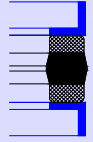


Claron Polyseal® Double Acting Piston Seal Metric DPW/L Imperial



Design

Designed for use on split pistons, the seal is a precision moulded rubber element with rubberised fabric reinforcements as style DP but with additional full width Polyacetal anti-extrusion bearing rings at each end to allow larger machining clearances between the piston head and cylinder bore, and to permit higher working pressures. The Polyacetal bearing rings also support the piston head under side load conditions thus preventing metal to metal contact. The seal is designed with sufficient radial sectional interference that on complete assembly low pressure sealing is effected. The supporting rubberised fabric has the capability of retaining the sealing media thus assisting in reducing friction and wear. Style DPW/L has proven to be effective over a wide range of applications and is a popular alternative for existing housing designs.

Operating Conditions

Maximum Pressure	
Max Speed	Temp. Range
m/s	-30°C to 100°C
0.50	250 Bar
0.15	400 Bar

These range parameters 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

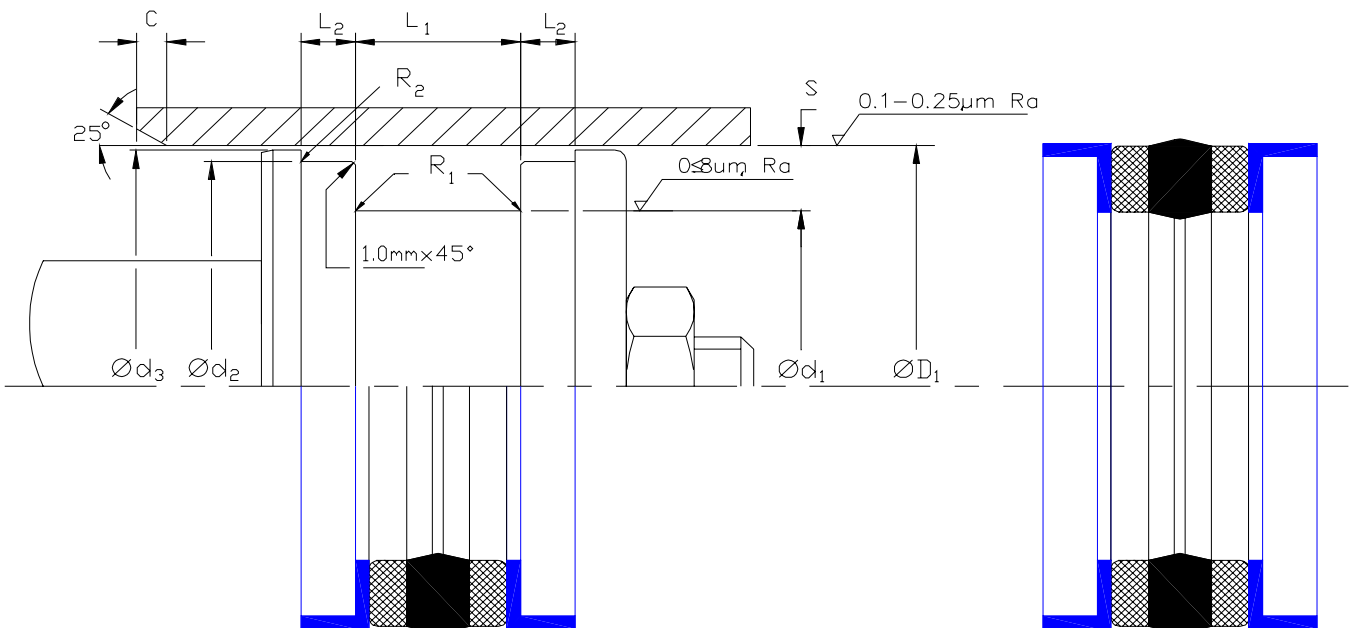
NBR Rubber		
DIN	Hydraulic Fluid Description	°C
H	Mineral oil without additives	100
H-L	Mineral Fluid with anti corrosion and anti ageing additives	100
H-LP	Mineral oil as HL plus additives reducing wear, raising load	100
H-LPD	Mineral oil as H-LP but with detergents and dispersants	100
H-V	Mineral oil 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

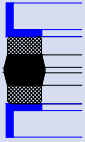
Housing

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

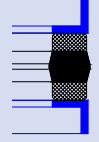
For the seal to function correctly, it is important that care be taken in fitting the seal within its housing. For a detailed checklist, refer to Appendix 3.





Claron Polyseal®
Double Acting Piston Seal

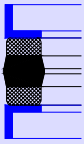
Metric



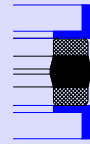
DPW/L

Nominal Dimensions & Machining Tolerances

Claron Part Number	H11	Js11	h9	js11	+0.25 -0.00	+0.00 -0.15	Nominal S	Minimum C	Maximum	
	ØD ₁	Ød ₁	Ød ₂	Ød ₃	L ₁	L ₂			R ₁	R ₂
DPW 098059/L	25	15.0	21.80	24.0	15.5	5.00	5.00	2.5	0.2	
DPW 126086/L	32	22.0	28.80	31.0	15.5	5.00	5.00	2.5	0.2	
DPW 137087/L	35	22.3	31.52	34.0	19.4	6.30	6.35	3.0	0.2	
DPW 157098/1L	40	25.0	34.80	39.0	24.0	6.00	7.50	4.0	0.2	
DPW 177102/L	45	26.0	38.80	43.0	31.0	6.50	9.50	3.5	0.2	
DPW 196137/1L	50	35.0	44.80	48.5	24.0	6.00	7.50	4.0	0.2	
DPW 216157/L	55	40.0	49.80	53.5	24.0	6.00	7.50	4.0	0.2	
DPW 236157/1L	60	40.0	53.80	58.5	31.0	7.00	10.00	5.0	0.2	
DPW 248169/L	63	43.0	56.80	61.5	31.0	7.00	10.00	5.0	0.2	
DPW 248188/L	63	48.0	57.80	61.5	24.0	6.00	7.50	4.0	0.2	
DPW 275196/2L	70	50.0	63.80	68.0	31.0	7.00	10.00	5.0	0.2	
DPW 314236/2L	80	60.0	73.80	78.0	31.0	7.00	10.00	5.0	0.2	
DPW 354275/1L	90	70.0	83.80	88.0	31.0	7.00	10.00	5.0	0.2	
DPW393295/L	100	75.0	93.80	98.0	25.0	9.50	12.50	6.5	0.4	
DPW 393314/L	100	80.0	93.80	98.0	31.0	7.00	10.00	5.0	0.2	
DPW 433354/L	110	90.0	103.80	108.0	31.0	7.00	10.00	5.0	0.2	
DPW 472393/L	120	100.0	113.80	118.0	31.0	7.00	10.00	5.0	0.2	
DPW 492393/2L	125	100.0	118.80	123.0	38.0	9.50	12.50	6.5	0.4	
DPW 551472/L	140	120.0	133.80	138.0	31.0	7.00	10.00	5.0	0.2	
DPW 570492/L	145	125.0	138.80	143.0	31.0	7.00	10.00	5.0	0.2	
DPW 590492/1L	150	125.0	143.50	148.0	38.0	6.45	12.50	6.5	0.4	
DPW 629531/L	160	135.0	153.80	158.0	38.0	9.50	12.50	6.5	0.4	
DPW 629551/L	160	140.0	153.80	158.0	31.0	7.00	10.00	5.0	0.2	



ClaronPolyseal®
 Double Acting Piston Seal Imperial
DPW/L



Nominal Dimensions & Machining Tolerances

Claron Part Number	H11	Js11	h9	js11	+0.025" +0.015"	+0.005" -0.000"	Nominal S	Minimum C	Maximum	
	ØD ₁	Ød ₁	Ød ₂	Ød ₃	L ₁	L ₂			R ₁	R ₂
DPW 075037/1L	0.750	0.375	0.615	0.718	0.593	0.182	0.187	0.093	0.008	
DPW 100062/L	1.000	0.625	0.865	0.968	0.593	0.182	0.187	0.093	0.008	
DPW 112062/1L	1.125	0.625	0.990	1.093	0.750	0.241	0.250	0.125	0.008	
DPW 125075/L	1.250	0.750	1.115	1.218	0.750	0.245	0.250	0.125	0.008	
DPW 137087/L	1.375	0.875	1.241	1.343	0.750	0.245	0.250	0.125	0.008	
DPW 150100/L	1.500	1.000	1.365	1.468	0.750	0.245	0.250	0.125	0.008	
DPW 162100/L	1.625	1.000	1.428	1.562	0.937	0.245	0.312	0.156	0.008	
DPW 175112/L	1.750	1.125	1.552	1.687	0.937	0.245	0.312	0.156	0.008	
DPW 200137/L	2.000	1.375	1.802	1.937	0.937	0.245	0.312	0.156	0.008	
DPW 225162/L	2.250	1.625	2.052	2.187	0.937	0.245	0.312	0.156	0.008	
DPW 237175/L	2.375	1.750	2.177	2.312	0.937	0.245	0.312	0.156	0.008	
DPW 250187/L	2.500	1.875	2.302	2.437	0.937	0.245	0.312	0.156	0.008	
DPW 262200/L	2.625	2.000	2.428	2.562	0.937	0.245	0.312	0.156	0.008	
DPW 275200/L	2.750	2.000	2.482	2.687	1.187	0.245	0.375	0.187	0.008	
DPW 300225/L	3.000	2.250	2.732	2.937	1.187	0.245	0.375	0.187	0.008	
DPW 300225/4L	3.000	2.250	2.732	2.937	0.843	0.245	0.375	0.187	0.008	
DPW 325250/L	3.250	2.500	2.982	3.187	1.187	0.245	0.375	0.187	0.008	
DPW 350275/L	3.500	2.750	3.232	3.437	1.187	0.245	0.375	0.187	0.008	
DPW 375300/L	3.750	3.000	3.482	3.687	1.187	0.245	0.375	0.187	0.008	
DPW 400325/L	4.000	3.250	3.732	3.937	1.187	0.245	0.375	0.187	0.008	
DPW 425350/L	4.250	3.500	3.982	4.187	1.187	0.245	0.375	0.187	0.008	
DPW 450350/L	4.500	3.500	4.232	4.437	1.500	0.370	0.500	0.218	0.015	
DPW 475375/L	4.750	3.750	4.482	4.687	1.500	0.370	0.500	0.218	0.015	
DPW 500400/L	5.000	4.000	4.732	4.937	1.500	0.370	0.500	0.218	0.015	
DPW 525425/L	5.250	4.250	4.982	5.187	1.500	0.370	0.500	0.218	0.015	
DPW 550450/L	5.500	4.500	5.232	5.437	1.500	0.370	0.500	0.218	0.015	
DPW 600500/L	6.000	5.000	5.732	5.937	1.500	0.370	0.500	0.218	0.015	
DPW 650550/L	6.500	5.500	6.232	6.437	1.500	0.370	0.500	0.218	0.015	
DPW 700600/L	7.000	6.000	6.732	6.937	1.500	0.370	0.500	0.218	0.015	