

MODEL 1250-LS SERVICE INSTRUCTIONS



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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. The Mercotac® model 1250-LS brushless slip rings are specifically designed for low rotating torque. They should only be used vertically. The "UP" arrow on the body of the slip ring indicates proper orientation. The slip ring should be used and stored 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. 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 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 that allow too much free play can wrap around the slip ring. <Fig 2>

5. Provide quick acting 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 anodized aluminum body is electrically "hot". Disable power source before handling a suspected failed slip ring or when working near the slip ring.

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

7. **In food and 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.

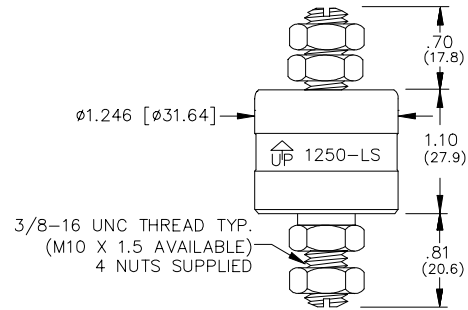


Fig 1 Dimensions: Inches [mm]

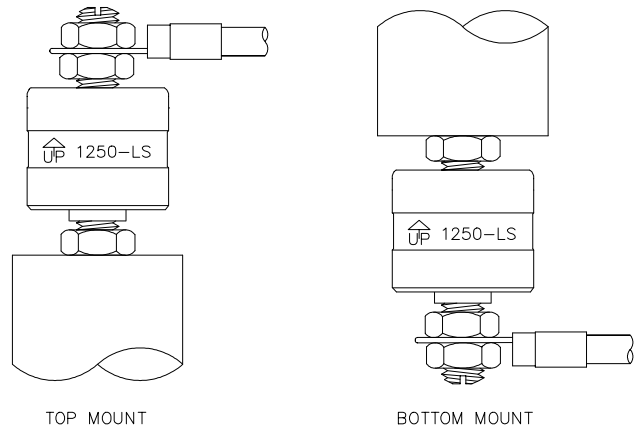


Fig 2 Mounting Examples

TECHNICAL SPECIFICATIONS	
CURRENT RATING	250 amps
MAXIMUM ROTATING TORQUE	125 gm·cm
MERCURY CONTACT RESISTANCE	< 1 milliohm
MAXIMUM ROTATING SPEED	1200 rpm
MAXIMUM BODY TEMPERATURE °C (°F)	60 (140)
MINIMUM OPERATING TEMP. °C (°F)	-29 (-20)
MAX. FREQUENCY RESPONSE	200 MHz
BALL BEARING IS STAINLESS STEEL	