

# Application Work Sheet (Temperature)

Quotation

Purchase Order

For better customer satisfaction and to minimize risks, we request you to fill out this form for all application as exactly as possible, when you quotation or place order.

## General Information

Client \_\_\_\_\_ Date \_\_\_\_\_  
Name \_\_\_\_\_ End-User \_\_\_\_\_  
TEL. No. \_\_\_\_\_ Project \_\_\_\_\_  
FAX. No. \_\_\_\_\_ Required delivery \_\_\_\_\_  
Model \_\_\_\_\_  
Quantity \_\_\_\_\_

## Performance Specifications

Temperature Range \_\_\_\_\_  
Operating Range \_\_\_\_\_  
Measuring Unit  °C  °F  
Temperature Sensor  RTD \_\_\_\_\_  T/C \_\_\_\_\_  
Output Signal  4 ~ 20 mA  RTD 100Ω  RTD 1000Ω  T/C  
Power Supply  24 V DC  12 V DC

## Physical Specifications

Process Connection  PT 1/2"  PT 3/8"  
 1.5S Tri-Clamp  3/4S Tri-Clamp  
 10 K, 25 A Flange  10 K, 40 A Flange  10 K, 50 A Flange  
 1", 150# Flange  1.5" 150# Flange  2", 150# Flange  
 Other \_\_\_\_\_  
Electrical Connection  Terminal  DIN 43650  Cable(1.5 m)  
Local Display Unit  None  LCD  LED

## Process Conditions

Process Media \_\_\_\_\_  
Operating Temperature \_\_\_\_\_  
Humidity \_\_\_\_\_  
Vibration \_\_\_\_\_  
Explosion Protection  Required  No required  
Weather Protection  Required  No required

# T203 Series General Purpose Temperature Transmitter.



## Feature

- 2Wire 4 ~ 20 mA current output signal
- Pt 100 or PT 1000 input
- Measuring range from -50 to 500 °C
- Excellent accuracy and long term stability

## Applications

*These are recommended in application requiring amplification of RTD signals to carry to a long distance or guard against heavy field electrical noise.*

The transmitter converts RTD input to an analog signal for direct interface with Indicators, recorders, controllers, PLC and DCS systems can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system.

### Input

Sensor Elements	Pt 100 Ω
	Pt 500 Ω
	Pt 1000 Ω
Measuring Range	-50 ~ 250 °C ... 500 °C

### Output

	Current output
Electrical connection type	2-wire technique
Full scale output signal	20 mA ± 0.05 %
Zero measured output	4 mA ± 0.03 %
	Other signals available on request

### Electrical Specifications

Power supply	12 ~ 36 V DC (It is not free voltage)
Load resistance	500 Ω at 24 V
Influence of excitation	0.01 % F.S.
Reverse Polarity	Protected
Shock resistance	No change in performance after 10 g for 11 ms
Vibration	5 g (10 ... 2000 Hz)
Response time(10~90 %)	± 2 milliseconds
Adjustment range	± 20 % F.S. zero and span

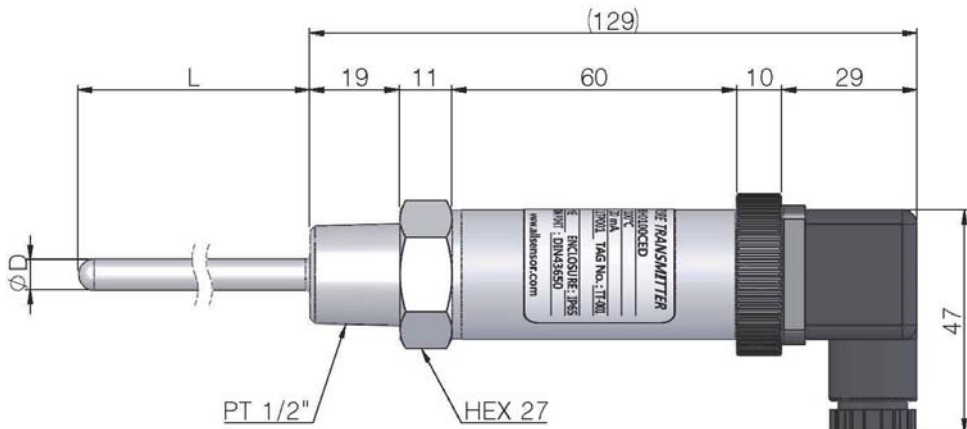
### Performance Specifications

Accuracy	≤ ± 0.25 % F.S.
Non-linearity	Better than ± 0.10 % F.S.
Repeatability	Better than ± 0.05 % F.S.
Long term stability	Better than 0.05 % F.S. per year
Cutoff frequency(-3 dB)	≤ 2 kHz
Ambient temperature limits	-20 ~ 80 °C
Ambient humidity limits	5 to 90 % R.H

**Physical Specifications**

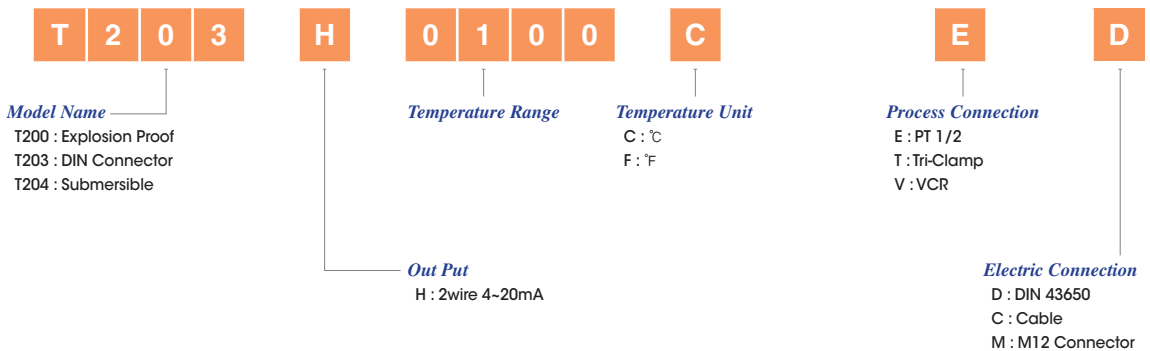
Process connection	Rc1/2" Male thread(Standard)
	Flange, Clamp Joint & Other connections available on request
Process media	Gases and liquid compatible with stainless steel 316
Materials wetted by process	Stainless steel 316L and other available on request
Materials of terminal head	Aluminum die-casting, or stainless steel HEAD
Enclosure rating	IP 65
Explosion protection	None
Influence of mounting position	No critical
option	Protection well

**Dimension(mm)**



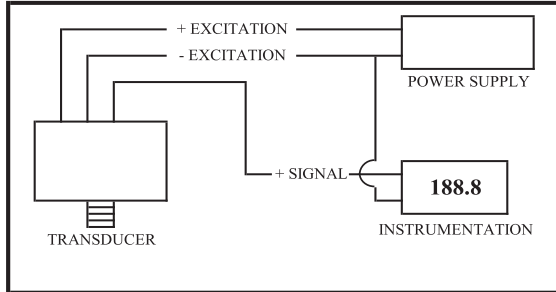
WIRING	
A, Red	Power +
B, Black	Return -

**Ordering Information**

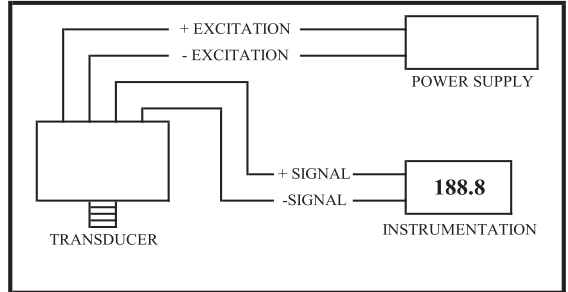


# Pressure Transducer & Transmitter

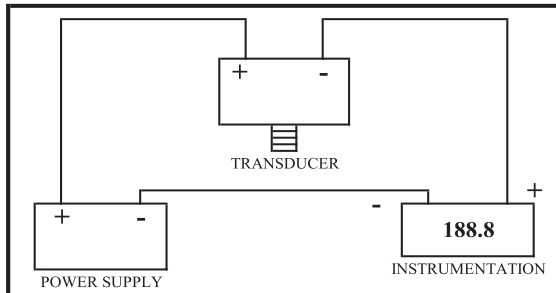
## Installation and Wiring



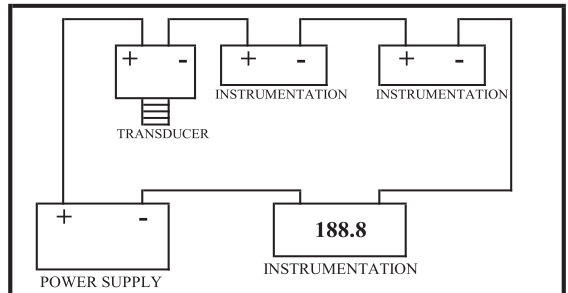
**3Wire Configuration for voltage output Transducer**  
 ("-"Excitation and "-"Signal Are Common)



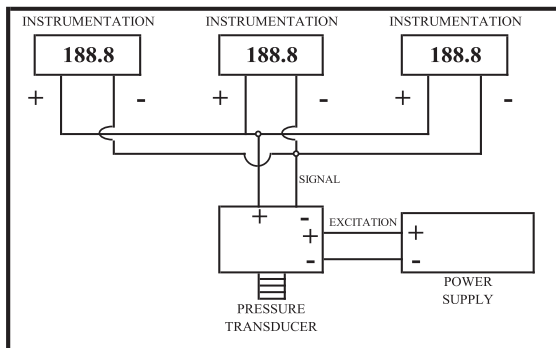
**4Wire Configuration Millivolt Output Transducer**



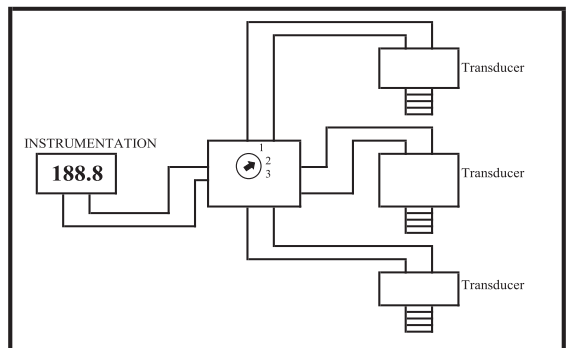
**2Wire Configuration for Current output Transducer**



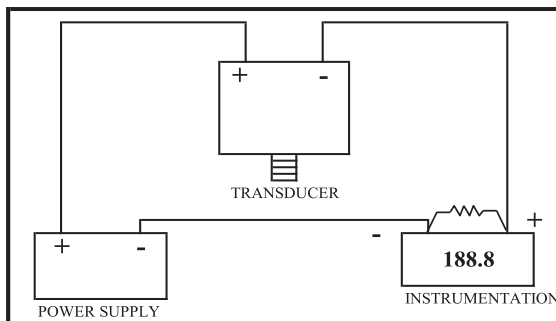
**Multi-instrument 4-20mA Current Loop**  
 (Panel Meters, Chart Recorder, Computers, etc)



**Multiple Instruments Wired In Parallel to a Voltage Output**



**Multiple Transducer Wired to One Meter and One Switch**  
 (Transducer With Built-in Zero & Span Adjustments, Same outputs & Same Pressure Range)



**Converting Current Into Voltage For Instrumentation Set Up For Voltage**