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. Mercotac® brushless 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. It is preferable to store units upright (with the arrow up). <Fig 1>

2. The slip ring can be held or mounted by the body or the receptacle <Fig 2>, and was 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. (Model 110 is an exception). There is a spring tension fit between the cap or receptacle and the contacts. The cap is usually mounted to the bearing end. <Fig 3>. **Never rigid mount both ends of the connector. This will cause connector failure.** Limit mounting eccentricity to a maximum of .005" (.13mm)

3. The brushless slip ring mounting is reversible (except model 110), so they need not be installed upside down <Fig 4>.

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

5. 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 contact end to rotate freely approximately ¼ turn. Wires that allow too much free play could wrap around the slip ring.

6. 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:** The aluminum body may be electrically "hot" after failure. Disable power source before handling a suspected failed slip ring or when working near the slip ring.

7. 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). <Fig 5>

8. Vibration and mechanical shock will reduce the life or cause slip ring failure. Some installations may require a shock isolating mounting, such as rubber tubing. <Fig 6>

9. **In food and packaging applications:**
Mercotac® brushless slip rings contain liquid mercury and other fluids. **Isolate 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 7>

Fig 1

DIMENSION "A" +.001(.025) −.0	
MODEL	HOLE SIZE
105	.283(7.19)
110	
205	
305	.408(10.36)

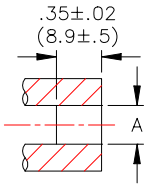

Fig 2 Receptacle press-fit Dimensions

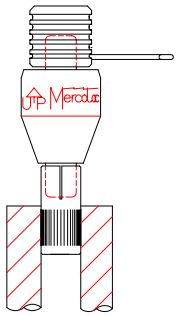

Fig 3 110-T Mounting

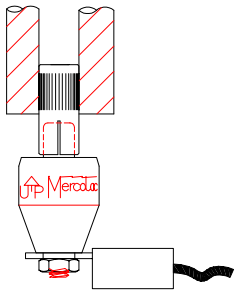

Fig 4 110 Mounting

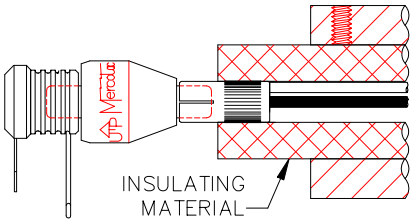

Fig 5 Thermal Insulation

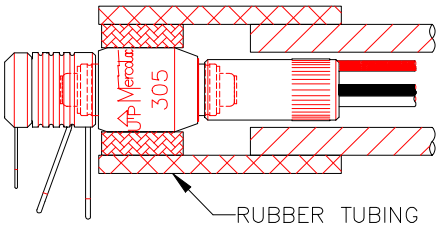

Fig 6 Vibration Isolation

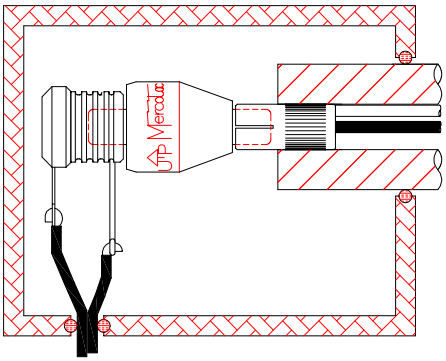

Fig 7 Protective Housing

COAX SERIES

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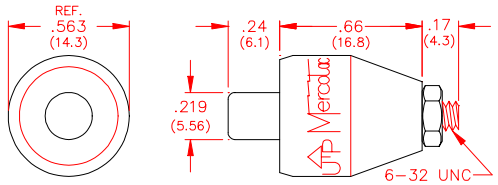
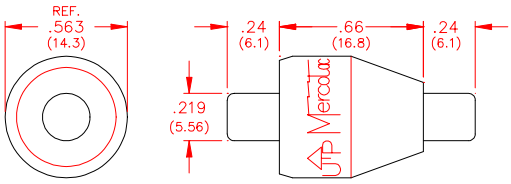
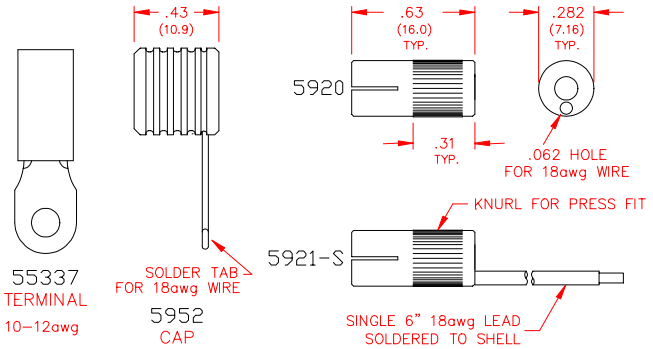
MODEL 110
1 pole

ORDER ACCESSORIES SEPARATELY



MODEL 110-T & 105
1 pole





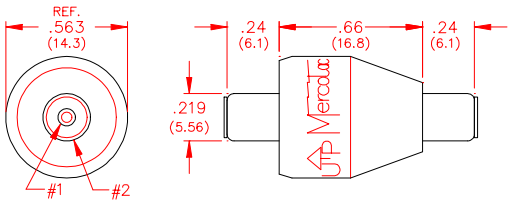
SINGLE CONDUCTOR ACCESSORIES

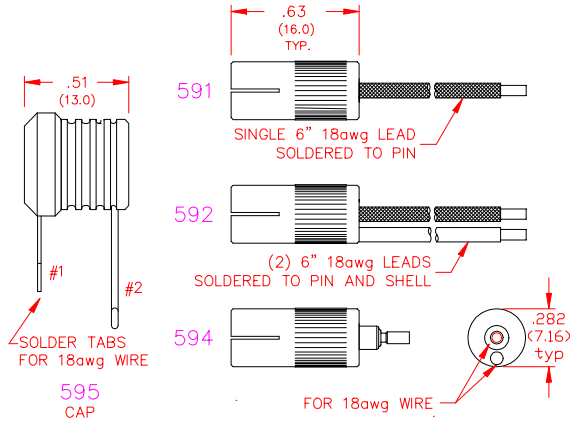
TOLERANCES	x.xxx (x.xx) ±0.001 (±0.025)
INCHES (mm)	x.xx (x.x) ±0.010 (±0.25)

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 205
2 pole

ORDER ACCESSORIES SEPARATELY

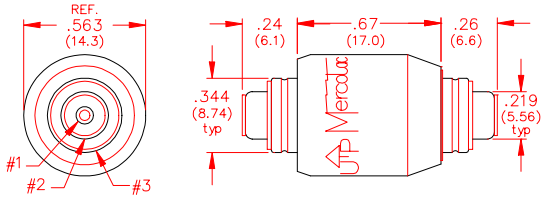


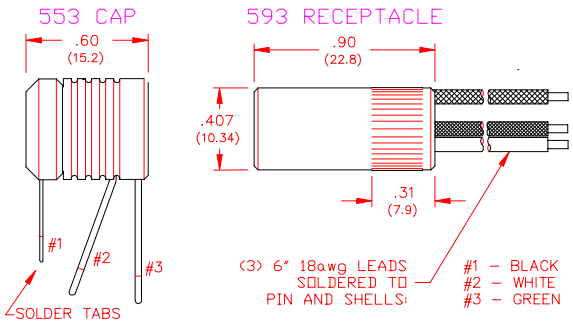


TWO CONDUCTOR ACCESSORIES

MODEL 305
3 pole

ORDER ACCESSORIES SEPARATELY





THREE CONDUCTOR ACCESSORIES

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	MODEL NUMBER						
	105	110 /-T	110-L/TL	205	205-H	205-L	305
CONDUCTORS	1			2			3
VOLTAGE RANGE (V) AC/DC	n/a			0 - 250			
CURRENT RATING (A @ 240VAC)	4	10		4			
MAXIMUM FREQUENCY (MHz)	200						
MERCURY CONTACT RESISTANCE	< 1 milliohm						
MAXIMUM ROTATING SPEED (RPM)	7500	3600	1200	2000	3600	1200	1800
MAXIMUM BODY TEMPERATURE °F (°C)	212 (100)	140 (60)					
MINIMUM OPERATING TEMP. °F (°C)	45 (7)	-20 (-29)		45 (7)		-20 (-29)	45 (7)
CIRCUIT SEPARATION	n/a			> 25 megohm			
TYP. ROTATIONAL TORQUE (NmX10-4)	< 10	35	10	75	35	20	100