



# Infinity

## Duct Averaging Temperature Sensor

TAC Duct Averaging Temperature Sensors afford easy installation while at the same time providing accurate, reliable measurement of temperatures for use in an TAC building automation system. Each sensor is composed of a long, flexible plenum-rated cable, with a total of four or nine thermistor sensing elements encapsulated at equal distances along the length of the assembly. The complete array acts as a single sensor, averaging any temperature change across all sensors. The response time of any temperature change will be less than 20 seconds

The sensor has a wide operating range of -30°F to 230°F (-34°C to 110°C), making it suitable for all types of duct temperature measurement.

The flexible cable assembly allows for easy installation in any size duct. Four lengths of probe are available: 12, 16, 20, and 24 feet. Each probe comes with 6 inch wire leads and a single-gang utility box for wiring terminations.

### Features

- Accurate, reliable Type III thermistor
- Flexible probe for easy installation
- Up to nine thermistors for maximum averaging accuracy
- FT6 plenum CSA rated cable
- Four different probe lengths available

## SPECIFICATIONS

### GENERAL

#### Sensing Element

Type III Thermistor, 10,000 ohms @ 77°F (25°C)

#### Number of Elements

4 (12 ft. and 20 ft. sensors)  
9 (16 ft. and 24 ft. sensors)

#### Accuracy

±.36°F (±.2°C)

#### Response Time

Maximum of 20 seconds

#### Wiring Connections

6" (152.4mm) lead furnished with sensor. Use crimp-type butt splices or solder connections.

#### Wire Size

18, 20, or 22 gauge, 2 conductor, unshielded

#### Maximum Distance to Sensor

(with less than .1F° error)

#### Temperatures below 75°F (23.8°C)

22 gauge wire - 1,550 ft. (144 m)  
18 gauge wire - 3,900 ft. (362 m)

#### Temperatures above 160°F (71.1°C)

22 gauge wire - 125 ft. (11.6 m)  
18 gauge wire - 310 ft. (28.80 m)

#### Probe Lengths

12, 16, 20, and 24 ft. (1.1, 1.8, 1.5, and 2.2 m)

## Product Identification

Duct Averaging Sensor, 12ft. (3.6 m), 4 elements:	01-6013-039
Duct Averaging Sensor, 20ft. (6.1 m), 4 elements:	01-6013-040
Duct Averaging Sensor, 16ft. (4.8m), 9 elements:	01-6013-035
Duct Averaging Sensor, 24ft. (7.3), 9 elements:	01-6013-036

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