

DTS3000FL: FLANGE MOUNT

This sensor is used to measure the supply and return temperatures in HVAC systems. The flange mount design makes it easy to install the sensor in tight quarters. There are several sensor elements to choose from which guarantee compatibility with all popular DDC systems.

The probe shown in the picture is 12in long, and employs either a precision thermistor or platinum film sensor, field calibration is not generally required. The 10ft (3m) cable is plenum rated.



Sensor Property	Specification
Thermistor Accuracy	+/-0.2C
Platinum RTD Accuracy	+/-0.4C
Thermistor range	-70C to 150C
Platinum RTD range	-70C to 200C
Probe Material	Stainless Steel
Cable Properties	FT6, ULC S102.4 80C, 600V

Construction

The sensor is a high quality unit manufactured to high standards, borrowing materials and assembling techniques from the industrial sector. The probe material is stainless steel with a welded and ground tip. The DTS3000 probe is baked and then epoxy sealed to eliminate long term moisture problems. The flange accepts two #6 screws, and is made from galvanized steel.

Installation

Duct probes should be installed directly on the duct, in an area where the airstream is well mixed:

- Locate a supply air sensor two or three meters down stream from the nearest fan and coil.
- A return temperature sensor can be mounded anywhere in the return duct, after the return fan if there is one.

To install the sensor, drill a 3/4" hole in the duct and insert the probe into the airstream. Secure the metal flange to the duct with two sheet-metal screws. The plenum rated cable is secured to the duct to the nearest electrical box. The sensor requires two conductors, normally 18g unshielded twisted pair.

Ordering Information

Sensor	DDC System	Part#
10K thermistor, curve 3	Temco, Andover AAM, Siebe, Multine	DTS3000-FL-XX-YY-7
10K thermistor, curve 2	ALC, Trane, CSI, Solidyne, Delta	DTS3000-FL-XX-YY24
1000 ohm platinum RTD	Honeywell, Johnson, L&S	DTS3000-FL-XX-YY-12
3k thermistor	Alerton	DTS3000-FL-XX-YY-6
100k thermistor	Landys&Gyr Powers	DTS3000-FL-XX-YY-9

Note: -XX is the length of the probe in inches.
-YY is the length of the wire in inches.

Example: sensor for Andover=DTS3000-FL-XX-YY-7