CHESTERTON
Global Solutions, Local Service.

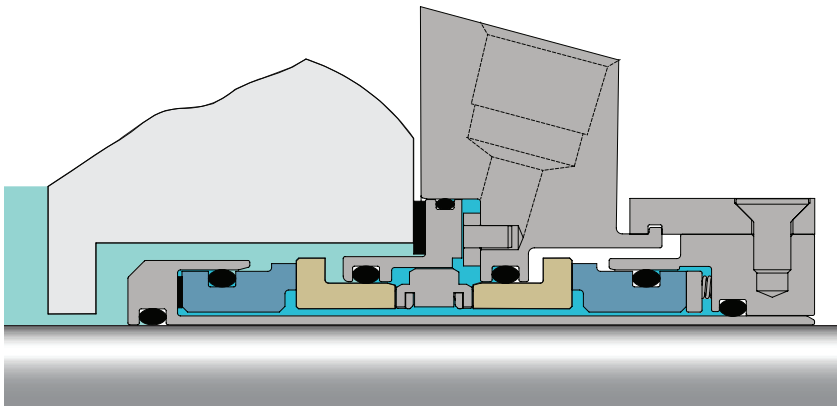
2810

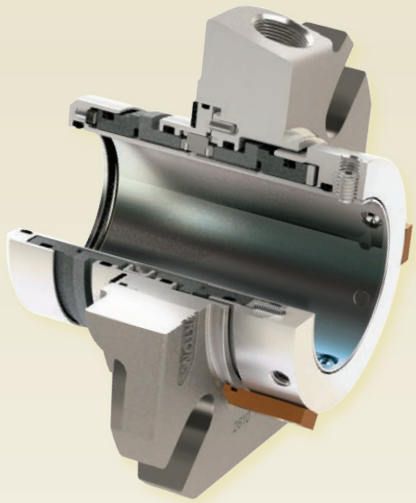
Heavy-Duty Modular Double Cartridge Seal

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

This Chesterton® double cartridge seal offers you the ultimate in seal quality, flexibility, and emissions control. Leveraging Chesterton's proprietary AXIUS modular platform, the 2810 can be configured with several different face profiles and auxiliary components within a common gland housing. This flexibility allows seal performance to be tailored to a wide range of process conditions.

A plant-wide sealing solution, the 2810 uses a geometric double-balanced seal face design. An optimized barrier/buffer channel for enhanced fluid flow provides greater seal reliability even at elevated temperatures.





AXIUS™
Chesterton® Modular Platform

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
- Accommodates axial, radial, and angular shaft movement through unified seal face alignment
- 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*) 17 bar g (250 psig) outboard
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

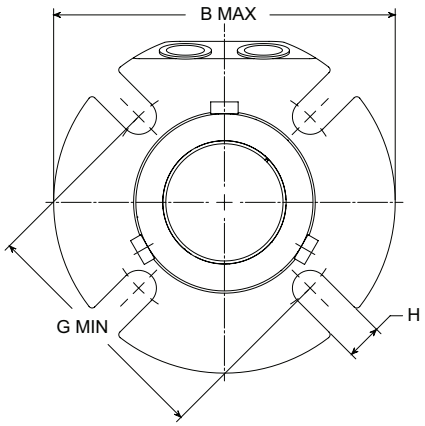
ISO-3069C, ASME B73.1, B73.2, ATEX Category I, Group 2 approved

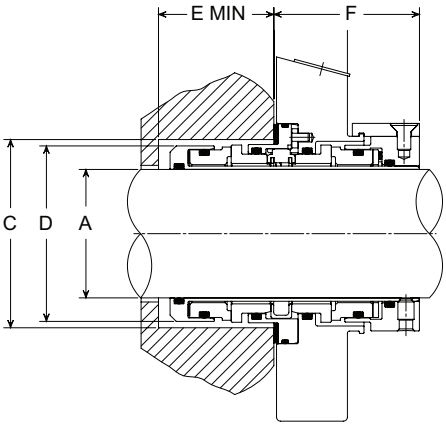
* Seal pressure capabilities are dependent on the fluid sealed, temperature, speed, and seal face combinations. *For operation outside the limits and additional materials consult Chesterton Mechanical Seal Engineering.*

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





Metric

A	B MAX	C MIN	C MAX	D MAX	E MIN	F MAX	G MIN 10 mm	G MIN 12mm	G MIN 16 mm	G MIN 20 mm	H
25	104,0	44,2	51,3	42,7	40,1	54,1	72,7	–	–	–	11,2
28	104,0	47,2	52,1	45,7	40,1	54,1	72,7	–	–	–	11,2
30	104,0	49,3	56,9	47,8	40,1	54,1	77,6	–	–	–	11,2
30 OS	126,6	59,4	68,1	47,6	40,1	53,8	90,0	–	–	–	10,9
32	110,7	51,1	57,9	49,8	40,1	54,1	79,8	–	–	–	14,5
33	110,7	52,1	58,9	50,8	40,1	54,1	79,3	81,3	–	–	14,5
35	110,7	54,1	59,4	52,6	40,1	54,1	82,9	84,9	–	–	14,5
38	113,9	57,2	62,2	55,9	40,1	54,1	86,3	88,3	–	–	14,5
40	126,6	59,2	68,6	57,7	40,1	54,1	89,7	91,7	–	–	14,5
40 OS	126,6	69,3	74,3	57,6	40,1	53,8	96,5	-	–	–	10,9
42	126,6	61,2	68,6	59,7	40,1	54,1	89,7	91,7	–	–	14,5
43	126,6	62,2	69,1	60,7	40,1	54,1	93,7	95,7	–	–	14,5
45	139,0	64,3	73,7	62,7	40,1	54,1	94,5	96,5	–	–	14,5
48	139,0	67,1	74,2	65,8	40,1	54,1	95,0	97,0	–	–	14,5
50	139,0	69,1	78,7	67,8	40,1	54,1	99,7	101,7	–	–	14,5
50 OS	152,0	85,2	94,1	67,6	40,1	53,8	118,6	120,6	–	–	14,2
53	152,0	72,1	87,6	71,6	40,1	54,1	108,0	110,0	114,0	–	17,5
55	152,0	74,2	81,3	72,6	40,1	54,1	104,2	106,2	110,2	–	17,5
58	152,0	77,2	92,2	78,0	40,1	54,1	115,9	117,9	121,9	–	17,5
60	152,0	79,2	92,2	78,0	40,1	54,1	115,9	117,9	121,9	–	17,5
60 OS	164,7	96,2	107,5	77,9	40,1	53,8	129,8	131,8	–	–	17,3
65	163,8	84,1	100,3	84,3	40,1	54,1	127,1	129,1	133,1	–	17,5
70	195,8	95,5	113,0	93,5	52,1	63,5	–	136,9	140,9	–	17,3
75	201,7	100,6	119,4	99,6	52,1	63,5	–	142,7	146,7	–	17,3
80	202,9	105,4	122,4	103,4	52,1	63,5	–	149,8	153,8	–	17,3
85	211,1	110,5	128,8	109,0	52,1	63,5	–	152,1	156,1	160,1	20,3
90	214,4	115,6	132,1	113,3	52,1	63,5	–	159,6	163,6	167,6	20,3
95	221,5	120,4	138,4	118,6	52,1	63,5	–	161,4	165,4	169,4	20,3
100	227,6	125,5	144,8	125,0	52,1	63,5	–	168,3	172,3	176,3	20,3
110	237,2	135,6	154,2	134,4	52,1	63,5	–	177,7	181,7	185,7	20,3
120	266,4	145,5	163,8	144,0	52,1	63,5	–	187,3	191,3	195,3	20,3

Inch

A	B MAX	C MIN	C MAX	D MAX	E MIN	F MAX	G MIN 3/8"	G MIN 1/2"	G MIN 5/8"	G MIN 3/4"	H
1.000	4.09	1.75	2.02	1.70	1.58	2.13	2.87	–	–	–	0.44
1.125	4.09	1.88	2.05	1.82	1.58	2.13	2.87	–	–	–	0.44
1.125 OS	4.49	2.61	2.92	1.82	1.58	2.12	3.77	–	–	–	0.43
1.250	4.09	2.00	2.28	1.95	1.58	2.13	3.14	–	–	–	0.44
1.375	4.36	2.13	2.34	2.07	1.58	2.13	3.26	3.38	–	–	0.57
1.375 OS	5.39	2.73	2.92	2.06	1.58	2.12	3.78	-	–	–	0.43
1.500	4.49	2.25	2.45	2.20	1.58	2.13	3.39	3.52	–	–	0.57
1.625	4.99	2.38	2.70	2.32	1.58	2.13	3.50	3.63	–	–	0.57
1.750	5.47	2.50	2.82	2.45	1.58	2.13	3.62	3.74	–	–	0.57
1.750 OS	6.65	3.48	3.73	2.44	1.58	2.12	4.59	4.72	–	–	0.56
1.875	5.47	2.63	2.95	2.57	1.58	2.13	3.74	3.87	–	–	0.57
1.875 OS	5.99	3.53	3.79	2.56	1.58	2.12	4.65	4.78	–	–	0.56
2.000	5.47	2.75	3.20	2.70	1.58	2.13	4.13	4.25	–	–	0.57
2.125	5.99	2.88	3.45	2.82	1.58	2.13	4.25	4.37	4.50	–	0.69
2.125 OS	6.99	3.86	4.23	2.81	1.58	2.12	5.09	5.22	5.34	–	0.68
2.250	5.99	3.00	3.47	2.95	1.58	2.13	4.37	4.49	4.62	–	0.69
2.375	5.99	3.13	3.63	3.07	1.58	2.13	4.56	4.68	4.81	–	0.69
2.375 OS	8.39	4.11	4.48	3.06	1.58	2.12	5.34	5.47	5.59	–	0.68
2.500	6.45	3.25	3.82	3.20	1.58	2.13	4.62	4.74	4.87	–	0.69
2.500 OS	7.76	4.48	5.23	3.19	1.58	2.12	6.09	6.22	6.34	–	0.68
2.625	6.45	3.38	3.95	3.32	1.58	2.13	5.00	5.12	5.25	–	0.69
2.625 OS	6.98	4.55	4.76	3.31	1.58	2.12	5.62	5.75	5.87	–	0.68
2.750	7.71	3.75	4.45	3.68	2.05	2.50	–	5.42	5.55	–	0.68
2.750 OS	7.89	4.45	4.76	3.67	2.05	2.50	–	5.84	5.97	6.09	0.81
2.875	7.83	3.88	4.57	3.79	2.05	2.50	–	5.50	5.63	–	0.68
3.000	7.94	4.00	4.70	3.92	2.05	2.50	–	5.65	5.78	–	0.68
3.000 OS	8.64	4.92	5.37	3.92	2.05	2.50	–	6.45	6.58	6.70	0.93
3.125	7.99	4.13	4.82	4.04	2.05	2.50	–	5.80	5.93	–	0.68
3.250	8.19	4.25	4.95	4.17	2.05	2.50	–	5.93	6.06	–	0.68
3.375	8.31	4.38	5.07	4.29	2.05	2.50	–	6.02	6.14	6.27	0.80
3.375 OS	8.39	4.95	5.26	4.29	2.05	2.50	–	6.33	6.45	6.58	0.81
3.500	8.44	4.50	5.20	4.42	2.05	2.50	–	6.18	6.31	6.43	0.80
3.625	8.49	4.63	5.32	4.54	2.05	2.50	–	6.31	6.44	6.56	0.80
3.750	8.72	4.75	5.45	4.67	2.05	2.50	–	6.38	6.51	6.63	0.80
3.750 OS	9.76	5.95	6.38	4.67	2.05	2.50	–	7.46	7.59	–	0.68
3.875	8.84	4.88	5.57	4.79	2.05	2.50	–	6.52	6.64	6.77	0.80
4.000	8.96	5.00	5.70	4.92	2.05	2.50	–	6.66	6.78	6.91	0.80
4.125	8.99	5.13	5.82	5.04	2.05	2.50	–	6.78	6.90	7.03	0.80
4.125 OS	9.76	5.95	6.26	5.04	2.05	2.50	–	7.33	7.45	7.58	0.93
4.250	8.99	5.25	5.95	5.17	2.05	2.50	–	6.91	7.04	7.16	0.80
4.375	9.34	5.38	6.07	5.29	2.05	2.50	–	7.03	7.15	7.28	0.80
4.500	9.49	5.50	6.20	5.42	2.05	2.50	–	7.18	7.30	7.43	0.80
4.500 OS	12.49	6.73	7.49	5.42	2.05	2.50	–	8.56	8.68	8.81	0.88
4.625	9.49	5.63	6.32	5.54	2.05	2.50	–	7.28	7.40	7.53	0.80
4.750	10.49	5.75	6.45	5.67	2.05	2.50	–	7.40	7.53	7.65	0.80
4.750 OS	11.39	7.20	7.63	5.67	2.05	2.50	–	8.71	8.84	8.96	0.81

2810 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

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CHESTERTON®
Global Solutions, Local Service.

A.W. Chesterton Company
860 Salem Street
Groveland, MA 01834 USA

Telephone: 781-438-7000
Fax: 978-469-6528
chesterton.com

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