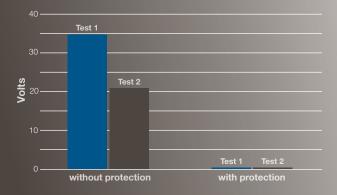


Bearing Gard[™] Bearing Isolator With Electrical Grounding

Bearing Gard isolators with AEGIS[®] grounding ring technology provide superior reliability and extended life for electric motors using variable frequency drives.

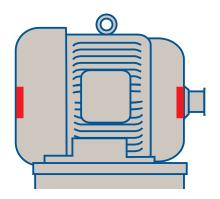
VFD induced shaft voltage

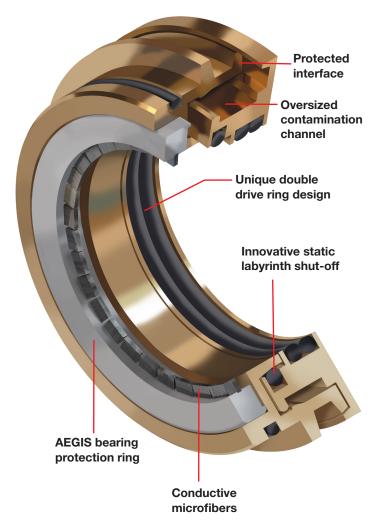


Complete motor protection

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 in) TIR







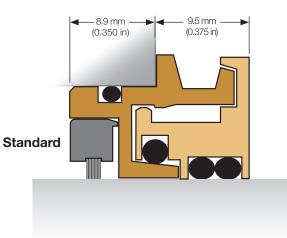
Bearing Gard[™] Bearing Isolator With Electrical Grounding

Custom sizes ship in two days or less

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

General guidelines for electrical grounding designs:

| Shaft diameters | 23–152 mm (0.875–6.000 in) |
|------------------------|---|
| Housing bore | 20–50 mm (0.750–2.000 in) over shaft diameter |
| Lengths | Standard and slimline (see cross-section view) |
| Maximum axial movement | 0.63 mm (0.025 in) TIR |
| Maximum radial runout | 0.13 mm (0.005 in) TIR |
| Shaft temperature | to 190°C (375°F) |
| Speed | to 5000 rpm |
| Rotor and stator | bronze |
| O-rings | Fluoroelastomer |
| Bearing lubrication | grease or dry lubrication |



Slimline

AEGIS® is a registered trademark of Electro Static Technology, an ITW Company. All rights reserved.

FSD264a (E/AQ) December 2018

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative 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, regarding any matter with respect to this product. Because Flowserve is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.

©2018 Flowserve Corporation. All rights reserved. This document contains registered and unregistered trademarks of Flowserve Corporation. Other company, product, or service names may be trademarks or service marks of their respective companies.

<mark>ੋ</mark> 208 v Цон +196 V ного -∞ **Т** 0,

Reliable discharge of voltage

| · | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|----|---|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|---|---|---|------|---|
| - | - | ~ | | - | 7 | - | T. | | - | - | - | *** | | r | - | | - | _ | | - | _ | - | | - | - | _ | v | - | 1 | | | |
| | - | ~ | | - | Ŧ | - | T, | - | - | - | - | ~ | ÷ | r | | ÷ | - | - | Ŧ | - | | ÷ | - | - | Ę | | Y | - | ÷ | - | | |
| | | ~ | ī | - | - | - | Ť | | | - | - | | ł | r | | ł | | | Ŧ | | | ł | | | 1 | | Y | | ī | | | 1 |
| | | ~ | 1 | | - | | Ť | | | | - | | 1 | - | | ł | | | ł | | | 1 | | | 1 | | Y | | | | | |
| | | | | | | | 1 | | | | | | | | | - | | | | | | - | | | | | Y | | | | | |
| | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | Y | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | Y | | | | | |
| | | | | | | | * | | | | | | | | | | | | | | | | | | | | Y | | | | | |
| | | | | | | | T | | | | | | | | | | | | | | | | | | | | Ý | | | | | |
| | | | | | | | T | | | | | | | | | | | | | | | | | | | | Ŷ | | | | | |
| | | | | | | | T | | | | | | | | | | | | | | | | | | | | Y | | | | | |
| | | | | | | | T | | | | | | | | | | | | | | | | | | | | Ŷ | | | | | |
| · · · · | | | - | | | | T | | | | | | | | | | | | | | | | | | | | Ŷ | | | | | |
| | | | - | | | | | | | | | | | | | | | | | | | | | | | | Ŷ | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | Ŷ | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | ¥ | | | | •••• | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | ¥ | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | ¥ | | | | | |
| · · · · · | | | - | | | | * | | | | | | | | | | | | | | | | | | | | ¥ | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | ¥ | | | | | |
| A | | | | | | | | | | | | | | | | | | | | | | | | | | | Υ | | | | | |

VFD motor without protection discharges 20.8 V through the bearings.

| Å | 0, | 44 | Ų | HI(LO | ώH + ω - | 020 024 | Ŭ | | 09 RE | /08 0 PLA\ | 0:01:1 / 00 |
|---|----|-------|-------|-----------|-------------|------------|-------|-------|----------|---------------|----------------|
| | | | | | | | | | | | |
| : | 1 | | | | | | | | | | 1 |
| · | | | | | | | | | | | |
| | | | | | | | | | | | |
| : | | | - 2 | - 2 | - 1 | - | | | 1.1 | 1.1 | |
| • | | | | | | | · · · | | | | |
| | | | | | | | | | | | |
| | | 1.1 | | | | | | | | | |
| : | | ÷ | - ÷ - | ÷ | | | | | | | |
| | | | | | | | | | | | |
| | - | 1.0.1 | 10.00 | ALC: NO | | 1000 | 1000 | 11010 | 1.444 | 1414 | 1171 |
| | | | -111 | | | | | 11/11 | ,,,,,, | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | 1 | : | : | : | : | | | | : |
| | 1 | 1 | 1 | 1 | - | | 1 | 1 | 1 | 1 | 1 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

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

Headquarters

Flowserve Corporation 5215 North O'Connor Blvd. Suite 2300 Irving, Texas 75039-5421 USA Telephone: +1 937 890 5839

USA and Canada

Kalamazoo, Michigan USA Telephone: +1 269 381 2650 Europe, Middle East, Africa

Etten-Leur, The Netherlands Telephone: +31 765 028 200

Asia Pacific

Singapore Telephone: +65 6544 6800

Latin America

Mexico City Telephone: +52 55 5567 7170