11251375	1.125	1.375	0.207	0.187	0.125	0.093	0.016
CPG 12501500	1.250	1.500	0.275	0.250	0.125	0.093	0.010
CPG 12501625/2	1.250	1.625	0.275	0.250	0.187	0.093	0.016
CPG 12501625/1	1.250	1.625	0.207	0.187	0.187	0.093	0.016
CPG 12501625	1.250	1.625	0.300	0.280	0.187	0.093	0.016
CPG 12501750	1.250	1.750	0.413	0.315	0.250	0.125	0.020
CPG 13751750	1.375	1.750	0.375	0.341	0.187	0.093	0.016
CPG 15001750	1.500	1.750	0.275	0.250	0.125	0.093	0.010
CPG 15001875	1.500	1.875	0.275	0.250	0.187	0.093	0.016
CPG 15002000/1	1.500	2.000	0.275	0.250	0.250	0.125	0.020
CPG 15002000	1.500	2.000	0.413	0.375	0.250	0.125	0.020
CPG 16252000	1.625	2.000	0.413	0.375	0.187	0.093	0.016
CPG 17502125	1.750	2.125	0.275	0.250	0.187	0.093	0.016
CPG 17502250/1	1.750	2.250	0.275	0.250	0.250	0.125	0.020
CPG 17502250	1.750	2.250	0.413	0.375	0.250	0.125	0.020
CPG 20002500	2.000	2.500	0.413	0.375	0.250	0.125	0.020
CPG 20002500/1	2.000	2.500	0.275	0.250	0.250	0.093	0.020
CPG 22502625	2.250	2.625	0.207	0.187	0.187	0.093	0.016
CPG 25003000	2.500	3.000	0.275	0.250	0.250	0.125	0.020
CPG 25003125	2.500	3.125	0.550	0.500	0.312	0.216	0.046
CPG 30003750	3.000	3.750	0.688	0.625	0.375	0.187	0.046