WTS3000 WATER TEMPERATURE SENSOR

This sensor is used to measure water temperature of heated or chilled water and other liquids in mechanical systems. The sensor includes a brass well which allows the probe to be removed from the pipe without draining the system and protects the probe. There are four thermistor based models, and one RTD version to provide compatibility with the majority of DDC systems. The sensors are accurate enough that calibration is not usually required.

Sensor Property	Specification
Thermistor Accuracy	+/-0.2C
Platinum RTD Accuracy	+/-o.4C
Thermistorrange	-70C to 150C
Probe Material	Stainless
Cable Properties	FT4, 80C, 600V

Construction

The sensor probe is made to industrial standards, the stainless steel probe is welded, ground down and finally pressure tested. The probe assembly is baked and epoxy sealed to provide long term protection from moisture. The probe is spring loaded to ensure thermal contact with the bottom of the well. The thermistors are accurate to 0.2C while the platinum RTD is accurate to 0.5C.The well is made from machined brass, and fits a standard ½" NPT fitting. The sensor housing is a galvanized electrical box.

Installation

Locate water temperature sensors at least a few pipe diameters downstream any heat or cooling source:

· A ½" NPT female pipe fitting is welded into the pipe. These fittings are usually suplied and installed by the piping trade under direction of the controls trade.
· Choose an orientation where any condensation will not collect, such as the top of a horizontal pipe section or at a 45deg angle from horizontal
· Before threading the sensor into the well, deposit some thermal paste in the bottom of the well to improve heat conduction between the metal parts.
· The sensor is wired with two conductor 18ga, unshileded twisted pair.

the water sensor and well wounted on pipe

Ordering Information

Sensor	DDC System	Part#
10K thermitor, curve 3	AAM,Andover Siebe, Multinet,Kreuter	WTS3000-7
10K thermitor, curve 2	ALC,Trane,CSI, Solidyne, Delta	WTS3000-24
1000 ohm platinum RTD	Honeywell, Johnson,L&S	WTS3000-12
3k thermistor	Alerton	WTS3000-6
100k thermitor	Landys&Gyr Powers	WTS3000-9

Example: a water temp sensor for Andover = WTS3000-7