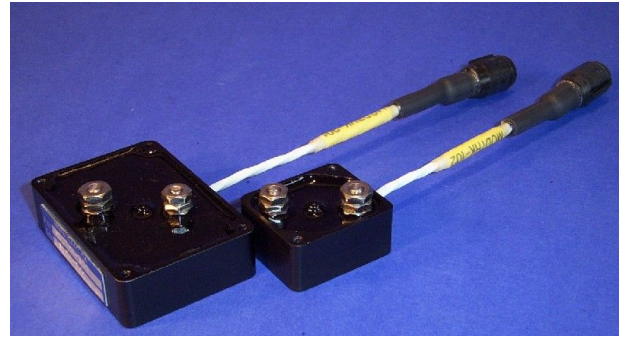


Features

- Intense temperature measurement: brake rotors, EGT, cylinder head, tire surface.
- Available for type J or type K thermocouples.
- Excellent immunity to EMI/RFI.
- Built-in ice point compensation.
- Built-in open thermocouple indicator.
- Rugged epoxy filled enclosure.
- Small size, low power consumption.
- Watertight mini sure-seal® connector.

Description

The module provides cold junction compensation, amplifies and linearizes electrical signals from type J or type K thermocouples. If the thermocouples break, the red LED is lit. These modules are used for various temperature measurements, e.g. exhaust gas, cylinder head, rolling tire surface and brake rotors. Refer to thermocouple datasheets (TCKEGT, TCJCHT, TCKSTK)



- Do not bend cable with curvature radius smaller than 1.60" [40 mm].
- Protect module from extreme vibrations.
- Carefully align indexing rib when mating mini sure-seal® connectors.

Specifications

Name	Type	Temp. Range
MODTHJ-301	J	-100°C to 300°C
MODTHK-301	K	-100°C to 300°C
MODTHJ-501	J	0°C to 500°C
MODTHK-501	K	0°C to 500°C
MODTHJ-102	J	0°C to 750°C
MODTHK-102	K	0°C to 1000°C

- Module operating temperature: -40°C to 85°C
- Calibration Error @ Module Temperature: ±2°C @ 25°C, ±4°C over Oper. Temp.
- Power supply: 3.5mA typ., 11.1mA max.
- Weight: 65 grams (2.293 oz).

Installation

- Connect each terminal of the thermocouple to the module's lead: #10-32 (+) and #8-32 (-).
- Do not expose module to water, oil or fuel.
- Do not place module near sources of interference, such as ignition coils, plug leads, high current electronic modules or RF antennas.
- Verify that the cable is not pinched or stretched at extreme suspension or steering movements.

Calibration

Name	MODTHJ-301		
Predefined Equation	<custom>		
Category	Temperature		
Units	Celsius or Fahrenheit		
Equation Type	3 rd order		
P1	-147.278	P2	2.6169
P3	-0.004401	P4	9.538E-6

Name	MODTHK-301		
Predefined Equation	<custom>		
Category	Temperature		
Units	Celsius or Fahrenheit		
Equation Type	3 rd order		
P1	-132.044	P2	2.416
P3	-0.003756	P4	9.547E-6

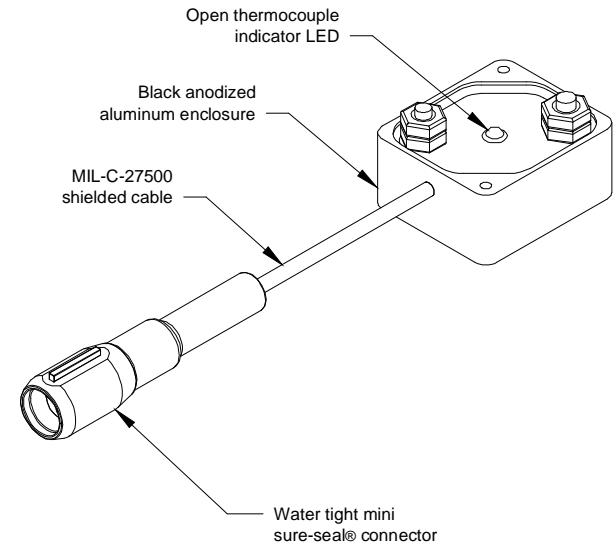
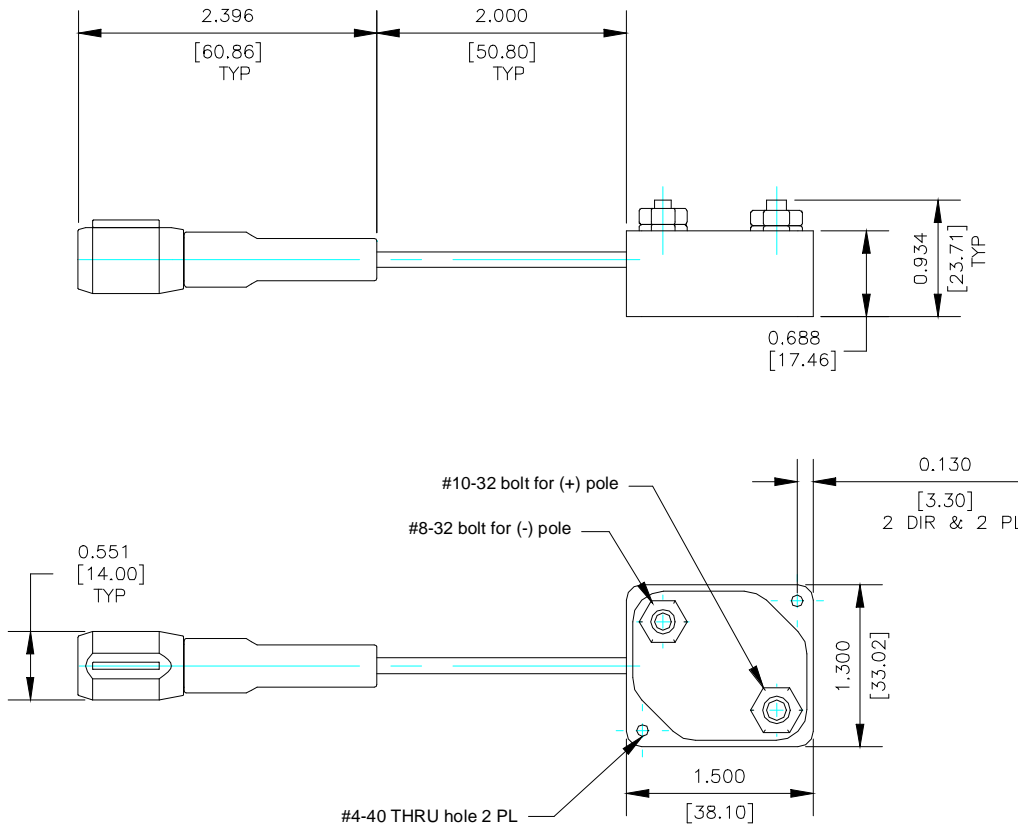
Name	MODTHJ-501		
Predefined Equation	Temperature		
Units	Celsius or Fahrenheit		
P1	1.342	P2	0.5062

Name	MODTHK-501		
Predefined Equation	Temperature		
Units	Celsius or Fahrenheit		
P1	-0.6715	P2	0.5150

Name	MODTHJ-102		
Predefined Equation	Temperature		
Units	Celsius or Fahrenheit		
P1	-0.1616	P2	0.2577

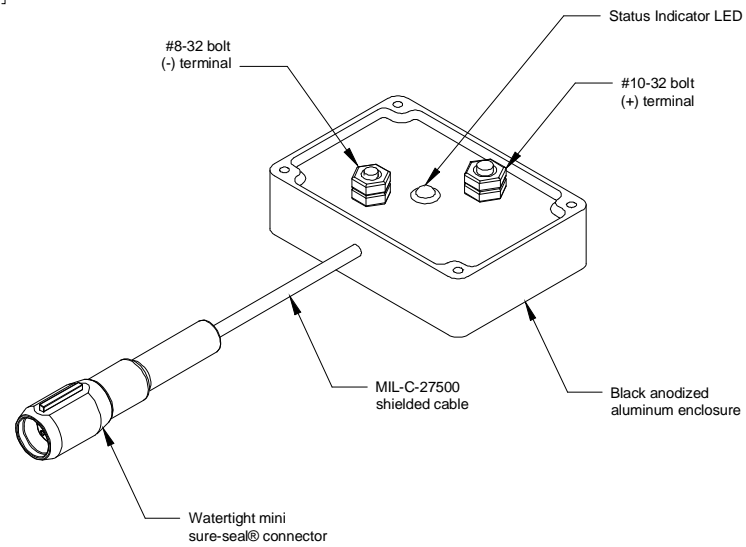
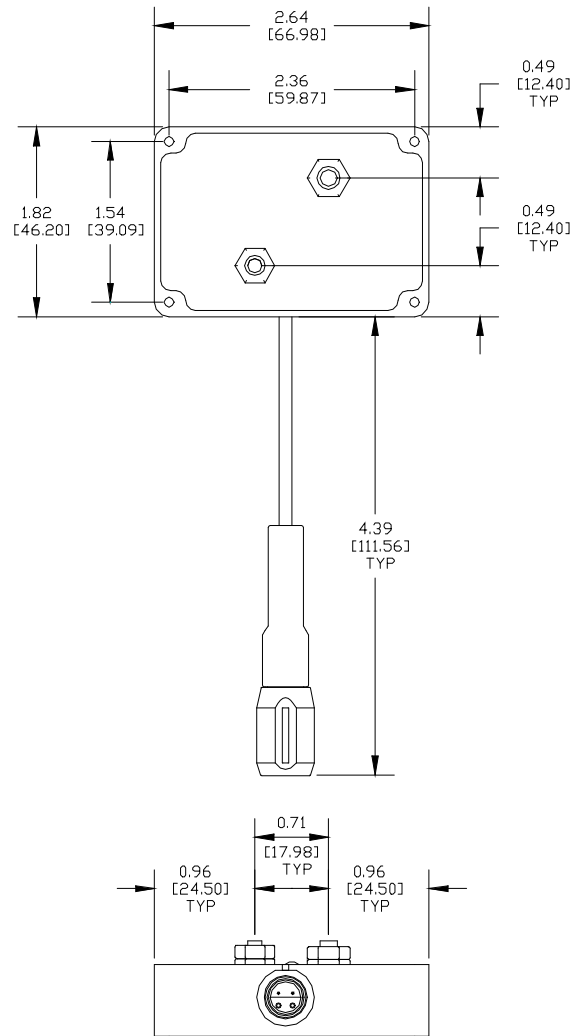
Name	MODTHK-102		
Predefined Equation	Temperature		
Units	Celsius or Fahrenheit		
P1	-0.8554	P2	0.2607

MODTHx



All dimensions are in inches [millimeters].

MODTHx-301



All dimensions are in inches [millimeters].