REVISIONS					
REV	DESCRIPTION	DATE	ECO	DR	APPD

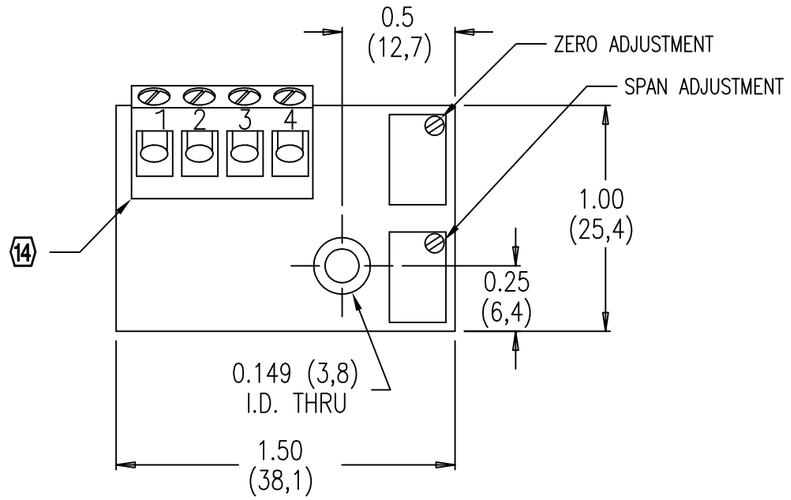
1. How to order:

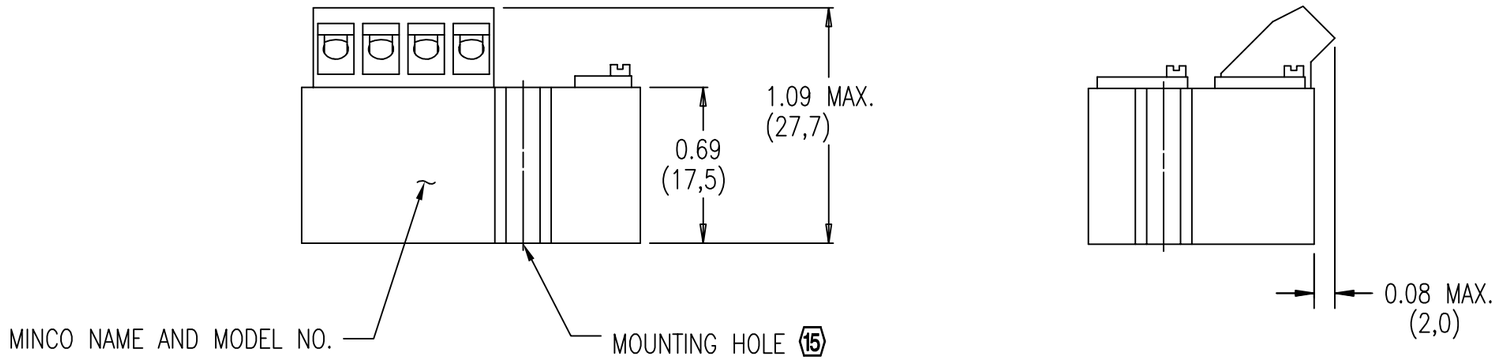
TT412	Model Number: TT412
PD	Resistance Thermometer Type: FA = 604Ω Nickel-Iron FB = 1000Ω Nickel-Iron FC = 2000Ω Nickel-Iron NA = 120Ω Nickel PA = 100Ω Platinum (.00392) PB = 100Ω Platinum (.00391) PD = 100Ω Platinum (.00385) PE = 100Ω Platinum (.00385) PF = 1000Ω Platinum (.00385) PW = 1000Ω Platinum (.00375)
1	4 to 20 mA DC output
QN	Temperature Range: Consult factory for current list of available ranges.
TT412PD1QN ← Sample Part Number	

2. Output: 4-20 mA DC over the specified temperature range.
3. Sensing Element: 100 Ω Platinum, 1000 Ω Platinum, 120 Ω nickel, 604 Ω nickel-iron, 1000 Ω nickel-iron, or 2000 Ω nickel-iron 2-lead resistance thermometer.
4. Physical: Epoxy-potted for moisture resistance.
5. Ambient Temperature: Operation: -25 to 85°C (-13 to 185°F).
   Storage: -55 to 100°C (-67 to 212°F).
6. Supply Voltage: 8.5 to 35 VDC.
7. Loop Resistance: The maximum allowable resistance of the signal-carrying loop, including extension wires and load resistors, is given by this formula: Rloopmax=(Vsupply-8.5)/.02 AMPS. For example, if supply voltage is 24 VDC, the loop resistance must be less than 775 Ω. See Minco Application Aid #15 for more information.
8. Calibration Accuracy: ±.1% of span.
9. Adjustments: Zero and Span ±5%.
10. Linearity: Referenced to actual sensor temperature:
    With platinum resistance thermometers: ±.1% of span.
    With nickel and nickel-iron resistance thermometers:
    Spans less than 100°C (180°F): ±.25% of span.
    Spans greater than 100°C (180°F): ±.25% of span per 100°C (180°F) of span.
11. Warmup drift: ±.1% of span max., assuming Vsupply = 24VDC and Rloop = 250 Ω; stable within 30 minutes.
12. Ambient Temperature Drift: Calibrated at 23.9°C (75°F); ±.013% of span/°C (±.007% of span/°F), ±.025% of span/°C (±.014% of span/°F for spans < 55°C).
13. Voltage Effect: ±.001% of span/volt from 8.5 to 35 VDC.
14. Connections:

T.B.#	DESCRIPTION
1	(+) current loop
2	(-) current loop
3	RTD
4	

15. Mounting: Use #6 screw through or Use #8 thread forming screw.
16. Maximum Output Current: 27 mA.
17. Minimum Span: Dependent on resistance thermometer type.





UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES IN INCHES DIMENSIONS IN [ ] ARE IN MILLIMETERS ALL DIMENSIONS: ±.03 (0,8)	INITIALS	DATE	ITEM	REQD	PART/STOCK NO	MATERIAL DESCRIPTION
	DR BMP	09/01/05	TITLE: TEMPERATURE TRANSMITTER FOR INGERSOLL-RAND MODEL TT412			
	CHK					
	APP MWG	09/07/05				
MATERIAL:	ENGR K.S.D.	09/02/05				
	QA					
	PRD MCC	09/07/05				
FINISH:	NEXT ASSY	CATEGORY 16	F:\AUTOCAD\DWG\TT412\TT412SPC.DWG			
	USED ON TT412	INIT. JOB 16-	STOCK NO	SCALE NONE	DWG SIZE B	

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TT412 REV –

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