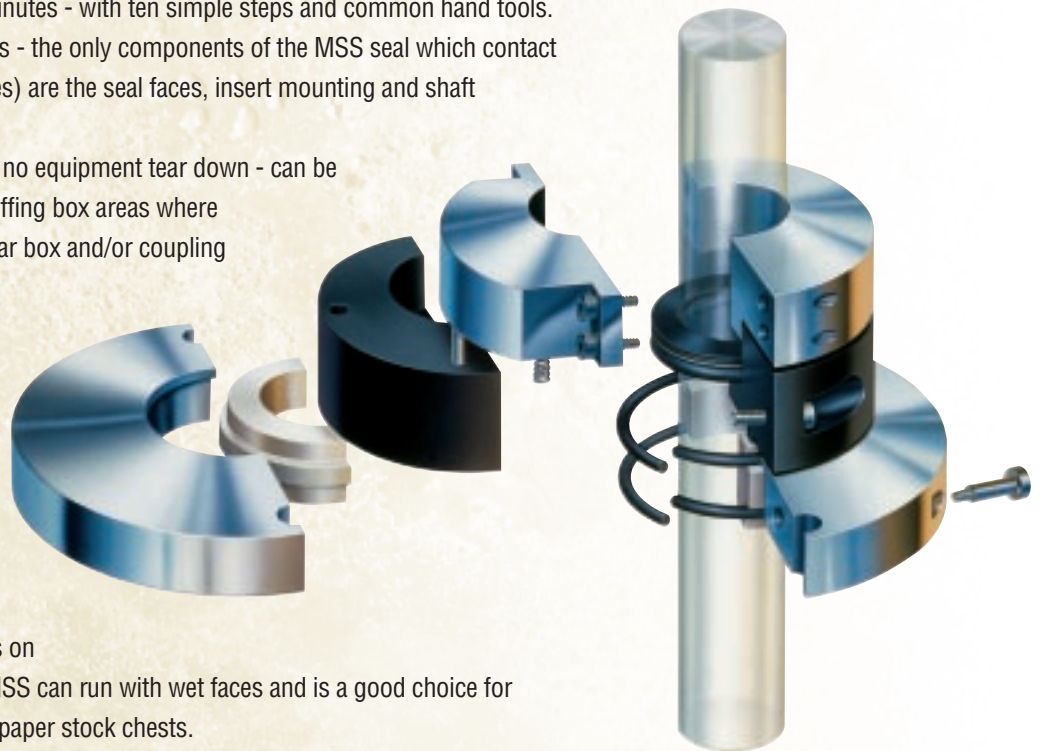


# MSS

This economical split seal installs easily on mixers, reactors, and other containment vessels. On older equipment, or where compression packing is being changed out for a mechanical seal, shaft wobble and eccentricities can be severe. The MSS seal was designed to work in these tough conditions where stuffing box face run-out, bore run-out, and O.D. run-out are beyond the capabilities of seals designed primarily for centrifugal pumps.

#### **Features/Benefits**

- Handles shaft run-out up to 0.150" T.I.R.
- The outside seal arrangement of the MSS makes installation, inspection and maintenance simple. Installation time is typically less than 45 minutes - with ten simple steps and common hand tools.
- Nonmetallic wetted parts - the only components of the MSS seal which contact process fluids (or gasses) are the seal faces, insert mounting and shaft packing O-rings.
- Fits in tight spaces with no equipment tear down - can be installed in cramped stuffing box areas where the bearing housing, gear box and/or coupling create obstructions.
- Can be run dry or wet - the self-lubricating faces and a design that dissipates heat from the seal faces, make dry-running the MSS a practical alternative to packings and liquid-running seals on top entry mixers. The MSS can run with wet faces and is a good choice for side entry reactors and paper stock chests.
- Withstands pressure reversals - the MSS design compensates for pressure reversals and helps to ensure product purity.

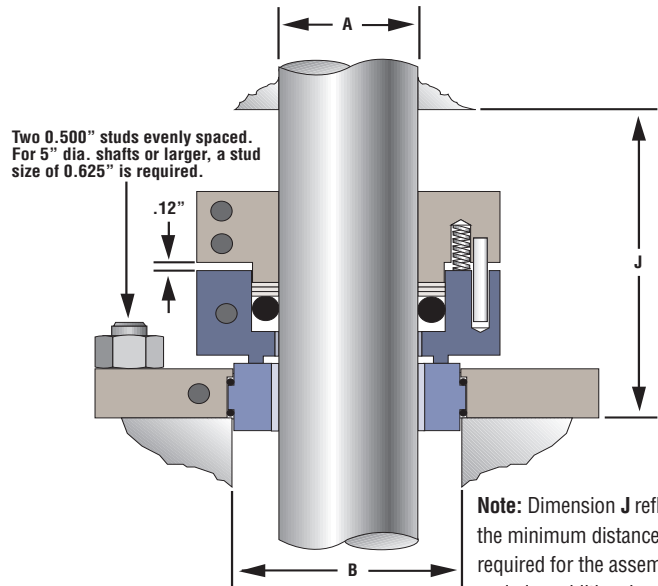


**Materials of Construction**

- Seal ring: Carbon
- Insert: Ceramic (tungsten carbide optional)
- Gland and collar: 316 Stainless Steel
- Elastomers: Fluoroelastomer (EPR optional)

**Operating Parameters**

- Pressures: Dry: Full vacuum up to 75 psi (5 bar)  
Wet: Up to 100 psi (7 bar)
- Speeds: Dry: Up to 350 rpm  
Wet: Up to 1750 rpm
- Temperatures: Up to 250°F (121°C)
- Shaft Run-out: Up to 0.150" (4mm) T.I.R. (sum total of run-out, eccentricity, and deflection)
- Sizes: 1.000" to 12.000" (25mm to 305mm)



**Dimensional Data** (dimensions in inches)

Shaft Size ±0.001" (Dimension A)	Standard Bore Diameter ±0.005" (Dimension B)	Gland Bolt Circle Diameter	Distance to First Obstruction (Dimension J)
1.000	2.250	4.75	4.44
1.250	2.500	5.00	4.44
1.500	2.750	5.25	4.44
1.750	3.000	5.50	4.44
2.000	3.250	5.75	4.44
2.250	3.500	6.00	4.44
2.500	3.750	6.25	4.44
2.750	4.000	6.50	4.44
3.000	4.250	6.75	4.44
3.250	4.500	7.00	4.44
3.500	4.750	7.25	4.44
3.750	5.000	7.50	4.44
4.000	5.250	7.75	4.44
4.250	5.500	8.00	4.44
4.500	5.750	8.25	4.44
4.750	6.000	8.50	4.44
5.000	6.500	9.50	5.00
5.250	6.750	9.75	5.00
5.500	7.000	10.00	5.00
5.750	7.250	10.25	5.00
6.000	7.500	10.50	5.00

The above is a partial listing. Additional sizes up to 12.000" and metric sizes are also available.

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

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