

# M12 and DIN 43650 Socket Connection Two Wires Temperature Converter ( Thermocouple Input )



## TT12 (TC)

TT12 Model converters are industrial devices for measuring temperature information in industrial environments and converting this information with a standard two-wire 4-20mA analog signal. Thermocouple type sensors can be connected.

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### Device Features

1 pcs Sensor Input ( TC )  
 1 pcs Analog Output (4-20mA)  
 Mineral Insulated -200...+1200°C

24V DC Supply  
 Two-Wire Connection

Hygienic Connection Options  
 M12 Connection (IP66)  
 DIN 43650 Electrical Connection

During the design phase, compliance with international standards, reliability and ease of use are based on. For this reason, they are ergonomic devices that can be used for many different controls in many sectors.

### Input Types

Sensor Type	Standard	Min.	Max.
Type-T ( Cu-Const )	IEC60584	-200 °C	300 °C
Type-U ( Cu-Const )	IEC60584	-200 °C	600 °C
Type-J ( Fe-Const )	IEC60584	-200 °C	800 °C
Type-L ( Fe-Const )	IEC60584	-200 °C	900 °C
Type-K ( NiCr-Ni )	IEC60584	-200 °C	1200 °C
Type-E ( Cr-Const )	IEC60584	-200 °C	1200 °C
Type-N ( Nicrosil-Nisil )	IEC60584	0 °C	1200 °C
Type-S ( Pt%10Rh-Pt )	IEC60584	0 °C	1500 °C
Type-R ( Pt%13Rh-Pt )	IEC60584	0 °C	1600 °C
Type-B ( Pt%18Rh-Pt )	IEC60584	0 °C	1800 °C

Technical Specifications	
Power Supply ( PS )	10-35 VDC
Input	Thermocouple = B, E, J, K, L, N, R, S, T, U Current = 4-20mA, 20-4mA
Thermocouple Input Impedance	10MΩ
Analog Output	Current = 0/4-20mA , 20-4mA
Relay Output	250V, 80mA, NO Contact
Memory	100 Years, 100.000 Renewals
Accuracy	+/- 0,2%
Sampling Time	100 ms
Environment Temperature	Working = -20...+70°C Storage = -40...+85°C
Dimensions	Width = 85 mm Height = 120 mm Depth = 120 mm

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## Product Code

## Thermocouple Type Coding

TT12 - - - - -

Picture No :

- A1
- A2 - Hygienic Type
- A3 - Hygienic Type
- A4
- A5 - Hygienic Type
- A6 - Hygienic Type

Electrical Connection :

- 1 = DIN 43650 Valve Socket
- 2 = M12 x 1 Socket

Element Type :

- T = Cu-Konst
- L = Fe-Konst
- J = Fe-Konst
- K = NiCr-Ni
- N = Nicrosil-Nisil

Outer Protective Sheath Diameter (\*) :

- 10 = 1 mm Mineral Insulated
- 15 = 1,5 mm Mineral Insulated
- 20 = 2 mm Mineral Insulated
- 30 = 3 mm Mineral Insulated
- 45 = 4,5 mm Mineral Insulated
- 60 = 6 mm Mineral Insulated
- 80 = 8 mm Mineral Insulated

Immersion Length (\*) :

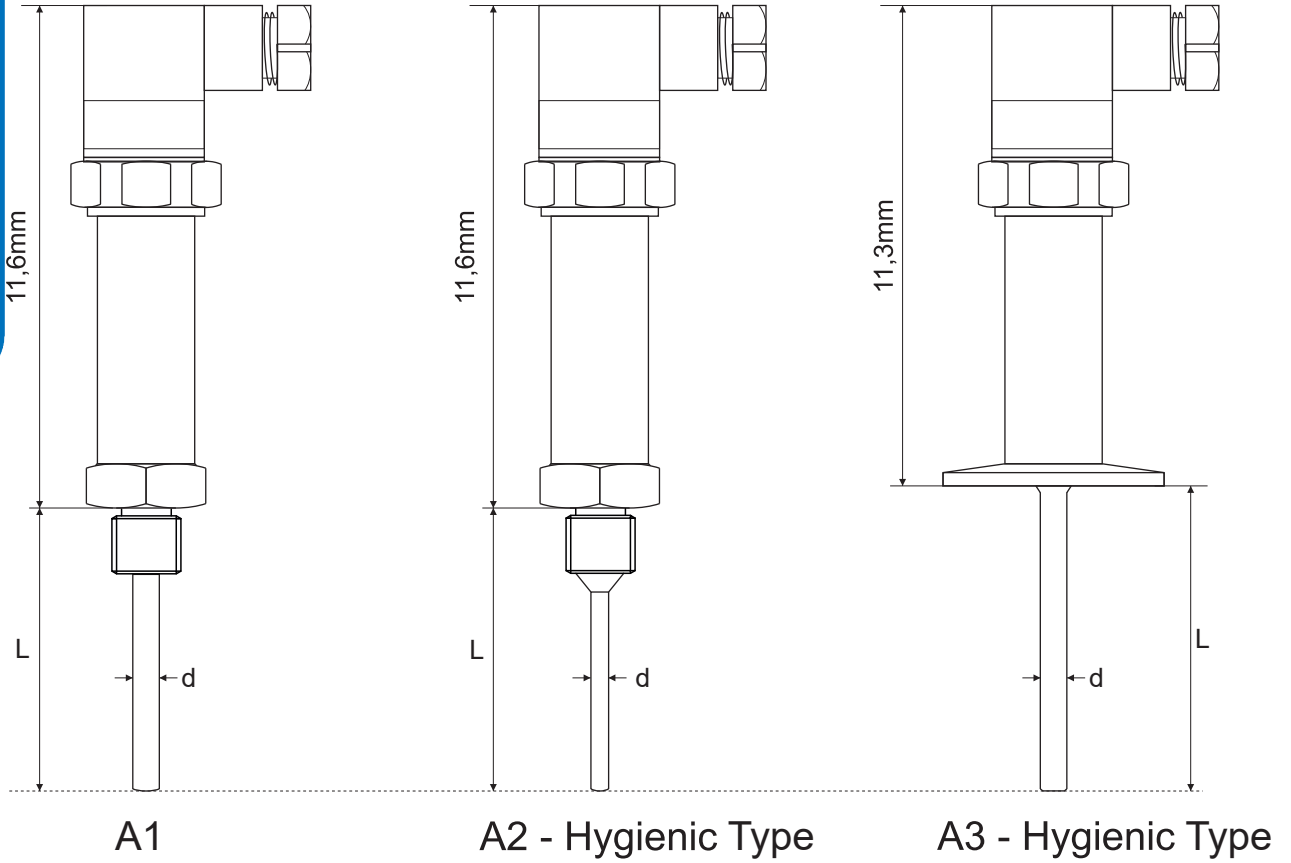
- 5 = 50 mm
- 10 = 100 mm
- 15 = 150 mm
- 20 = 200 mm
- 25 = 250 mm
- 30 = 300 mm
- 40 = 400 mm
- 80 = 800 mm

Note: All Lengths Between 10 mm .... 5000 mm

Exceptions :

- RX\* (Raccord)
- RA (Adjustable Raccord)
- F (Flange)
- HD (Air Perforated)
- Ó (Special)
- SF (Certificate)
- W (Thermowell)
- T (Teflon Coating)
- TH (Teflon Hose)

**DIN 43650 Valve Socket**



**M12 x 1 Sokect**

