

TEMPERATURE SENSOR

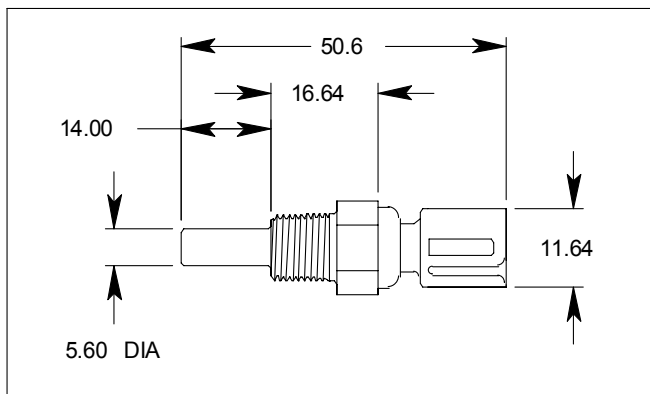
PRODUCT DATA

TEMPERATURE SENSOR

PART NUMBER 30-2012

FEATURES:

- Design for Manufacturability
- Cost Effective
- Robust Design
- Few Components
- Few Assembly Processes
- Thermistor Technology
- 100% Calibration Certified



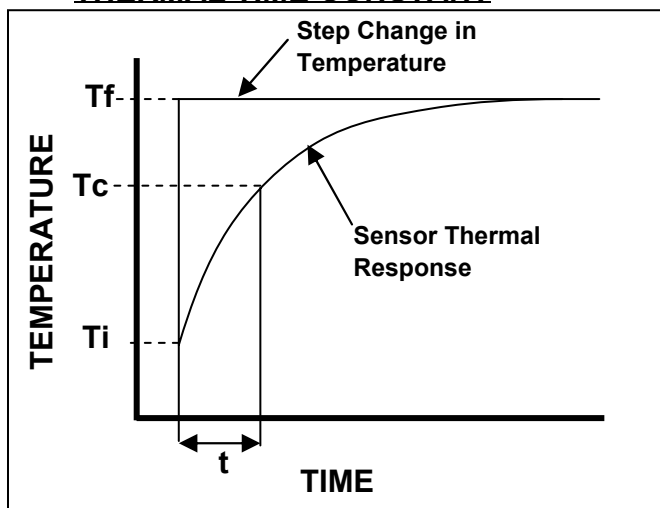
THERMAL & ELECTRICAL PROPERTIES

Typical Voltage Supply: **5V DC**
 Operating Temperature:
 Sensor Tip: **-40°C to 200°C**
 Connector: **-40°C to 150°C**
 Resistive Range (Ohms): **See Table**
 Dissipation Constant: * **12 mW/°C**
 Thermal Time Constant: ** **10 seconds**
 Accuracy: **See Table**

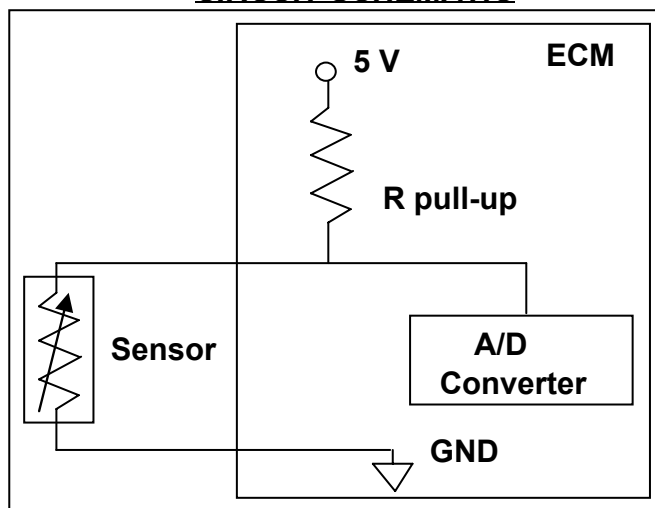
MECHANICAL PROPERTIES

Sensor Body Material: **Brass**
 Connector: **PA66**
 Hex Size: **12.70 mm (1/2")**
 Thread Size: **1/8" - 27 PTF**
 Mating Connector: **12047662**
 Overall Weight: **12.2 g**

THERMAL TIME CONSTANT



CIRCUIT SCHEMATIC



* The ratio, at a specified ambient temperature, of the change in the power dissipation of the sensor to the resultant temperature change of the thermistor. Test medium: silicone oil

** The time required for the sensor to achieve 63.2% of its steady state value when subjected to a step change in ambient temperature [$T_c = (T_f - T_i) * 63.2\% + T_i$]. Test medium: silicone oil.