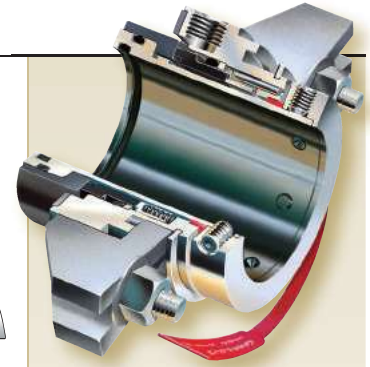
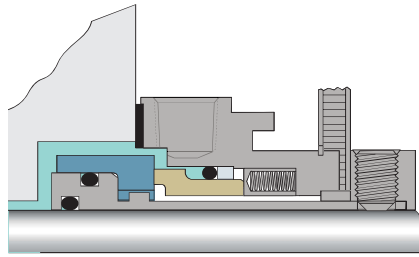


CARTRIDGE SEALS

# 155™

## Standard Single Cartridge Seal

A single seal designed for plant-wide flexibility and ease of use



Operating Conditions		Materials	
Size	25 mm – 120 mm (1.000" – 4.750")	Faces	CB, SSC, TC
Pressure	711 mm (28") Hg Vacuum – 40 bar g (600 psig)*	Elastomers	FKM, EPDM, FEPM, FFKM
Temperature	-55°C – 300°C (-67°F – 570°F)	Metals	EN 1.4401 (316SS)
Speed	25 m/s (5000 fpm)	Springs	EN 2.4819 (Alloy C-276)

Standards and Approvals: ISO-3069C, ASME B73.1, ASME B73.2, NSF61

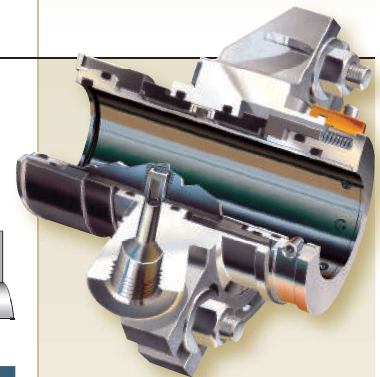
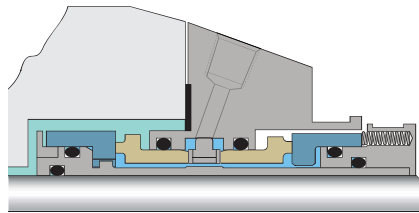
\* Seal pressure capabilities are dependent on the fluid sealed, temperature, speed, and seal face combinations. For operation outside the limits and additional materials consult Chesterton Mechanical Seal Engineering.

- Adjustable/removable gland tabs
- 360 degree flush port rotation
- Quick release centering strap
- Available in special alloys
- Reliable sealing for a broad range of fluids
- Dynamically stress relieved narrow profile faces
- Low heat generation monolithic faces
- Self-Centering Lock Ring eliminates misalignment
- Stationary springs

# 255™

## Standard Double Cartridge Seal

A proven design and versatile performer providing reliable double sealing capability in a wide variety of process and barrier fluids



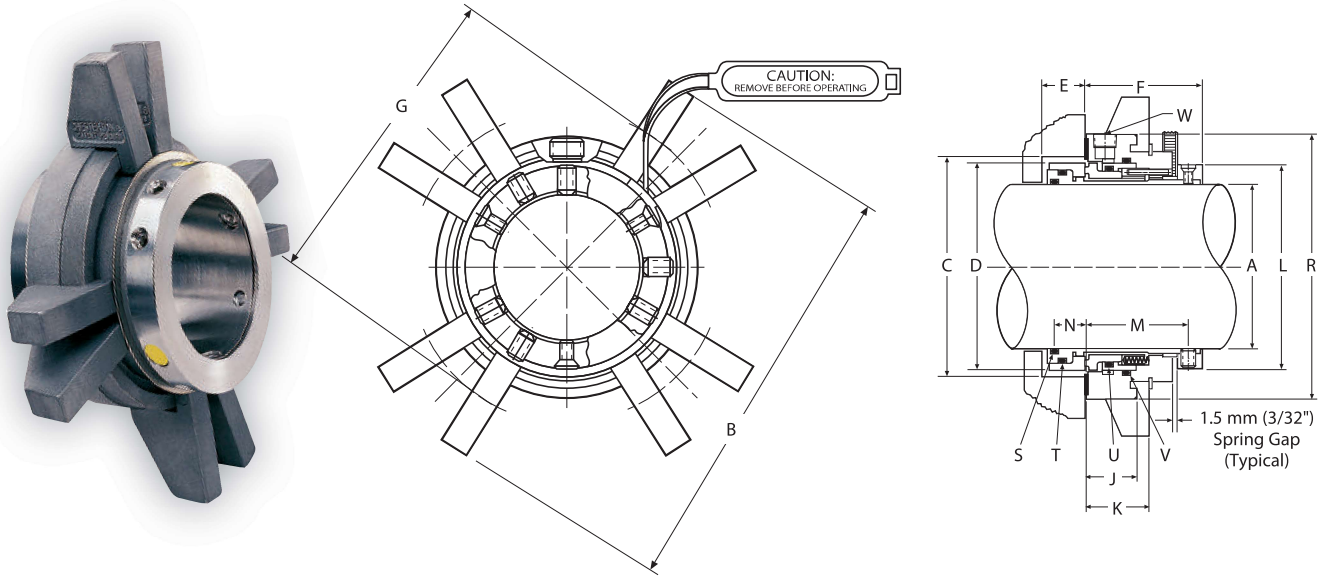
Operating Conditions		Materials	
Size	25 mm – 120 mm (1.000" – 4.750")	Faces	CB, SSC, TC
Pressure	711 mm (28") Hg Vacuum – 40 bar g (600 psig)* 17 bar g (250 psig) outboard*	Elastomers	FKM, EPDM, FEPM, FFKM
Temperature	-55°C – 300°C (-67°F – 570°F)	Metals	EN 1.4401 (316SS)
Speed	20 m/s (4000 fpm)	Springs	EN 2.4819 (Alloy C-276)

Standards and Approvals: ISO-3069C, ASME B73.1, ASME 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.

- Geometric double balance eliminates shifting O-Rings
- High flow pumping device
- Monolithic seal faces
- Self-Centering Lock Ring eliminates misalignment
- Unified Seal Face Alignment

# 155™ Standard Single Cartridge Seal – Metric

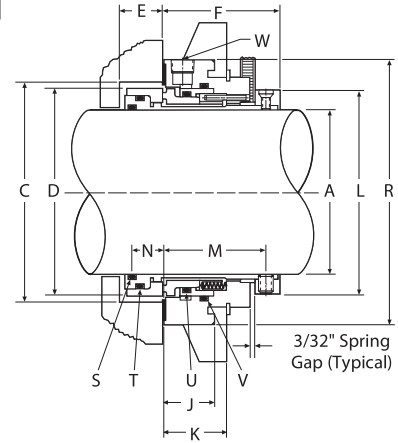
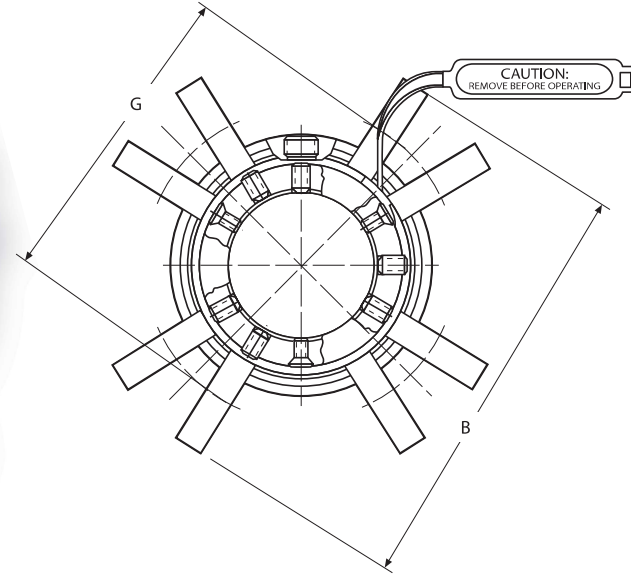
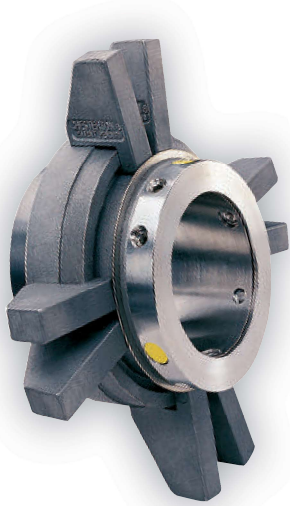


**Key**

- A – Shaft Size
- B – Gland Outside Diameter
- C – Seal Chamber Bore
- D – IB Seal Diameter
- E – Seal Chamber Depth
- F – Outboard Seal Length
- G – Minimum Bolt Circle by Bolt Size
- H – Slot Width
- J – Gland Width
- K – Hub Gland Slot Width
- L – Lock Ring Diameter
- M – Distance from Seal Chamber Face to Set Screws
- N – Distance from Seal Chamber Face to Shaft O-Ring
- P – Hub Gland Slot Diameter
- R – Hub Gland Diameter
- S – Shaft O-Ring
- T – Rotary O-Ring
- U – Stationary O-Ring
- V – Gland O-Ring (applies only to large sizes)
- W – NTP Size

A	B MAX TABS	C MIN	C MAX	D	E MIN	F	G MIN TABS			G MIN 478			H	J	K	L	M	N	P	R	S	T	U	W
							8 mm	10 mm	12 mm	8 mm	10 mm	12 mm												
25	118	44	51	43	16	48	70	72	74	71	73	–	11	24	9	44	40	12	57	62	120	124	126	1/8"
28	118	47	52	46	16	48	70	72	74	71	73	–	11	24	9	47	40	12	57	62	121	126	128	1/8"
30	124	49	57	48	16	48	76	78	80	77	79	–	11	24	9	49	40	12	60	68	123	127	129	1/8"
32	124	51	58	50	16	48	77	79	81	78	80	–	11	24	9	51	40	12	62	69	124	128	130	1/8"
33	124	52	59	51	16	48	76	78	80	78	80	–	11	24	9	52	40	12	62	69	125	129	131	1/8"
35	128	54	62	52	16	48	80	82	84	86	88	–	11	24	9	54	40	12	70	72	126	130	132	1/8"
38	133	57	67	56	16	48	85	87	89	86	88	–	11	24	9	57	40	12	70	77	128	132	134	1/8"
40	134	59	68	58	16	48	86	88	90	86	88	90	15	24	9	59	40	12	73	78	129	134	135	1/8"
43	134	62	69	61	16	48	86	88	90	86	88	90	15	24	9	62	40	12	73	78	131	135	137	1/8"
45	140	64	73	63	16	48	92	94	96	92	94	96	15	24	9	64	40	12	79	84	132	136	138	1/8"
48	139	67	74	66	16	48	91	93	95	92	94	96	15	24	9	67	40	12	79	84	134	139	140	1/8"
50	145	69	78	68	16	48	97	99	101	96	98	100	15	24	9	69	40	12	82	89	136	140	142	1/8"
55	150	74	83	73	16	48	102	104	106	112	114	116	17	24	9	74	40	12	94	94	139	143	145	1/8"
60	160	79	91	78	16	48	112	114	116	113	115	117	17	24	9	80	40	12	99	104	142	146	148	1/8"
A	B MAX	C MIN	C MAX	D	E MIN	F	10 mm	G MIN 12 mm	16 mm	J	K	L	M	N	R	S	T	U	V	W				
65	194	92	102	90	22	64	132	134	138	27	34	89	56	17	122	231	234	236	239	1/4"				
70	197	95	105	93	22	64	135	137	141	27	34	92	56	17	125	232	235	237	240	1/4"				
75	203	100	113	99	22	64	141	143	147	27	34	98	56	17	131	234	237	239	242	1/4"				
80	207	105	116	103	22	64	144	146	150	27	34	102	56	17	134	236	238	240	243	1/4"				
85	213	110	122	109	22	64	151	153	157	27	34	108	56	17	141	237	240	242	245	1/4"				
90	216	115	125	113	22	64	154	156	160	27	34	112	56	17	144	239	241	243	246	1/4"				
95	222	120	131	118	22	64	160	162	166	27	34	117	56	17	150	240	243	245	248	1/4"				
100	229	127	138	125	22	64	167	169	173	27	34	123	56	17	157	242	245	247	250	1/4"				
110	236	136	148	134	22	64	174	176	180	27	34	133	56	17	164	245	248	250	253	1/4"				
120	248	145	158	144	22	64	186	188	192	27	34	142	56	17	176	248	251	253	256	1/4"				

# 155™ Standard Single Cartridge Seal – Inch



Key		F – Outboard Seal Length		L – Lock Ring Diameter		S – Shaft O-Ring	
A – Shaft Size	B – Gland Outside Diameter	G – Minimum Bolt Circle by Bolt Size	H – Slot Width	M – Distance from Seal Chamber Face to Set Screws	N – Distance from Seal Chamber Face to Shaft O-Ring	T – Rotary O-Ring	U – Stationary O-Ring
C – Seal Chamber Bore	D – IB Seal Diameter	J – Gland Width	K – Hub Gland Slot Width	P – Hub Gland Slot Diameter	R – Hub Gland Diameter	V – Gland O-Ring (applies only to large sizes)	W – NTP Size

A	B MAX	C MIN	C MAX	D	E MIN	F	3/8"	G MIN 1/2"	5/8"	3/8"	G MIN 478 1/2"	5/8"	H	J	K	L	M	N	P	R	S	T	U	W
1.000	4.65	1.75	2.00	1.69	0.63	1.89	2.88	3.01	3.13	2.90	–	–	0.44	0.93	0.37	1.76	1.58	0.47	2.25	2.45	120	124	126	1/8"
1.125	4.69	1.88	2.03	1.82	0.63	1.89	2.92	3.05	3.17	2.90	–	–	0.44	0.93	0.37	1.89	1.58	0.47	2.25	2.48	122	126	128	1/8"
1.250	4.90	2.00	2.26	1.94	0.63	1.89	3.13	3.26	3.38	3.21	–	–	0.44	0.93	0.37	2.01	1.58	0.47	2.43	2.70	124	128	130	1/8"
1.375	5.04	2.13	2.42	2.07	0.63	1.89	3.27	3.40	3.52	3.52	–	–	0.44	0.93	0.37	2.14	1.58	0.47	2.75	2.84	126	130	132	1/8"
1.500	5.23	2.25	2.62	2.19	0.63	1.89	3.46	3.59	3.71	3.52	–	–	0.44	0.93	0.37	2.26	1.58	0.47	2.75	3.03	128	132	134	1/8"
1.625	5.29	2.38	2.68	2.32	0.63	1.89	3.52	3.65	3.77	3.51	3.63	–	0.58	0.93	0.37	2.39	1.58	0.47	2.87	3.08	130	134	136	1/8"
1.750	5.41	2.50	2.80	2.44	0.63	1.89	3.64	3.77	3.89	3.74	3.86	–	0.58	0.93	0.37	2.51	1.58	0.47	3.12	3.21	132	136	138	1/8"
1.875	5.53	2.63	2.93	2.57	0.63	1.89	3.76	3.89	4.01	3.90	4.02	–	0.58	0.93	0.37	2.64	1.58	0.47	3.25	3.33	134	138	140	1/8"
2.000	5.74	2.75	3.18	2.69	0.63	1.89	3.97	4.10	4.22	4.15	4.27	–	0.58	0.93	0.37	2.76	1.58	0.47	3.50	3.54	136	140	142	1/8"
2.125	6.04	2.88	3.43	2.82	0.63	1.89	4.27	4.40	4.52	4.53	4.66	4.78	0.69	0.93	0.37	2.89	1.58	0.47	3.75	3.84	138	142	144	1/8"
2.250	6.14	3.00	3.55	2.94	0.63	1.89	4.38	4.51	4.63	4.56	4.69	4.81	0.69	0.93	0.37	3.01	1.58	0.47	3.87	3.94	140	144	146	1/8"
2.375	6.29	3.13	3.59	3.07	0.63	1.89	4.52	4.65	4.77	4.56	4.69	4.81	0.69	0.93	0.37	3.14	1.58	0.47	3.90	4.08	142	146	148	1/8"
2.500	6.41	3.25	3.80	3.19	0.63	1.89	4.65	4.78	4.90	4.79	4.92	5.04	0.69	0.93	0.37	3.26	1.58	0.47	4.12	4.21	144	148	150	1/8"
A	B MAX	C MIN	C MAX	D	E MIN	F	1/2"	G MIN 5/8"	3/4"	J	K	L	M	N	R	S	T	U	V	W				
2.625	7.63	3.63	4.00	3.54	0.88	2.50	5.35	5.48	5.60	1.08	1.33	3.49	2.22	0.68	4.79	231	234	236	239	1/4"				
2.750	7.76	3.75	4.13	3.67	0.88	2.50	5.48	5.60	5.73	1.08	1.33	3.61	2.22	0.68	4.92	232	235	237	240	1/4"				
2.875	7.88	3.88	4.25	3.79	0.88	2.50	5.60	5.73	5.85	1.08	1.33	3.74	2.22	0.68	5.04	233	236	238	241	1/4"				
3.000	8.01	4.00	4.44	3.92	0.88	2.50	5.73	5.85	5.98	1.08	1.33	3.86	2.22	0.68	5.17	234	237	239	242	1/4"				
3.125	8.13	4.13	4.55	4.04	0.88	2.50	5.85	5.98	6.10	1.08	1.33	3.99	2.22	0.68	5.29	235	238	240	243	1/4"				
3.250	8.26	4.25	4.69	4.17	0.88	2.50	5.98	6.10	6.23	1.08	1.33	4.11	2.22	0.68	5.42	236	239	241	244	1/4"				
3.375	8.38	4.38	4.80	4.29	0.88	2.50	6.10	6.23	6.35	1.08	1.33	4.24	2.22	0.68	5.54	237	240	242	245	1/4"				
3.500	8.51	4.50	4.94	4.42	0.88	2.50	6.23	6.35	6.48	1.08	1.33	4.36	2.22	0.68	5.67	238	241	243	246	1/4"				
3.625	8.63	4.63	5.05	4.54	0.88	2.50	6.35	6.48	6.60	1.08	1.33	4.49	2.22	0.68	5.79	239	242	244	247	1/4"				
3.750	8.76	4.75	5.14	4.67	0.88	2.50	6.48	6.60	6.73	1.08	1.33	4.61	2.22	0.68	5.92	240	243	245	248	1/4"				
3.875	8.88	4.88	5.26	4.79	0.88	2.50	6.60	6.73	6.85	1.08	1.33	4.74	2.22	0.68	6.04	241	244	246	249	1/4"				
4.000	9.01	5.00	5.44	4.92	0.88	2.50	6.73	6.85	6.98	1.08	1.33	4.86	2.22	0.68	6.17	242	245	247	250	1/4"				
4.125	9.13	5.13	5.55	5.04	0.88	2.50	6.85	6.98	7.10	1.08	1.33	4.99	2.22	0.68	6.29	243	246	248	251	1/4"				
4.250	9.18	5.25	5.69	5.17	0.88	2.50	6.89	7.02	7.14	1.08	1.33	5.11	2.22	0.68	6.33	244	247	249	252	1/4"				
4.375	9.30	5.38	5.81	5.29	0.88	2.50	7.02	7.14	7.27	1.08	1.33	5.24	2.22	0.68	6.46	245	248	250	253	1/4"				
4.500	9.43	5.50	5.94	5.42	0.88	2.50	7.14	7.27	7.39	1.08	1.33	5.36	2.22	0.68	6.58	246	249	251	254	1/4"				
4.625	9.56	5.63	6.06	5.54	0.88	2.50	7.27	7.39	7.52	1.08	1.33	5.49	2.22	0.68	6.71	247	250	252	255	1/4"				
4.750	9.76	5.75	6.22	5.67	0.88	2.50	7.47	7.60	7.72	1.08	1.33	5.61	2.22	0.68	6.91	248	251	253	256	1/4"				