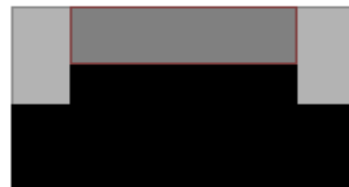


Design

AB Seals RP is a compact double acting piston seal assembly designed for one piece pistons and is suitable for low to high pressure, medium to heavy duty applications. The assembly comprises as standard a self lubricating wear resistant bronze filled or glass / MoS2 filled PTFE cap ring, which is loaded by a NBR energizer. Thermoplastic split anti-extrusion rings support the seal on both sides and prevent contamination of the energizer and cap ring. AB Seals RP piston seal is designed to be used in a variety of equipment and is particularly suited to use in earthmoving and other off-highway equipment. .



For information about other material options available, please contact your local AB Seals office.

Features

- Heavy duty
- High pressure capability
- PTFE cap ring
- Compact design
- Low friction
- Long life
- Range of material options to extend service temperature

Materials

- Main Seal -PTFE -PTB7
- Energizer NBR8
- Back up ring- DEL

Applications

- Mobile hydraulics
- Agriculture equipment
- Machine tools
- Injection cylinder
- Hydraulic presses
- Lift platforms

Technical details

Operating Conc
 Maximum speed
 Temperature R:
 Maximum Press:

Metric

1.5m/sec
 -40
 500 bar

inch

4.5ft/sec
 -40
 7500 p.s.i

Maximum extrusion gap

Figures show the maximum permissible gap all on one side using minimum rod $\varnothing$ and maximum clearance $\varnothing$. refer to housing design section.

Pressure bar
 Maximum Gap mm
 Pressure p.s.i.
 Maximum Gap in

160	250	400	500
1	0.8	0.6	0.5
2,400	3750	6000	7,500
0	0.03	0.024	0

Surface roughness

Dynamic Sealing Face $\varnothing$ D1
 static sealing face $\varnothing$ d1
 static housing faces L1

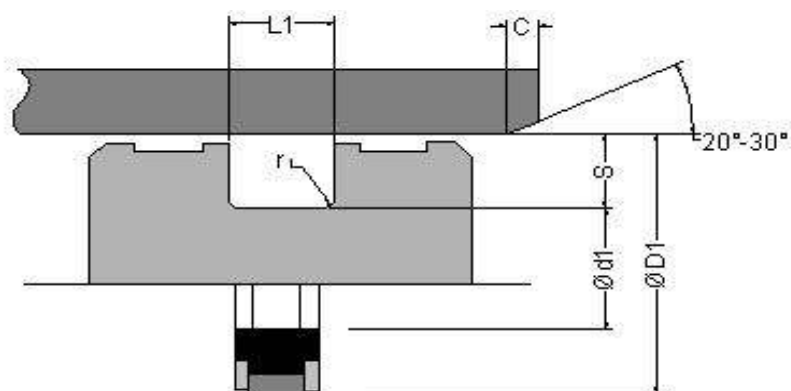
umRa	umRt	Uin CLA	UIN RMS
0.1<> 0.4	4 max	4<>16	5<>18
1.6 max	10 max	63 max	70 max
3.2 max	16 max	125 max	140 max

chamafers & Radll

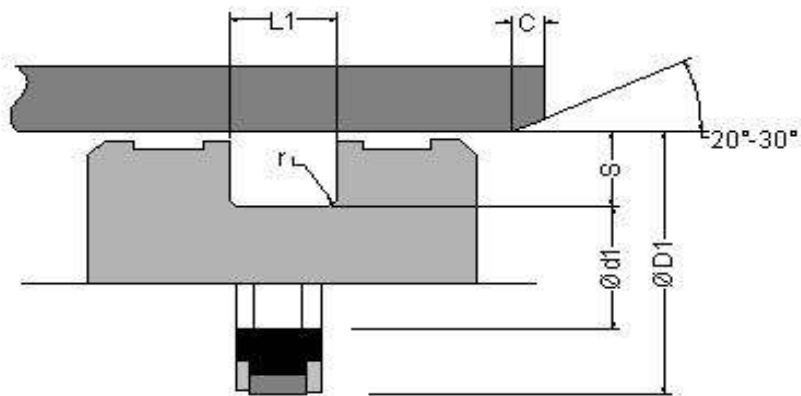
Grove section < 5 mm	7	7.5	11.5	14
Min Chamfer C mm	4	5	7	8
Max Fillet rad r1 mm	0.8	0.8	0.8	0.8
Grove section < 5 in	0.187	0.24	0.365	0.47
Min Chamfer C in	0.16	0.2	0.25	0.28
Max Fillet rad r1 in	0.016	0.016	0.032	0.032

Tolerance

mm	ØD1	Ød1	L1
	H9	0.2	0.2
in	H9	see below	0.01
ØD1 in	< 3,000	< 4,500	> 4,500
Ød1 Tol	0.002	0.003	0.004



ØD1	TOL	Ød1	L1	PART NO.	ØD1	TOL	Ød1	L1	PART NO.
H9	-0.2	0.2	0.2		H9	-0.2	0.2	0.2	
50	0.06 0	36	9	RP-50x36x9	95	0.09 0	80	11	RP-95x80x11
60	0.07 0	46	9	RP-60x46x9	100	0.09 0	85	12.5	RP-100x85x12.5
63	0.07 0	48	11	RP-63x48x11	105	0.09 0	90	12.5	RP-105x90x12.5
65	0.07 0	50	11	RP-65x50x11	110	0.09 0	95	12.5	RP-110x95x12.5
70	0.07 0	55	11	RP-70x55x11	115	0.09 0	100	12.5	RP-115x100x12.5
75	0.07 0	60	11	RP-75x60x11	120	0.09 0	105	12.5	RP-120x105x12.5
80	0.07 0	65	11	RP-80x65x11	125	0.1 0	102	16	RP-125x102x16
85	0.09 0	70	11	RP-85x70x11	130	0.1 0	107	16	RP-130x107x16
90	0.09 0	75	11	RP-90x75x11	135	0.1 0	112	16	RP-135x112x16



ØD1 H9	TOL -0.2	Ød1	L1 0.2	PART NO.	ØD1 H9	TOL -0.2	Ød1	L1 0.2	PART NO.
140	0.1 0	117	16	RP- 140x117x16	225	0.12 0	202	16	RP- 225x202x16
145	0.1 0	122	16	RP- 145x122x16	230	0.12 0	207	16	RP- 230x207x16
150	0.1 0	127	16	RP- 150x127x16	240	0.12 0	217	16	RP- 240x217x16
160	0.1 0	137	16	RP- 160x137x16	250	0.12 0	222	17.5	RP- 250x222x17.5
165	0.1 0	142	16	RP- 165x142x16	260	0.13 0	232	17.5	RP- 260x232x17.5
170	0.1 0	147	16	RP- 170x147x16	270	0.13 0	242	17.5	RP- 270x242x17.5
175	0.1 0	152	16	RP- 175x152x16	280	0.13 0	252	17.5	RP- 280x252x17.5
180	0.1 0	157	16	RP- 180x157x16	290	0.13 0	262	17.5	RP- 290x262x17.5
185	0.12 0	162	16	RP- 185x162x16	300	0.13 0	272	17.5	RP- 300x272x17.5
190	0.12 0	167	16	RP- 190x167x16	320	0.13 0	292	17.5	RP- 320x292x17.5
200	0.12 0	177	16	RP- 200x177x16	330	0.13 0	302	17.5	RP- 330x302x17.5
210	0.12 0	187	16	RP- 210x187x16	350	0.14 0	322	17.5	RP- 350x322x17.5
215	0.12 0	192	16	RP- 215x192x16	400	0.14 0	372	17.5	RP- 400x372x17.5
220	0.12 0	197	16	RP- 220x197x16					