Design

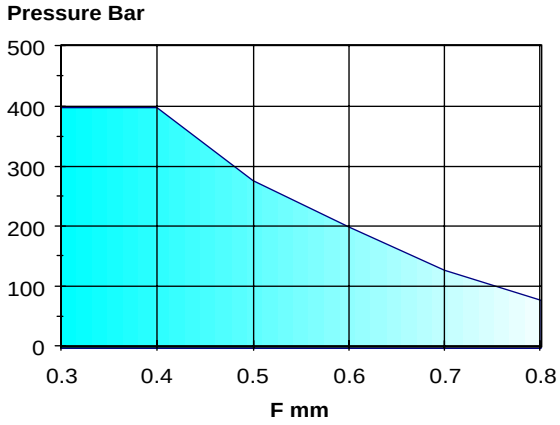
The Claron style CPG.../G is an asymmetrical profiled lip seal designed for medium duty rod applications. Features include an outside diameter specifically designed for static face sealing and a robust inner lip for high performance sealing. Manufactured in a high performance grade of Polyurethane for outstanding abrasion and extrusion resistance combined with flexibility for ease of installation. European and Japanese standard housings are covered in this range.

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

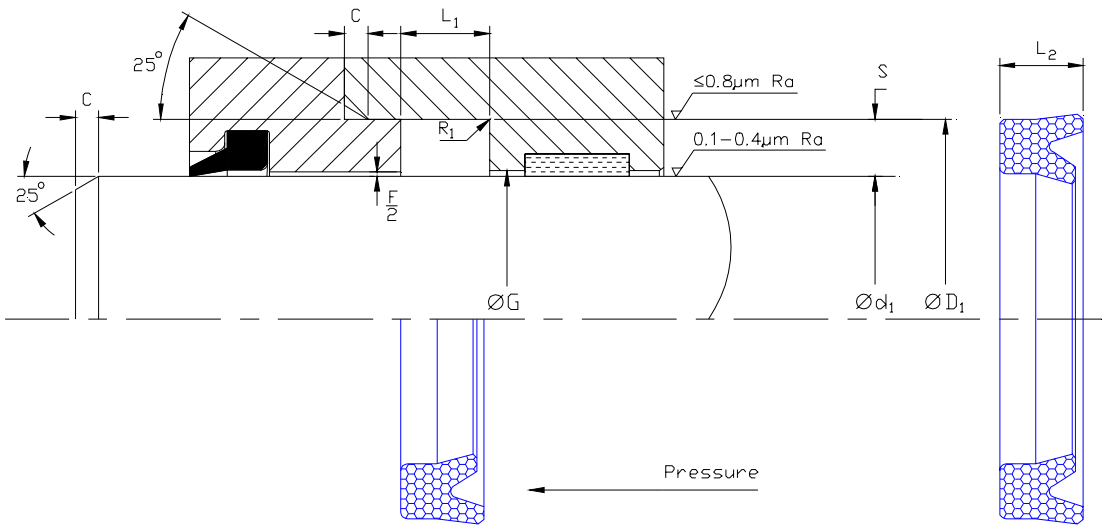
Note: Clearance gap F is the maximum permissable. i.e. gap completely on one side, in the temperature range of -30°C to 80°C
The use of a suitably selected Claron bearing ring will effectively reduce the clearance gap F max. to a value closer to F/2 thus increasing the pressure capability of the seal.

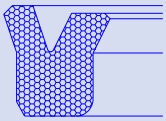
Housing

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.

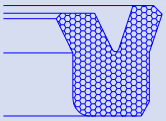




Single Acting Rod Seal

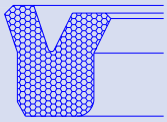
CPU.../G

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
CPU 074047/G	12	19	5.6	5.0	3.5	3.0	0.3
CPU 110078/G	20	28	6.3	5.7	4.0	3.0	0.3
CPU 141110/G	28	36	6.3	5.7	4.0	3.0	0.3
CPU 145118/G	30	37	6.7	6.0	3.5	3.0	0.3
CPU 149118/G	30	38	9.0	8.2	4.0	3.0	0.3
CPU 157118/1G	30	40	8.0	7.3	5.0	3.5	0.5
CPU 157125/G	32	40	6.3	5.7	4.0	3.0	0.3
CPU 177137/1G	35	45	8.0	7.3	5.0	3.5	0.5
CPU 188157/G	40	48	6.3	5.7	4.0	3.0	0.3
CPU 196157/G	40	50	8.0	7.3	5.0	3.5	0.5
CPU 208177/G	45	53	6.3	5.8	4.0	3.0	0.3
CPU 216157/G	40	55	11.0	10.0	7.5	5.0	0.4
CPU 228177/G	45	58	9.0	8.3	6.5	4.0	0.4
CPU 236157/2G	40	60	11.0	10.0	10.0	5.0	0.6
CPU 248196/G	50	63	11.0	10.0	6.5	4.0	0.4
CPU 267216/G	55	68	11.0	10.0	6.5	4.0	0.4
CPU 275216/G	55	70	10.0	9.0	7.5	5.0	0.4
CPU 287236/G	60	73	11.0	10.0	6.5	4.0	0.4
CPU 295236/G	60	75	10.0	9.0	7.5	5.0	0.4
CPU 295255/G	65	75	6.7	6.0	5.0	3.5	0.5
CPU 307255/G	65	78	11.0	10.0	6.5	4.0	0.4
CPU 314255/G	65	80	10.0	9.0	7.5	5.0	0.3
CPU 334255/G	65	85	13.0	12.0	10.0	5.0	0.6
CPU 334275/G	70	85	10.0	9.0	7.5	5.0	0.4
CPU 326275/G	70	83	11.0	10.0	6.5	4.0	0.4
CPU 334295/G	75	85	6.7	6.0	5.0	3.5	0.5
CPU 354275/G	70	90	13.0	12.0	10.0	5.0	0.4
CPU 354295/G	75	90	10.0	9.0	7.5	5.0	0.4
CPU 346295/G	75	88	11.0	10.0	6.5	4.0	0.4
CPU 354314/G	80	90	6.7	6.0	5.0	3.5	0.5
CPU 366314/G	80	93	11.0	10.0	6.5	4.0	0.6
CPU 374295/G	75	95	13.0	12.0	10.0	5.0	0.6
CPU 374314/G	80	95	10.0	9.0	7.5	5.0	0.4
CPU 393314/G	80	100	13.0	12.0	10.0	5.0	0.6
CPU 393334/G	85	100	11.0	10.0	7.5	5.0	0.4
CPU 393334/1G	85	100	10.0	9.0	7.5	5.0	0.4
CPU 413354/G	90	105	11.0	10.0	7.5	5.0	0.4
CPU 413354/1G	90	105	10.0	9.0	7.5	5.0	0.4
CPU 433354/G	90	110	13.0	12.0	10.0	5.0	0.6
CPU 433354/1G	90	110	10.0	9.0	10.0	5.0	0.6
CPU 433374/G	95	110	11.0	10.0	7.5	5.0	0.4
CPU 433374/1G	95	110	10.0	9.0	7.5	5.0	0.4
CPU 452354/G	90	115	13.0	12.0	7.5	5.0	0.4
CPU 452374/G	95	115	13.0	12.0	10.0	5.0	0.6
CPU 452393/G	100	115	11.0	10.0	7.5	5.0	0.4

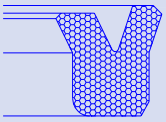


ClaronPolyseal®

Single Acting Rod Seal

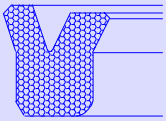
CPU.../G

Metric



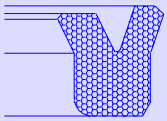
Nominal Dimensions & Machining Tolerances

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
CPU 472393/G	100	120	13.0	12.0	10.0	5.0	0.6
CPU 492413/G	105	125	13.0	12.0	10.0	5.0	0.6
CPU 511433/G	110	130	13.0	12.0	10.0	5.0	0.6
CPU 511433/1G	110	130	11.0	10.0	10.0	5.0	0.6
CPU 511433/2G	110	130	14.0	13.0	10.0	5.0	0.6
CPU 531452/G	115	135	13.0	12.0	10.0	5.0	0.6
CPU 551472/G	120	140	11.0	10.0	10.0	5.0	0.6
CPU 551472/1G	120	140	14.0	13.0	10.0	5.0	0.6
CPU 590511/G	130	150	13.0	12.0	10.0	5.0	0.6
CPU 590551/G	140	150	6.7	6.0	3.5	3.0	0.3
CPU 610551/G	140	155	10.0	9.0	7.5	5.0	0.4
CPU 629551/G	140	160	14.0	13.0	10.0	5.0	0.6
CPU 728649/G	165	185	13.0	12.0	10.0	5.0	0.6
CPU 885787/G	200	225	18.0	16.5	12.5	5.0	0.6



Single Acting Rod Seal Imperial

CPU.../G



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
CPU 100060/G	0.605	1.000	0.275	0.250	0.197	0.093	0.016
CPU 125100/G	1.000	1.250	0.205	0.187	0.125	0.093	0.016
CPU 212175/G	1.750	2.125	0.280	0.260	0.187	0.093	0.016
CPU 250200/G	2.000	2.500	0.413	0.380	0.250	0.125	0.032
CPU 275225/G	2.250	2.750	0.413	0.380	0.250	0.125	0.032
CPU 287237/G	2.375	2.875	0.413	0.380	0.250	0.125	0.032
CPU 300250/G	2.500	3.000	0.413	0.380	0.250	0.125	0.032
CPU 312262/G	2.625	3.125	0.413	0.380	0.250	0.125	0.032
CPU 325275/G	2.750	3.250	0.413	0.380	0.250	0.125	0.032
CPU 350300/G	3.000	3.500	0.413	0.380	0.250	0.125	0.032
CPU 375325/G	3.250	3.750	0.413	0.380	0.250	0.125	0.032
CPU 400350/G	3.500	4.000	0.413	0.380	0.250	0.125	0.032
CPU 425350/1G	3.500	4.250	0.690	0.660	0.375	0.187	0.040
CPU 425375/G	3.750	4.250	0.620	0.580	0.250	0.125	0.032
CPU 462400/G	4.000	4.625	0.413	0.380	0.312	0.156	0.032
CPU 575525/G	5.250	5.750	0.620	0.580	0.250	0.125	0.032
CPU 612550/G	5.500	6.125	0.413	0.380	0.312	0.156	0.032
CPU 725675/G	6.750	7.250	0.620	0.580	0.250	0.125	0.032
CPU 750650/G	6.500	7.500	0.785	0.755	0.500	0.218	0.040
CPU 800700/G	7.000	8.000	0.785	0.755	0.500	0.218	0.040