



STYLE 85

World's First 2-Piece Split Cartridge Mechanical Seal



US Patent No. 5662340 / Years Active: 1997-2017

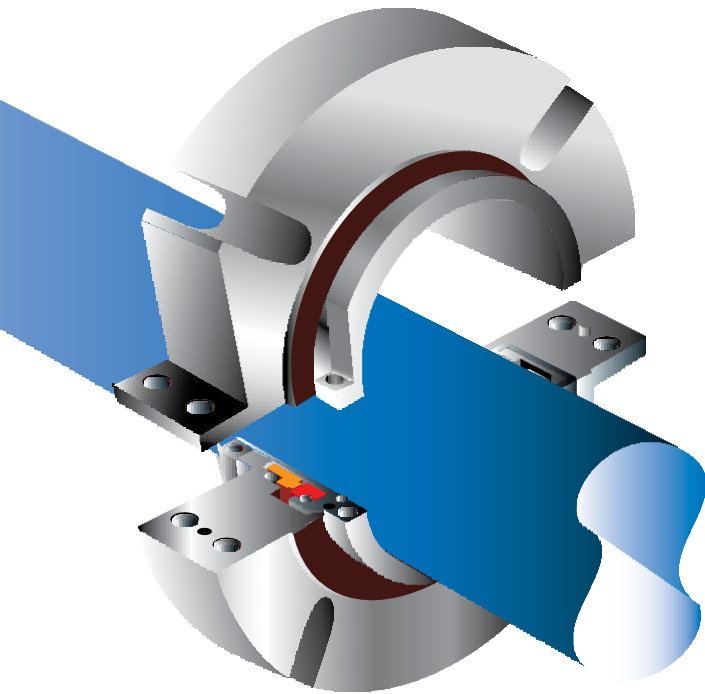
THE FIRST TRUE SPLIT CARTRIDGE MECHANICAL SEAL

No Measurements

No Shims

No Special Tools

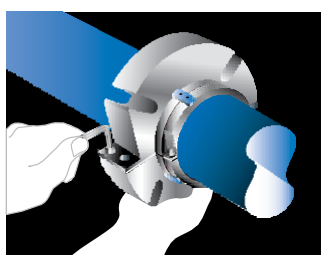
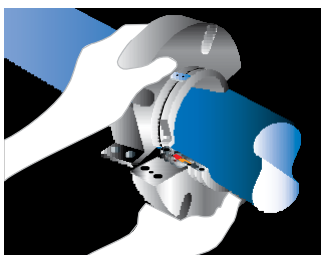
No Glue



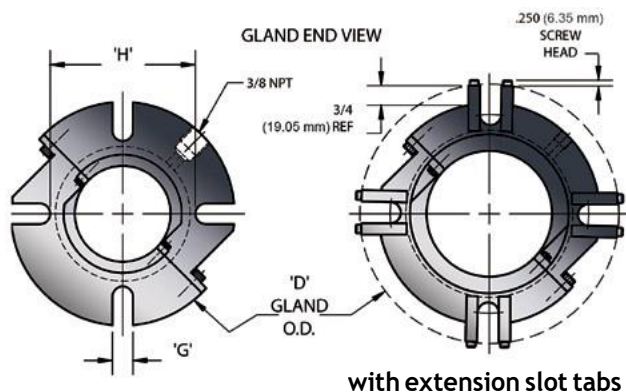
Flex-A-Seal developed the Style 85 Split Cartridge Mechanical Seal to provide the easiest installation found anywhere in the world. After simply attaching two halves over the shaft, the seal mounts to the equipment like any other cartridge mechanical seal. It doesn't get any easier than that!

The Style 85 is the first split cartridge mechanical seal in the world in which just two pieces are handled, eliminating the need to touch sensitive lapped faces. Both sealing faces are secured safely in cartridge halves and cannot be cocked, chipped or damaged. The design of the Style 85 is like no other split mechanical seal on the market: it is engineered as a true, fully split cartridge mechanical seal. The hydraulically-balanced design and stationary multi-spring feature enable centrifugal force to keep the solids away from the seal faces while maintaining the ability to handle higher speeds, pressures and misalignment.

No need to worry about solids, as the springs are protected and out of the product to eliminate clogging. The static shaft sleeve O-ring is positioned outside of the stuffing box to assure a good sealing surface, even on worn packing sleeves! The Style 85 is the first split cartridge mechanical seal that can be fully assembled and pressure tested at the factory. This process ensures the sealing integrity of each seal before it is sent to the field.



For more information on
our Style 85, visit
flexaseal.com



Materials of Construction

Stationary Gland Assembly	316 Stainless Steel
Rotating Sleeve Assembly	316 Stainless Steel
O-Rings, Gaskets	Viton® (standard) consult factory for AFLAS® or Fluoraz® option
Rotating Face	Silicon Carbide
Stationary Face	Carbon or Silicon Carbide
Springs	Hastelloy C®
Screws	316 Stainless Steel

Additional materials available upon request

Operating Conditions

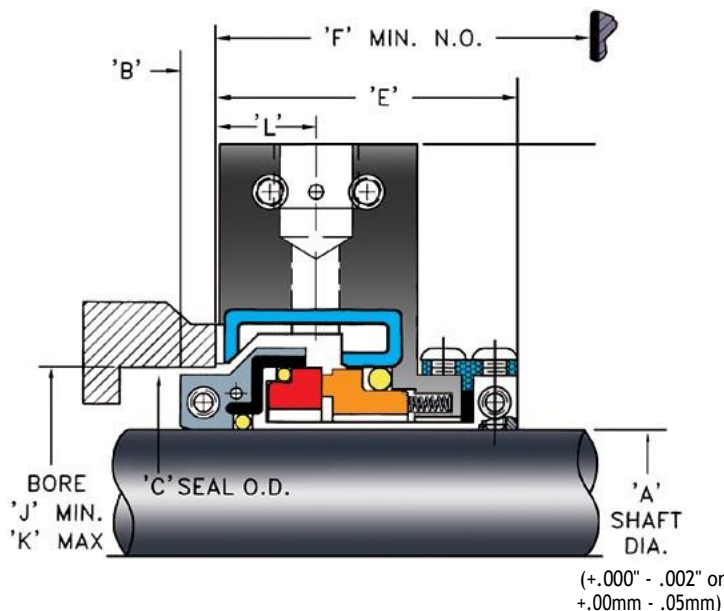
Seal Size	Temp.	Speed	Pressure
1 1/4"-3" (45mm-75mm)	350° F (175° C)	3600 RPM	250 PSI (17 bar)
3 1/8"-3 3/4" (80mm-95mm)	350° F (175° C)	1800 RPM	200 PSI (14 bar)
3 7/8"-4 1/2" (100mm-190mm)	350° F (175° C)	1800 RPM	150 PSI (10 bar)
5"+ (125mm +)	350° F (175° C)	875 RPM	100 PSI (7 bar)

* Maximum temperature / pressure / speed indicates operating extremes independently and does not imply the seal will function at these extremes at the same time. Contact Flex-A-Seal Engineering to review specific operating conditions.

Metric (all sizes in mm)

A	B	C	D	E	F	G	H	J	K	L
45	6.35	65.1	140	54.0	64.0	14.3	84.9	66.68	76.20	16.7
48	6.35	68.2	140	54.0	64.0	14.3	90.5	68.85	79.38	16.7
50	6.35	68.2	140	54.0	64.0	14.3	90.5	68.85	79.38	16.7
55	6.35	77.8	159	54.0	64.0	17.4	100.0	79.40	88.90	16.7
60	6.35	81.0	165	54.0	64.0	17.4	104.8	85.73	95.25	16.7
62	6.35	81.0	165	54.0	64.0	17.4	104.8	85.73	95.25	16.7
65	6.35	85.0	165	54.0	64.0	17.4	112.8	88.90	98.40	16.7
68	6.35	90.5	169	54.0	64.0	17.4	112.8	92.08	104.78	16.7
70	6.35	90.5	197	54.0	64.0	17.4	112.8	92.08	104.77	16.7
71	6.35	93.6	198	54.0	64.0	17.4	122.2	96.80	107.90	16.7
75	6.35	96.8	203	54.0	64.0	17.4	125.4	100.00	111.10	16.7
80	7.14	106.4	210	62.0	72.0	20.6	131.8	108.00	120.65	20.6
87	7.14	112.7	216	62.0	72.0	20.6	138.1	114.30	127.00	20.6
90	7.14	115.9	219	62.0	72.0	20.6	141.3	117.50	130.20	20.6
95	7.14	117.5	222	62.0	72.0	20.6	144.5	119.05	130.18	20.6
100	7.14	125.4	224	62.0	72.0	20.6	147.6	127.00	136.52	20.6
110	7.14	135.0	235	62.0	72.0	20.6	163.5	136.50	149.20	20.6
115	7.14	140.5	248	62.0	72.0	20.6	173.0	142.90	155.60	20.6
120	7.14	143.7	248	62.0	72.0	20.6	176.2	146.05	158.75	20.6
125	9.5	157.2	*273	77.8	96.8	23.8	185.7	160.30	171.40	23.4
140	9.5	169.9	292	78.0	97.0	23.8	198.4	173.00	184.10	23.4
145	9.5	176.2	*305	77.8	96.8	23.8	207.2	179.40	193.70	23.4
150	9.5	182.6	*311	77.8	96.8	23.8	214.3	185.70	200.00	23.4
160	9.5	195.3	*311	77.8	96.8	23.8	223.8	198.40	212.70	23.4
180	9.5	214.3	*343	82.6	101.6	23.8	247.6	217.50	231.80	23.4
219	9.5	250.8	*432	82.6	101.6	31.7	285.8	254.00	269.90	23.4

* Sizes use extension slots tabs



Imperial (all sizes in inches)

SIZE	A	B	C	D	E	F	G	H	J	K	L
-23	1.437	.250	2.187	5.25	2.125	2.500	.562	3.125	2.250	2.625	.656
-24	1.500	.250	2.187	5.25	2.125	2.500	.562	3.125	2.250	2.625	.656
-26	1.625	.250	2.312	5.25	2.125	2.500	.562	3.250	2.375	2.750	.656
-27	1.687	.250	2.437	5.50	2.125	2.500	.562	3.375	2.500	2.875	.656
-28	1.750	.250	2.437	5.50	2.125	2.500	.562	3.375	2.500	2.875	.656
-30	1.875	.250	2.562	5.50	2.125	2.500	.562	3.344	2.625	3.000	.656
-31	1.937	.250	2.625	5.44	2.125	2.500	.562	3.563	2.687	3.125	.656
-32	2.000	.250	2.687	5.44	2.125	2.500	.562	3.563	2.750	3.125	.656
-33	2.062	.250	2.812	6.00	2.125	2.500	.687	3.687	2.875	3.375	.656
-34	2.125	.250	2.812	6.00	2.125	2.500	.687	3.688	2.875	3.375	.656
-35	2.188	.250	2.937	6.25	2.125	2.500	.687	3.813	3.000	3.375	.656
-36	2.250	.250	3.062	6.25	2.125	2.500	.687	3.937	3.125	3.500	.656
-38	2.375	.250	3.188	6.25	2.125	2.500	.687	4.062	3.250	3.500	.656
-39	2.438	.250	3.188	6.44	2.125	2.500	.687	4.125	3.375	3.625	.656
-40	2.500	.250	3.188	6.44	2.125	2.500	.687	4.125	3.375	3.625	.656
-42	2.625	.250	3.347	6.44	2.125	2.500	.687	4.438	3.500	3.875	.656
-43	2.688	.250	3.562	7.82	2.125	2.500	.687	4.438	3.625	4.125	.656
-44	2.750	.250	3.562	7.82	2.125	2.500	.687	4.438	3.625	4.125	.656
-46	2.875	.250	3.687	7.82	2.125	2.500	.687	4.812	3.812	4.250	.656
-47	2.938	.250	3.812	7.88	2.125	2.500	.687	4.938	3.937	4.375	.656
-48	3.000	.250	3.812	7.88	2.125	2.500	.687	4.938	3.937	4.375	.656
-52	3.250	.281	4.188	8.25	2.437	2.812	.812	5.188	4.250	4.750	.812
-54	3.375	.281	4.312	8.25	2.437	2.812	.812	5.313	4.375	4.875	.812
-55	3.438	.281	4.437	8.50	2.437	2.812	.812	5.437	4.500	5.000	.812
-56	3.500	.281	4.437	8.50	2.437	2.812	.812	5.437	4.500	5.000	.812
-58	3.625	.281	4.562	8.63	2.437	2.812	.812	5.562	4.625	5.125	.812
-60	3.750	.281	4.625	8.82	2.437	2.812	.812	5.688	4.687	5.125	.812
-62	3.875	.281	4.812	8.82	2.437	2.812	.812	5.813	4.875	5.250	.812
-64	4.000	.281	4.937	8.82	2.437	2.812	.812	5.813	5.000	5.375	.812
-68	4.250	.281	5.188	9.25	2.437	2.812	.812	6.063	5.250	5.750	.812
-70	4.375	.281	5.312	9.25	2.437	2.812	.812	6.437	5.375	5.875	.812
-72	4.500	.281	5.406	9.69	2.437	2.812	.812	6.500	5.500	6.000	.812
-74	4.625	.281	5.531	9.69	2.437	2.812	.812	6.812	5.625	6.125	.812
-76	4.750	.281	5.656	9.75	2.437	2.812	.812	6.938	5.750	6.250	.812
-79	4.938	.375	6.188	*10.75	3.062	3.812	.937	7.312	6.312	6.750	.923
-80	5.000	.375	6.188	*10.75	3.062	3.812	.937	7.312	6.312	6.750	.923
-82	5.125	.375	6.375	*11.00	3.062	3.812	.937	7.812	6.500	7.250	.923
-84	5.250	.375	6.375	*11.00	3.062	3.812	.937	7.812	6.500	7.250	.923
-88	5.500	.375	6.688	*11.50	3.062	3.812	.937	7.813	6.812	7.375	.923
-92	5.750	.375	6.938	*12.00	3.062	3.812	.937	8.156	7.062	7.625	.923
-96	6.000	.375	7.188	*12.25	3.062	3.812	.937	8.437	7.312	7.875	.923
-100	6.250	.375	7.438	*12.50	3.062	3.812	.937	8.656	7.562	8.125	.923
-104	6.500	.375	7.688	*12.25	3.062	3.812	.937	8.813	7.812	8.375	.923
-108	6.750	.375	7.938	*12.50	3.250	4.000	.937	9.312	8.062	8.625	.923
-112	7.000	.375	8.188	*12.75	3.250	4.000	.937	9.562	8.312	8.750	.923
-136	8.500	.375	9.688	14.25	3.250	4.000	1.000	11.000	9.812	10.250	.923
-140	8.750	.375	9.875	*17.00	3.250	4.000	1.250	11.250	10.000	10.625	.923
-144	9.000	.375	10.125	17.88	3.250	4.000	1.250	11.625	11.000	10.875	.924

Additional sizes available upon request

FAST, SIMPLE AND RELIABLE

Split mechanical seals are designed for environments where it may be difficult to install or replace conventional seals on rotating equipment. The Flex-A-Seal Style 85 two-piece fully split cartridge mechanical seal design is easy to install, making it ideal for hard-to-access equipment such as:

- ▣ Pumps
- ▣ Mixers
- ▣ Agitators

The Style 85 is commonly used in many industries:

- ▣ Chemical Processing
- ▣ Food Processing
- ▣ Industrial
- ▣ Mining
- ▣ Pharmaceutical
- ▣ Power Generation
- ▣ Petrochemical
- ▣ Pulp and Paper
- ▣ Refining
- ▣ Water and Waste Management



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