

# MODEL 1500

## SERVICE INSTRUCTIONS



6195 Corte del Cedro, #100  
 Carlsbad, California 92011, USA  
 Ph 760 431 7723 Fax 760 431 0905  
 e-mail: [info@mercotac.com](mailto:info@mercotac.com)



Mercotac® brushless slip rings contain a small amount of liquid mercury and must be disposed of properly through recycling. Mercotac, Inc. offers a no cost recycling service for this purpose. **Do not dispose of them in the trash.** Ship spent units to Mercotac Inc., in a sealed plastic bag and package items for UPS Ground shipment. Please state on paperwork "For Recycling", and identify shipments with company name and Phone / FAX numbers. (Do not send through USPS or by Air, as it is illegal.) Contact Mercotac for shipping information.

1. Mercotac® slip rings can be used both horizontally and vertically. However the "UP" arrow on the body of the slip ring should not point below horizontal. The slip rings are reversible so they need not be installed upside down. It is preferable to store units upright (arrow up). <Fig 1>

2. . The slip ring is mounted by the body or the lower threaded stud when mounted above the rotating element, or by the upper threaded stud when mounted below the rotating element. They are not designed to carry mechanical loads. One end should always float, attached only by the connecting wires. In horizontal applications, mount the slip ring with the body rotating to reduce mechanical loads on the bearing. One end should be allowed to float attached only by the connecting wires. Never rigid mount both ends of the slip ring. This will cause slip ring failure. Limit mounting eccentricity to .005" (.13mm). <Fig 2>

3. **Do not solder to the connection studs as such misuse will cause slip ring failure and voids the warranty.**

4. Use stranded wires of ample length and flexibility, such as welding cable, to avoid mechanical loads. Avoid taut wires that pull on the slip ring. The wires should have enough free play to allow the connection end to rotate freely approximately ¼ turn. Wires which allow too much free play could wrap around the slip ring. <Fig 2>

5. Provide current protection (fuse) on the wires attached to the slip ring. Over-current conditions can cause failure of the slip ring. **CAUTION:** Although primary current flow is between the contact studs, the stainless steel body may become electrically "hot".

6. The slip ring contains plastic materials, which are sensitive to heat. Over-heating will cause reduced life or slip ring failure. Provide thermal insulation where necessary to prevent temperature of the unit from exceeding 140°F (60°C).

7. **In food packaging applications:** Mercotac® brushless slip rings contain liquid mercury and other fluids. **Isolate the slip ring from the food processing area by using a protective housing.** Short circuit failure at or in connection with a Mercotac® slip ring may rarely result in leakage. The use of a protective housing is required in these applications. (Machine specific- not supplied by Mercotac, Inc.).

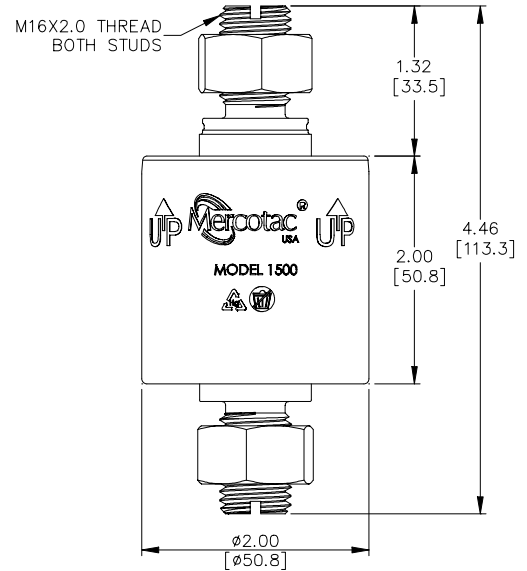


Fig 1 Dimensions: Inches [mm]

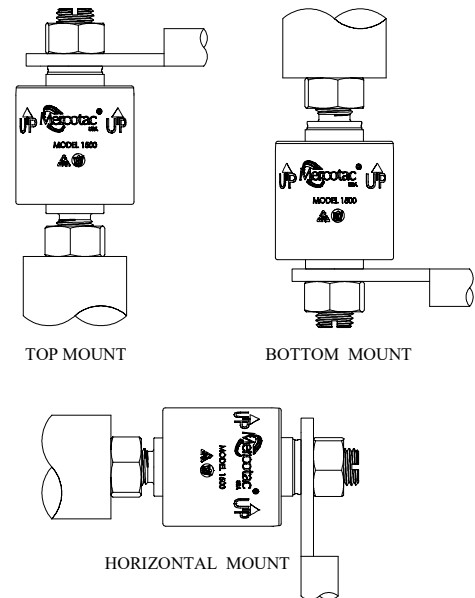


Fig 2 Mounting Examples

### TECHNICAL SPECIFICATIONS:

NUMBER OF CONDUCTORS:	1
CURRENT RATING (MAX):	500 AMPS
MAXIMUM BODY TEMPERATURE:	60°C (140°F)
MINIMUM OPERATING TEMP.:	-29°C (-20°F)
MAXIMUM ROTATING SPEED:	300 RPM
TYPICAL ROTATING TORQUE:	750 gm•cm
WEIGHT (WITH HEX NUTS):	.815Kg (1.80lb)

**WARRANTY:** Units are guaranteed for one year from date of purchase against defective materials and workmanship. Replacement will be made except for defects caused by abnormal use or mishandling. All statements and technical information contained herein, or presented by the manufacturer or his representative are rendered in good faith. User must assume responsibility to determine suitability of the product for intended use. The manufacturer shall not be liable for any injury, loss or damage, direct or consequential arising out of the use, or attempt to use the product.

# MODEL 1500-1

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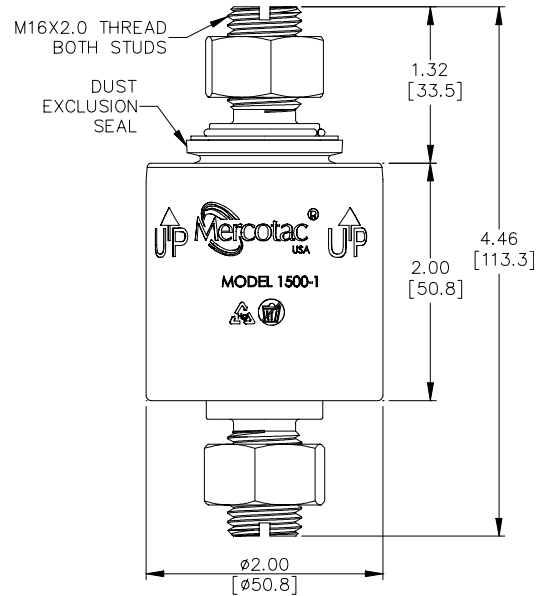
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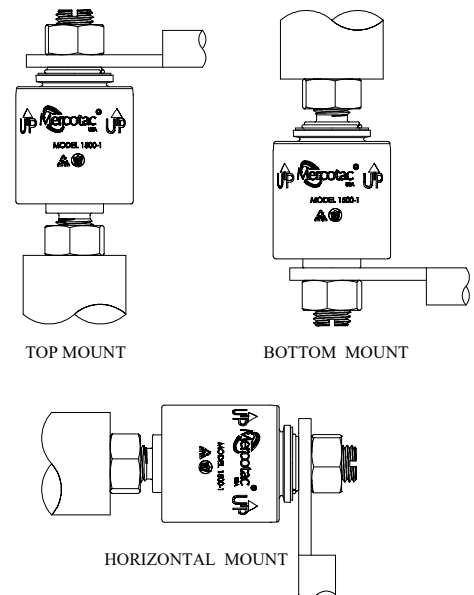
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