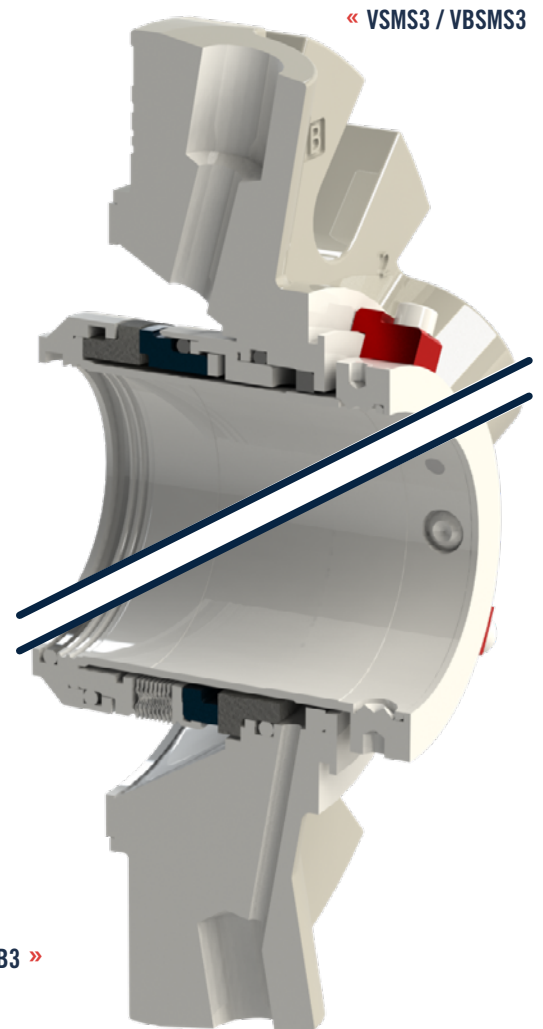


# VANTAGE SINGLE CARTRIDGE SEAL FEATURES

*ANSI MULTI-SPRING AND WELDED METAL BELLOWS MECHANICAL SEAL*

## PRODUCT LINE FEATURES

- Simple cartridge seal installation
- Sleeve is isolated from process fluid
- 3/8" NPT flush connection allows for cooling and venting of seal.
- 1/4" NPT vent and drain connections provide differential sizing to minimize the potential of improper piping
- Non-sparking throttle bushing is positively retained to avoid pressure blow out, minimizing leakage in the event of seal failure.
- Vantage seal glands include flush, vent, and drain connections and a close-clearance, non-sparking throttle bushing to direct any leakage to the drain connection.
- Flush, vent, and drain connections available to be piped at multiple locations.
- Angled gland connections allow for easier pipe fitting.
- Setting clips provide positive axial and radial setting of the Vantage cartridge seal to ensure proper seal installation. The Vantage setting clips are easy to access for simple removal.
- Convertible gland design to accept over four (4) design configurations

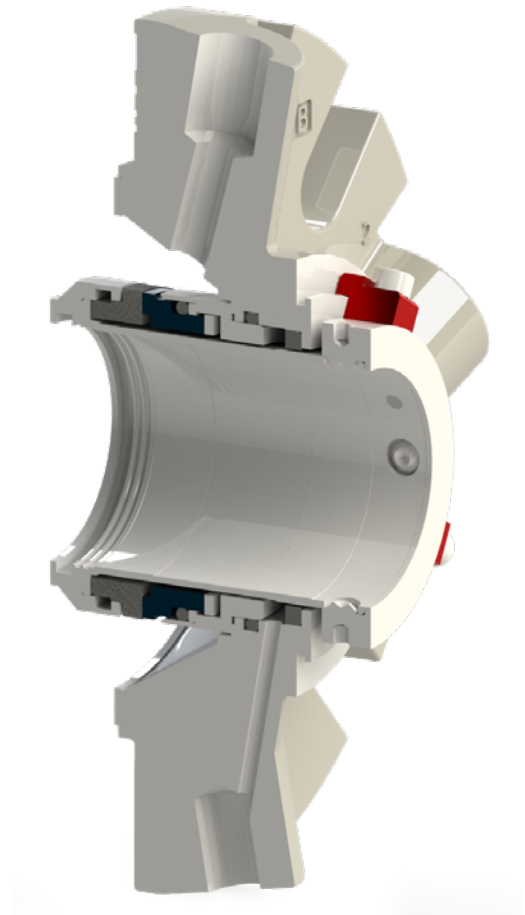


# VSMS3 / VBSMS3

## ANSI STATIONARY MULTI-SPRING SINGLE CARTRIDGE MECHANICAL SEAL

### FEATURES

- Stationary springs isolated from process fluids to minimize corrosion, clogging
- Flat Drive System eliminates face drive pins enhancing face stability and reducing face fractures
- Dynamic Drive Ring eliminates primary face hang up and reduces face to pin fretting
- Dynamic elastomer moves on non-metallic, smooth surface eliminating fretting
- Stationary design for optimal face alignment
- Available in ANSI Big/Taper and Standard Bore



### Materials of Construction

Rotating Seal Face	Sintered Silicon Carbide
Stationary Seal Face	Carbon, Sintered Silicon Carbide
Springs	Hastelloy® C276
Metallurgy	316 SS
Elastomers	Viton®, Ethylene Propylene, Aflas®, Buna, Neoprene, Perfluorelastomer
Gland Gasket	Glass-Filled Teflon™
Throttle Bushing	Glass-Filled Teflon™

### Operating Parameters

Temperature	400° F (200°C)
Pressure	300 PSI (20 Bar)
Speed	4500 FPM

# VANTAGE SINGLE CARTRIDGE FEATURES

## DESIGN FEATURES & BENEFITS

**Setting Clips** provide positive axial and radial setting of the Vantage cartridge seal to ensure proper seal installation. The Vantage setting clips are easy to access for simple removal.

**Non-Sparking Throttle Bushing** is positively retained to avoid pressure blow out, minimizing leakage in the event of seal failure.

**Stationary Springs** isolated from process fluids to minimize corrosion, clogging, and stress-related failures

**3/8" NPT Flush Connection** allows for cooling and venting of seal.

**Dynamic Drive Ring** eliminates primary face hang up and reduces face to pin fretting

**Stationary Design** for optimal face alignment.

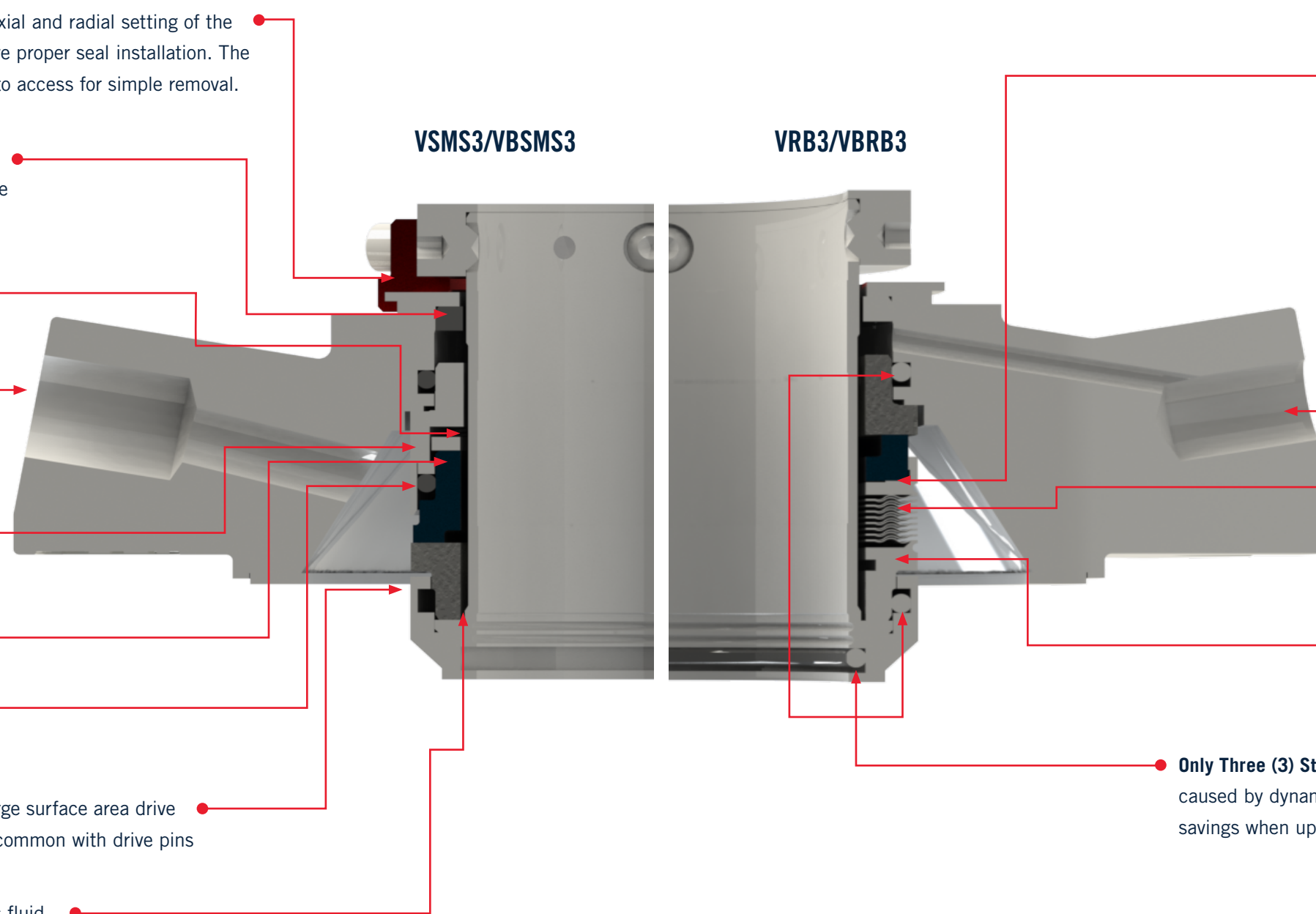
**Dynamic Elastomer** moves on non-metallic, smooth surface eliminating fretting

**Unique Flat Drive System** Seal faces are driven by large surface area drive flats in retainers to reduce stress and face fracture common with drive pins

**Sleeve** is isolated from process fluid.

VSMS3/VBSMS3

VRB3/VBRB3



• No fretting • No springs to clog or break

• Uniform 360° transfer of torque to the rotating face.

• **Angled Gland Connections** allow for easier pipe fitting.

• **1/4" NPT Vent and Drain Connections** provide differential sizing to minimize the potential of improper piping.

• **Welded Metal Bellows** replace the dynamic elastomer which can hang up the seal faces.

• **Rotating Design** uses centrifugal force for self-cleaning.

• **Only Three (3) Static Elastomers** eliminate seal failures caused by dynamic O-ring "hang up" and offers cost savings when upgrading to Perfluorelastomers.