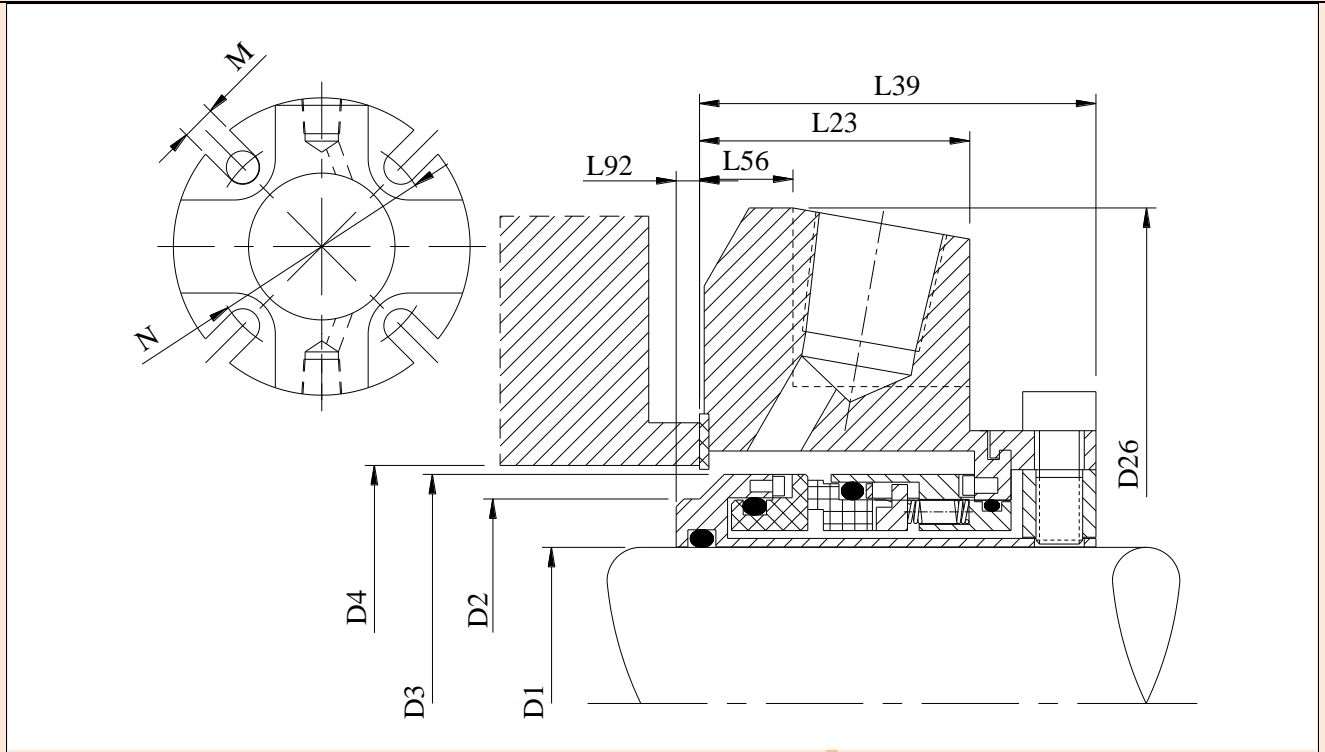


The 8160 Series Universal Cartridge Seal is a modular cartridge seal family. It includes interchangeable elastomer bellows and O-Ring pusher seal design. A common seal head/mating ring set, utilized throughout all versions, is reversible to allow rotating seat/mating ring or rotating seal head operation. It also has an optional quench gland (8160Q) with carbon throttle bushing.

Features

- ❖ Reversible Seal Head
- ❖ Fits ANSI, ISO and DIN Seal Chambers.
- ❖ Optimized Primary Ring Design for Greater Reliability
- ❖ Non-clogging Multi-spring Outside the Product.

8160 Series Universal Cartridge Seal



Dimensional Data (Metric)

Size	D2	D3	D4		D26	L23	L39	L56	L92	M	N
			min	max							
25	34.9	39.7	41.3	48.0	101.6	34.4	49.6	13.5	1.0	13.3	71.2
28	38.1	42.9	44.5	51.2	104.8	36.7	52.4	13.5	1.0	13.3	74.5
30	40.0	44.5	46.1	56.5	108.0	36.7	52.4	13.5	1.0	13.3	79.9
32	41.3	46.0	47.6	58.3	108.0	36.7	52.4	13.5	1.0	13.3	81.6
33	44.5	49.3	50.8	61.5	111.1	36.7	52.4	13.5	1.0	13.3	84.8
35	44.5	49.3	50.8	61.5	111.1	36.7	52.4	13.5	1.0	13.3	84.8
38	49.2	55.5	57.2	68.1	123.8	37.8	54.0	15.1	1.0	13.3	91.4
40	52.4	58.7	60.3	71.4	127.0	37.8	54.0	15.1	1.0	14.3	95.7
43	55.1	61.1	63.0	74.1	133.4	37.8	54.0	15.1	1.0	14.3	98.4
45	55.1	61.1	63.0	74.1	133.4	37.8	54.0	15.1	1.0	14.3	98.4
48	58.7	64.7	66.7	74.1	133.4	37.8	54.0	15.1	1.0	14.3	98.4
50	61.9	67.9	70.0	76.6	139.7	40.7	58.7	15.1	1.6	17.4	101.6
53	65.1	71.1	73.0	85.3	148.8	40.7	58.7	15.1	1.6	17.4	113.5
55	66.7	72.9	75.0	85.3	148.8	40.7	58.7	15.1	1.6	17.4	113.5
58	68.2	74.2	76.2	88.5	165.1	40.7	58.7	15.1	1.6	17.4	116.0
60	71.4	77.4	79.4	91.7	165.1	43.6	62.6	15.9	1.6	17.4	119.9
63	77.8	83.8	85.7	98.8	171.5	43.6	65.1	15.9	1.0	17.4	127.0
65	77.8	83.8	85.7	98.8	171.5	43.6	65.1	15.9	1.0	17.4	127.0
68	84.1	90.2	92.1	103.2	171.5	41.3	63.5	15.9	1.0	17.4	131.3
70	84.1	90.2	92.1	103.2	171.5	41.3	63.5	15.9	1.0	17.4	131.3
75	92.1	98.1	101.6	113.5	196.9	45.4	65.1	17.4	1.0	20.6	145.3
80	95.3	102.2	105.0	116.8	188.9	40.5	63.8	17.4	1.3	20.6	148.5
85	101.6	107.9	111.1	123.2	206.4	40.5	65.1	17.4	1.3	20.6	154.8
90	107.1	114.3	117.5	129.5	212.7	40.5	65.1	17.4	1.3	17.5	158.6
95	110.3	117.5	120.0	132.1	222.3	40.5	65.1	17.4	1.3	17.5	172.0
100	116.7	123.8	127.0	139.7	228.6	40.5	65.1	17.4	1.3	20.6	171.7
105	119.8	127.0	130.2	142.9	228.6	40.5	65.1	17.4	1.3	20.6	174.9
110	129.4	136.5	139.7	152.4	241.3	40.5	65.1	17.4	1.3	20.6	184.4
115	129.4	136.5	146.1	152.4	241.3	40.5	65.1	17.4	1.3	20.6	184.4
120	135.7	142.9	146.1	160.4	263.5	40.5	65.1	17.4	1.3	20.6	192.4
125	148.4	155.6	171.7	184.4	304.8	44.4	77.3	17.4	1.3	20.6	254.0
130	154.8	161.9	178.1	190.8	311.2	44.4	77.3	17.4	1.3	20.6	260.4
135	161.1	168.3	190.5	203.2	322.3	44.4	77.3	17.4	1.3	20.8	266.7
140	161.1	168.3	190.5	203.2	322.3	44.4	77.3	17.4	1.3	20.8	266.7



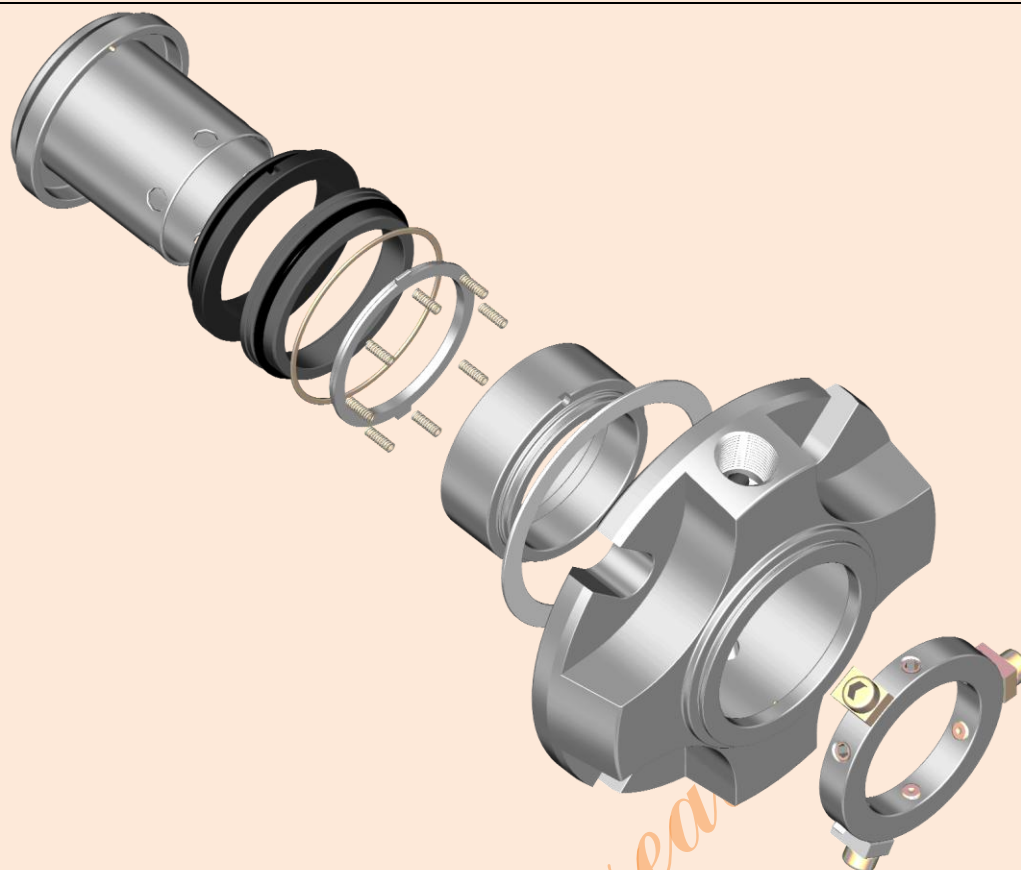
8160 Series Universal Cartridge Seal

Dimensional Data (Inches)

Size	D2	D3	D4min	D4max	D26	L23	L39	L56	L92	M	N
1.000	1.375	1.564	1.625	1.889	4.000	1.353	1.954	0.531	0.039	0.525	2.805
1.125	1.500	1.689	1.750	2.015	4.125	1.446	2.062	0.531	0.039	0.525	2.933
1.250	1.625	1.812	1.875	2.294	4.250	1.446	2.062	0.531	0.039	0.525	3.213
1.375	1.750	1.939	2.000	2.421	4.375	1.446	2.062	0.531	0.039	0.525	3.338
1.500	1.937	2.187	2.250	2.680	4.875	1.487	2.125	0.593	0.039	0.525	3.599
1.625	2.062	2.312	2.375	2.812	5.000	1.487	2.125	0.593	0.039	0.562	3.766
1.750	2.170	2.406	2.480	2.918	5.250	1.487	2.125	0.593	0.039	0.562	3.875
1.875	2.312	2.549	2.625	2.918	5.250	1.487	2.125	0.593	0.039	0.562	3.875
2.000	2.437	2.673	2.750	3.015	5.500	1.601	2.312	1.032	0.062	0.562	4.000
2.125	2.562	2.798	2.875	3.360	5.859	1.601	2.313	0.593	0.062	0.687	4.469
2.250	2.687	2.923	3.000	3.485	6.500	1.601	2.313	0.593	0.062	0.687	4.566
2.375	2.812	3.048	3.125	3.610	6.500	1.717	2.466	0.625	0.039	0.687	4.719
2.500	3.062	3.301	3.375	3.891	6.750	1.717	2.563	0.625	0.039	0.687	5.000
2.625	3.312	3.551	3.625	4.062	6.750	1.625	2.500	0.625	0.039	0.687	5.170
2.750	3.312	3.551	3.625	4.062	6.750	1.625	2.500	0.625	0.039	0.687	5.170
2.875	3.375	3.614	3.687	4.186	7.000	1.725	2.500	0.625	0.039	0.687	5.312
3.000	3.625	3.864	3.934	4.469	7.750	1.787	2.562	0.685	0.039	0.812	5.720
3.125	3.750	4.022	4.125	4.600	7.875	1.593	2.562	0.685	0.039	0.812	5.845
3.250	3.750	4.022	4.125	4.600	7.437	1.593	2.510	0.685	0.052	0.812	5.845
3.375	4.000	4.246	4.375	4.850	8.125	1.593	2.562	0.685	0.052	0.812	6.095
3.500	4.125	4.372	4.500	4.975	8.250	1.593	2.562	0.685	0.052	0.812	6.220
3.625	4.218	4.500	4.625	5.100	8.375	1.593	2.562	0.685	0.052	0.687	6.250
3.750	4.343	4.625	4.724	5.199	8.750	1.593	2.562	0.685	0.052	0.687	6.770
3.875	4.468	4.750	4.875	5.375	8.750	1.593	2.562	0.685	0.052	0.812	6.636
4.000	4.593	4.875	5.000	5.500	9.000	1.593	2.562	0.685	0.052	0.812	6.761
4.125	4.718	5.000	5.125	5.625	9.000	1.593	2.562	0.685	0.052	0.812	6.866
4.250	4.843	5.125	5.250	5.750	9.250	1.593	2.562	0.685	0.052	0.812	7.011
4.500	5.093	5.375	5.500	6.000	9.500	1.593	2.562	0.685	0.052	0.812	7.261
4.750	5.343	5.625	5.750	6.313	10.375	1.593	2.562	0.685	0.052	0.812	7.574
5.000	5.843	6.125	6.250	7.260	12.000	1.749	3.043	0.685	0.052	0.812	10.000
5.250	6.093	6.375	6.500	7.510	12.250	1.749	3.043	0.685	0.052	0.812	10.250
5.500	6.343	6.625	6.750	8.000	12.687	1.749	3.043	0.685	0.052	0.937	10.500

Dimensional Data (8160Q) (Inches)

Size	D2	D3	D4min	D4max	D26	L23	L39	L56	L92	M	N
1.000	1.375	1.564	1.625	1.889	4.000	1.353	1.954	0.531	0.621	0.525	2.805
1.125	1.500	1.689	1.750	2.015	4.125	1.446	2.062	0.531	0.589	0.525	2.933
1.250	1.625	1.812	1.875	2.294	4.250	1.446	2.062	0.531	0.666	0.525	3.213
1.375	1.750	1.939	2.000	2.421	4.375	1.446	2.062	0.531	0.666	0.525	3.338
1.500	1.937	2.187	2.250	2.680	4.875	1.487	2.125	0.593	0.039	0.525	3.599
1.625	2.062	2.312	2.375	2.812	5.000	1.487	2.125	0.593	0.619	0.562	3.766
1.750	2.170	2.406	2.480	2.918	5.250	1.487	2.125	0.593	0.619	0.562	3.875
1.875	2.312	2.549	2.625	2.918	5.250	1.487	2.125	0.593	0.619	0.562	3.875
2.000	2.437	2.673	2.750	3.015	5.500	1.601	2.312	1.032	0.619	0.562	4.000
2.125	2.562	2.798	2.875	3.360	5.859	1.601	2.313	0.593	0.650	0.687	4.469
2.250	2.687	2.923	3.000	3.485	6.500	1.601	2.313	0.593	0.650	0.687	4.566
2.375	2.812	3.048	3.125	3.610	6.500	1.717	2.466	0.625	0.650	0.687	4.719
2.500	3.062	3.301	3.375	3.891	6.750	1.717	2.563	0.625	0.597	0.687	5.000
2.625	3.312	3.551	3.625	4.062	6.750	1.625	2.500	0.625	0.417	0.687	5.170
2.750	3.312	3.551	3.625	4.062	6.750	1.625	2.500	0.625	0.588	0.687	5.170
2.875	3.375	3.614	3.687	4.186	7.000	1.725	2.500	0.625	0.588	0.687	5.312
3.000	3.625	3.864	3.934	4.469	7.750	1.787	2.562	0.685	0.588	0.812	5.720
3.125	3.750	4.022	4.125	4.600	7.875	1.593	2.562	0.685	0.526	0.812	5.845
3.250	3.750	4.022	4.125	4.600	7.437	1.593	2.510	0.685	0.594	0.812	5.845
3.375	4.000	4.246	4.375	4.850	8.125	1.593	2.562	0.685	0.583	0.812	6.095
3.500	4.125	4.372	4.500	4.975	8.250	1.593	2.562	0.685	0.594	0.812	6.220
3.625	4.218	4.500	4.625	5.100	8.375	1.593	2.562	0.685	0.594	0.687	6.250
3.750	4.343	4.625	4.724	5.199	8.750	1.593	2.562	0.685	0.594	0.687	6.770
3.875	4.468	4.750	4.875	5.375	8.750	1.593	2.562	0.685	0.594	0.812	6.636
4.000	4.593	4.875	5.000	5.500	9.000	1.593	2.562	0.685	0.594	0.812	6.761
4.125	4.718	5.000	5.125	5.625	9.000	1.593	2.562	0.685	0.594	0.812	6.866
4.250	4.843	5.125	5.250	5.750	9.250	1.593	2.562	0.685	0.594	0.812	7.011
4.500	5.093	5.375	5.500	6.000	9.500	1.593	2.562	0.685	0.594	0.812	7.261
4.750	5.343	5.625	5.750	6.313	10.375	1.593	2.562	0.685	0.594	0.812	7.574
5.000	5.843	6.125	6.250	7.260	12.000	1.749	3.043	0.685	0.566	0.812	10.000
5.250	6.093	6.375	6.500	7.510	12.250	1.749	3.043	0.685	0.566	0.812	10.250
5.500	6.343	6.625	6.750	8.000	12.687	1.749	3.043	0.685	0.566	0.937	10.500



Materials:

- ❖ Metal Parts: 304SS, 316SS
- ❖ Rotating Face: Silicon Carbide, Tungsten Carbide.
- ❖ Stationary Seat: Carbon, Silicon Carbide, Tungsten Carbide.
- ❖ Springs: 316SS, C-276.
- ❖ O-Rings: EP, Fluoroelastomer, AFLAS, Perfluoroelastomer.

Operating Limits:

- ❖ Pressure: Up to 21 bar (300psig)
- ❖ Temperature: Up to 205°C (400°F)
- ❖ Speed: Up to 25 m/s

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