

## The TDHTT Series Low Cost Industrial Temperature Transducer



### SERIES: TDHTT

#### APPLICATIONS

- Hydraulic / Mobile Hydraulic
- Automated Systems
- Energy and water management
- Anywhere Accurate Temperature Measurement of fluids is required

#### DESCRIPTION

The TDHTT series temperature transducer is built using dependable thermistor based sensing technology with industry standard voltage or current outputs.

Perfect for a wide range of applications, this solution is perfect for communicating accurate temperature measurements to panel mount displays, PLC's, or data acquisition systems.

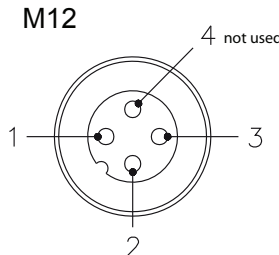
#### FEATURES

- Low Cost
- Wide Temperature Measurement Range
- Industry Standard Analog Outputs
- 316 Stainless Steel Wetted Parts
- Excellent Long Term Stability
- OEM Tested and Approved

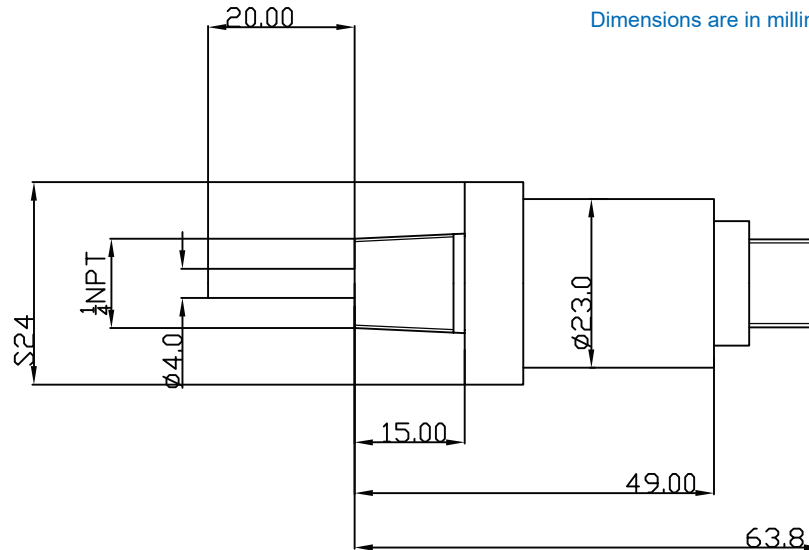
#### ELECTRICAL CONNECTIONS

Signal	Function	Color	Pin
0.5-4.5V	Supply V +	Brown	1
0-5V	Output +	White	2
0-10V	Com	Blue	3
4-20mA	Supply V +	Brown	1
	Output	Blue	3

M12



## DIMENSIONS



Dimensions are in millimeters and for reference only

## SPECIFICATIONS

### Performance @ 25°C (77 °F)

Accuracy	1% FS
Stability	0.2% FS
Measuring Temperature Range	-40 to 200° C (-40 to 392° F)
Max Continuous Temperature	250° C (482° F) (media)
Operating Temperature Range	-40 to 85° C (-40 to 185° F) (electronics)
Current Consumption	23mA for 4-20mA 8mA for 0-5V 11mA for 0-10V
Max Pressure for 4mm Diameter Probe	70 bar (1015 psi)
Max Pressure for 6mm Diameter Probe	300 bar (4351 psi)
Max Pressure for 8mm Diameter Probe	500 bar (7252 psi)

### Mechanical Configuration

Probe Lengths	50mm, 100mm, 150mm *
Process Connection	1/4 NPT (standard) *
Electrical Connection	4-pin M12 *
Ingress Rating	IP67 with T-Direct standard M12 cable
Housing	304 stainless steel
Wetted Parts	316SS

### Input

Supply Voltage / (Output)	9-32 VDC / (4-20mA)
	12-32 VDC / (0-5 VDC)
	12-32 VDC / (0-10 VDC)
	5 VDC / (0.5-4.5 VDC) ratiometric
	7-32 VDC (0.5-4.5 VDC) non-ratiometric

**TRANSDUCERS**  
direct®

*For best performance use shielded cables.*

*Mating connectors and cable assemblies sold separately.*

*\* Consult factory for further OEM options.*

## ORDERING

Series	Output	Electrical Connection	Probe Length	Pressure Port	Temperature Range
TDHTT	B	Q	50	03	0-200° F
	B = 4-20mA (2 wire) C = 0-5VDC (3 wire) **	Q = 4-pin M12 **	50mm 100mm 150mm **	03 = 1/4" NPT Male **	-40-392° F

\*\*= Consult factory for further OEM options

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use. While we provide application assistance personally, through our literature and the Transducers Direct web site, it is up to the customer to determine the suitability of the product in the application.