



*Manufacturers of Process
Controls and Instrumentation*

Instruction Manual

Model: *TWI-RTX-TB*

Function: *Two Wire RTD Transmitter*

Input Range:

- | | |
|--|---|
| <input type="checkbox"/> X=1: 0-300 Deg. F. | <input type="checkbox"/> X=4: 0-750 Deg. F. |
| <input type="checkbox"/> X= 2: 0-400 Deg. F. | <input type="checkbox"/> X=5: 0-1000 Deg. F. |
| <input type="checkbox"/> X= 3: 0-500 Deg. F. | <input type="checkbox"/> X=6: -350 to +1100 Deg. F. |
| | <input type="checkbox"/> X=7: _____ |

Output: 4-20mA

Power: 12 to 60 VDC

Serial #: _____

(If special or required)

For Technical Assistance And Questions Call
USA: (231) 788-2900 CANADA: (905) 660-5336

Restocking Policy

All product returned to Pribusin Inc. in prime condition (not damaged, scratched or defaced in any way) within seven (7) months from the original date of shipment is subject to a 50% restocking charge. All product must be accompanied by a Return Authorization number (RA number) which must be obtained from Pribusin Inc. prior to returning any product.

After seven (7) months from the original date of shipment, products cannot be returned for restocking.

Custom designed products, modified products or all non-standard products may not be returned for restocking.

Warranty Policy

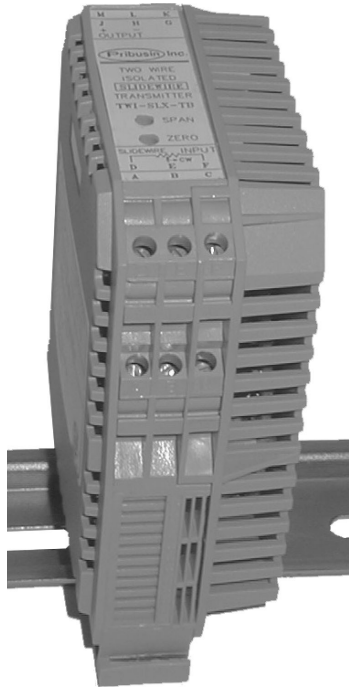
Pribusin Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective, on its return to Pribusin Inc., transportation charges prepaid, within one year of its original purchase. Pribusin Inc. will extend the same warranty protection on equipment, peripherals and accessories which is extended to Pribusin Inc. by the original manufacturer. Pribusin Inc. also assumes noliability, expressed or implied, beyond its obligation to prelace any component involved. Such warranty is in lieu of all other warranties, expressed or implied.

Pribusin Inc.

Manufacturers of Process
Controls and Instrumentation

Model: TWI-RTX-TB

Two Wire Isolated RTD Transmitter



Standard features:

- High Input to Output Isolation (800 VAC Test)
- Small Size - Fits on Terminal Block Rail
- Industry Standard 4-20 mA Output
- Standard Ranges for 100 Ohm Platinum
- Special Ranges and other RTD Types Available
- Wide Operating Range (12 to 60 VDC)
- High Noise Rejection
- CSA and NRTL Approved (LR 51078)

Function:

The TWI-RTX-TB is an isolated two wire RTD transmitter in a small, easy to install package. It has a universal DIN mount which makes it ideal for installation into crowded control panels. The many different temperature ranges allow it to be used in a great variety of temperature measurement applications.

Temperature Conversion Equations:

$$^{\circ}\text{C} = \frac{5}{9} (^{\circ}\text{F} - 32)$$

$$^{\circ}\text{F} = \frac{9}{5} ^{\circ}\text{C} + 32$$

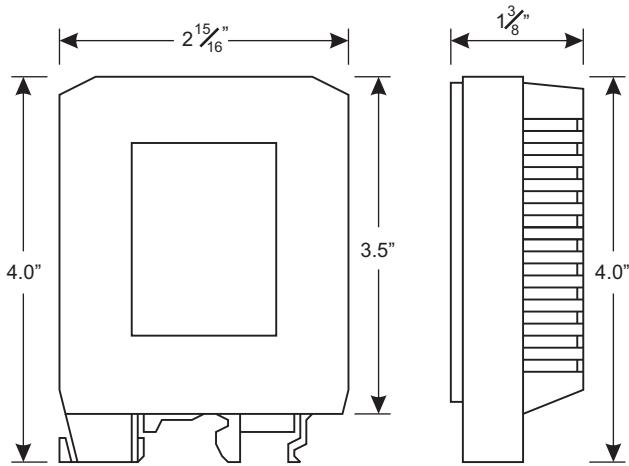
$$\text{Kelvin} = ^{\circ}\text{C} + 273.15 \quad \text{Rankin} = ^{\circ}\text{F} + 459.67$$

Specifications:

- Output: 4-20 mA
- Isolation: 800 VAC Test
- Operating Power: 12 to 60 VDC
- RTD Type: Platinum, 100 Ohms at 0 Deg.C., 0.0385 Alpha
- Accuracy/Linearity: +/-0.25% max., +/-0.1% typ (Linearized to RTD Curve).
- Response Time: 100 msec to 63% of final value
400 msec to 99% of final value
- Temperature Effects: +/- 0.025% per Deg.C.
- Span Drift: +/-0.025% per Deg.C.
- Zero Drift: 1 milliohm per 1 ohm offset per Deg.C. or 1 milliohm per Deg.C. whichever is larger
- Line Effects: 0.03% per 10 VDC Line Change
- Operating Temperature: -20 Deg. C. to + 40 Deg. C.

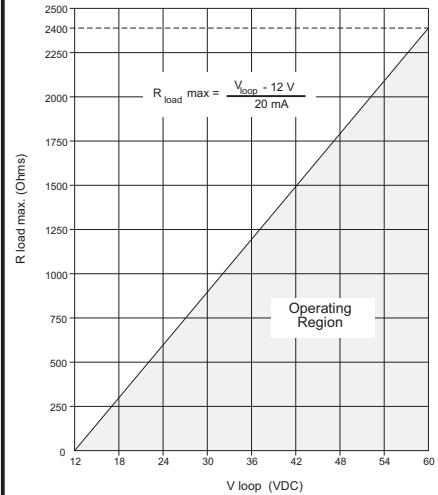
TWI-RTX-TB

Dimensions:

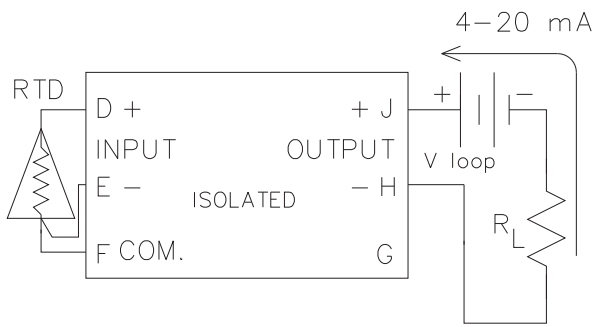


M	L	K
J	H	G
+ OUTPUT		
Pribusin Inc.		
TWO WIRE ISOLATED		
RTD		
TRANSMITTER		
TWI-RTX-TB		
⊕ SPAN		
⊕ ZERO		
RTD	-	Com
+	D	E F
-	A	B C

Loop Characteristics:



Connection:



Model Designation:

TWI-RTX-TB

Temperature Range

- 1: 0 to 300F (-18 to 150C)
- 2: 0 to 400F (-18 to 205C)
- 3: 0 to 500F (-18 to 260C)
- 4: 0 to 750F (-18 to 400C)
- 5: 0 to 1000F (-18 to 538C)
- 6: -350 to 1100F (-200 to 600C)
- 7: Special (must specify on order)

Example: Isolated RTD Transmitter for 100 Ohm Platinum RTD for 0-500 Deg.F. is designated by: TWI-RT3-TB

Manufactured By:

Pribusin Inc.

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info@pribusin.com

USA:

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743 Marquette Ave.
Muskegon, MI 49442
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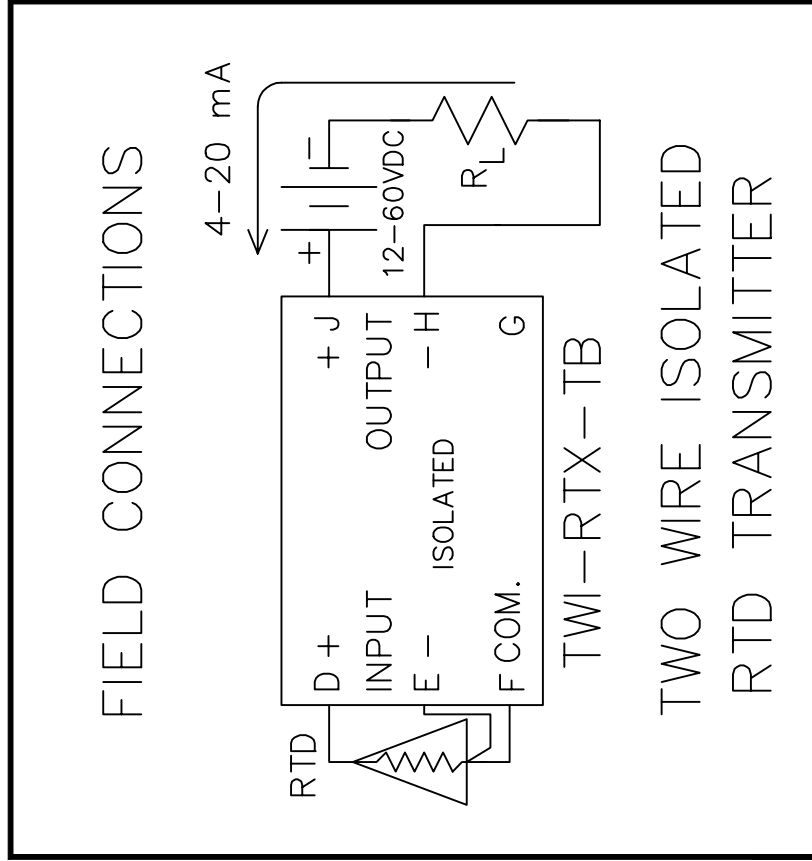


CANADA:

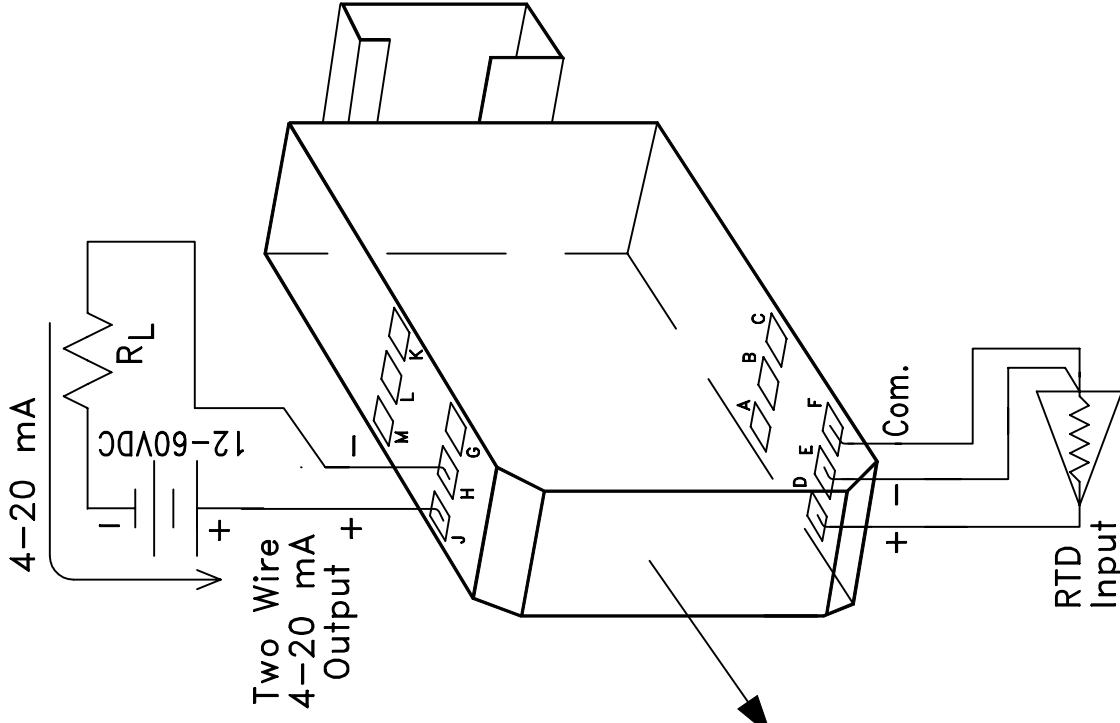
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Notes:

1. For Details of Terminal Block Enclosure/Din Rail See Dwg. 104385.



M	L	K
J	H	G
+	-	
OUTPUT		
Pribusin Inc. ©		
TWO WIRE ISOLATED RTD TRANSMITTER TWI-RTX-TB		
SPAN ZERO		
RTD	INPUT	Com
+	D	E
-	F	F
A	B	C



Pribusin Inc. ©			
CHKD :	DATE : NOV. 02/94	DRN: KS	
Model: TWI-RTX-TB Two Wire Isolated RTD Transmitter Connection Diagram			
DWG. NO. :	103710-1		REV. A

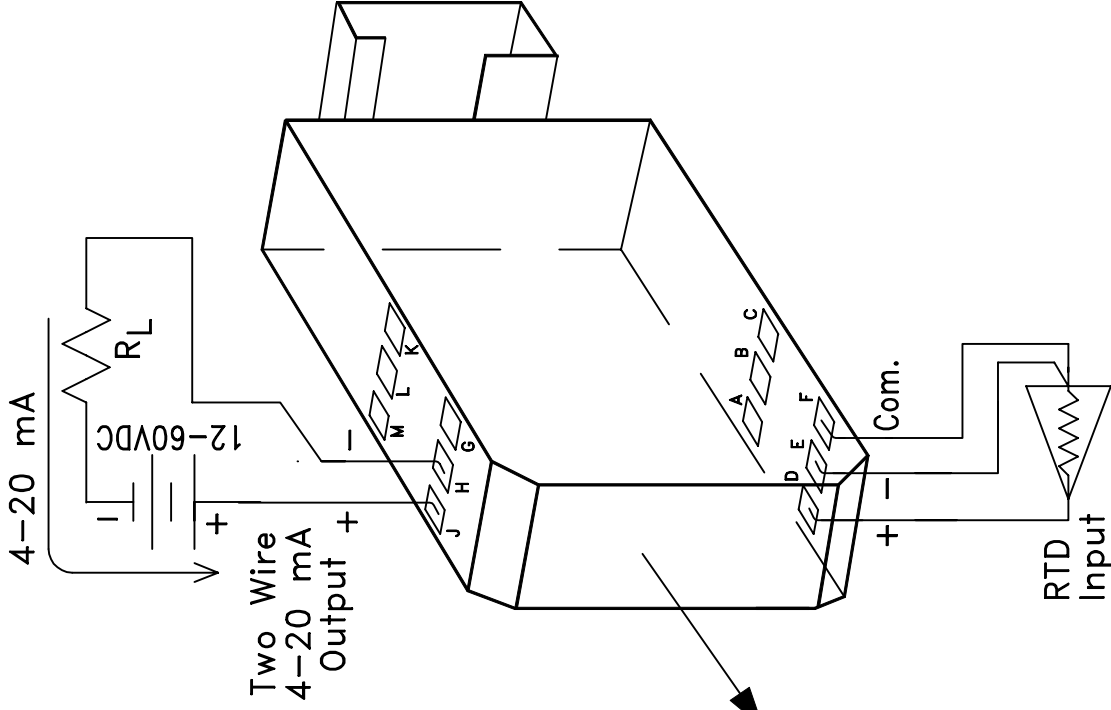
Notes:

1. For Details of Terminal Block Enclosure/Din Rail See Dwg. 104385.

Calibration Procedure:

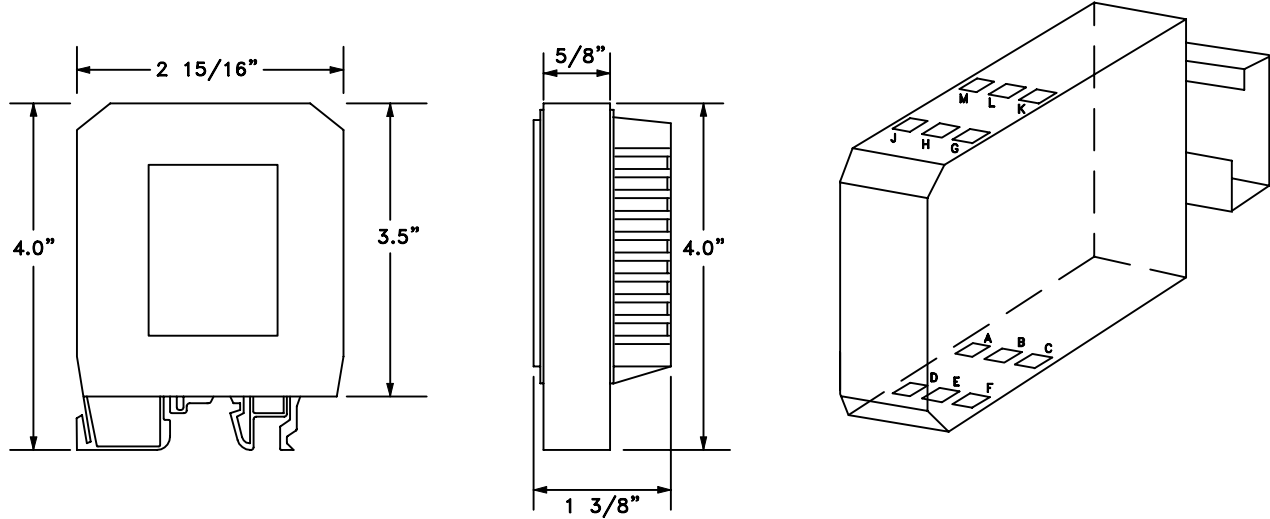
1. Apply an input signal equal to 100 % of the input range.
2. Adjust the Span potentiometer for an output of 20.00 mA.
Note: If the output will not go down to 20.00 mA, then adjust the Zero potentiometer to get down to 20.00 mA.
3. Apply an input signal equal to 0 % of the input range.
4. Adjust the Zero potentiometer for an output of 4.00 mA.
5. Repeat steps 1 to 5 until no further adjustments are required.

M	L	K
J	H	G
+	-	
OUTPUT		
Pribusin Inc.		
TWO WIRE ISOLATED RTD TRANSMITTER TWI-RTX-TB		
 SPAN  ZERO		
RTD	INPUT	
+	-	Com
D	E	F
A	B	C



Pribusin Inc. ©			
CHKD :	DATE : NOV. 02/94	DRN: KS	
Model: TWI-RTX-TB Two Wire Isolated RTD Transmitter Calibration Procedure			
DWG. NO. :	103710-2		REV. A

Enclosure Detail :



Din Rail Detail :

	<p>A</p> <p>Rail Standard EN 50 035 Dimensions: 32 x 15 x 1.5 mm</p>
	<p>B</p> <p>Rail Standard DIN EN 50 022 Dimensions: 35 x 15 x 2.3 mm</p>
	<p>C</p> <p>Rail Standard DIN EN 50 022 Dimensions: 35 x 7.5 x 1 mm</p>
	<p>D</p> <p>Rail Standard DIN EN 50 022 Dimensions: 35 x 15 x 1.5 mm</p>

Pribusin Inc. ©		
CHKD:	DATE: APR. 26/93	DRN: KS
(Wide Cover) Terminal Block Enclosure/ Din Rail Detail		
DWG. NO. :	104385	REV. B