

VRA VRA-C

An outside mounted dry running single seal designed specifically for use on top-entry agitator and mixer services. The contacting dry running design eliminates the need for a buffer fluid system while handling run out up to 0.150" FIM.

Features/Benefits

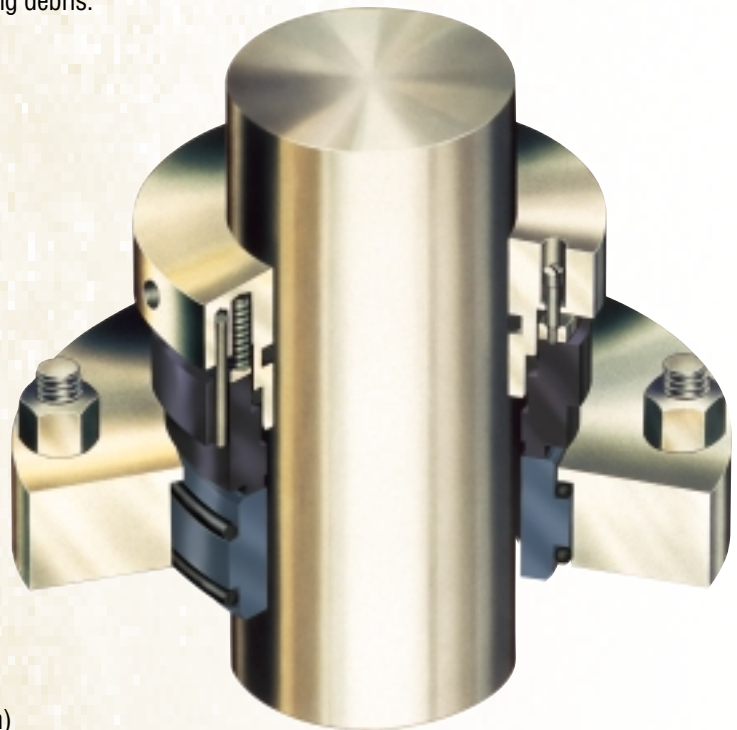
- Self-lubricating carbon or filled PTFE seal face runs completely dry without cooling - Long life and reliability are achieved in the dry vapor space at the top of the mixer vessel while eliminating product contamination from liquid barrier fluids.
- Flexible rotor design compensates for shaft misalignment - Clearances, drive design, seal face dimensions, and O-ring configuration were optimized for the high run-out requirements of mixers and similar equipment. The VRA operates at eccentric run-out levels up to 0.150" FIM.
- Double O-ring mounted stator prevents distortion - Various configurations are available to fit different equipment types.
- Non-metallic collar option provides superior chemical resistance - Designated the VRA-C, a two-piece collar design eliminates the need for expensive exotic metal alloys in non-wetted areas.
- Optional sanitary gland allows steam cleaning and sterilizing of the seal's interior while mounted on the equipment - Sanitary porting aids in the removal of steam cleaning debris.

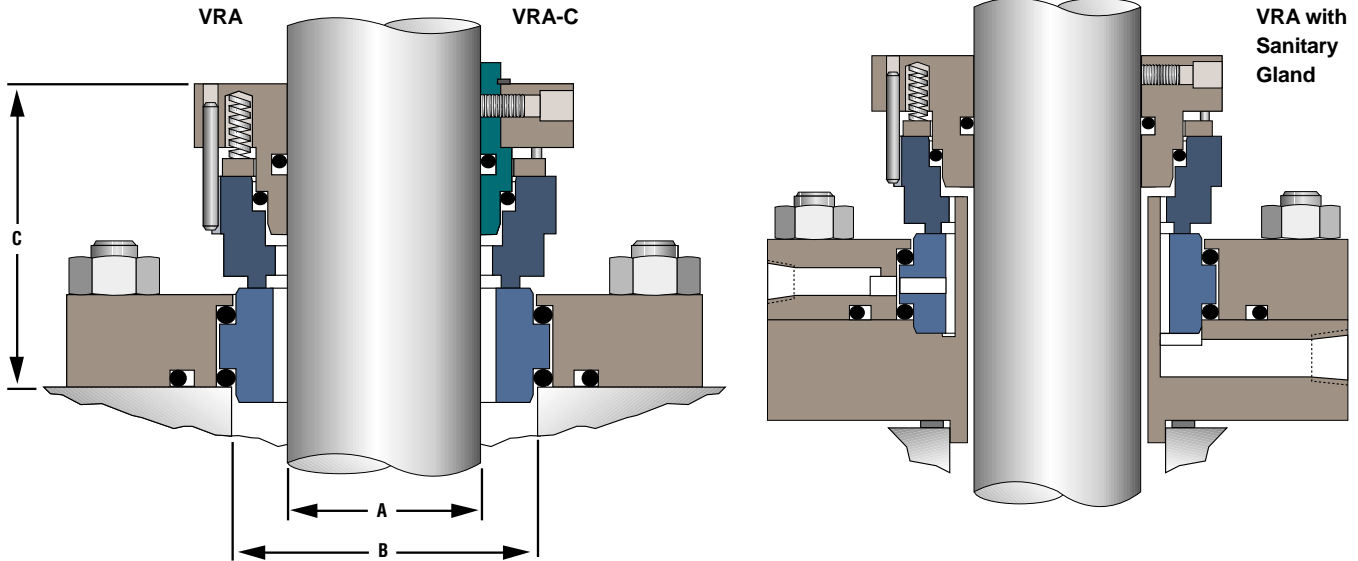
Materials of Construction

- Seal ring: Carbon, Filled PTFE
 - Insert: Durchrome®, Tungsten Carbide, Silicon Carbide
 - Collar: 316 Stainless Steel, Filled PTFE
 - Elastomers: Fluoroelastomer, Perfluoroelastomer, EPR
- * Food grade materials of construction also available

Operating Parameters

- Pressures: Full vacuum to 200 psi (13.8 bar)
- Temperatures: Up to 300°F (Up to 149°C)
- Shaft Speeds: Up to 350 rpm
- Sizes: 1.000" to 7.000" (25mm to 178mm)





Dimensional Data (dimensions in inches)

A	B	C	A	B	C
1.000	2.000	3.00	4.250	5.250	3.25
1.250	2.250	3.00	4.500	5.500	3.25
1.500	2.500	3.00	4.750	5.750	3.25
1.750	2.750	3.00	5.000	6.000	3.25
2.000	3.000	3.00	5.250	6.250	3.25
2.250	3.250	3.00	5.500	6.500	3.25
2.500	3.500	3.00	5.750	6.750	3.25
2.750	3.750	3.00	6.000	7.000	3.25
3.000	4.000	3.00	6.250	7.250	3.25
3.250	4.250	3.00	6.500	7.500	3.25
3.500	4.500	3.00	6.750	7.750	3.25
3.750	4.750	3.25	7.000	8.000	3.25
4.000	5.000	3.25			

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

The information and specifications presented in this product brochure are believed to be accurate, but are supplied for information 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, with respect to the product. Although Flowserve Corporation can provide general application guidelines, it cannot provide specific information for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper selection, installation, operation and maintenance of Flowserve products. Because Flowserve Corporation is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice.

Primary Worldwide Flow Solutions Division Locations

Licenseses, authorized agents, and affiliated companies located worldwide.

United States Kalamazoo, MI Phone 616-381-2650 Fax 616-381-8368	Canada Edmonton, Alberta Phone 780-463-7958 Fax 780-450-1241	Netherlands Roosendaal Phone 31-165-581400 Fax 31-165-552622	Argentina Villa Martelli Phone 54-11-4790-6800 Fax 54-11-4709-7072	Australia Marayong NSW Phone 61-2-8822-7100 Fax 61-2-9679-7511
Singapore Phone 65-746-4318 Fax 65-747-1963	Mexico Tlaxcala Phone 52-2-461-6791 Fax 52-2-461-6847	Brazil Sao Paulo Phone 55-11-4066-8600 Fax 55-11-4066-7014	Japan Osaka Phone 81-720-85-5571 Fax 81-720-85-5575	Germany Dortmund Phone 49-231-6964-0 Fax 49-231-6964-248