



Multi Spring Seal (MSO 30B Series & MSW 40B Series)

MSO 30B



MSW 40B



Multi Spring Seal MSO 30B Series & MSW 40B Series are multiple spring units developed for universal high pressure application. Their compact design makes them suitable for use in all types of Centrifugal pumps. As all

parts are interchangeable, so Series MSO 30B can be converted to Series MSW 40B by changing only the seal ring & the elastomer.

Applications : Petrochemicals, Petroleum Refineries, General Chemicals & Light Hydrocarbons.

Seal Components :

Seal Face :

Carbon / Lecrolloy
Carbon / Ceramic
Carbon / Silicon Carbide
Silicon Carbide / Silicon Carbide
Tungsten Carbide / Tungsten Carbide

Secondary Seal :

MSO 30B : Elastomers ('O' Ring)

MSW 40B : PTFE, GFT (Wedge)

Metal Parts : SS 304, SS 316, Hastelloy-C, Monel, Alloy-20

Seal Characteristics :

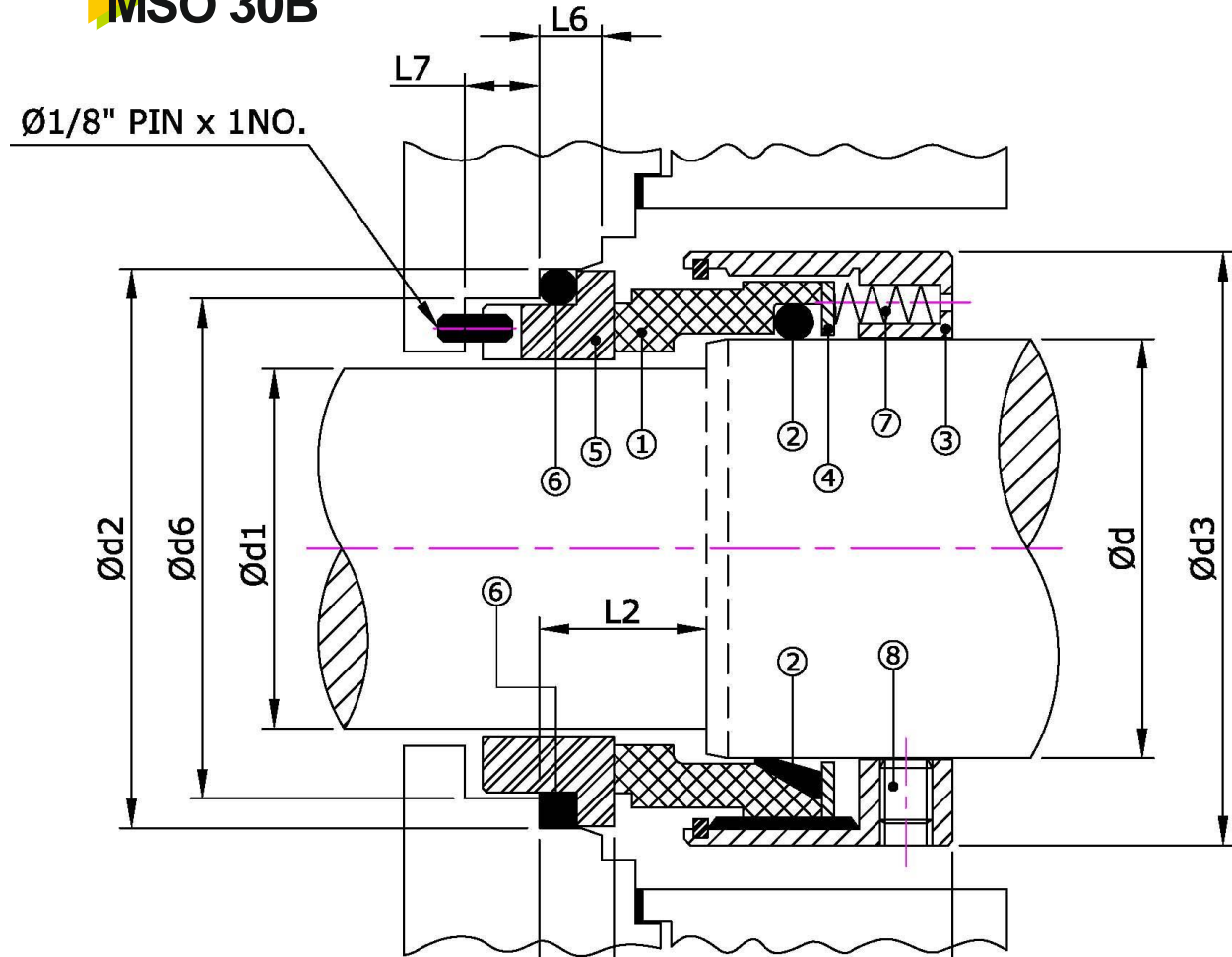
- Single Acting
- Balanced
- Inside Mounted
- Independent of Direction of Rotation

Operating Parameters :

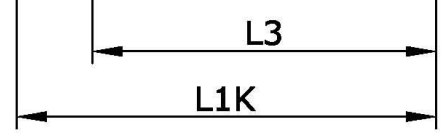
Shaft Dia : 14 to 105 mm / 0.875 to 4.000 Inch
Pressure : 35 Bars (max)
Temperature : -60 to +180°C
Velocity : Up to 20 m/sec



MSO 30B



MSW 40B



ITEM	DESCRIPTION
1	SEAL RING
2	O RING / WEDGE
3	RETAINER
4	THRUST RING
5	MATING RING
6	O RING / PTFE PACKING
7	SPRING
8	SET SREW



MSO 30B & MSW 40B DIMENSIONS IN MILLIMETER

SEAL SIZE	+0.00 d -0.05	+0.00 d1 -0.05	+0.00 d2 -0.05	d3	+0.10 d6 -0.00	L2	L6	L7	L3	L1K
20	14	27.0	35.0	23.0	7.5	5.5	8.5	28.0	33.5	
22	16	33.0	37.0	27.0	7.5	7.0	9.0	30.0	37.0	
24	18	35.0	39.0	29.0	8.0	7.0	9.0	34.0	41.0	
26	20	37.0	41.0	31.0	8.0	7.0	9.0	34.0	41.0	
28	22	39.0	43.0	33.0	9.5	7.0	9.0	35.5	42.5	
30	24	40.0	45.0	34.0	9.5	7.0	9.0	35.5	42.5	
33	27	43.0	48.0	37.0	9.5	7.0	9.0	35.5	42.5	
35	28	45.0	50.0	39.0	9.5	7.0	9.0	35.5	42.5	
38	32	48.0	55.0	42.0	9.5	7.0	9.0	35.5	42.5	
40	34	50.0	57.0	44.0	11.0	7.0	9.0	38.0	45.0	
43	37	56.0	60.0	49.0	11.0	8.0	9.0	38.0	46.0	
45	39	58.0	62.0	51.0	11.0	8.0	9.0	38.0	46.0	
48	42	61.0	65.0	54.0	11.0	8.0	9.0	38.0	46.0	
50	44	63.0	67.0	56.0	11.0	8.0	9.0	38.0	46.0	
53	47	66.0	70.0	59.0	12.0	8.0	9.0	40.0	48.0	
55	49	70.0	72.0	62.0	12.0	8.5	9.0	40.0	48.5	
58	52	73.0	79.0	65.0	12.0	8.5	9.0	40.0	48.5	
60	54	75.0	81.0	67.0	12.0	8.5	9.0	40.0	48.5	
63	57	78.0	84.0	70.0	12.0	8.5	9.0	43.0	51.5	
65	59	80.0	86.0	72.0	12.0	8.5	9.0	43.0	51.5	
68	62	83.0	89.0	75.0	12.0	8.5	9.0	43.0	51.5	
70	64	85.0	91.0	77.0	12.0	8.5	9.0	43.0	51.5	
75	69	92.0	99.0	83.0	12.5	9.5	9.0	45.5	55.0	
80	74	97.0	104.0	88.0	12.5	9.5	9.0	45.5	55.0	
85	79	105.0	109.0	95.0	12.5	10.0	9.0	48.5	58.5	
90	84	110.0	114.0	100.0	12.5	10.0	9.0	48.5	58.5	
95	89	115.0	119.0	105.0	12.5	10.0	9.0	48.5	58.5	
100	94	120.0	124.0	110.0	12.5	10.0	9.0	50.5	60.5	
105	99	125.0	129.0	115.0	12.5	10.0	9.0	50.5	60.5	



MSO 30B & MSW 40B DIMENSIONS IN INCH

SEAL SIZE										
+0.00 d -0.05		+0.00 d1 -0.05	+0.00 d2 -0.05	d3	+0.10 d6 -0.00	L2	L6	L7	L3	L1K
Inch	mm									
0.875	22.220	15.880	37.95	36.50	32.00	7.50	7.00	8.50	30.0	37.0
1.000	25.400	19.050	41.15	38.80	35.20	8.00	7.00	8.50	34.0	41.0
1.125	28.580	22.220	44.32	43.50	38.30	9.50	7.00	8.50	35.5	42.5
1.250	31.750	25.400	47.50	46.80	41.60	9.50	7.00	8.50	35.5	42.5
1.375	34.920	28.580	50.67	50.00	44.70	9.50	7.00	9.00	35.5	42.5
1.500	38.100	31.750	53.85	53.50	47.90	9.50	7.00	9.00	35.5	42.5
1.625	41.280	34.920	60.20	57.00	54.30	11.00	7.00	9.00	38.0	45.0
1.750	44.450	38.100	63.35	60.00	57.50	11.00	7.00	9.0	38.0	45.0
1.875	47.620	41.280	66.55	63.50	60.60	11.00	7.00	9.00	38.0	45.0
2.000	50.800	44.450	69.72	66.70	63.80	11.00	7.00	9.00	38.0	45.0
2.125	53.980	47.620	76.05	69.50	70.10	12.00	7.00	9.00	40.0	47.0
2.250	57.150	50.800	79.24	72.50	73.30	12.00	7.00	9.00	40.0	47.0
2.375	60.320	53.980	82.42	76.50	76.50	12.00	7.00	9.00	40.0	47.0
2.500	63.500	57.150	85.60	79.50	79.65	12.00	7.00	9.00	43.0	50.0
2.625	66.680	60.320	85.60	82.50	79.65	12.00	7.00	9.00	43.0	50.0
2.750	69.850	63.500	88.77	85.70	82.80	12.00	7.00	9.00	43.0	50.0
2.875	73.020	66.680	91.66	93.50	85.70	12.50	9.50	9.00	45.5	55.0
3.000	76.200	69.850	94.84	96.70	88.90	12.50	9.50	9.00	45.5	55.0
3.125	79.380	73.020	98.00	101.50	92.10	12.50	9.50	9.00	47.0	56.5
3.250	82.550	76.200	101.16	104.70	95.30	12.50	9.50	9.00	47.0	56.5
3.375	85.720	79.380	104.36	108.00	98.40	12.50	9.50	9.00	48.5	58.0
3.500	88.900	82.550	107.54	111.00	101.60	12.50	9.50	9.00	48.5	58.0
3.625	92.080	85.720	110.70	114.00	104.75	12.50	9.50	9.00	48.5	58.0
3.750	95.250	88.900	113.88	118.50	108.00	12.50	9.50	9.00	50.5	60.0
3.875	98.420	92.080	117.56	120.50	111.10	12.50	9.50	9.00	50.5	60.0
4.000	101.600	95.250	120.22	124.70	114.30	12.50	9.50	9.00	50.5	60.0