

Design

The AB Seals BU is a buffer seal developed to work in conjunction with high performance rod seals. It is also interchangeable with common PTFE buffer seal housings. The seal, which is manufactured in polyurethane, is designed to provide a valve action to prevent excessive pressure build up in the cavity between the buffer seal and the rod seal. A polyacetal anti-extrusion ring is fitted to provide maximum extrusion resistance against shock pressure loads.



NB : Some Part numbers have housing sizes to meet ISO 7425-2

Features

- Prevents inter-seal pressure build up
- Interchangeable with common PTFE buffer seal housings
- Easy installation
- Long life

Materials

- Main seal-PUAB
- Energizer- DEL/PT

Applications

- Mobile hydraulics
- Agriculture equipment
- Machine tools
- Injection cylinder lift plateforms

Technical details

Operating Conditic

Maximum speed

Temperature Rang

Maximum Pressur

Metric

1.0m/sce

-45

700 bar

inch

1.7 ft/ sce

-50

10,000 p.s.i

maximum extrutions gap

figures show the maximum premissible gap all on side
using minimum rod $\varnothing$ and maximum clearance $\varnothing$.
Refer to housing design section .

Pressure bar	160	250	400	500	700
maximum gap (5<=6) mm	0.6	0.5	0.4	0.3	0.2
maximum gap (5>=6) mm	1	0.8	0.6	0.4	0.25
pressure p.s.i.	2400	3750	6000	7500	10,000
maximum gap (5<=0.250) IN	0.024	0.02	0.016	0.012	0.008
maximum gap (5>=0.250) IN	0.04	0.032	0.024	0.016	0.01

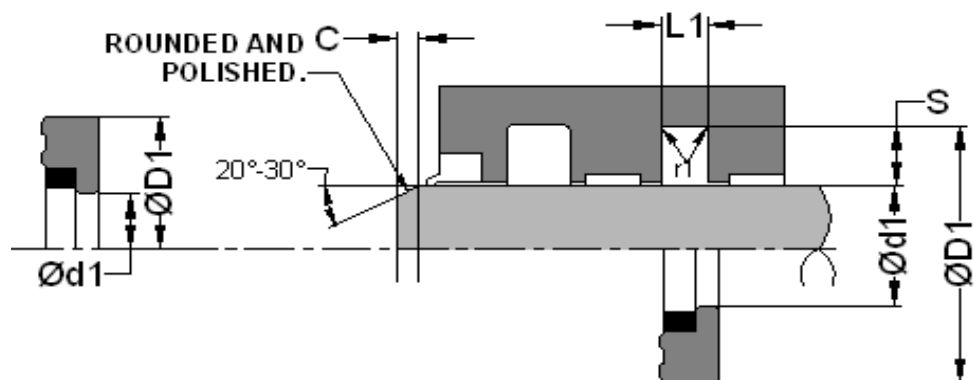
Surface roughness

	umRa	umrt	Uin CLA	UIN RMS
Dynamic Sealing Face-rod $\varnothing$ d1	0.1<> 0.4	4 max	4<>16	5<>18
static sealing face $\varnothing$ D1	1.6 max	10 max	63 max	70 max
static housing faces L1	3.2 max	16 max	125 max	140 max

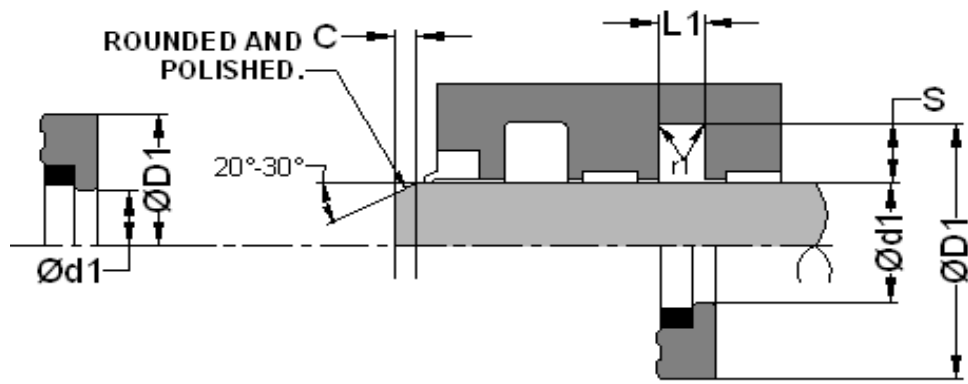
chamafers & Radii

Grove section < s mm	3.75	5.5	7.75	10.5
Min chamfer C mm	3	3.5	5	7.5
max Fillet Rad r1 mm	0.5	0.7	1.2	1.6
Grove section < 5 IN	0.15	0.215	0.306	0.413
Min chamfer C IN	0.125	0.14	0.2	0.3
max Fillet Rad r1 IN	0.02	0.028	0.047	0.062

Tolerance	Ø d1	ØD1	L1
Rod	f9	H 11	0.25
Piston	f9	js 11	0.01

**METRIC:-**

Ød1	TOL f9	ØD1	TOL H10	L1 0.25	PART NO.	Ød1	TOL f9	ØD1	TOL H10	L1 0.25	PART NO.
40	-0.025 -0.087	55.5	0.12 0	6.3	BU- 40x55.5x6.3	85	-0.036 -0.123	100.5	0.14 0	6.3	BU- 85x100.5x6.3
45	-0.025 -0.087	56	0.12 0	4.2	BU- 45x56x4.2	90	-0.036 -0.123	105.5	0.14 0	6.3	BU- 90x105.5x6.3
45	-0.025 -0.087	60.5	0.12 0	6.3	BU- 45x60.5x6.3	95	-0.036 -0.123	110.5	0.14 0	6.3	BU- 95x110.5x6.3
50	-0.025 -0.087	65.5	0.12 0	6.3	BU- 50x65.5x6.3	100	-0.036 -0.123	115.5	0.14 0	6.3	BU- 100x115.5x6.3
55	-0.03 -0.104	70.5	0.12 0	6.3	BU- 55x70.5x6.3	110	-0.036 -0.123	125.5	0.16 0	6.3	BU- 110x125.5x6.3
60	-0.03 -0.104	75.5	0.12 0	6.3	BU- 60x75.5x6.3	124	-0.036 -0.123	139.5	0.16 0	6.3	BU- 124x139.5x6.3
63	-0.03 -0.104	78.5	0.12 0	6.3	BU- 63x78.5x6.3	125	-0.036 -0.123	140.5	0.16 0	6.3	BU- 125x140.5x6.3
65	-0.03 -0.104	80.5	0.14 0	6.3	BU- 65x80.5x6.3	130	-0.036 -0.123	145.5	0.16 0	6.3	BU- 130x145.5x6.3
70	-0.03 -0.104	85.5	0.14 0	6.3	BU- 70x85.5x6.3	135	-0.036 -0.123	150.5	0.16 0	6.3	BU- 135x150.5x6.3
75	-0.03 -0.104	90.5	0.14 0	6.3	BU- 75x90.5x6.3	140	-0.043 -0.143	155.5	0.16 0	6.3	BU- 140x155.5x6.3
80	-0.03 -0.104	95.5	0.14 0	6.3	BU- 80x95.5x6.3	150	-0.043 -0.143	165.5	0.16 0	6.3	BU- 150x165.5x6.3



Ød1	TOL f9	ØD1	TOL H10	L1 0.25	PART NO.	Ød1	TOL f9	ØD1	TOL H10	L1 0.25	PART NO.
150	-0.043 -0.143	170	0.16 0	10	BU- 150x170x10	170	-0.043 -0.143	185.5	0.185 0	6.3	BU- 170x185.5x6.3
155	-0.043 -0.143	170.5	0.16 0	6.3	BU- 155x170.5x6.3	180	-0.05 -0.165	195.5	0.185 0	6.3	BU- 180x195.5x6.3
160	-0.043 -0.143	175.5	0.16 0	6.3	BU- 160x175.5x6.3	215	-0.05 -0.165	236	0.185 0	8.1	BU- 215x236x8.1