Integrated Temperature Transmitter

MTM

Feature

- Exquisite and meticulous design
- Provide diversified user customization
- Compact size, easily installed
- Full stainless-steel material, corrosion resistant
- High-cost performance
- Diversified output forms

Introduction

MTM Integrated Temperature Transmitter can directly measure the temperature of various liquid, gas medium as well as solid surface from -200 ℃ to 500 ℃ . It uses special temperature module to make a linearity correction on temperature sensing element, outputting a standard analog signal and digital signal. This transmitter is easily used and with various choices of output, it can fulfill the temperature measurement needs of many different fields including petroleum, chemical industry, metallurgy, power station and light industry, etc.

Specifications

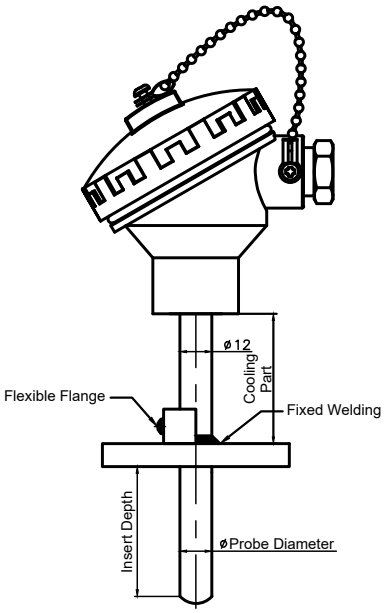
- Power Supply: 10V ～ 30V DC
  15V ～ 30V DC(with indicator)
- Output: 4mA ～ 20mADC, RS485, HART
- Accuracy: ±1.0%FS
- Insulation Resistance: ≥20MΩ@500V DC
- Circuit Operation Temperature: -10°C～ 80°C
- Medium Temperature: -200°C～ 500°C
- Indicator Temperature: -10°C～ 60°C
- Protection: IP65

Construction Material

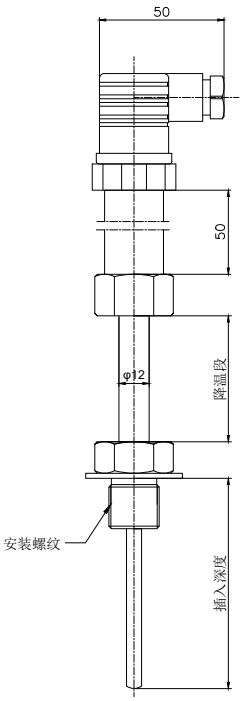
- Housing: Aluminum Alloy (water-proof connection box)
- Wetted Part: Stainless Steel 304,316L or others
- Sensing Element: PT100,PT1000 or others

Outline Construction

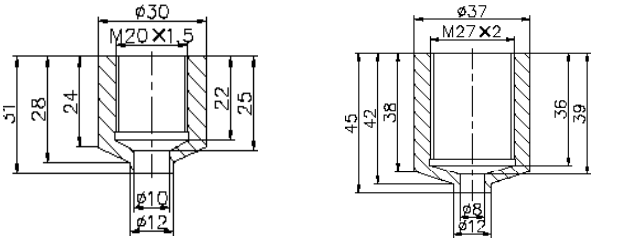
Unit: mm



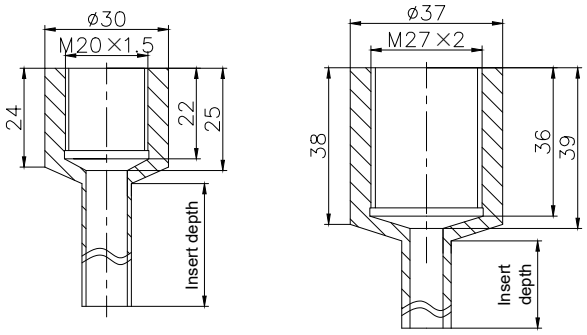
Water-proof Connection Box



Hirschmann Plug



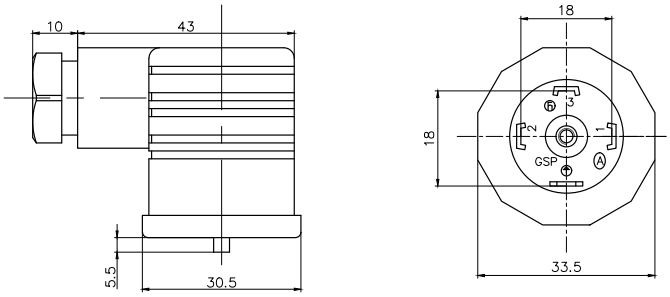
Welded Fitting



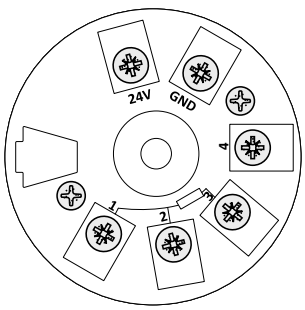
Welded Sleeve

Electrical Connection

PIN	Electrical Definition
1	+V
2	+OUT
3	Null



Hirschmann Plug



Water-proof Connection Box

Order Guide

MTM	Integrated Temperature Transmitter

Code	Temperature Sensing Element
Z	Thermal Resistance

Code	Graduation
P	PT100

Code	Temperature Range
[X ～ Y°C]	X, Y: Lower limit value and upper limit value, Unit: °C .(measured Range: -200°C ~500°C)

Code	Output Signal
E	4mA ～ 20mA DC
EH	4mA ～ 20mA DC + HART
R8	RS485(Only Hirschmann)
ER8	4mA ～ 20mA DC + RS485(Only Hirschmann)

Code	Protection Tube Diameter, Unit: mm
6	φ6
8	φ8
12	φ12
16	φ16
612	Internal tubeφ8, External tubeφ12(φ12 Welded sleeve)
816	Internal tubeφ8, External tubeφ16(φ16 Welded sleeve)

Code	Installation & Connection
I	Fixed thread installation, M20×1.5 male, Thread Length 18mm
II	Fixed thread installation, M27×2 male, Thread Length 32mm
III	Fixed thread installation, G1/2 male, Thread Length 20mm
IV	Fixed flange installation (DN10, DN15, DN20, DN32…)
V	Chuck installation (Clamp φ25.4, φ50.4)
VI	Loose flange installation (DN10, DN15, DN20, DN32…)
VII	Fixed thread installation, M16×1.5 male, Thread Length 18mm
VIII	Fixed thread installation, G3/8 male, Thread Length 14mm
IX	Other standard Thread, please note
X	Fixed thread installation, NPT1/4 male, Thread Length 14mm
XI	Fixed thread installation, G1/4 male, Thread Length 14mm

Code	Insert Depth of Protection Tube (Unit: mm)
XXX	Per actual length, unit mm (Default length includes thread length, if it is not included, please note; if fitting is needed, the insert depth should be the length excludes the fitting.

Code	Material of Wetted Part
1	Stainless Steel 304(Default)
2	Stainless Steel 316L
3	PTFE Sleeve
4	Others, please note

Code	Connection Box
H	Hirschmann
F	Water-proof connection box (without indicator)

Code	Display
A	LCD
B	None
C	LED

Code	Length of Cooling Part (Unit: mm)
XXX	0mm [-50°C～ 100°C]
	100mm[-200°C～ 150°C]
	150mm[-200°C～ 500°C]

MTM	Z	P	[0 ～ 200°C]	- E	- 6	- I	- 200	- 1	- H	- B	-150	The whole spec

Order Notes:

1. If there is no special requirement, the material is stainless-steel 304 except probe and explosion proof housing.
2. If customization is needed, please contact us for details. The customized code should be replaced by “*”, please also remark with details or provide drawings.
3. If other thermal resistance like PT1000 or K type thermal couple is needed, please note clearly on the order.
4. Code example:
   Code: MTMZP[0~200°C]E-6-I-150-H-1-B-150
   Details: MTM Integrated Temperature Transmitter, Thermal Resistance PT1000, measuring range 0~200°C , 4~20mA DC output, Probe external diameter 6mm, Fixed thread installation M20×1.5, thread length 18mm, insert depth of protection tube 150mm including thread length, plug connection, SS304 probe, Without display, Length of cooling part 150mm.