



Multi Spring Out Of Product Seal (MSOP 70 Series)

MSOP 70



Multi Spring Out Of Product Seal MSOP 70 Series (Equivalent to Flowserve ROTT) is a single unbalanced multi spring seal which can be used as an inside or outside seal. This seal is specially developed for high levels of corrosion used in abrasive, corrosive and viscous fluids in chemical services. Heavy cross section of rotary units endure high level of corrosion. Open spring rotating compression unit helps in protecting solids from getting stuck around the seal faces and amends abstraction of seal face produced heat. All parts in this seal are interchangeable and easy to replace.

Applications : Food Industry, pulp & Paper Industry, Chemical Industry, Mining Industry, Water Treatment, Pharmaceuticals, Biofuels And Media Containing Slurry.

Seal Components :

Seal Face :

Carbon / Ceramic

Carbon / Silicon Carbide

Silicon Carbide / Silicon Carbide

Tungsten Carbide / Tungsten Carbide

Secondary Seal :

Elastomers, PTFE, TCV

Metal Parts : SS 304, SS 316, Hastelloy-C

Seal Characteristics :

- Single Acting
- Unbalanced
- Independent of Direction of Rotation

Operating Parameters :

Shaft Dia : 20 to 100 mm / 1.000 to 4.000 Inch

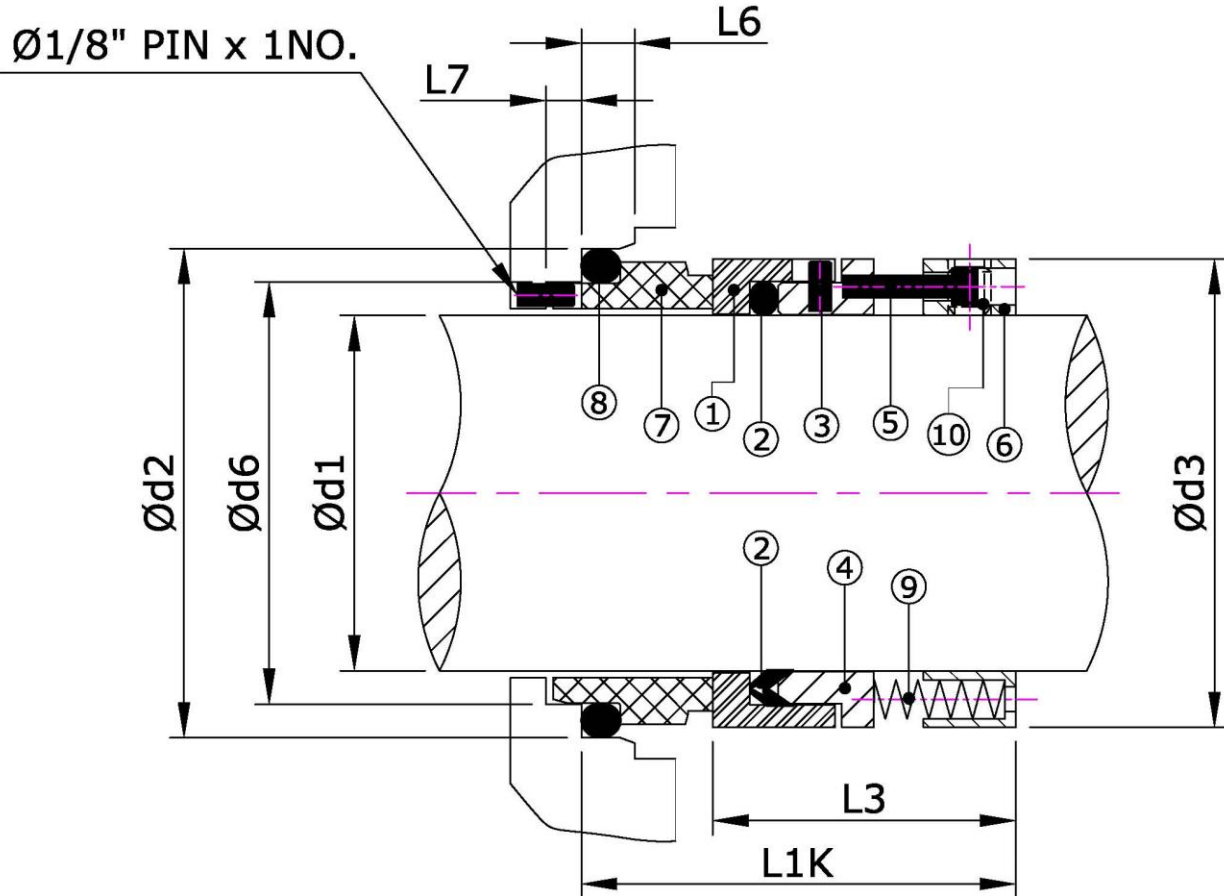
Pressure : 10 Bars (max)

Temperature : -20 to +180°C

Velocity : Up to 20 m/sec



MSOP 70



ITEM	DESCRIPTION
1	SEAL RING
2	"V" PACKING / O RING
3	ANTI-ROTATION PIN
4	ENERGIZER
5	DRIVE PIN
6	DRIVE COLLAR
7	MATING RING
8	O RING
9	SPRING
10	SET SCREW



MSOP 70 DIMENSIONS IN MILLIMETER

SEAL SIZE								
	+0.00 d1 -0.05	+0.00 d2 -0.05	d3	+0.10 d6 -0.00	L3	L6	L7	L1K
20		35.0	34.0	29.0	35.0	5.5	8.5	40.5
22		37.0	36.0	31.0	35.0	7.0	9.0	42.0
24		39.0	38.0	33.0	35.0	7.0	9.0	42.0
25		40.0	39.0	34.0	35.0	7.0	9.0	42.0
28		43.0	42.0	37.0	35.0	7.0	9.0	42.0
30		45.0	44.0	39.0	35.0	7.0	9.0	42.0
32		48.0	46.0	42.0	35.0	7.0	9.0	42.0
33		48.0	47.0	42.0	35.0	7.0	9.0	42.0
35		50.0	49.0	44.0	35.0	7.0	9.0	42.0
38		56.0	54.0	50.0	38.0	7.0	9.0	45.0
40		58.0	56.0	52.0	38.0	7.0	9.0	45.0
43		61.0	59.0	55.0	38.0	8.0	9.0	46.0
45		63.0	61.0	57.0	38.0	8.0	9.0	46.0
48		66.0	64.0	60.0	38.0	8.0	9.0	46.0
50		68.0	66.0	62.0	39.0	8.0	9.0	47.0
53		71.0	69.0	65.0	40.0	8.0	9.0	48.0
55		73.0	71.0	67.0	40.0	8.5	9.0	48.5
58		79.0	76.0	70.0	41.0	8.5	9.0	49.5
60		81.0	78.0	72.0	41.0	8.5	9.0	49.5
63		86.0	81.0	75.0	41.0	8.5	9.0	49.5
65		88.0	83.0	77.0	41.0	8.5	9.0	49.5
68		90.0	86.0	81.0	41.0	8.5	9.0	49.5
70		92.0	90.0	83.0	42.0	8.5	9.0	50.5
75		97.0	95.0	88.0	42.0	9.5	9.0	51.5
80		105.0	100.0	96.0	42.0	9.5	9.0	51.5
85		110.0	105.0	101.0	43.0	10.0	9.0	53.0
90		115.0	110.0	106.0	45.0	10.0	9.0	55.0
95		120.0	115.0	111.0	45.0	10.0	9.0	55.0
100		125.0	120.0	116.0	45.0	10.0	9.0	55.0



MSOP 70 DIMENIONS IN INCH

SEAL SIZE								
$\begin{matrix} +0.00 \\ \mathbf{d1} \\ -0.05 \end{matrix}$		$\begin{matrix} +0.00 \\ \mathbf{d2} \\ -0.05 \end{matrix}$	$\mathbf{d3}$	$\begin{matrix} +0.10 \\ \mathbf{d6} \\ -0.00 \end{matrix}$	$\mathbf{L3}$	$\mathbf{L6}$	$\mathbf{L7}$	$\mathbf{L1K}$
Inch	mm							
1.000	25.400	41.15	40.0	33.5	35.0	7.0	9.0	42.0
1.125	28.575	44.32	43.0	36.0	35.0	7.0	9.0	42.0
1.250	31.750	47.50	46.0	38.5	35.0	7.0	9.0	42.0
1.375	34.925	50.67	49.0	38.5	35.0	7.0	9.0	42.0
1.500	38.100	53.85	52.0	38.5	35.0	7.0	9.0	42.0
1.625	41.275	60.20	58.0	38.5	41.5	7.0	9.0	48.5
1.750	44.450	63.35	61.0	38.5	41.5	8.0	9.0	49.5
1.875	47.625	66.55	65.0	38.5	41.5	8.0	9.0	49.5
2.000	50.800	69.72	69.0	38.5	41.5	8.0	9.0	49.5
2.125	53.975	76.05	71.5	42.5	41.5	8.5	9.0	50.0
2.250	57.150	79.24	75.0	42.5	41.5	8.5	9.0	50.0
2.375	60.325	82.42	78.0	42.5	41.5	8.5	9.0	50.0
2.500	63.500	85.60	81.0	47.5	41.5	8.5	9.0	50.0
2.625	66.675	85.60	84.5	47.5	41.5	8.5	9.0	50.0
2.750	69.850	88.77	87.5	47.5	41.5	8.5	9.0	50.0
2.875	73.025	91.66	91.0	52.0	41.5	9.5	9.0	51.0
3.000	76.200	94.84	94.0	52.0	41.5	9.5	9.0	51.0
3.125	79.375	98.00	101.5	52.0	41.5	9.5	9.0	51.0
3.250	82.550	101.16	105.0	52.0	41.5	10.0	9.0	51.5
3.375	85.725	104.36	108.0	52.0	41.5	10.0	9.0	51.5
3.500	88.900	107.54	111.0	52.0	41.5	10.0	9.0	51.5
3.625	92.075	110.70	114.5	57.0	44.5	10.0	9.0	54.5
3.750	95.250	113.88	117.0	57.0	44.5	10.0	9.0	54.5
3.875	98.425	117.56	120.0	58.0	44.5	10.0	9.0	54.5
4.000	101.600	120.22	123.5	58.0	44.5	10.0	9.0	54.5