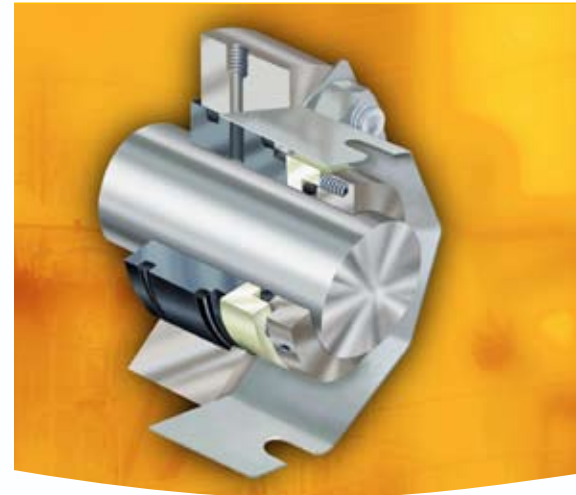


RA/RA-C Series

Outside mounted, single pusher seal

RA and RA-C Series seals are a cost-effective solutions for highly corrosive chemical services. Single pusher seal is easy to install outside the seal chamber, especially on nonmetallic pumps. RA-C seal has no wetted metal parts for the highest corrosion resistance.



Features and Benefits

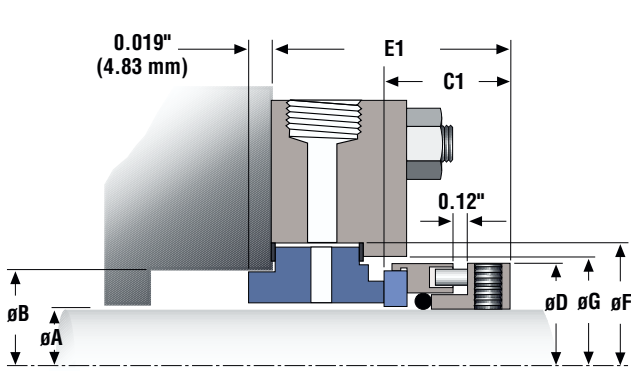
- Installs easily on the outside of the seal chamber and is suitable for metallic and nonmetallic equipment such as plastic, glass, and lined designs.
- Seal faces and elastomers are the only wetted components and are readily available in a wide range of materials for proper corrosion resistance.
- RA seal uses a composite rotor with an economical seal face insert. RA-C seal uses a solid ceramic rotor with a protective PTFE shroud.
- Drive collar, springs, and drive pins are isolated from the product to avoid the need for expensive alloys in highly corrosive services.
- Flexible rotor design is hydraulically balanced to provide proper face loading for extended reliability.
- Double O-ring mounted stator prevents distortion and various configurations are available to fit different equipment types.
- Optional integral seal flush enters through the stationary seal face, bringing cooling directly to the seal faces.
- Optional protective guard surrounds the rotating components for extra safety.

Operating Parameters

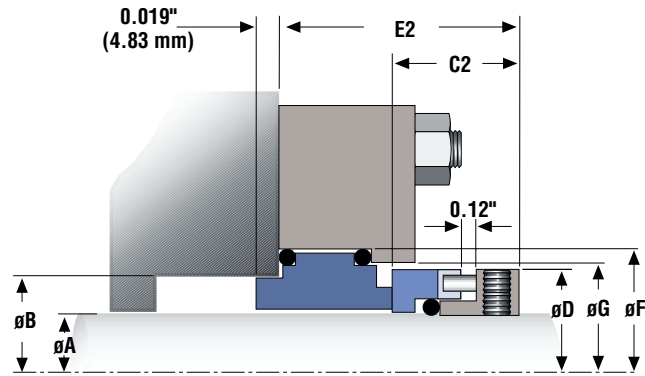
Pressure	Up to 400 psi (27.6 bar)
Temperature	Up to 400°F (204°C)
Shaft Speed	Up to 75 fps (23 m/s)
Shaft Size	0.500 to 5.000 inch (13 to 127 mm)

Materials of Construction

Metal Components	304, 316, or 20 Stainless Steel, Alloy C-276 or B-2, XM-19 or 17-4 PH Stainless Steel, Titanium, Monel
Seal Faces	Tungsten Carbide, Silicon Carbide, Ceramic, Durchrome, Carbon
Gaskets	Fluoroelastomer, Perfluoro-elastomer, Buna N, Ethylene Propylene, Neoprene, TFE-propylene



RA with Clamped Insert and Integral Flush



RA-C with O-Ring Mounted Insert

Dimensional Data in inches

A	B	C1	C2	D	E1	E2	F	G
.500	1.125	.98	.95	1.233	1.91	1.88	1.500	1.265
.562	1.187	.98	.95	1.296	1.91	1.88	1.562	1.327
.590	1.250	.98	.95	1.358	1.91	1.88	1.625	1.390
.625	1.250	.98	.95	1.358	1.91	1.88	1.625	1.390
.687	1.312	.98	.95	1.421	1.91	1.88	1.687	1.452
.750	1.375	1.03	1.00	1.515	1.97	1.94	1.812	1.577
.787	1.437	1.03	1.00	1.578	1.97	1.94	1.875	1.640
.812	1.437	1.03	1.00	1.578	1.97	1.94	1.875	1.640
.875	1.500	1.03	1.00	1.640	1.97	1.94	1.937	1.702
.937	1.562	1.03	1.00	1.703	1.97	1.94	2.000	1.765
1.000	1.625	1.03	1.00	1.765	1.97	1.94	2.062	1.827
1.062	1.687	1.09	1.00	1.828	2.03	1.94	2.125	1.890
1.125	1.750	1.09	1.00	1.890	2.03	1.94	2.187	1.952
1.181	1.812	1.09	1.00	1.984	2.03	1.94	2.312	2.077
1.187	1.812	1.09	1.00	1.954	2.03	1.94	2.250	2.015
1.250	1.875	1.09	1.00	2.015	2.03	1.94	2.312	2.077
1.312	1.937	1.09	1.00	2.078	2.03	1.94	2.375	2.140
1.375	2.000	1.09	1.00	2.140	2.03	1.94	2.437	2.202
1.437	2.062	1.09	1.00	2.203	2.03	1.94	2.500	2.265
1.500	2.125	1.09	1.00	2.265	2.03	1.94	2.562	2.327
1.562	2.187	1.19	1.16	2.453	2.12	2.09	2.750	2.515
1.625	2.375	1.19	1.16	2.515	2.12	2.09	2.812	2.577
1.647	2.375	1.19	1.16	2.546	2.12	2.09	2.875	2.640
1.687	2.437	1.19	1.16	2.578	2.12	2.09	2.875	2.640
1.750	2.500	1.19	1.19	2.640	2.12	2.09	2.937	2.702
1.812	2.562	1.19	1.16	2.703	2.12	2.09	3.000	2.765
1.875	2.625	1.19	1.16	2.765	2.12	2.09	3.062	2.827
1.937	2.687	1.19	1.16	2.828	2.12	2.09	3.125	2.890
2.000	2.750	1.19	1.16	2.890	2.12	2.09	3.187	2.952
2.062	2.812	1.19	1.16	2.953	2.12	2.09	3.250	3.015
2.125	2.875	1.19	1.16	3.015	2.12	2.09	3.312	3.077
2.187	2.937	1.19	1.16	3.078	2.12	2.09	3.375	3.140
2.250	3.000	1.19	1.16	3.140	2.12	2.09	3.437	3.202
2.312	3.062	1.19	1.16	3.203	2.12	2.09	3.500	3.265
2.375	3.125	1.19	1.16	3.265	2.12	2.09	3.562	3.327

A	B	C1	C2	D	E1	E2	F	G
2.437	3.187	1.19	1.16	3.328	2.12	2.09	3.625	3.390
2.500	3.250	1.19	1.16	3.390	2.12	2.09	3.687	3.452
2.562	3.312	1.19	1.16	3.453	2.12	2.09	3.750	3.515
2.625	3.375	1.19	1.16	3.515	2.12	2.09	3.812	3.577
2.687	3.437	1.19	1.16	3.578	2.12	2.09	3.875	3.640
2.750	3.500	1.19	1.16	3.640	2.12	2.09	3.937	3.702
2.812	3.562	1.19	1.16	3.703	2.12	2.09	4.000	3.765
2.875	3.625	1.19	1.16	3.765	2.12	2.09	4.062	3.827
2.937	3.687	1.19	1.16	3.828	2.12	2.09	4.125	3.890
3.000	3.750	1.19	1.16	3.890	2.12	2.09	4.187	3.952
3.062	3.812	1.31	1.16	3.953	2.25	2.09	4.250	4.015
3.125	4.062	1.31	1.16	4.016	2.25	2.09	4.312	4.077
3.187	4.062	1.31	1.16	4.078	2.25	2.09	4.375	4.140
3.250	4.187	1.31	1.16	4.140	2.25	2.09	4.437	4.202
3.312	4.187	1.31	1.16	4.203	2.25	2.09	4.500	4.265
3.375	4.312	1.31	1.16	4.265	2.25	2.09	4.562	4.327
3.437	4.312	1.31	1.16	4.328	2.25	2.09	4.625	4.390
3.500	4.437	1.31	1.16	4.390	2.25	2.09	4.687	4.452
3.562	4.437	1.31	1.16	4.452	2.25	2.09	4.750	4.515
3.625	4.562	1.31	1.16	4.515	2.25	2.09	4.812	4.577
3.687	4.562	1.31	1.16	4.577	2.25	2.09	4.875	4.640
3.750	4.687	1.31	1.16	4.640	2.25	2.09	4.937	4.702
3.812	4.687	1.44	1.28	4.702	2.38	2.22	5.000	4.765
3.875	4.812	1.44	1.28	4.765	2.38	2.22	5.062	4.827
3.937	4.812	1.44	1.28	4.827	2.38	2.22	5.125	4.890
4.000	4.937	1.44	1.28	4.890	2.38	2.22	4.187	4.952
4.062	4.937	1.44	1.28	4.952	2.38	2.22	5.250	5.015
4.125	5.062	1.44	1.28	5.015	2.38	2.22	5.312	5.077
4.187	5.062	1.44	1.28	5.077	2.38	2.22	5.375	5.140
4.250	5.187	1.44	1.28	5.140	2.38	2.22	5.437	5.202
4.312	5.187	1.44	1.28	5.202	2.38	2.22	5.500	5.265
4.375	5.312	1.44	1.28	5.265	2.38	2.22	5.562	5.327
4.437	5.437	1.44	1.28	5.327	2.38	2.22	5.625	5.390
4.500	5.437	1.44	1.28	5.390	2.38	2.22	5.687	5.452

Note: For sizes and conditions not listed, contact your local Flowserve Representative

FSD170eng REV 01-08 Printed in USA

To find your local Flowserve representative
and find out more about Flowserve Corporation visit
www.flowserve.com

USA and Canada

Kalamazoo, Michigan USA
Telephone: 1 269 381 2650
Telefax: 1 269 382 8726

Europe, Middle East, Africa

Essen, Germany
Telephone: 49 201 31937-0
Telefax: 49 201 2200-561

Asia Pacific

Singapore
Telephone: 65 6544 6800
Telefax: 65 6214 0541

Latin America

Mexico City
Telephone: 52 55 5567 7170
Telefax: 52 55 5567 4224

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. Because Flowserve is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.