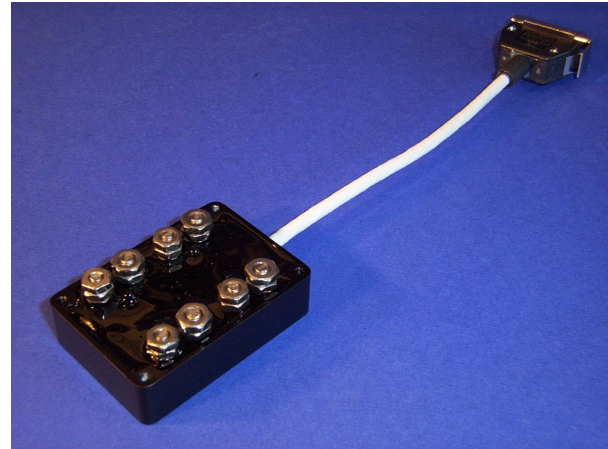


Quadruple Thermocouple Conditioner – MODT4K
Features

- 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.
- Military spec D-Sub connector with quick disconnects connector, no tools required.

Description

The module provides cold junction compensation, amplifies and linearizes electrical signals from type J or type K thermocouples. If a thermocouple break, its 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)



- Verify that the cable is not pinched or stretched by extreme suspension or steering movements.
- Do not bend cable with curvature radius smaller than 1.60" [40 mm].
- Protect module from extreme vibrations.

Specifications

Name	Type	Temp. Range
MODT4K-501	K	0°C to 500°C
MODT4K-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: 167 grams (5.8907 oz).

Cable and Connector pin-out		
8 conductors cable color	DD15M10JVLX PIN #	Signal description
Red	1	SIGN_TH1
Green	2	SIGN_TH2
Yellow	3	SIGN_TH3
White	4	SIGN_TH4
Shield	5	SHD
Orange	6	V+ (11 - 18 VDC)
Blue	11	GND
Black	N.C.	N.C.
Violet	N.C.	N.C.

Installation

- Connect each terminal of the thermocouple to the module's leads: #10-32 (+) and #8-32 (-).
- Connect the D-SUB connector to an analog input (A, B or C) of the recorder.
- 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.

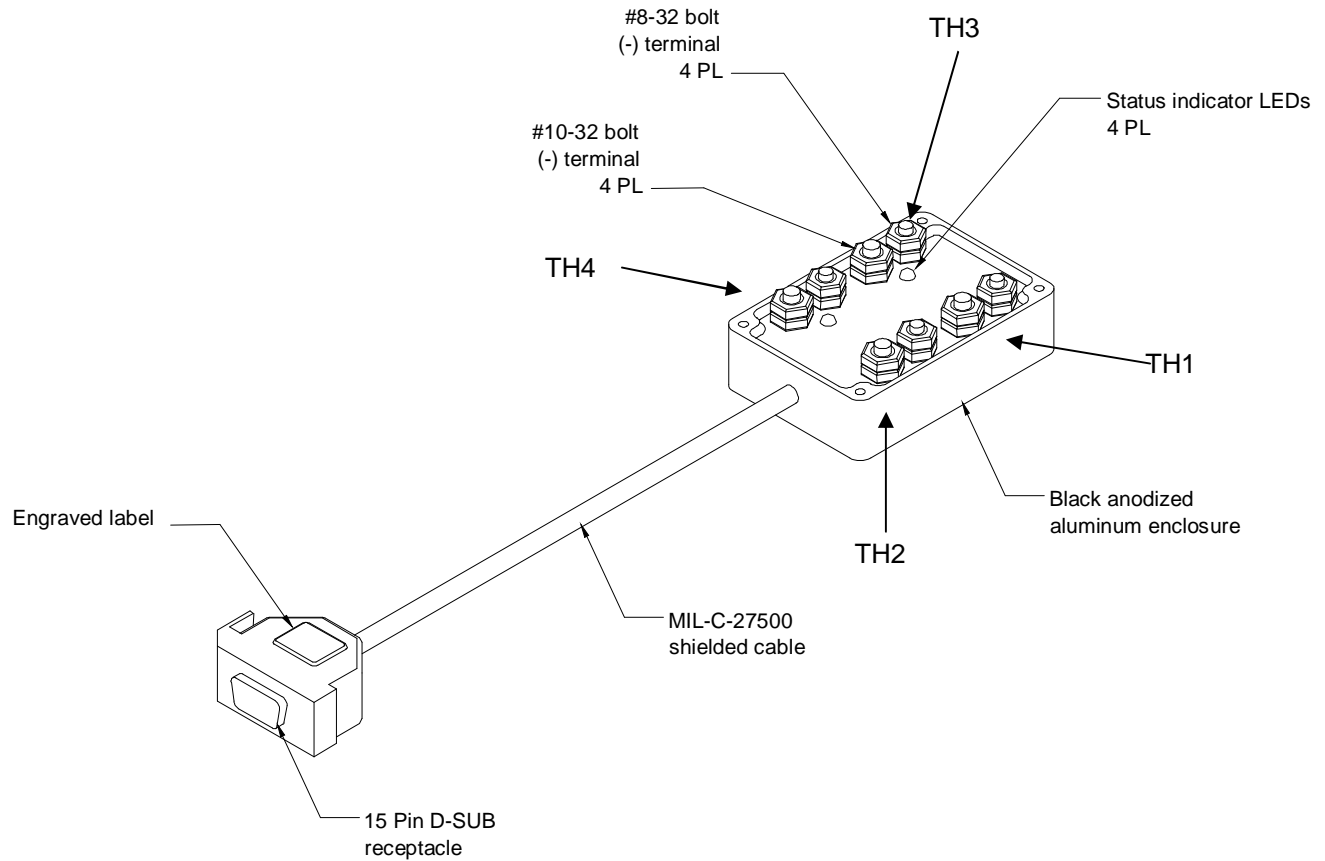
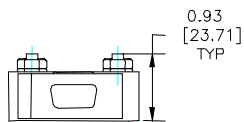
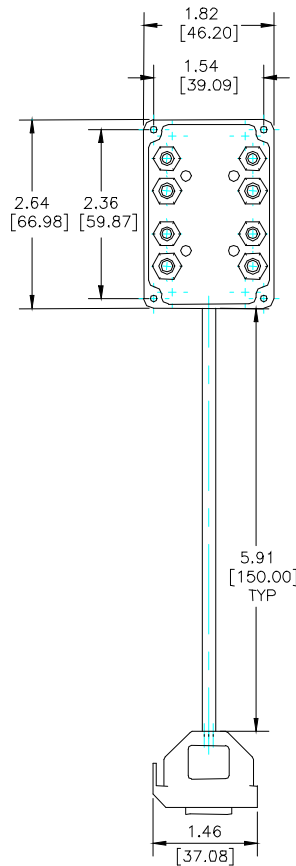
Calibration

Name	MODT4K-501		
Predefined Equation	Temperature		
Units	Celsius or Fahrenheit		
P1	-0.672	P2	0.515

Name	MODT4K-102		
Predefined Equation	Temperature		
Units	Celsius or Fahrenheit		
P1	-0.8554	P2	0.2607

Quadruple Thermocouple Conditioner – MODT4K

MODT4K



All dimensions are in inches [millimeters].