

Instructions: S214627 Non-Sparking Temperature Detector

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1. Description

These temperature detectors are designed to be installed in babbitt style bearing shoes.

- Operating temperature range -50°C to 200°C
- Models are available for 2-, 3- or 4-wire measurement circuits and with single or dual resistance temperature detector (RTD) elements.

2. Attestation of Conformity

This Attestation of Conformity is issued under the sole responsibility of the manufacturer.

Temperature detector type: S214627.

The product defined above is in conformity with the following relevant legislation:

ATEX Directive 2014/34/EU

EN 60079-0:2012+A11:2013 Explosive atmospheres - Part 0: Equipment - General requirements

EN 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Rob Bohland 11 July 2017

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3. Installation Instructions (Potting Method)

Installation of the temperature detector in a bearing completes the enclosure and provides protection from mechanical impact. This procedure can be used with other types of bearings and with equipment other than bearings.

1. Drill or bore a .140" (3.56mm) diameter hole (9/64 or #28 drill) into the bearing shoe where temperature detection is desired. The hole bottom may be left in the shape of the drill tip. However, a flat hole bottom will result in the detector having a faster response time to temperature change.
2. If the hole has a drill point, apply a small amount of silicone heat sink compound to the tip end of the temperature detector (Dow Corning's 340 or similar compound is recommended). Apply enough compound to fill the drill tip cone at the bottom of the hole when the detector is installed. This compound will improve thermal conductivity from bearing shoe to detector when installed, and will result in faster response of the detector to bearing temperature change.
3. Insert the detector into the hole until it reaches the bottom.
4. Pot the leadwire in place where it enters the shoe: use an epoxy or another suitable potting compound compatible with the bearing shoe materials, temperature, and service conditions. During application and curing of the potting compound, make certain the detector remains at the bottom of the hole. Position the shoe so the leadwire extends upward. This method is recommended because it uses gravity to help keep the detector at the bottom of the hole.
5. When routing the leadwire from the bearing shoe, leave sufficient slack in the leadwire for movement of the shoe when it is in service. Use mechanical retainers to secure the leadwire externally to the shoe, or pot the leadwire in place using epoxy or another suitable potting compound.

4. Special Conditions of Use

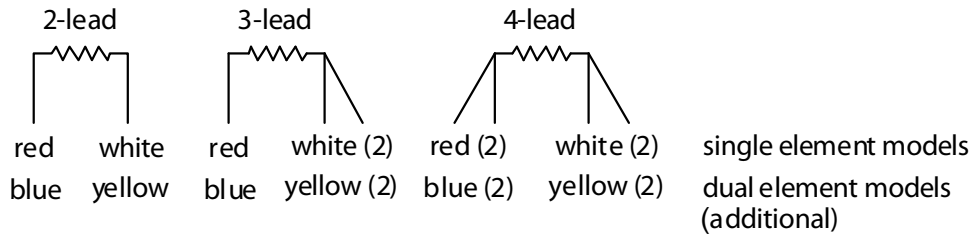
Maximum voltage: $\leq 30\text{ V}$

5. Electrical Data

Measuring current: $\leq 1\text{ mA}$

Power (under fault conditions): $\leq 0.45\text{ W}$

6. Electrical Connections



7. Marking Example

