

**Rotating Electrical Connectors** 

# **TECHNICAL INFORMATION**

### MOUNTING

- Rotating connectors may be used in any position between vertical and 90° horizontal. The UP arrow should not point below horizontal.
- Model 110, 110-T, 205 and 305 connectors use the knurled receptacle inserted into the rotating member for mounting. This receptacle holds the rotating connector.
- Larger rotating connectors use either the body or the plastic collar for mounting to the rotating member.
- In horizontal applications, mount the connector with the body rotating to reduce mechanical loads on the bearing.
- Limit mounting eccentricity to a maximum of .005" TIR.
- Rotating connectors are not designed to carry mechanical loads. One end should be allowed to float, attached only by the connecting wires.

#### CONNECTION

- Use stranded wires of ample length and flexibility for the connection in order to avoid mechanical loads.
- Terminal accessories are push-on quick disconnects which crimp onto the connecting wires and push onto the connector tabs.
- Do not solder wires to the connector or bend tabs, as such misuse will cause connector failure and void the warranty.
- Provide overload protection to the electrical circuit containing the rotating electrical connector.
- If wire wrapping occurs from too much connector torque, it is suggested to use a torque arm positioned to float against a fixed stop.

#### TEMPERATURE

- Provide thermal insulation where necessary to prevent the connector temperature from exceeding 140°F (60°C). Rotating electrical connectors contain plastic materials that are sensitive to heat.
- Overheating will cause connector failure and voids the warranty.

#### **VIBRATION/SHOCK**

- Vibration or mechanical shock will reduce connector life or cause failure.
- If vibration or shock is present, we suggest a flexible isolating mounting.

#### **FOOD APPLICATIONS**

- Rotating electrical connectors are factory sealed but do contain mercury and other fluids.
- As a precaution, a protective housing is suggested to isolate the rotating connector from the food product.

#### **BOOT KIT**

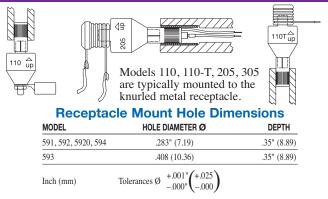
• The boot kit is not watertight or intended for waterproofing but is designed to give protection to the wire terminals from splashing water or dust. The protection rating is IP51.

#### RECYCLING

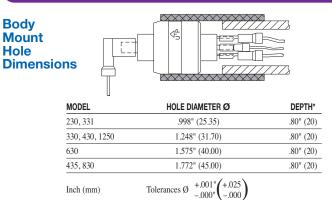
Rotating electrical connectors contain mercury and should not be disposed of in the trash but only through mercury recycling programs. Tempco offers a mercury recycling service for this purpose. Ship spent connectors to our facility by UPS ground enclosed in a plastic bag. Include paperwork stating "for recycling" with your company name, phone and fax numbers. Do not send through the U.S. Mail.







## **Typical Body Mount**



\*Minimum additional depth for disconnect clearance is 1.4" (35.5).

## **Typical Collar Mount**

Collar Mount Hole Dimensio			
	MODEL	HOLE DIAMETER Ø	DEPTH*
	230, 331	.500" (12.70)	.40" (10)
	330, 430	.625" (15.88)	.40" (10)
	430 w/ plug	.625" (15.88)	1.40" (36)
	630	.875" (22.23)	.40"(10)
	830	1.125" (28.58)	.40" (10)
	435	1.250" (31.75)	.80" (20)
	1250 Stud	3/8"-16 UNC	.81" (20.5)
	1250-metric Stud	$10 \times 1.5$ metric	.81" (20.5)
	Inch (mm)	Tolerances $\emptyset + .001"(+.025)$	

-.000" (-.000)

\*Minimum additional depth for disconnect clearance is 1.4" (35.5).

#### Insulating Collar Mount

Mounting with an insulating collar may be required to insulate connector from conducted heat. Soft-mounting with rubber type material is needed if unit will be subjected to vibration.

