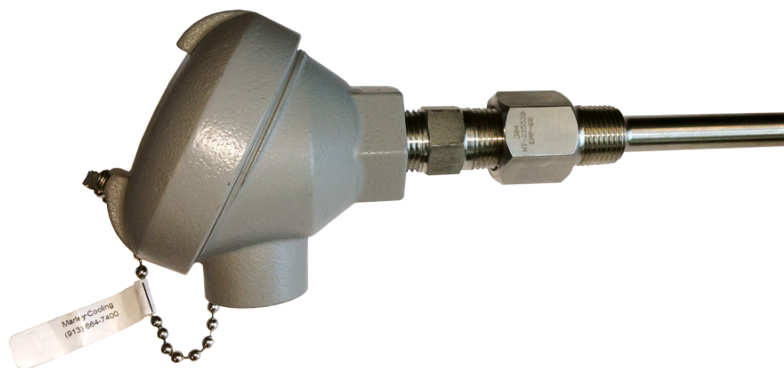


RTD Temperature Sensor for VFD and Fan Motor Starter

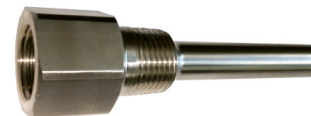


Benefits and Usage

- The Marley RTD (resistive temperature device) is an industrial process rated component used to measure fluid temperature in piping.
- The Marley RTD provides a means to capture temperature and feed this value back to a PI temperature controller. PI temperature controllers are used to vary cooling tower fan speeds maintaining a set-point water temperature back to the process loop. VFDs have built-in internal PI controllers for adjustable speed control and motor starters using optional solid-state PI temperature controllers to provide ON-OFF cycling control used in one-speed and two-speed motor starters.
- Marley RTDs are furnished with a stainless steel drywell.
- The 2-wire RTD includes an internal passive current loop transmitter which when powered by an external source provides a 4 to 20 mA analog signal. This signal may be used to represent water temperature with 4 mA being the lowest end of the range and 20 mA the highest. The RTD is typically used with a VFD where the VFD output provides source power and scaling is performed within the VFD.

Drywell Specifications

- RTD may be removed from piping without having to drain piping
- 0.50" NPT pipe connection
- 4.50" total length
- 2.50" insertion length
- 304 stainless steel



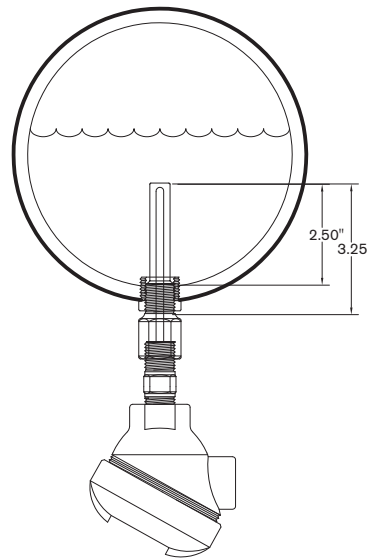
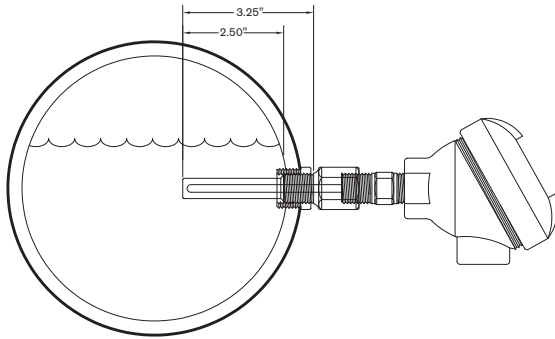
RTD Specifications

- Cast iron weather-proof screw-cover connection head with threaded fitting for 0.75" conduit
- Platinum 100 Ohm element
- -50° to 100°C temperature range
- Spring loaded 316 stainless steel sheath

more 

Recommended Installation Locations

- Tip of RTD must always be submerged in liquid even during reduced flow conditions

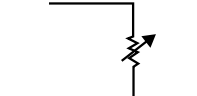


Head Unit Wiring Diagram

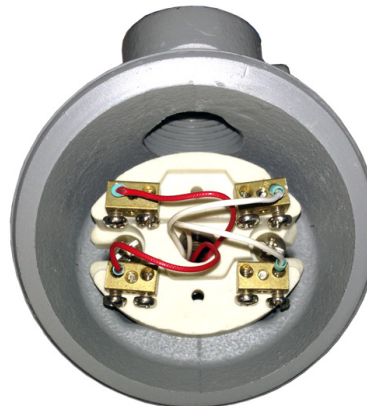


2-Wire

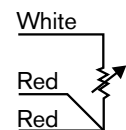
+6 Sense positive



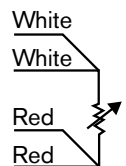
-7 Sense negative



3-Wire



4-Wire



2 Wire 4-20 mA Transmitter

Item Number	Configuration	Description
E16086	2 wire 4-20 mA	Used with ABB ACH550 VFD
D55230	3 wire	Use with solid state temperature control option for fan starter panels*
D55230	4 wire	Use with Marley Premium VFD

* of the four wires, use only one white wire and two red wires

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