

VRA and VRA-C

Outside mounted dry running seal

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 3.81 mm (0.150 inch) FIM.



Features and Benefits

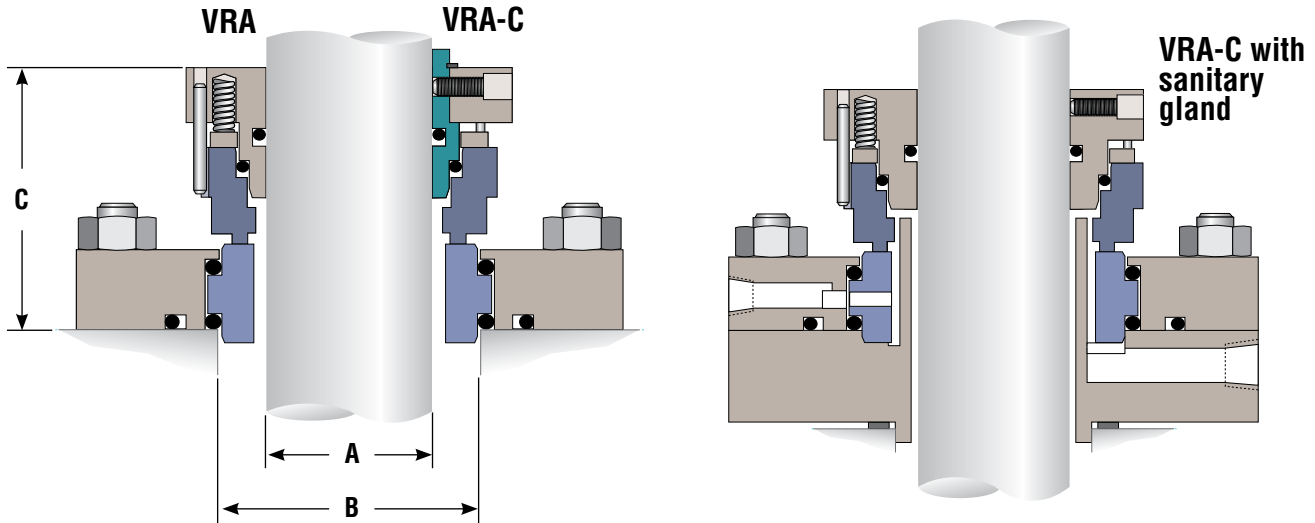
- Self-lubricating carbon or filled PTFE seal face runs completely dry without cooling. Long life and reliability are achieved in the dry vapor space at the top of the mixer vessel while eliminating product contamination from liquid barrier fluids.
- Flexible rotor design compensates for shaft misalignment. 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 3.81 mm (0.150 inch) 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

Metal Components	316 Stainless Steel, Filled PTFE
Rotating Face	Carbon, Filled PTFE
Stationary Face	Durchrome®, Tungsten Carbide, Aluminum Oxide
Gaskets	Fluoroelastomer, Perfluoroelastomer, EPR
	*Food grade materials of construction also available
Springs	Alloy C-276

Operating Parameters

Pressure	Full vacuum to 13.8 bar (200 psi)
Temperature	up to 149°C (300°F)
Shaft Speed	up to 350 rpm
Shaft Sizes	25 to 178 mm (1.000 to 7.000 inch)



Dimensional Data in millimeters

in inches

A	B	C	A	B	C
25.40	50.80	76.20	1.000	2.000	3.000
31.75	57.15		1.250	2.250	3.000
38.10	63.50		1.500	2.500	3.000
44.45	69.85		1.750	2.750	3.000
50.80	76.20		2.000	3.000	3.000
57.15	82.55		2.250	3.250	3.000
63.50	88.90		2.500	3.500	3.000
69.85	95.25		2.750	3.750	3.000
76.20	101.6		3.000	4.000	3.000
82.55	108.0		3.250	4.250	3.000
88.90	114.3	76.20	3.500	4.500	3.000
95.25	120.7	82.55	3.750	4.750	3.250
101.6	127.0		4.000	5.000	3.250
108.0	133.4		4.250	5.250	3.250
114.3	139.7		4.500	5.500	3.250
120.7	146.1		4.750	5.750	3.250
127.0	152.4		5.000	6.000	3.250
133.4	158.8		5.250	6.250	3.250
139.7	165.1		5.500	6.500	3.250
146.1	171.1		5.750	6.750	3.250
152.4	177.8		6.000	7.000	3.250
158.8	184.2		6.250	7.250	3.250
165.1	190.5		6.500	7.500	3.250
171.5	196.9		6.750	7.750	3.250
177.8	203.2		7.000	8.000	3.250

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

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