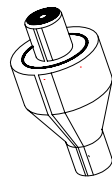


Application Information



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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. The connectors are reversible so they need not be installed upside down. It is preferable to store units upright (arrow up). <Fig 1>

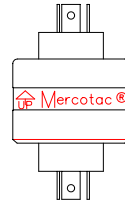


Fig 1

2. The connector can be held or mounted by the body or plastic bushing, but 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. **Never rigid mount both ends of the connector. This will cause connector failure.** Limit mounting eccentricity to .005" (.13mm). <Fig 2>

Fig 2 Mounting Dimensions

3. **Do not solder to the connector or bend tabs excessively as such misuse may cause connector failure and voids the warranty.**

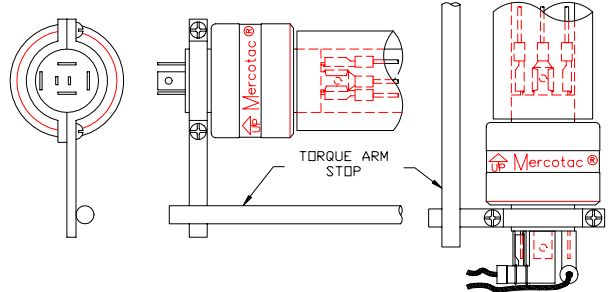


Fig 3 Floating Torque Arm Examples

4. 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, which allow too much free play, could wrap around the connector. Generally wires are strong enough to restrain the turning end of the connector. A floating torque arm attached to the stationary bushing may be used if the wires are not adequate. <Fig 3>

5. 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.

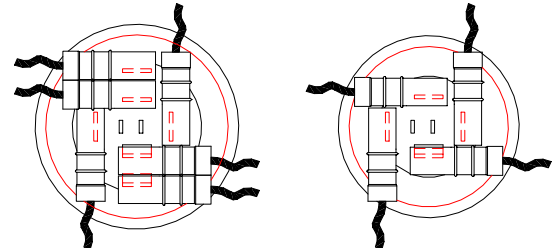


Fig 4 Wire Configuration for Right Angle Terminals

6. The push on terminals (right angle, straight) supplied with the modular connector series use an improved double wall barrel design vs. typical single wall barrel. The extra strength in the barrel improves electrical conductivity and wire grip. Some crimp tools do not have enough leverage to securely crimp this terminal which could cause poor connections. The shape of the crimp die also affects the quality of the crimp, especially for the smaller wire sizes. A recommended crimp tool manufactured by Thomas & Betts is their model #WT112M. The right angle terminals can be configured on the 830 and 630 models as shown. <Fig 4>

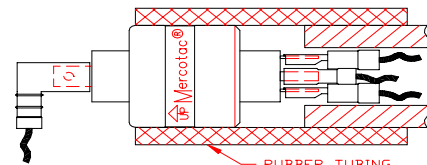


Fig 5 Vibration Isolation

7. Vibration and mechanical shock will reduce service life or cause connector failure. Some installations may require a shock isolating mounting, such as rubber tubing. <Fig 5>

8. The connector contains plastic materials, which 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 6>

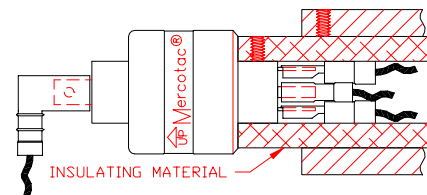


Fig 6 Thermal Insulation

9. In food 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.

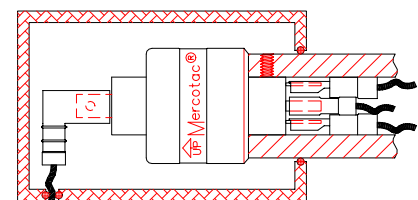
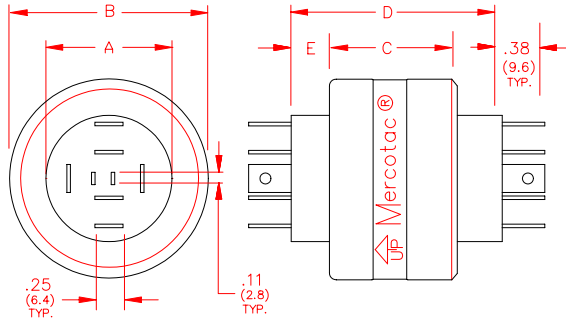
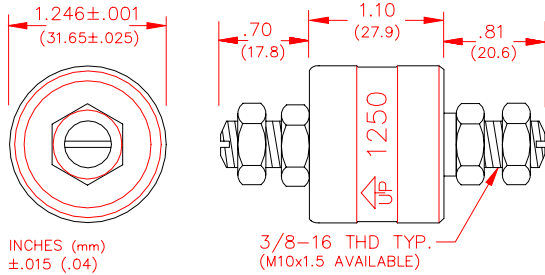


Fig 7 Protective Housing

MODULAR SERIES

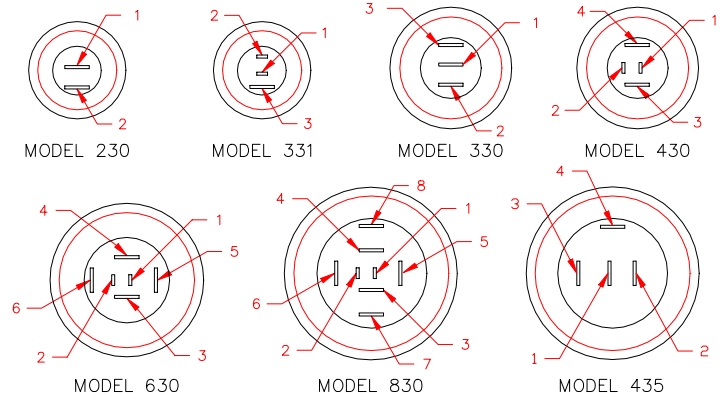


MODEL	A	B	C	D	E
230	.498(12.65)	.996(25.30)		1.82(46.2)	.34(8.6)
331			1.10(27.9)		
330	.623(15.82)	1.246(31.65)		1.87(47.5)	.37(9.4)
430					
630	.873(22.17)	1.573(39.95)	1.14(29.0)		.36(9.2)
830	1.123(28.52)	1.770(44.96)	1.16(29.5)	1.88(47.8)	.34(8.6)
435	1.248(31.70)			2.72(69.1)	.77(19.6)
±in(mm)	.002 (.05)		.01 (.25)	REF	.01(.25)

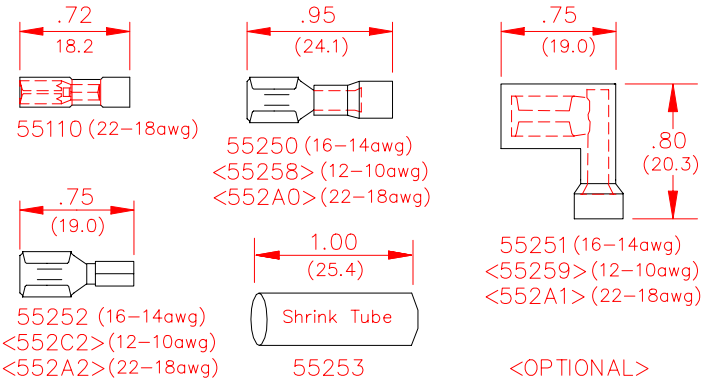


MODEL 1250

CONTACT TAB ORIENTATION



AVAILABLE DISCONNECTS



TECHNICAL SPECIFICATIONS

SPECIFICATIONS	MODEL NUMBER							
	1250	230	330	331	430	630	830	435
CONDUCTORS	1	2	3	3	4	6	8	4
VOLTAGE RANGE (V) AC/DC	0 - 250							
CURRENT RATING (A @ 240VAC) SMALL TABS	2 SMALL TABS @ 4							
CURRENT RATING (A @ 240VAC) LARGE TABS	250	2 @ 30	3 @ 30	1 @ 30	2 @ 30	4 @ 30	6 @ 30	4 @ 30
MAXIMUM FREQUENCY RESPONSE (MHz)	200				100			
MERCURY CONTACT RESISTANCE	< 1 milliohm							
MAXIMUM ROTATING SPEED (RPM)	1200	1800	1200	1800	1200	300	200	300
MAXIMUM BODY TEMPERATURE °C (°F)	60 (140)							
MINIMUM OPERATING TEMPERATURE °C (°F)	-29 (-20)							
CIRCUIT SEPARATION (megOhm)	> 25							
TYPICAL ROTATIONAL TORQUE (NmX10-4)	250	200	300	200	400	700	1000	850

ACCESSORIES

SMALL TERMINAL, INS. (18-22awg) 55110	STD (4)							
LARGE TERMINAL, INS. (18-22awg) 55A20	OPTIONAL							
LARGE TERMINAL, INS. (14-16awg) 55250	STD (2)	OPT.*	STD (1)	STD (2)	OPTIONAL*	OPTIONAL*	STD (4)	
LARGE TERMINAL, INS. (10-12awg) 55258	OPTIONAL*							
LARGE TERMINAL, UNINS. (18-22awg) 552A2	OPTIONAL							
LARGE TERMINAL, UNINS. (14-16awg) 55252	OPT.	STD (3)	OPTIONAL	STD (4)	STD (6)	OPT.		
LARGE TERMINAL, UNINS. (10-12awg) 552C2	OPTIONAL							
SHRINK TUBE FOR UNINS. DISC. 55253	OPT.	STD (3)	OPTIONAL	STD (4)	STD (6)	OPT.		
LARGE ANG. TERMINAL, INS. (18-22awg) 552A1	OPTIONAL							
LARGE ANG. TERMINAL, INS. (14-16awg) 55251	STD (2)	STD (3)	STD (1)	STD (2)	STD (4)	STD (6)	STD (4)	
LARGE ANG. TERMINAL, INS. (10-12awg) 55259	OPTIONAL							
HEX NUT, 3/8-16 BRASS 12580	STD (4)							
RUBBER BOOT KIT FOR SPLASH PROTECTION:	57125	57230	57430	57230	57430	57630	57830	57435

* Note: These optional terminals may require additional clearance and slight bending of tabs.

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.

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