

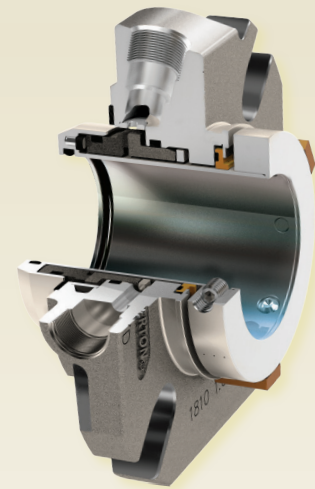
1810

Heavy-Duty Modular Single Cartridge Seal

Built on Chesterton's AXIUS™ modular platform for simple configuration and installation plant-wide

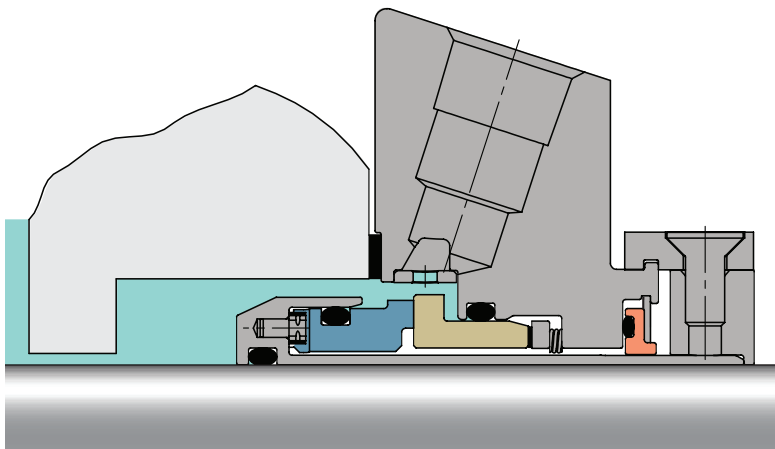
This Chesterton® single cartridge seal offers you the ultimate in seal quality, flexibility, and convenience. Leveraging Chesterton's proprietary AXIUS modular platform, the 1810 can be configured with several different face profiles and auxiliary components which allows performance to be tailored to a wide range of process conditions.

A plant-wide sealing solution, the 1810 is effective for both simple and highly demanding applications. It offers selectable features around a common gland housing. This flexibility allows for the creation of the best sealing parameters for your equipment and application needs to maximize single seal reliability.



Advantages

- Simplifies configuration and maximizes seal performance with the AXIUS™ modular platform
- Maintains reliability throughout temperature cycling and stop/start processes with monolithic seal faces
- Increases face life and reduces contact stress with cushioned drive pins
- Allows for easy, positive seal identification with ViewIn™ technology



SPECIFICATIONS

Operating Parameters

Sizes	25 mm – 120 mm 1.00" – 4.75"
Pressure	711 mm or 28" Hg Vacuum to 40 bar g (600 psig*)
Temperature	-55°C – 300°C (-67°F – 570°F) Temperature limits depend on actual elastomers used
Speed	25 m/s (5000 fpm)

Applicable Standards and Approvals

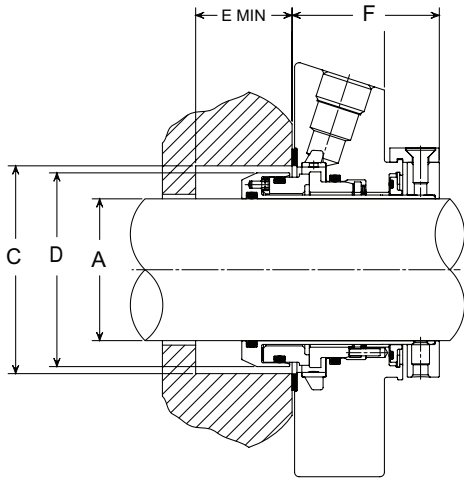
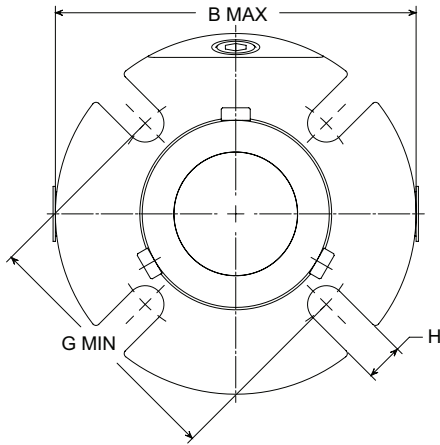
ISO-3069C, ASME B73.1, B73.2

* Seal pressure capabilities are dependent on the fluid sealed, temperature, speed, and seal face combinations. For operation outside the limits and additional materials consult Chesterton Mechanical Seal Engineering.

Materials of Construction

Rotary Faces	CB SSC TC
Stationary Faces	SSC TC
Elastomers	FKM EPDM FEPM FFKM
Metal Parts	316 Stainless Steel (EN 1.4401)
Springs	Alloy C-276 (EN 2.4819)

Dimensional Data



1810 KEY

- A – Shaft Size
- B – Maximum Gland Diameter
- C – Seal Chamber Bore
- D – Seal Outside Diameter
- E – Minimum Seal Chamber Depth
- F – Outboard Seal Length
- G – Minimum Bolt Circle by Bolt Size
- H – Slot Width

1810 Dimensional Data Metric

SHAFT SIZE	GLAND OD	STUFFING BOX BORE		IB SEAL DIA	SB DEPTH	OB LENGTH	BOLT CIRCLE BY BOLT SIZE			
		B	C				G MIN			
A	B	C	C	D	E	F	10 mm	12 mm	16 mm	20 mm
25	104	44.5	51.1	42.9	18.5	50	73.2	-	-	-
28	104	47.8	51.8	46.0	18.5	50	73.2	-	-	-
30 (OS)	104 (127)	51.0 (59.4)	56.6 (68.1)	49.5	18.5	50	78.0 (90.0)	-	-	-
32	104	49.0	58.8	47.4	18.5	50	80.1	-	-	-
33	111	49.0	58.8	47.4	18.5	50	80.1	81.6	-	-
35	111	53.9	59.2	52.4	18.5	50	83.2	85.2	-	-
38	114	57.1	62.0	55.5	18.5	50	85.8	88.6	-	-
40 (OS)	127	59.0 (69.1)	68.3 (74.2)	57.5	18.5	50	90.0 (96.5)	92.0	-	-
42	127	61.0	66.0	59.5	18.5	50	90.2	92.0	-	-
43	127	62.0	68.8	60.5	18.5	50	94.0	96.0	-	-
45	139	64.0	73.4	62.5	18.5	50	94.8	96.8	-	-
48	139	67.0	73.8	65.5	18.5	50	95.3	97.3	-	-
50 (OS)	139 (152)	69.0 (84.9)	78.5 (96.3)	67.5	18.5	50	100.0 (118.6)	102.0 (120.6)	-	-
53	152	73.0	87.4	71.4	18.5	50	108.3	110.3	114.3	-
55	152	74.0	83.6	72.4	18.5	50	104.5	106.5	110.5	-
58	152	79.3	91.2	77.8	18.5	50	116.2	118.2	122.2	-
60 (OS)	152 (165)	79.3 (96.1)	91.2 (107.4)	77.8	18.5	50	116.2 (129.8)	118.2 (131.8)	122.2 (-)	-
65	164	85.7	100.3	84.1	18.5	50	127.4	129.4	133.4	-
70	196	95.0	111	93.0	24.0	63	-	137.0	141.0	-
75	202	101.0	119	99.0	24.0	63	-	143.0	147.0	-
80	203	106.0	122	103.0	24.0	63	-	150.0	154.0	-
85	211	111.0	128	109.0	24.0	63	-	156.5	160.5	164.0
90	215	116.0	132	114.0	24.0	63	-	160.0	164.0	168.0
95	222	121.0	137	118.0	24.0	63	-	161.0	165.0	170.0
100	228	127.0	145	125.0	24.0	63	-	168.0	172.0	177.0
110	237	137.0	154	134.0	24.0	63	-	178.0	182.0	186.0
120	267	146.0	164	144.0	24.0	63	-	191.0	195.0	198.5

1810 Dimensional Data Inches

SHAFT SIZE	GLAND OD	STUFFING BOX BORE		IB SEAL DIA	SB DEPTH	OB LENGTH	BOLT CIRCLE BY BOLT SIZE			
		B	C				G MIN			
A	B	C	C	D	E	F	3/8"	1/2"	5/8"	3/4"
1.000	4.11	1.75	2.01	1.69	0.73	1.95	2.88	-	-	-
1.125 (OS)	4.11 (4.49)	1.88 (2.24)	2.04 (2.79)	1.81	0.73	1.95	2.88 (3.65)	-	-	-
1.250	4.11	2.00	2.27	1.94	0.73	1.95	3.14	-	-	-
1.375 (OS)	4.45 (5.39)	2.13 (2.72)	2.33 (2.92)	2.06	0.73	1.95	3.27 (3.78)	3.40 (-)	-	-
1.500	4.50	2.25	2.44	2.19	0.73	1.95	3.40	3.53	-	-
1.625	5.00	2.38	2.69	2.31	0.73	1.95	3.52	3.64	-	-
1.750 (OS)	5.50 (6.65)	2.50 (3.20)	2.81 (3.73)	2.44	0.73	1.95	3.62 (4.59)	3.75 (4.72)	-	-
1.875 (OS)	5.50 (5.99)	2.63 (3.41)	2.94 (3.79)	2.56	0.73	1.95	3.75 (4.65)	3.88 (4.78)	-	-
2.000	5.50	2.75	3.19	2.69	0.73	1.95	4.13	4.27	-	-
2.125 (OS)	6.00 (6.99)	2.88 (3.70)	3.44 (4.23)	2.81	0.73	1.95	4.25 (5.09)	4.38 (5.22)	4.50 (5.34)	-
2.250	6.00	3.00	3.56	2.94	0.73	1.95	4.37	4.50	4.62	-
2.375 (OS)	6.00 (8.39)	3.13 (3.93)	3.59 (4.48)	3.06	0.73	1.95	4.56 (5.34)	4.75 (5.47)	4.82 (5.59)	-
2.500 (OS)	6.50 (7.76)	3.25 (3.93)	3.81 (5.23)	3.19	0.73	1.95	4.62 (6.09)	4.75 (6.22)	4.87 (6.34)	-
2.625 (OS)	6.50 (6.98)	3.38 (4.30)	3.95 (4.76)	3.31	0.73	1.95	5.00 (5.62)	5.13 (5.75)	5.26 (5.87)	-
2.750 (OS)	7.70 (7.89)	3.76 (4.45)	4.38 (4.76)	3.67	0.94	2.48	-	5.42 (5.75)	5.54 (5.87)	- (6.00)
2.875	7.83	3.88	4.50	3.79	0.94	2.48	-	5.61	5.73	-
3.000 (OS)	7.94 (8.64)	4.00 (4.92)	4.69 (5.37)	3.91	0.94	2.48	-	5.65 (6.36)	5.77 (6.48)	- (6.61)
3.125	7.99	4.13	4.80	4.04	0.94	2.48	-	5.80	5.92	-
3.250	8.19	4.25	4.94	4.16	0.94	2.48	-	6.07	6.19	-
3.375 (OS)	8.30 (8.39)	4.38 (4.95)	5.05 (5.26)	4.29	0.94	2.48	-	6.19 (6.23)	6.32 (6.35)	6.44 (6.48)
3.500	8.44	4.50	5.19	4.41	0.94	2.48	-	6.18	6.31	6.43
3.625	8.49	4.63	5.25	4.54	0.94	2.48	-	6.42	6.54	6.67
3.750 (OS)	8.71 (9.76)	4.75 (5.95)	5.39 (6.38)	4.66	0.94	2.48	-	6.38 (7.37)	6.51 (7.49)	6.63 (7.61)
3.875	8.84	4.88	5.51	4.79	0.94	2.48	-	6.62	6.74	6.87
4.000	8.96	5.00	5.69	4.91	0.94	2.48	-	6.65	6.78	6.90
4.125 (OS)	8.99 (9.76)	5.13 (5.95)	5.80 (6.26)	5.04	0.94	2.48	-	6.77 (7.23)	6.90 (7.35)	7.02 (7.48)
4.250	8.99	5.25	5.94	5.16	0.94	2.48	-	7.06	7.19	7.31
4.375	9.33	5.38	6.06	5.29	0.94	2.48	-	7.02	7.15	7.27
4.500 (OS)	9.49 (12.49)	5.50 (6.73)	6.19 (7.49)	5.41	0.94	2.48	-	7.17 (8.46)	7.30 (8.58)	7.42 (8.71)
4.625	9.49	5.63	6.31	5.54	0.94	2.48	-	7.45	7.57	7.70
4.750 (OS)	10.49 (11.39)	5.75 (7.20)	6.47 (7.63)	5.66	0.94	2.48	-	7.55 (8.62)	7.68 (8.74)	7.80 (8.87)

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