

# **Bearing Gard**<sup>™</sup> bearing isolator

with electrical grounding

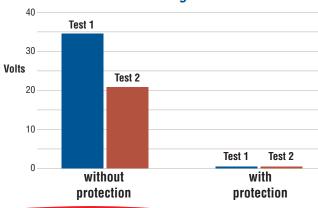
Bearing Gard isolators with AEGIS® grounding ring technology provide superior reliability and extended life for electric motors using Variable Frequency Drives

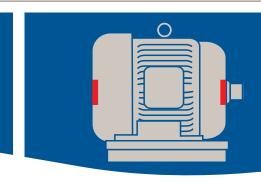
# Complete motor protection

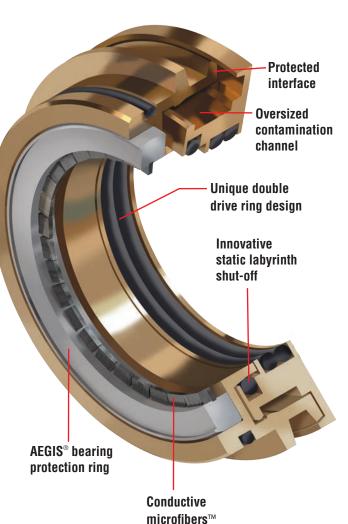
The growing population of Variable Frequency Drives (VFDs) as motor controllers has revealed electrical grounding through the bearings to be a major cause of premature motor failure. The Bearing Gard with electrical grounding is specifically designed to prevent motor failure from electrical fluting and contamination ingress.

- Bearing Gard technology provides superior static and dynamic protection against contamination ingress
- AEGIS® bearing protection ring utilizes Electron Transport Technology™ and conductive microfibers™ to provide the most reliable current diversion technology
- Prevents electrical discharge damage including fluting in bearings
- Protects against lubrication breakdown due to electrical arcing and contamination
- Standard design accommodates axial shaft movement of 0.63 mm (0.025 inch) TIR

## VFD induced shaft voltage





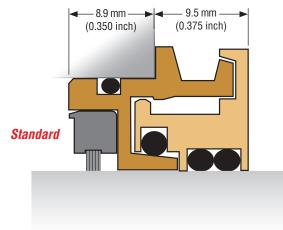


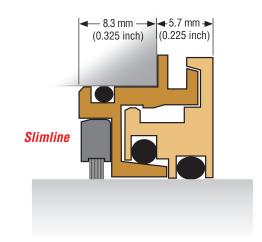


# Working to keep industry running, Flowserve offers the Bearing Gard with electrical grounding in many stocked sizes. Custom sizes ship in 2 days or less.

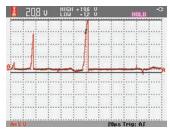
## General guidelines for electrical grounding designs:

- Shaft diameters 23-152 mm (0.875 6.000 inch)
- Housing bore: 20 50 mm (0.750 2.000 inch) over shaft diameter
- · Lengths: Standard and Slimline (see cross section view)
- Maximum axial movement: 0.63 mm (0.025 inch) TIR
- · Maximum radial runout: 0.13 mm (0.005 inch) TIR
- Shaft temperature: up to 190°C (375°F)
- Speed: up to 5000 rpm
- Rotor and Stator: Bronze
- · O-rings: Fluoroelastomer
- · Bearing lubrication: Grease or dry lubrication

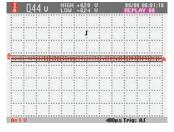




# Reliable discharge of voltage



VFD motor without protection discharges 20.8V through the bearings.



VFD motor and Bearing Gard with electrical grounding provides a 98% drop in shaft voltage

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