

# Model THT Temperature Sensors

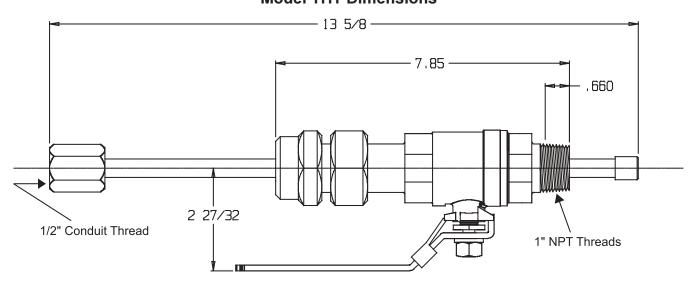
The Data Industrial THT temperature sensor provides accurate remote temperature sensing for use with Data Industrial Series 340, 1550 and 2300 Btu meters and other building automation applications. The THT includes unique mounting hardware incorporating an



isolation valve allowing the temperature probe to be "hot tapped", or installed in a working pipeline without shutting down or draining the line. This hot tap capability allows temperature sensors to be retrofit to existing pipelines at a fraction of the cost of thermowell installations. For Btu measurement or submetering applications THT temperature sensors should always be installed in pairs to match their reaction time to temperature change.

The THT sensor features a precision 10 K $\Omega$  thermistor element encapsulated with a temperature conductive compound within a 316 Stainless Steel probe. These two-wire devices have a thermal accuracy of +/- 0.36°F (0.2°C).

#### **Model THT Dimensions**



## **Ordering information**

Model Number Description

THT-000 1" Stainless Steel hot tap temperature sensor complete

XTHT-000 Replacement thermistor probe

A-1027 Brass tapping nipple- adapts threads to NPT for tapping machine, re-useable

# Specifications.

#### Sensing element

2 wire thermistor (thermal resistor)

#### Accuracy

+/-0.36°F (0.2°C) from 32°F to 158°F (0°C to 70°C)

#### Temperature range

0°F to 250°F (-17°C to 121°C)

#### **Stability**

.024°F(0.13°C) over 5 years

#### **Heat Dissipation**

2mW/°C typical before potting

#### **Wetted Materials**

316 Stainless Steel, Viton® O-rings

#### Service connection size

1" NPT

### **Pressure rating**

1,000 psi

#### Insertion force required

approximately 20% of line pressure

#### Mounting

1" NPT tap, tapping saddle or weldment

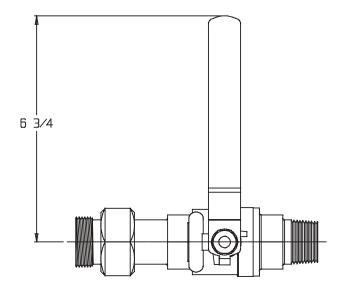
#### **Electrical connection**

6" 24 AWG flying leads with 1/2" conduit thread

# Temperature V.S. Resistance $10K\Omega$ Thermistors

°F	°C	Resistance
		Ohms
32	0	32,654
50	10	19,903
68	20	12,493
77	25	10,000
86	30	8,056
104	40	5,325
122	50	3,602
140	60	2,488
158	70	1,753
176	80	1,257
194	90	917
212	100	679

#### **Model THT Ball Valve Dimensions**



#### Temperature probe removed from Valve

