

023-0140, 4" strap-on Temp probe & Transmitter Installation Instructions



Strap-on Temperature Sensor

Designed for monitoring temperatures on pipes where an immersion probe can not be used.

Wiring & Color codes (see diagrams)

The three-wire sensors have the following color code:

Connection Block	Wire Color
EXCitation	RED
SENse	RED
NEGative	WHITE
PWR	24VAC/DC
OUT	4-20mA signal
COM	AC Power GND

To connect a three-wire sensor as a two-wire, tie the EXCitation and SENse lines together. All connections should be made using either butt-splices or soldering. The use of wire nuts is not recommended. Don't use the COM terminal if 4-20mA is used with DC power supply.

Physical Installation

Mount the probe under any pipe insulation in direct contact with the pipe to measure the temperature of the pipe using metal pipe straps or cable ties. For best results, thermal compound should be used between the probe and the pipe to improve heat transfer and the installation should be wrapped with insulation to reduce the effect of ambient air.

MT Alliance Installation

Drop as a 023-0140 sensor model

Specifications

Probe length	4" strap-on
Probe wire length	10' of Teflon coated wire
Sensor type	RTD 100Ω
Sensor Operating Temperature Range	-100 to 100 °C (-148 to 212 °F)
Transmitter Operating Temperature Range	0 to 70 °C (32 to 158 °F)
Enclosure type	ABS with 2 holes ½" pipe
Wiring Connections	Screw connectors, 18-22awg
Accuracy before calibration	±0.9°C over -100 to 100°C (±2.0°F over -148 to 212°F)
Power	24VAC or DC / 30mA max
Output Signal	4-20mA (0-5V optional)



Other available strap-on temperature sensor (* = regular stock)

MTT Part Number	Probe Length	Temp Range	Dropped as
023-0140 *	4"	-100 to 100C	Same
023-0073	1.5"	-40 to 65C	10k type 2
023-0228	3"	-200 to 175C	RTD pf 1k
Call MTT	Other	Other	

Diagram 24V AC powered: TE500 sensor transmitter 20mA.bmp

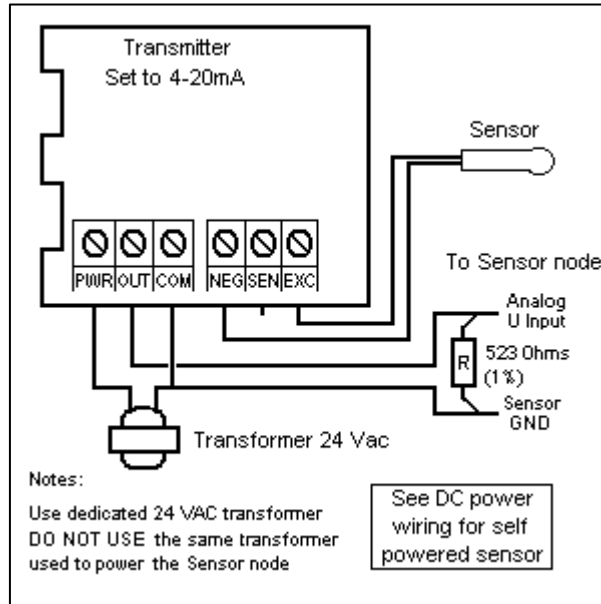


Diagram DC powered: TE500 sensor transmitter 20mA to 5V.bmp
 This drawing is updated for the new type of transmitter.

