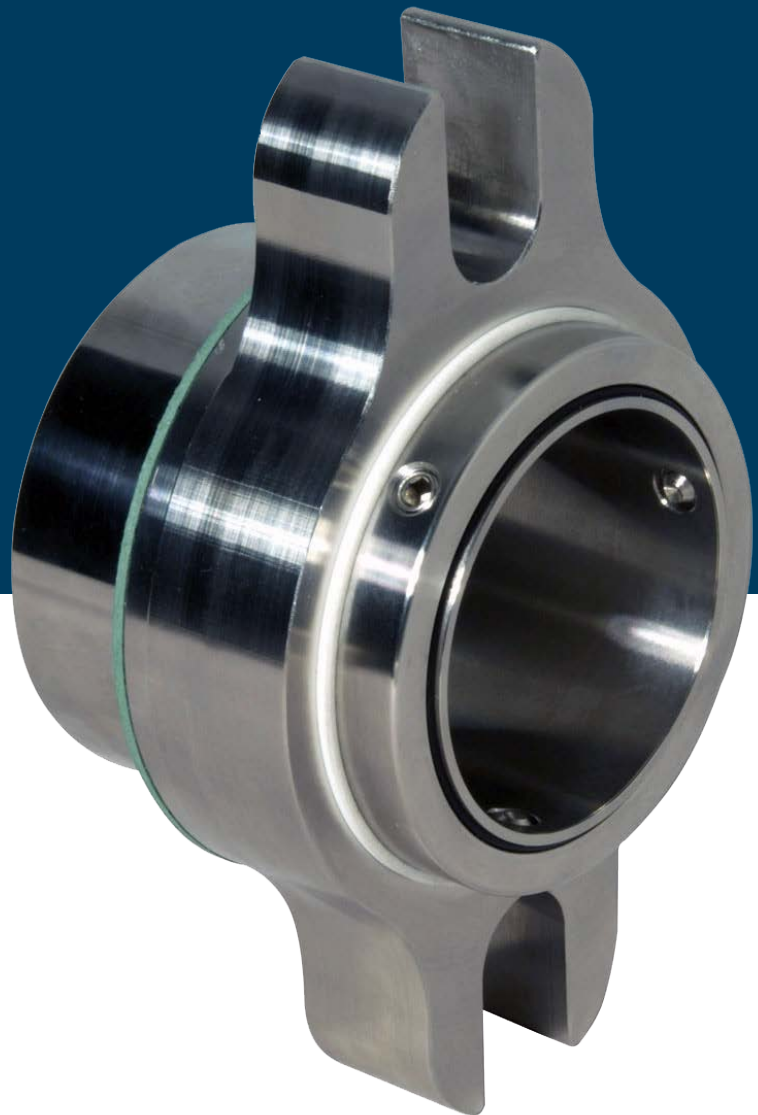




www.first4seals.com



Compact

**Environmental
Cartridge Mechanical Seals
MV™ Series**

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General industry requires sealing solutions that are reliable, simple and affordable. The MV™ seal uses proven F4S design and high quality parts, making it an ideal solution for upgrading packed, single spring or component seal pumps.

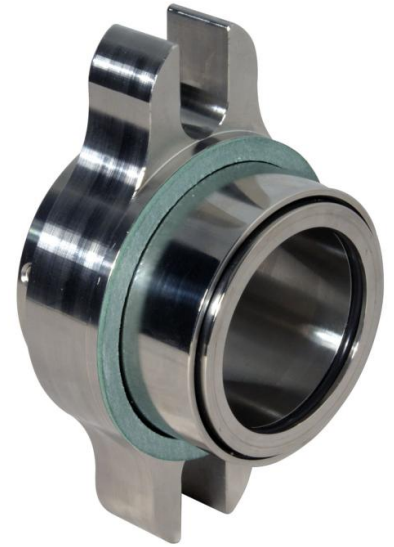
Designed as a compact single cartridge seal to fit most pump installations, the MV™ is an excellent general purpose sealing solution.

Today's environmental issues demand that industry commit to a reduction in energy consumption. The balanced mechanical seal design absorbs less power than both unbalanced seal designs and traditional pump packing.

As leakage is eliminated, corrosion problems to pumps and bearings are substantially reduced, as are costs associated with expensive product loss.

Most packing must leak to survive, where as seals should be leak free. This reduces environmental contaminants and disposal costs.

MV™ cartridge seals can be fully refurbished with most parts being re-used.

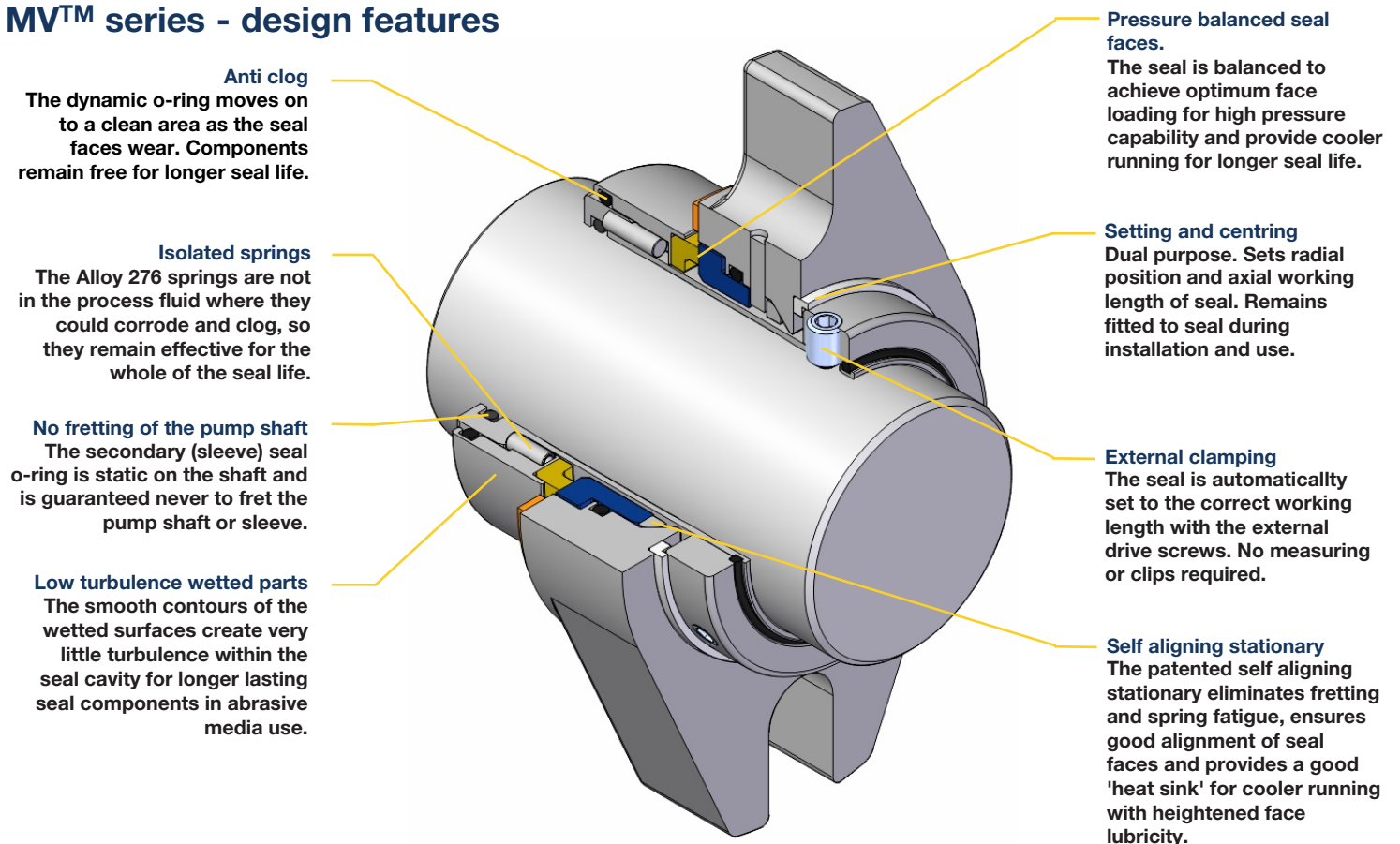


MV™ series - technical specification

metal parts	316 Stainless Steel as standard.	stationary	Silicon Carbide or Tungsten Carbide.
springs	Alloy 276	temperature limits	-30°C to 260°C (-22°F to 500°F) dependent upon specified elastomer and system configuration.
o-rings	Viton® (Flurocarbon) or Ethylene Propylene (EPR) as standard. Aflas®, Kalrez® and other elastomers available to order.	pressure limits	711mm HG Vacuum to 30 Bar (-28" HG - 440 PSI).
rotary face	Carbon, Silicon Carbide or Tungsten Carbide		

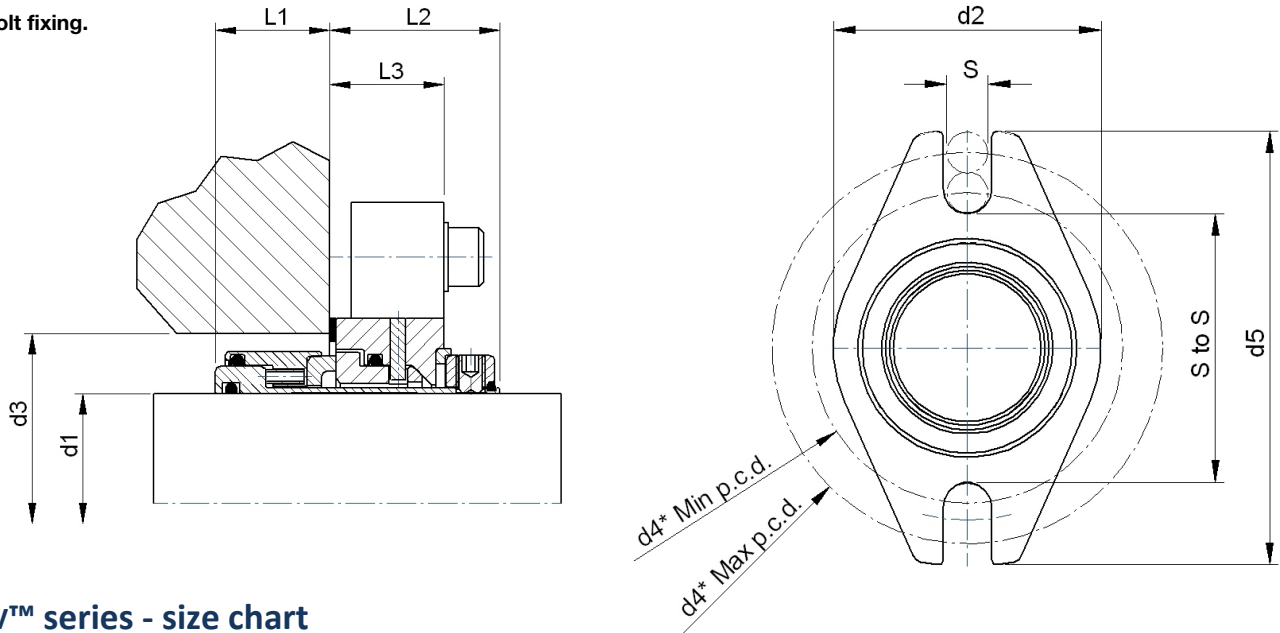
As the conditions of use are outside the control of first4seals, the information contained within this brochure is given in good faith but without warranty. The above temperature and pressure limits are individual maximum values for SOFT/HARD seal face combinations only. The values are provided for guidance only and are intended for use by suitably qualified application engineers. It is recommended that all users contact the first4seals Technical Department for advice on any new application.

MV™ series - design features



MV™ dimensional information

2 bolt fixing.



MV™ series - size chart

d1	d2	d3	d4*pcd		d5	L1	L2	L3	S to S	S	
Metric	Gland Width	S/B I.D. Min	S/B I.D. Max	Min	Max	Gland O.D.	Inboard length	Outboard length	Bolting Surface	Slot to Slot	Max Bolt
24	56.1	40.0	48.0	69.9	88.9	101.6	23.6	33.3	21.1	55.6	M12
25	56.1	41.0	48.0	69.9	88.9	101.6	23.6	33.3	21.1	55.6	M12
28	59.3	44.0	50.0	73.1	92.1	104.8	23.6	33.3	21.9	58.8	M12
30	62.4	46.0	54.0	76.2	95.3	108.0	23.6	33.3	22.4	61.9	M12
32	62.4	48.0	54.0	76.2	95.3	108.0	23.6	33.3	22.4	61.9	M12
33	62.4	49.0	55.0	76.2	95.3	108.0	23.6	33.3	22.4	61.9	M12
35	67.2	51.0	59.0	81.0	95.3	108.0	23.6	35.2	22.8	66.7	M12
38	72.0	58.0	62.0	85.8	101.6	114.3	23.6	35.2	23.6	71.5	M12
40	72.0	60.0	64.0	85.8	101.6	114.3	23.6	35.2	23.6	71.5	M12
43	75.1	63.0	67.0	88.9	108.0	120.7	23.6	35.2	23.6	74.6	M12
45	78.3	65.0	69.0	92.1	114.3	127.0	23.6	35.2	23.6	77.8	M12
48	81.5	68.0	72.0	95.3	120.7	133.4	23.6	35.2	23.6	81.0	M12
50	81.5	70.0	74.0	95.3	120.7	133.4	23.6	35.2	23.6	81.0	M12
53	84.7	73.0	77.0	101.6	123.9	139.7	22.6	37.9	26.3	84.2	M16
55	87.8	75.0	79.0	104.8	130.2	146.1	22.6	37.9	26.3	87.3	M16
58	98.9	78.0	85.7	115.9	146.0	165.1	23.6	36.9	25.3	95.3	M20
60	98.9	80.0	85.7	115.9	146.0	165.1	23.6	36.9	25.3	95.3	M20
63	121.2	86.0	101.6	131.8	158.7	177.8	26.8	41.7	23.6	111.2	M20
65	121.2	89.0	101.6	131.8	158.7	177.8	26.8	41.7	23.6	111.2	M20
68	121.2	92.0	101.6	131.8	158.7	177.8	26.8	41.7	23.6	111.2	M20
70	121.2	92.0	101.6	131.8	158.7	177.8	26.8	41.7	23.6	111.2	M20
75	130.7	99.0	114.3	146.1	171.4	190.5	26.8	42.2	28.1	125.4	M20
80	130.7	102.0	114.3	146.1	171.4	190.5	26.8	43.2	29.1	125.4	M20

d1	d2	d3	d4*pcd		d5	L1	L2	L3	S to S	S	
Imperial	Gland Width	S/B I.D. Min	S/B I.D. Max	Min	Max	Gland O.D.	Inboard length	Outboard length	Bolting Surface	Slot to Slot	Max Bolt
1.000	2.208	1.614	1.875	2.750	3.500	4.000	0.929	1.310	0.829	2.187	0.500
1.125	2.333	1.772	2.000	2.875	3.625	4.125	0.929	1.310	0.864	2.312	0.500
1.250	2.458	1.890	2.125	3.000	3.750	4.250	0.929	1.310	0.880	2.437	0.500
1.375	2.645	2.008	2.250	3.187	3.750	4.250	0.929	1.385	0.896	2.625	0.500
1.500	2.833	2.283	2.500	3.375	4.000	4.500	0.929	1.385	0.928	2.812	0.500
1.625	2.958	2.402	2.625	3.500	4.250	4.750	0.929	1.385	0.928	2.937	0.500
1.750	3.083	2.559	2.750	3.625	4.500	5.000	0.929	1.385	0.928	3.062	0.500
1.875	3.207	2.677	2.875	3.750	4.750	5.250	0.929	1.452	0.996	3.187	0.500
2.000	3.333	2.756	3.000	4.000	4.875	5.500	0.929	1.452	0.996	3.312	0.625
2.125	3.458	2.913	3.125	4.125	5.125	5.750	0.929	1.452	0.996	3.437	0.625
2.250	3.895	3.071	3.375	4.562	5.750	6.500	0.929	1.452	0.996	3.750	0.750
2.375	3.895	3.150	3.375	4.562	5.750	6.500	0.929	1.452	0.996	3.750	0.750
2.500	4.770	3.386	4.000	5.187	6.250	7.000	1.057	1.640	0.930	4.375	0.750
2.625	4.770	3.504	4.000	5.187	6.250	7.000	1.057	1.640	0.930	4.375	0.750
2.750	4.770	3.622	4.000	5.187	6.250	7.000	1.057	1.640	0.930	4.375	0.750
2.875	5.145	3.740	4.500	5.750	6.750	7.500	1.057	1.660	1.105	4.937	0.750
3.000	5.145	3.898	4.500	5.750	6.750	7.500	1.057	1.660	1.105	4.937	0.750
3.125	5.145	4.016	4.500	5.750	6.750	7.500	1.017	1.701	1.145	4.937	0.750

*Based on the largest bolt diameter (specials can be produced)

single spring seals



component seals



mv™ single rotary cartridge seals



301™/303A™ single rotary cartridge seals



302™ double rotary cartridge seals



f4s100™ single stationary cartridge seals



f4s200™ double stationary cartridge seals



seal support systems



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FM61505

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