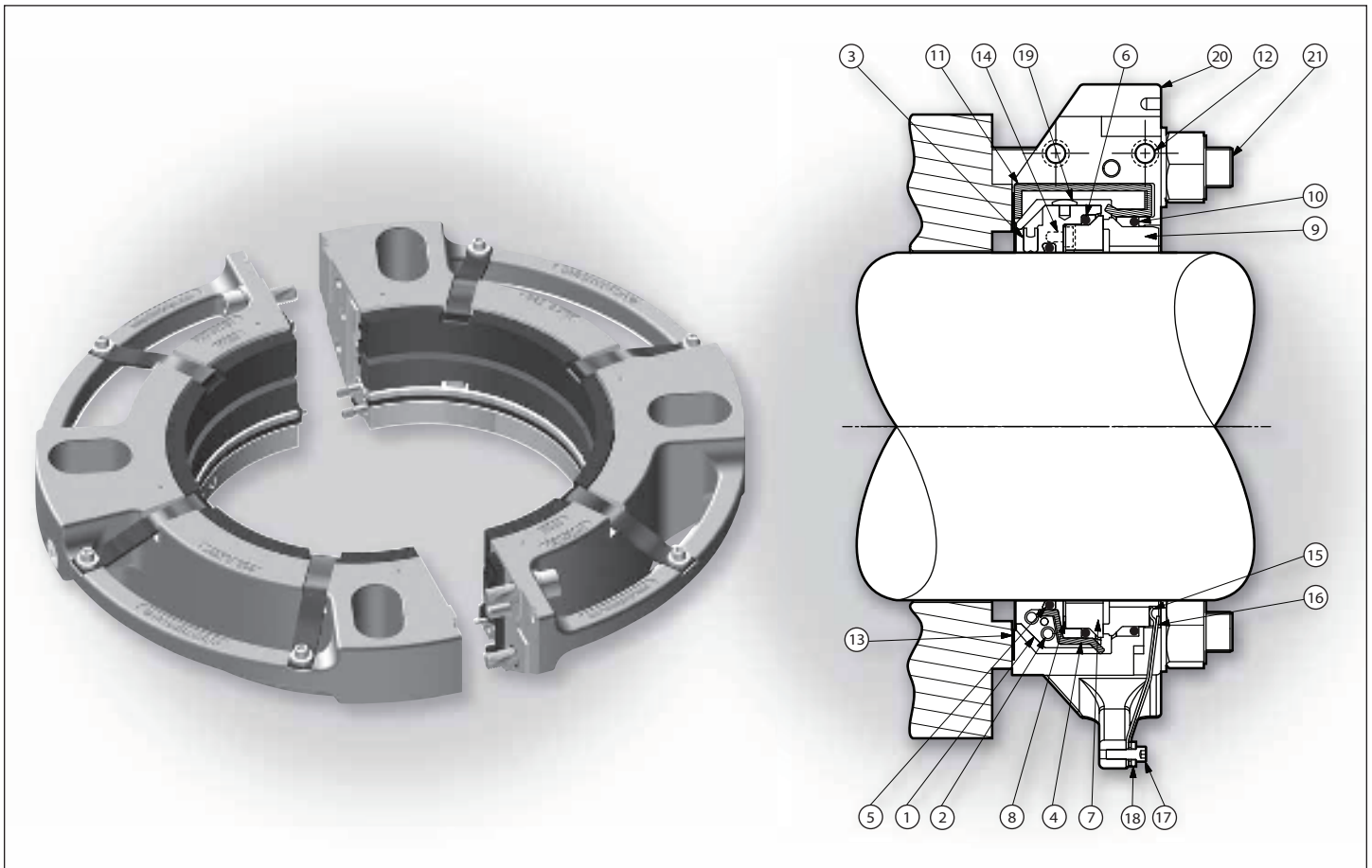


442™ Split Mechanical Seal Technical Data

For Large Shaft Diameter Equipment - 8 in. to 12 in. (200 mm to 305 mm)

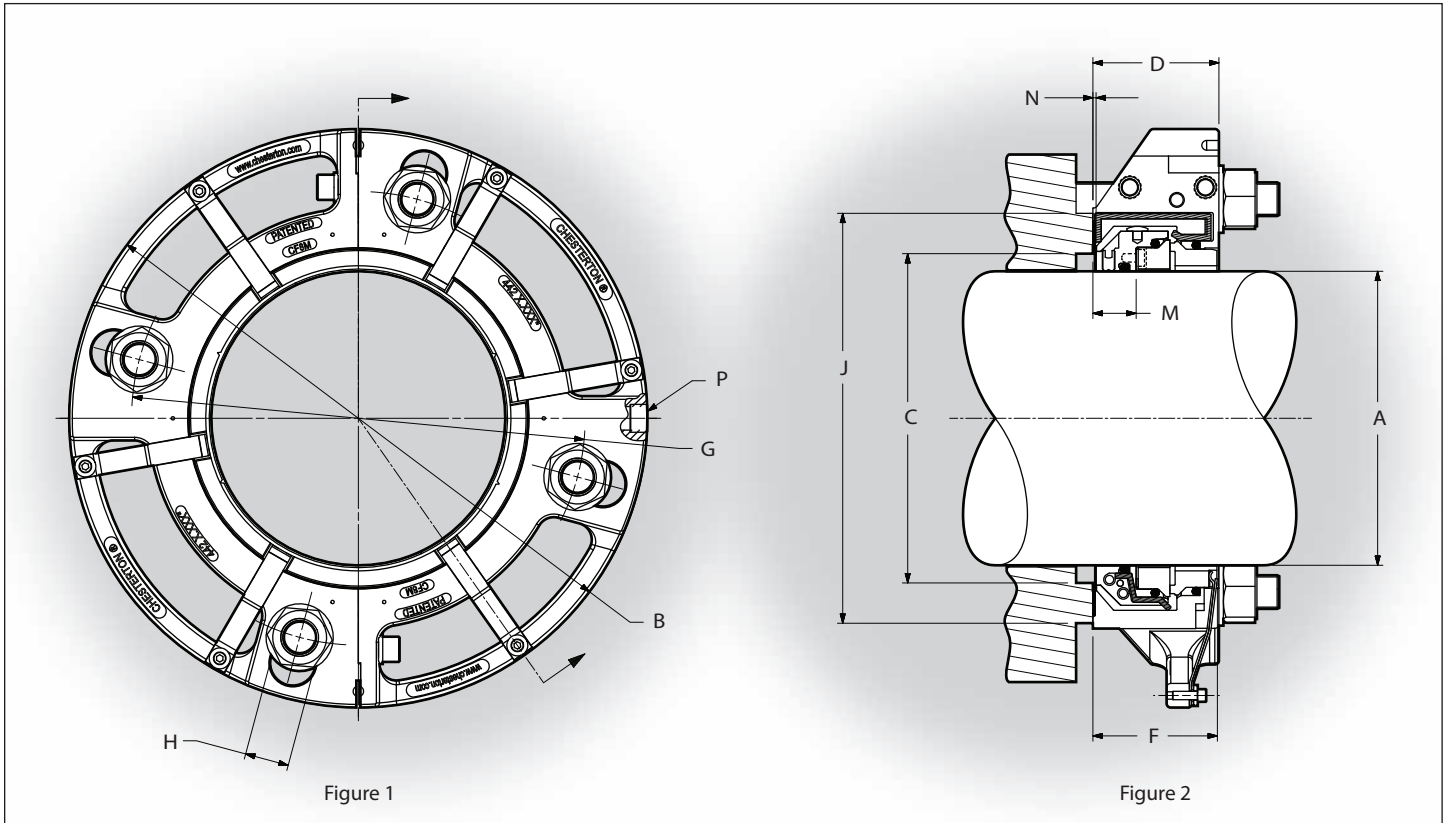


- 1 – Rotary Holder
- 2 – Socket Head Cap Screw
- 3 – Cup Point Set Screw
- 4 – Holder Gasket
- 5 – Shaft O-ring
- 6 – Rotary O-ring
- 7 – Rotary Face

- 8 – Rotary Support Gasket
- 9 – Stationary Face
- 10 – Stationary O-ring
- 11 – Gland Gasket
- 12 – Socket Head Cap Screw
- 13 – Stuffing Box Gasket
- 14 – Anti-Rotation Lug

- 15 – Spring
- 16 – Spring, Auxiliary
- 17 – Socket Head Cap Screw
- 18 – Flat Washer
- 19 – Centering Button
- 20 – Gland
- 21 – Stuffing Box Bolt

DIMENSIONAL DATA (INCH AND METRIC)



KEY - Figures 1 and 2

A – Shaft Size	F – Outboard Length Required	M – Holder ID from Box
B – Max. Gland Diameter	G – Min./Max. Bolt Circle by Bolt Size	N – Installation Dimension
C – Min./Max. Stuffing Box Diameter	H – Min. Slot Width	P – NPT Size
D – Gland Length	J – Min. Stuffing Box Face OD	

SHAFT SIZE	M HOLDER ID FROM BOX		N INSTALLATION DIMENSION		P NPT SIZE
	INCH	METRIC	INCH	METRIC	
8.00 in. to 12.00 in. (200 mm to 305 mm)	1.29	32,8	0.094	2,4	1/2 in.

DIMENSIONAL DATA (INCH)

A	B	C		D	F	G						H	J
		MIN	MAX			3/4 in.		7/8 in.		1 in.			
						MIN	MAX	MIN	MAX	MIN	MAX		
8.00	16.65	9.51	10.26	3.75	4.00	12.07	14.69	12.20	14.56	12.32	14.44	1.25	11.26
8.25	16.90	9.76	10.51	3.75	4.00	12.32	14.94	12.45	14.81	12.57	14.69	1.25	11.51
8.50	17.15	10.01	10.76	3.75	4.00	12.57	15.19	12.70	15.06	12.82	14.94	1.25	11.76
8.75	17.40	10.26	11.01	3.75	4.00	12.82	15.44	12.95	15.31	13.07	15.19	1.25	12.01
9.00	17.65	10.51	11.26	3.75	4.00	13.07	15.69	13.20	15.56	13.32	15.44	1.25	12.26
9.25	17.90	10.76	11.51	3.75	4.00	13.32	15.94	13.45	15.81	13.57	15.69	1.25	12.51
9.50	18.15	11.01	11.76	3.75	4.00	13.57	16.19	13.70	16.06	13.82	15.94	1.25	12.76
9.75	18.40	11.26	12.01	3.75	4.00	13.82	16.44	13.95	16.31	14.07	16.19	1.25	13.01
10.00	18.65	11.51	12.26	3.75	4.00	14.07	16.69	14.20	16.56	14.32	16.44	1.25	13.26
10.25	18.90	11.76	12.51	3.75	4.00	14.32	16.94	14.45	16.81	14.57	16.69	1.25	13.51
10.50	19.15	12.01	12.76	3.75	4.00	14.57	17.19	14.70	17.06	14.82	16.94	1.25	13.76
10.75	19.40	12.26	13.01	3.75	4.00	14.82	17.44	14.95	17.31	15.07	17.19	1.25	14.01
11.00	19.65	12.51	13.26	3.75	4.00	15.07	17.69	15.20	17.56	15.32	17.44	1.25	14.26
11.25	19.90	12.76	13.51	3.75	4.00	15.32	17.94	15.45	17.81	15.57	17.69	1.25	14.51
11.50	20.15	13.01	13.76	3.75	4.00	15.57	18.19	15.70	18.06	15.82	17.94	1.25	14.76
11.75	20.40	13.26	14.01	3.75	4.00	15.82	18.44	15.95	18.31	16.07	18.19	1.25	15.01
12.00	20.65	13.51	14.26	3.75	4.00	16.17	18.68	16.29	18.56	16.42	18.44	1.25	15.26

DIMENSIONAL DATA (METRIC)

A	B	C		D	F	G						H	J
		MIN	MAX			20 mm		22 mm		25 mm			
						MIN	MAX	MIN	MAX	MIN	MAX		
200	422,9	241,4	260,5	95,3	101,6	308	372	310	370	313	367	31,8	285,9
205	429,3	247,8	266,8	95,3	101,6	314	378	316	376	319	373	31,8	292,2
210	435,6	254,1	273,2	95,3	101,6	320	385	323	383	326	379	31,8	298,6
215	435,6	254,1	273,2	95,3	101,6	320	385	323	383	326	379	31,8	298,6
220	442,0	260,5	279,5	95,3	101,6	327	391	329	389	332	386	31,8	304,9
225	448,3	266,8	285,9	95,3	101,6	333	397	335	395	338	392	31,8	311,3
230	454,7	273,2	292,2	95,3	101,6	339	404	342	402	345	398	31,8	317,6
235	461,0	279,5	298,6	95,3	101,6	346	410	348	408	351	405	31,8	324,0
240	461,0	279,5	298,6	95,3	101,6	346	410	348	408	351	405	31,8	324,0
245	467,4	285,9	304,9	95,3	101,6	352	417	354	414	357	411	31,8	330,3
250	473,7	292,2	311,3	95,3	101,6	358	423	361	421	364	418	31,8	336,7
255	480,1	298,6	317,6	95,3	101,6	365	429	367	427	370	424	31,8	343,0
260	480,1	298,6	317,6	95,3	101,6	365	429	367	427	370	424	31,8	343,0
265	486,4	304,9	324,0	95,3	101,6	371	436	373	433	376	430	31,8	349,4
270	492,8	311,3	330,3	95,3	101,6	377	442	380	440	383	437	31,8	355,7
275	499,1	317,6	336,7	95,3	101,6	384	448	386	446	389	443	31,8	362,1
280	505,5	324,0	343,0	95,3	101,6	390	455	392	452	396	449	31,8	368,4
285	505,5	324,0	343,0	95,3	101,6	390	455	392	452	396	449	31,8	368,4
290	511,8	330,3	349,4	95,3	101,6	397	461	399	459	402	456	31,8	374,8
295	518,2	336,7	355,7	95,3	101,6	403	467	405	465	408	462	31,8	381,1
300	524,5	343,0	362,1	95,3	101,6	412	474	414	472	417	468	31,8	387,5
305	524,5	343,0	362,1	95,3	101,6	412	474	414	472	417	468	31,8	387,5

442 SPLIT MECHANICAL SEAL OPERATING PARAMETERS†

PRESSURE CAPABILITIES (INCH and METRIC)

SIZE RANGE	SHAFT SPEED	FACE MATERIAL COMBINATION			
		CARBON/RSC		RSC/RSC	
		Psig	bar g	Psig	bar g
8.00 in. to 12.00 in. (200 mm to 305 mm)	To 875 RPM	28 in. Hg to 150 Psig	710 mm Hg to 10 bar g	28 in. Hg to 150 Psig	710 mm Hg to 10 bar g

TEMPERATURE

To 250 °F (120 °C)

SPEED

To 3000 fpm (15 mps)

MOTION CAPABILITIES

Runout, TIR: 0.150 in. (3,8 mm)

Axial movement: ± 0.125 in. (3,2 mm)

RSC - Reaction bonded silicon carbide.

† Consult Chesterton Application Engineering for applications exceeding published operating parameters and for additional seal sizes. Significantly higher limits can be achieved depending on the application.

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