

**Category**

- Seal, Double Acting Piston

**Construction**

- Central rubber and fabric seal component with two L shaped acetal wear rings

**Housing**

- Stepped groove in two piece piston

**Duty**

- Heavy

**Features**

- Robust trouble free design
- Rubber and fabric construction is tolerant of contamination
- Wear rings prevent any metal on metal contact and improve extrusion resistance
- Consists of a Type-56 seal with the addition of two wear rings

**Comments**

- The original Hallprene fluid seal, often copied, never equalled
- A well proven, trouble free, heavy duty piston seal suitable for new applications where the need for a two piece piston is considered to be acceptable

**Manufacturer**

- Hallite

**Size Range**

- Metric and imperial

**Metric Specifications**

<b>Operating Conditions</b>	Maximum Speed:	0.5 m/sec
	Temperature Range:	-30°C ~ 100°C
	Maximum Pressure:	700 bar

<b>Surface Finish</b>	Dynamic Sealing Face:	0.1 ~ 0.4 µmRa
	Static Sealing Face:	1.6 µmRa max
	Other Faces:	3.2 µmRa max

**Chamfers**

Groove Section, C (mm)	5.0	7.5	10.0	12.5	15.0
Min Chamfer, Z (mm)	2.5	4.0	5.0	6.5	7.5
Min Chamfer, Y (mm)	1.0	1.0	1.0	1.5	1.5

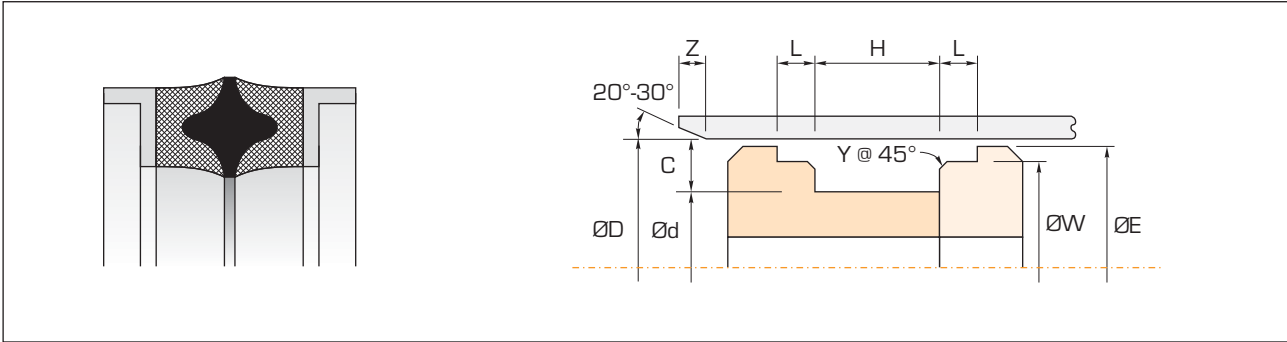
**Imperial Specifications**

<b>Operating Conditions</b>	Maximum Speed:	1.5 ft/sec
	Temperature Range:	-22°F ~ 212°F
	Maximum Pressure:	10 000 psi

<b>Surface Finish</b>	Dynamic Sealing Face:	4 ~ 16 µinCLA
	Static Sealing Face:	63 µinCLA max
	Other Faces:	125 µinCLA max

**Chamfers**

Groove Section, C (in)	0.187	0.250	0.312	0.375	0.500	0.625
Min Chamfer, Z (in)	0.093	0.125	0.156	0.187	0.217	0.250
Min Chamfer, Y (in)	0.032	0.032	0.032	0.062	0.062	0.062

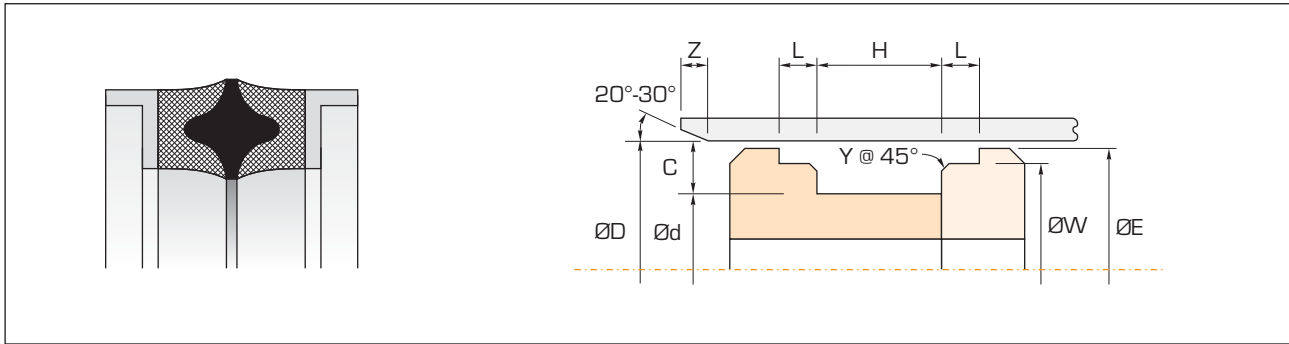


## Metric Sizes

Part No.	ØD	Ød	H	ØW	L	ØE
<i>Tolerances</i>	<i>H11</i>	<i>js11</i>	<i>+0.25-0</i>	<i>h9</i>	<i>+0-0.15</i>	<i>js11</i>
R2028DW	25.00	15.00	15.50	21.85	5.00	24.00
R6161DW	32.00	17.00	24.00	26.85	6.00	31.00
R2033DW	32.00	22.00	15.50	28.85	5.00	31.00
R4728DW	40.00	25.00	24.00	34.85	6.00	39.00
R4740DW	45.00	26.00	31.00	38.85	6.50	44.00
R8148DW	50.00	34.00	18.00	45.54	6.45	48.50
R4746DW	50.00	35.00	24.00	44.85	6.00	48.50
R4750DW	55.00	40.00	24.00	49.85	6.00	53.50
R2820DW	60.00	40.00	31.00	53.85	7.00	58.50
R21803DW	60.00	44.00	18.00	55.45	6.45	58.50
R6467DW	63.00	43.00	31.00	56.85	7.00	61.50
R2052DW	63.00	48.00	24.00	57.85	6.00	61.50
R3157DW	65.00	50.00	18.00	60.54	6.45	63.50
R3838DW	65.00	50.00	24.00	59.85	6.00	63.50
R2946DW	70.00	50.00	31.00	63.85	7.00	68.00
R8186DW	75.00	55.00	31.00	68.85	7.00	73.00
R1853DW	80.00	60.00	22.60	74.85	6.00	78.00
R2949DW	80.00	60.00	31.00	73.85	7.00	78.00
R3145DW	85.00	65.00	22.00	79.16	6.45	83.00
R3886DW	85.00	65.00	31.00	78.85	7.00	83.00
R2960DW	90.00	70.00	31.00	83.85	7.00	88.00
R4127DW	95.00	75.00	31.00	88.85	7.00	93.00
R349DW	100.00	75.00	22.00	93.24	6.45	98.00
R8916DW	100.00	75.00	26.00	93.85	9.50	98.00
R2951DW	100.00	80.00	31.00	93.85	7.00	98.00
R4131DW	105.00	80.00	38.00	98.85	9.50	103.00
R11882DW	110.00	85.00	22.00	103.50	6.45	108.00
R8206DW	110.00	85.00	25.00	103.50	6.45	108.00
R7124DW	110.00	90.00	31.00	103.50	7.00	108.00
R7964DW	115.00	95.00	31.00	108.85	7.00	113.00
R2961DW	120.00	100.00	31.00	113.85	7.00	118.00
R10074DW	125.00	100.00	25.25	118.50	6.45	123.00
R4186DW	125.00	100.00	38.00	118.85	9.50	123.00
R2443DW	130.00	104.00	38.00	123.85	9.50	128.00

## Metric Sizes (cont'd)

Part No.	ØD	Ød	H	ØW	L	ØE
R448DW	130.00	105.00	25.00	123.50	6.45	128.00
R3043DW	135.00	110.00	38.00	128.35	9.50	133.00
R10084DW	140.00	115.00	25.00	133.50	6.45	138.00
R2505DW	140.00	120.00	31.00	133.85	7.00	138.00
R6401DW	145.00	125.00	31.00	138.85	7.00	143.00
R12895DW	150.00	120.00	44.00	143.85	9.50	148.00
R10080DW	150.00	125.00	25.00	143.50	6.45	148.00
R10082DW	160.00	130.00	25.00	153.50	6.45	158.00
R804DW	160.00	135.00	38.00	153.85	9.50	158.00
R3046DW	160.00	140.00	31.00	153.85	7.00	158.00
R12222DW	170.00	140.00	25.00	162.54	6.45	168.00
R3033DW	170.00	150.00	31.00	163.85	7.00	168.00
R6798DW	180.00	150.00	35.00	173.00	6.45	178.00
R12831DW	180.00	160.00	31.00	173.85	7.00	178.00
R8384DW	190.00	160.00	44.00	183.85	9.50	188.00
R468DW	200.00	170.00	35.20	193.13	6.45	198.00
R871DW	200.00	170.00	44.00	193.85	12.00	198.00
R8388DW	200.00	175.00	38.00	193.85	9.50	198.00
R11984DW	210.00	180.00	31.70	203.13	6.45	208.00
R10564DW	220.00	200.00	31.00	213.85	7.00	218.00
R10563DW	250.00	220.00	44.00	243.85	12.00	248.00
R10555DW	280.00	250.00	44.00	273.85	12.00	278.00



### Imperial Sizes

Part No.	ØD	Ød	H	ØW	L	ØE
<i>Tolerances</i>	<i>H11</i>	<i>js11</i>	<i>+0.010-0</i>	<i>h9</i>	<i>+0-0.005</i>	<i>js11</i>
R13793SDW	0.750	0.375	0.619	0.618	0.187	0.718
R7238DW	1.000	0.500	0.650	0.864	0.187	0.960
R12476BSDW	1.000	0.625	0.619	0.868	0.187	0.968
R8550SDW	1.125	0.625	0.775	0.990	0.250	1.093
R4037SDW	1.250	0.750	0.775	1.118	0.250	1.218
R4013BDW	1.375	0.875	0.650	1.234	0.254	1.343
R4013BSDW	1.375	0.875	0.775	1.241	0.250	1.343
R14411-1DW	1.500	1.000	0.650	1.362	0.188	1.460
R14411DW	1.500	1.000	0.650	1.362	0.254	1.460
R4224SDW	1.500	1.000	0.775	1.371	0.250	1.468
R5406SDW	1.625	1.000	0.962	1.428	0.250	1.562
R7782DW	1.750	1.125	0.775	1.572	0.254	1.710
R7782SDW	1.750	1.125	0.962	1.555	0.250	1.687
R4041SDW	1.875	1.250	0.962	1.822	0.254	1.812
R6391DW	2.000	1.375	0.775	1.822	0.254	1.962
R7784SDW	2.000	1.375	0.962	1.805	0.250	1.937
R9676-2SDW	2.125	1.500	0.962	1.928	0.250	2.062
R6404DW	2.250	1.625	0.775	2.071	0.254	2.211
R14326SDW	2.250	1.625	0.962	2.055	0.250	2.187
R8908DW	2.375	1.750	0.775	2.180	0.250	2.312
R9398SDW	2.375	1.750	0.962	2.180	0.250	2.312
R8672DW	2.500	1.875	0.775	2.321	0.254	2.460
R8672SDW	2.500	1.875	0.962	2.305	0.250	2.437
R13710SDW	2.625	2.000	0.962	2.428	0.250	2.562
R7832DW	2.750	2.000	0.962	2.524	0.254	2.710
R13691SDW	2.750	2.000	1.212	2.485	0.250	2.687
R7796SDW	2.875	2.125	1.212	2.610	0.250	2.812
R10984DW	3.000	2.250	0.962	2.774	0.254	2.960
R10984SDW	3.000	2.250	1.212	2.735	0.250	2.937
R10248SDW	3.125	2.375	1.212	2.858	0.250	3.062
R11541DW	3.250	2.500	0.962	3.024	0.254	3.210
R7824SDW	3.250	2.500	1.212	2.985	0.250	3.187
R4378DW	3.500	2.750	0.962	3.273	0.254	3.460
R21996DW	3.375	2.625	1.025	3.110	0.250	3.312

### Imperial Sizes (cont'd)

Part No.	ØD	Ød	H	ØW	L	ØE
R4378SDW	3.500	2.750	1.212	3.235	0.250	3.437
R14745DW	3.625	2.875	1.212	3.360	0.250	3.562
R4105SDW	3.750	3.000	1.212	3.485	0.250	3.687
R2958DW	3.875	3.125	1.212	3.610	0.250	3.812
R14077-1DW	4.000	3.250	0.962	3.772	0.254	3.958
R14077SDW	4.000	3.250	1.212	3.735	0.250	3.937
R11288-1DW	4.250	3.500	0.962	4.022	0.254	4.210
R11288SDW	4.250	3.500	1.212	3.985	0.250	4.187
R4488BDW	4.500	3.500	1.275	4.231	0.254	4.231
R4488BSDW	4.500	3.500	1.525	4.234	0.375	4.437
R382DW	4.750	3.750	1.275	4.483	0.254	4.700
R10070SDW	4.750	3.750	1.525	4.485	0.375	4.687
R4430ADW	5.000	4.000	1.275	4.730	0.254	4.956
R4430ASDW	5.000	4.000	1.525	4.735	0.375	4.937
R8922ASDW	5.250	4.250	1.525	4.980	0.375	5.187
R12165DW	5.500	4.500	1.025	5.235	0.238	5.437
R1332ADW	5.500	4.500	1.275	5.235	0.254	5.456
R12171DW	5.500	4.500	1.525	5.235	0.500	5.437
R1332ASDW	5.500	4.500	1.525	5.236	0.375	5.437
R13669SDW	5.750	4.750	1.525	5.484	0.375	5.687
R5579DW	6.000	5.000	1.275	5.728	0.254	5.954
R13670SDW	6.000	5.000	1.525	5.736	0.375	5.937
R21200DW	6.000	5.000	1.775	5.676	0.500	5.937
R833ASDW	6.250	5.250	1.525	5.984	0.375	6.187
R11641DW	6.500	5.500	1.275	6.227	0.254	6.454
R11641SDW	6.500	5.500	1.525	6.236	0.375	6.437
R3623DW	6.500	5.750	1.212	6.235	0.375	6.437
R12861SDW	6.750	5.750	1.525	6.484	0.375	6.687
R11888ASDW	7.000	6.000	1.525	6.736	0.375	6.937
R12552ASDW	7.500	6.250	1.900	7.240	0.375	7.437
R11927ASDW	7.750	6.500	1.900	7.490	0.375	7.687
R2243DW	8.000	7.000	1.275	7.740	0.375	7.937
R12666SDW	9.000	7.750	1.900	8.740	0.375	8.937
R6976DW	10.000	9.000	1.275	9.740	0.375	9.937