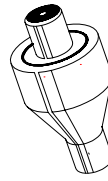


Application Information



Mercotac Inc.

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 Internet: www.mercotac.com
 e-mail: info@mercotac.com

1. Mercotac® connectors can be used both horizontally and vertically. However the "UP" arrow on the body of the connector should not point below horizontal. It is preferable to store units upright (arrow up). <Fig 1>

2. The connector can be held or mounted by the body or the receptacle <Fig 2>, and was not designed to carry mechanical loads. One end should be allowed to float, attached only by the connecting wires. In horizontal applications mount the connector with the body rotating to reduce mechanical loads on the bearing. (Model 110 may be excepted). 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 .005" (.13mm).

3. The connectors are reversible (except model 110), so they need not be installed upside down <Fig 4>.

4. **Do not solder to the connector as such misuse may cause connector 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 connector. The wires should have enough free play to allow the connector end to rotate approximately ¼ turn. Wires that allow too much free play could wrap around the connector.

6. Provide current protection (fuse) on wires attached to connector. Overcurrent conditions can cause failure of connector. **CAUTION:** The aluminum body may be electrically "hot" after failure. Disable power source before handling a suspected failed connector.

7. The connector contains plastic materials that are sensitive to heat. Over heating will cause reduced life or connector failure. Provide thermal insulation where necessary to prevent temperature of the unit from exceeding 140°F (60°C). <Fig 5>

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

9. In food and packaging applications:

Mercotac® connectors contain elemental mercury and other fluids. **Isolate connector from any possibility of leakage contaminating the product.** Short circuit failure at or in connection with a Mercotac® connector may result in leakage. The use of a sealed housing may be necessary to insure proper protection. <Fig 7>

10. Mercotac® connectors contain metallic mercury and should be disposed of properly through recycling or hazardous waste recovery programs. Mercotac, Inc. offers a recycling service for this purpose. When shipping to Mercotac, Inc. wrap and package items being returned so no fluids can leak out. Please state on paperwork "For Disposal", and identify shipments with company name and PH/FAX numbers.

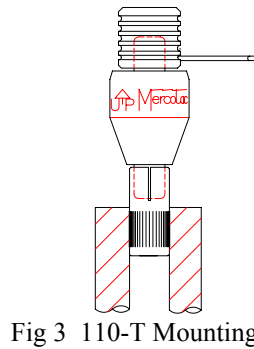
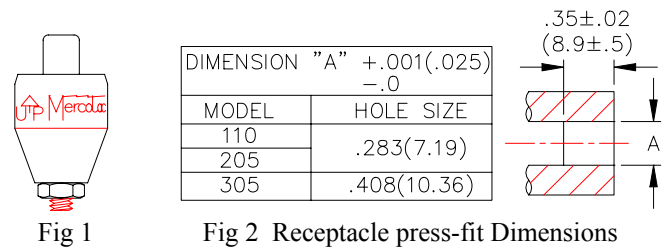


Fig 3 110-T Mounting

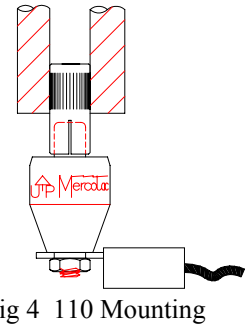


Fig 4 110 Mounting

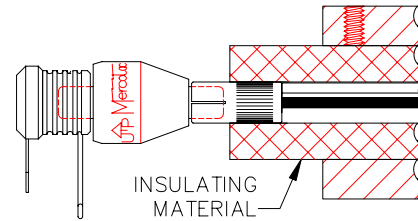


Fig 5 Thermal Insulation

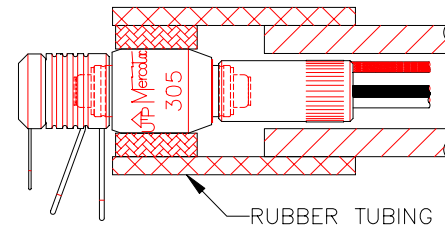


Fig 6 Vibration Isolation

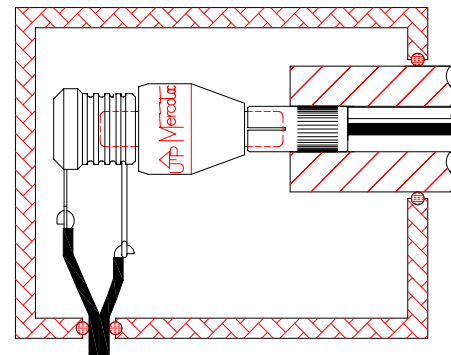
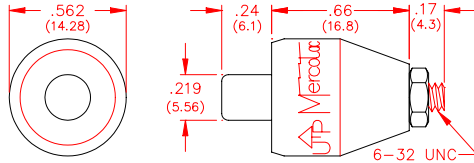


Fig 7 Protective Housing

COAXIAL SERIES

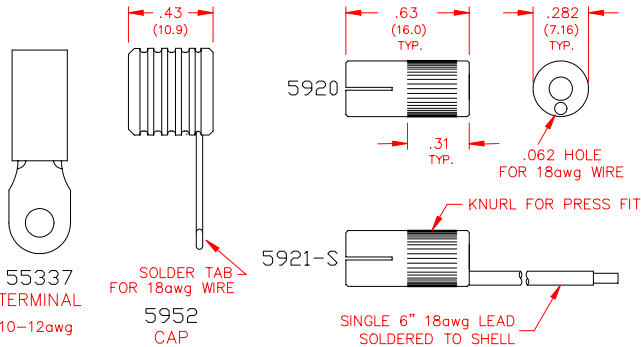
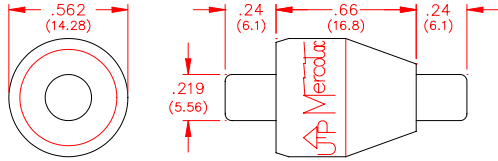
Mercotac Inc.

MODEL 110
1 pole



ORDER ACCESSORIES SEPARATELY

MODEL 110-T
1 pole

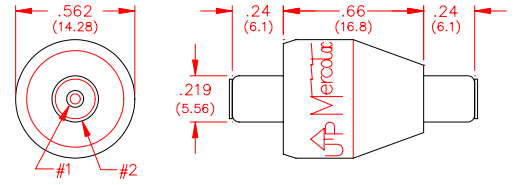


SINGLE CONDUCTOR ACCESSORIES

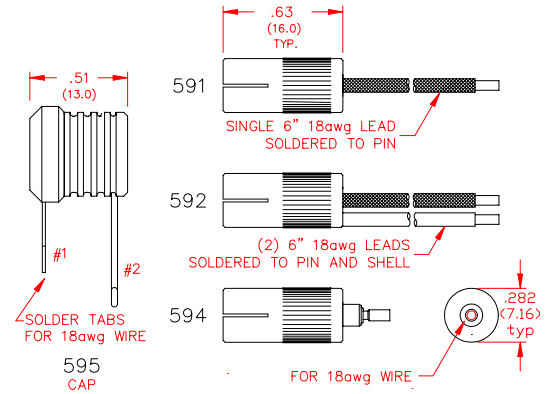
| | |
|-------------|------------------------------|
| TOLERANCES | x.xxx (x.xx) ±0.001 (±0.025) |
| INCHES (mm) | x.xx (x.x) ±0.010 (±0.25) |

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

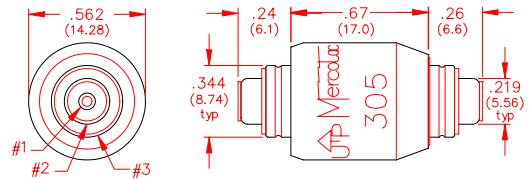


ORDER ACCESSORIES SEPARATELY

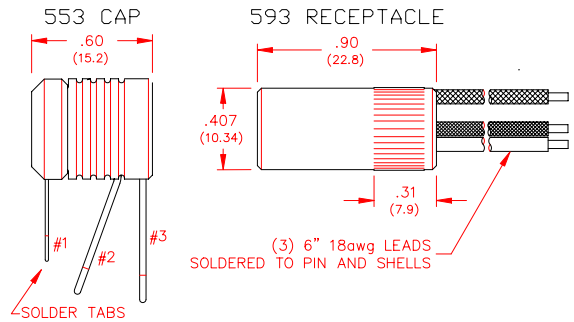


TWO CONDUCTOR ACCESSORIES

MODEL 305
3 pole



ORDER ACCESSORIES SEPARATELY



THREE CONDUCTOR ACCESSORIES

TECHNICAL SPECIFICATIONS

| SPECIFICATIONS | MODEL NUMBER | | | | | |
|-------------------------------------|--------------|------------|-------------|-------|------------------|------|
| | 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) | 10 | | 4 | | | |
| MAXIMUM FREQUENCY (MHz) | 200 | | | | | |
| MERCURY CONTACT RESISTANCE | < 1 milliohm | | | | | |
| MAXIMUM ROTATING SPEED (RPM) | 3600 | 1200 | 2000 | 3600 | 1200 | 1800 |
| MAXIMUM BODY TEMPERATURE °F (°C) | 140 (60) | | | | | |
| MINIMUM OPERATING TEMP. °F (°C) | -20 (-29) | | 45 (7) | | -20 (-29) 45 (7) | |
| CIRCUIT SEPARATION | n/a | | > 25 megohm | | | |
| TYPICAL ROTATIONAL TORQUE (NmX10-4) | 35 | 10 | 75 | 35 | 20 | 100 |