

### Introduction

The single point immersion temperature thermostat incorporates a precision thermistor temperature sensor and provides a Form C relay output (NO/NC) with an adjustable setpoint. The sensor is encapsulated in a 6.35 mm (0.25") OD, 304 stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resist moisture penetration. Two enclosure styles are available.

### Before Installation

Read these instructions carefully before installing and commissioning the temperature thermostat. Failure to follow these instructions may result in product damage. Do not use in an explosive or hazardous environment, with combustible or flammable gases, as a safety or emergency stop device or in any other application where failure of the product could result in personal injury. **Take electrostatic discharge precautions during installation and do not exceed the device ratings.**

### Mounting

**The TTLC sensor must be installed into a thermowell. Failure to use a thermowell will create leaks and could damage the sensor.** The TTLC is provided in two pieces, probe and enclosure, which allows for easier installation. The TTLC has 1/2" NPT thread for mounting to the thermowell. Install the thermowell as recommended in Figure 1. For complete thermowell installation instructions, please refer to installation instructions provided with the thermowell.

It is recommended to use heat conductive compound. Prior to installing the sensor inject a liberal amount into the thermowell and/or on the tip of the sensor. Slide the probe into thermowell until the 1/2" NPT fitting makes contact with the thermowell. Tighten slightly by hand by turning clockwise. See Figure 2.

Using a 7/8" (23 mm) wrench, tighten the fitting into the thermowell until snug. To protect against overtightening and damaging the probe, the assembly is designed to allow the probe to slide inside the fitting. See Figure 3.

### Mounting (Enclosure A)

Using a Phillips screwdriver, remove the (2) screws, as shown in Figure 4. Remove cover and set aside with screws for re-installing after wiring and set up.

Two 21 mm (0.8125") holes are provided one for connection to probe assembly and one for connection to either 12.77mm (0.5") EMT or a cable gland style connector. Insert probe wire in one of the connection holes and mount on probe fitting. Securely fasten using supplied locknut as shown in Figure 5.

Insert the EMT or cable gland connector through the hole and securely fasten using a locknut as shown in Figure 6. **Special care must be taken not to damage any internal components during installation.**

Make wire connections as per the "Wiring" illustrations on Page 3.

Once wiring and set up are complete, re-install cover and tighten the (2) screws using a Phillips screwdriver.

Figure 1

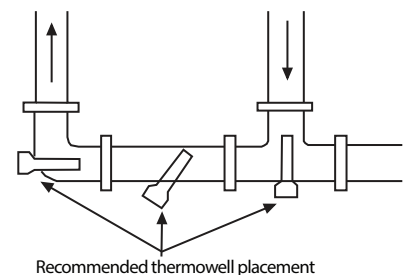


Figure 2

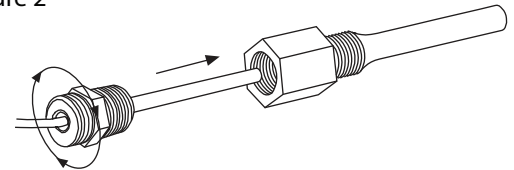


Figure 3

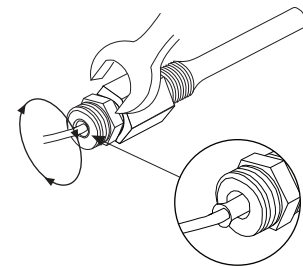


Figure 4

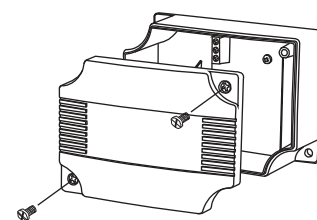


Figure 5

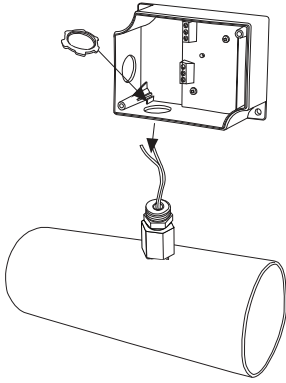


Figure 6

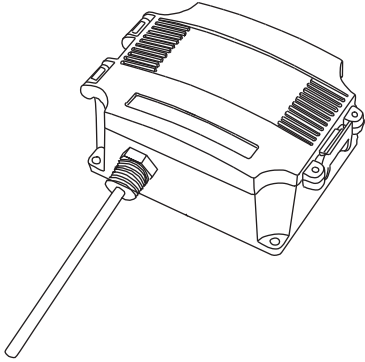
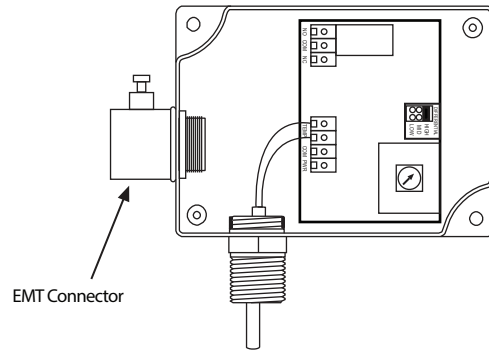


Figure 7

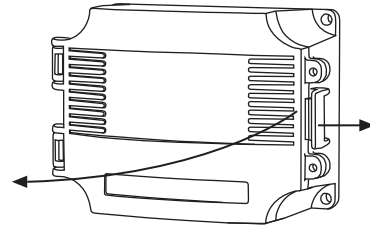
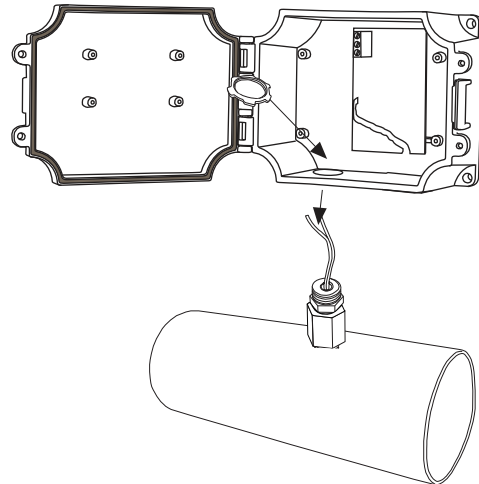


Figure 8



**Mounting (Enclosure D)**

The enclosure has a hinged cover with latch. Open cover by pulling slightly on the latch on the right side of the enclosure. At the same time pulling on the cover, as illustrated in Figure 7.

Two 21 mm (0.8125") holes are provided one for connection to probe assembly and one for connection to either 12.77mm (0.5") EMT or a cable gland style connector. Insert probe wire in one of the connection holes and mount on probe fitting. Securely fasten using supplied locknut as shown in Figure 8.

Insert the EMT or cable gland connector through the hole and securely fasten using a locknut as shown in Figure 9. **Special care must be taken not to damage any internal components during installation.**

Make wire connections as per the "Wiring" illustrations on Page 3.

Swing door closed until securely latched. For added security, 2 screws are provided that may be installed in the integrated screw tabs. See Figure 10.

Figure 9

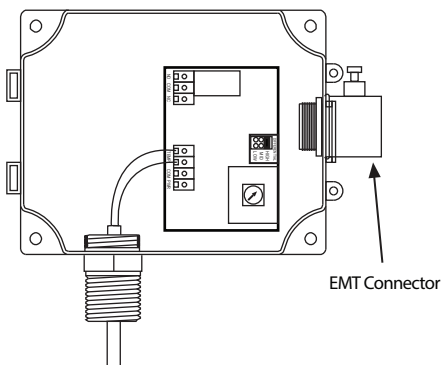
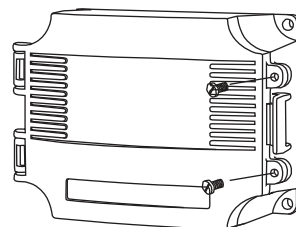


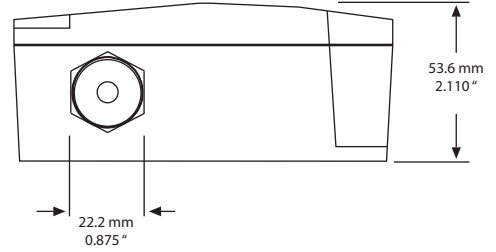
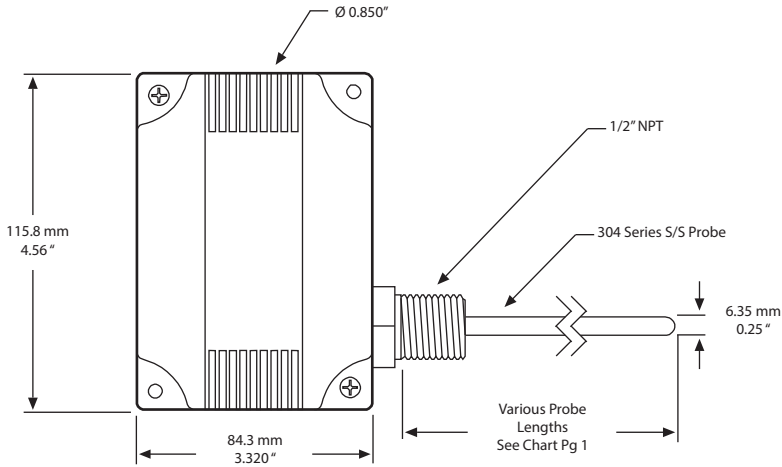
Figure 10





**Dimensions:**

**Enclosure A**



**Enclosure D**

