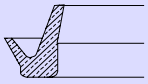
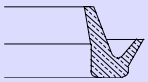


Single Acting Rod Wiper Seal

CSW CSWM

Imperial
Metric



Design

Claron Style CSW Rod wiper is designed to remove more tenacious mud and ice from a reciprocating rod during the negative stroke. It is classified as a heavy duty scraper. The scraper is precision moulded in Nylon (PA) with a filter of MOS_2 to improve the friction and wear characteristics of the material. The materials high modulus (stiffness) allow it to aggressively scrape larger debris from the rod. the wiper is designed with an outside sealing lip providing positive sealing on the housing thus preventing dirt and moisture from entering the system around the outside of the wiper.

Operating Conditions

Temp. range	-40°C to 100°C
Max Linear Speed m/sec	5

Optimum service conditions are affected by temperature, speed and surface finish.
Refer to Appendix 1 for further information.

Continuous operating temp. in various fluids

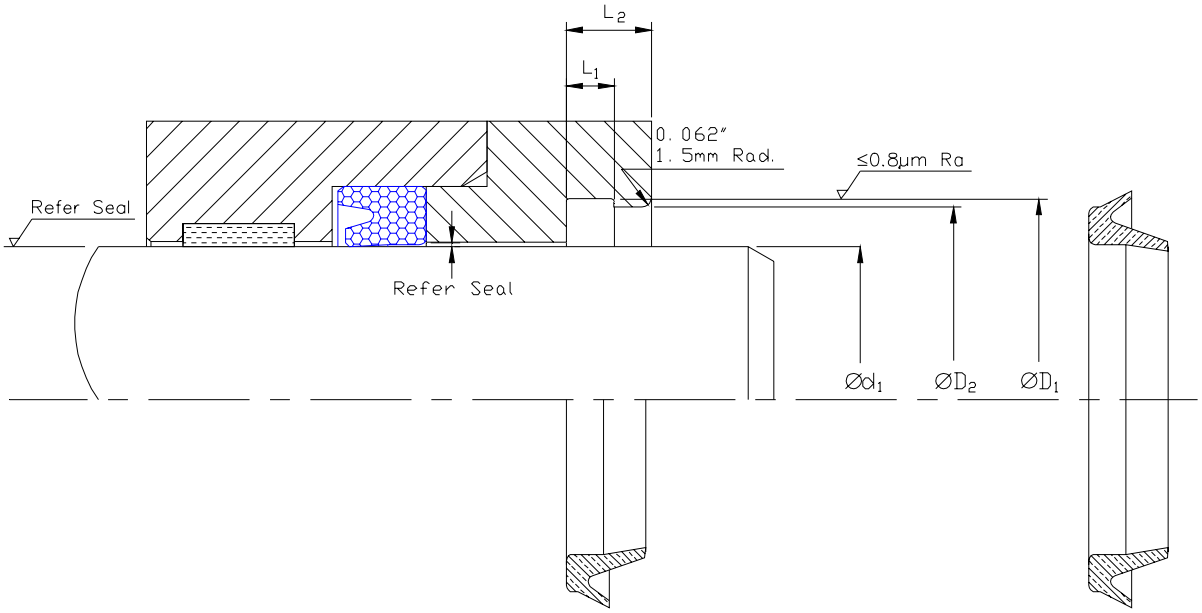
PA Nylon		
DIN	**Hydraulic Fluid Description**	**°C**
H	Mineral oil without additives	120
H-L	Mineral Fluid with anti corrosion and anti ageing additives	120
H-LP	Mineral oil as HL plus additives reducing wear, raising load	120
H-LPD	Mineral oil as H-LP but with detergents and dispersants	120
H-V	Mineral oil as H-LP plus improved viscosity temp.	120
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	80
HFD S	Chlorinated hydrocarbon based	80
HFD T	Mixtures of HFD R and HFD S	80
HEPG	Polyglycol based	100
HETG	Vegetable Oil based	60
HEES	Fully synthetic ester based	100

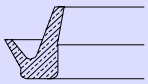
Housing

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

Styles CSW & CSWM are designed to snap fit into its housing. 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.

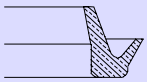




Single Acting Rod Wiper Seal

CSWM

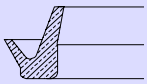
Metric



Nominal Dimensions & Machining Tolerances

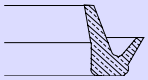
Claron Part Number	Refer Seal Selection $Ød_1$	+0.20 -0.00 $ØD_1$	+0.20 -0.00 $ØD_2$	+0.20 -0.00 L_1	Nominal L_2
CSWM 016	16	26	24.5	4.5	6.5
CSWM 018	18	28	26.5	4.5	6.5
CSWM 020	20	33	31.5	6.0	8.5
CSWM 022	22	35	33.5	6.0	8.5
CSWM 025	25	38	36.5	6.0	8.5
CSWM 028	28	41	39.5	6.0	8.5
CSWM 030	30	43	41.5	6.0	8.5
CSWM 032	32	45	43.5	6.0	8.5
CSWM 036	36	49	47.5	6.0	8.5
CSWM 040	40	53	51.5	6.0	8.5
CSWM 045	45	58	56.5	6.0	8.5
CSWM 050	50	63	61.5	6.0	8.5
CSWM 055	55	68	66.5	6.0	8.5
CSWM 056	56	69	67.5	6.0	8.5
CSWM 060	60	73	71.5	6.0	8.5
CSWM 063	63	76	74.5	6.0	8.5
CWSM 065	65	78	76.5	6.0	8.5
CSWM 070	70	83	81.5	6.0	8.5
CSWM 080	80	93	91.5	6.0	8.5
CSWM 090	90	103	101.5	6.0	8.5
CSWM 100	100	113	111.5	6.0	8.5

Single Acting Rod Wiper Seal



CSW

Imperial



Claron Part Number	Nominal Dimensions & Machining Tolerances				
	Refer Seal Selection $Ød_1$	+0.008 -0.000 $ØD_1$	+0.008 -0.000 $ØD_2$	+0.008 -0.000 L_1	Nominal L_2
CSW 050	0.500	0.875	0.812	0.172	0.250
CSW 062	0.625	1.000	0.938	0.172	0.250
CSW 075	0.750	1.250	1.187	0.234	0.345
CSW 087	0.875	1.375	1.312	0.234	0.345
CSW 100	1.000	1.500	1.437	0.234	0.345
CSW 112	1.125	1.625	1.562	0.234	0.345
CSW 125	1.250	1.750	1.687	0.234	0.345
CSW 137	1.375	1.875	1.812	0.234	0.345
CSW 150	1.500	2.000	1.937	0.234	0.345
CSW 162	1.625	2.125	2.062	0.234	0.345
CSW 175	1.750	2.250	2.187	0.234	0.345
CSW 200	2.000	2.500	2.437	0.234	0.345
CSW 212	2.125	2.625	2.562	0.234	0.345
CSW 225	2.250	2.750	2.687	0.234	0.345
CSW 250	2.500	3.000	2.937	0.234	0.345
CSW 275	2.750	3.250	3.187	0.234	0.345
CSW 300	3.000	3.500	3.437	0.234	0.345
CSW 325	3.250	3.750	3.687	0.234	0.345
CSW 350	3.500	4.000	3.937	0.234	0.345
CSW 375	3.750	4.250	4.187	0.234	0.345
CSW 400	4.000	4.500	4.375	0.234	0.345