

# Transmitter for Mounting Rails

for Thermocouples and Resistance thermometers

## Datasheet 84.3

Transmitters

### Description :

Analogue Transmitter for the installation on 35 mm mounting rails

**Output :** 4...20 mA • 0...10 V

### Inputs :

Platinum- RTD's acc. to DIN IEC 751  
Thermocouples acc. to DIN IEC 584

### Input RTD (Pt100, Pt1000) :

Smallest span : 20 K  
2- 3- or 4- wire connection  
Characteristic : temperature- linear  
Linearity error : < 0,1 %

### Input Thermocouples :

Smallest span : 200 K  
Characteristic : temperature- linear  
Linearity error : < 1 % FSO  
Error of cold junction compensation: < ± 0,5 K  
Thermocouple types :  
NiCr - Ni (Typ K) • Fe - CuNi (Typ J und L)  
Cu - CuNi (Typ T) • Pt10Rh - Pt (Typ S)  
Pt30Rh- Pt6Rh (Typ B)

**Ambient Temperature :** - 25 ... + 75 °C

**Temperaturdrift :** 0,05% / 10K

**Housing:** Plastic case for the installation on standard mounting rails according to EN 50022

**Dimensions :** 90 × 58 × 17,5 mm (B × H × T)

**Protection class :** IP 20 acc. to DIN 40 500

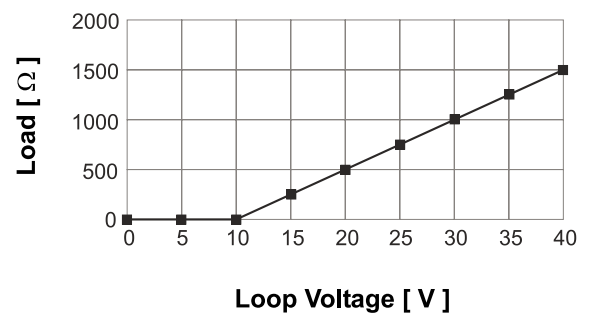
**Clamps :** Screw- clamps max. dia. 2,5 mm<sup>2</sup>

**Loop voltage :** 10 ... 35 V/DC

**Influence of loop voltage :** < 50 ppm / V



### Load (4...20 mA Version) :



**Load Influence :** 0,02 % / 100 Ω

**Current Limit :** Max. current 35 mA

**Response Time :** t<sub>90</sub> < 1s

**Failure Signal on probe rupture :**  
Current Output > 23 mA

### Failure signal on Probeshortcut

RTD - Version: I < 4 mA

Thermocouple- version : I corresponds ambient temperature (a probe shortcut is not detectable)

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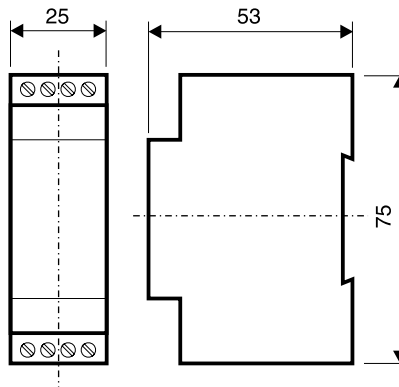
Measuring ranges	
Ordering - code	F G
- 200 ... + 200 °C	4 1
- 200 ... + 50 °C	4 2
- 50 ... + 50 °C	4 9
0 ... + 60 °C	5 8
0 ... + 100 °C	6 0
0 ... + 200 °C	6 3
0 ... + 300 °C	6 5
0 ... + 400 °C	6 7
Special - range	9 9

Please declare special ranges in plain language - see bottom

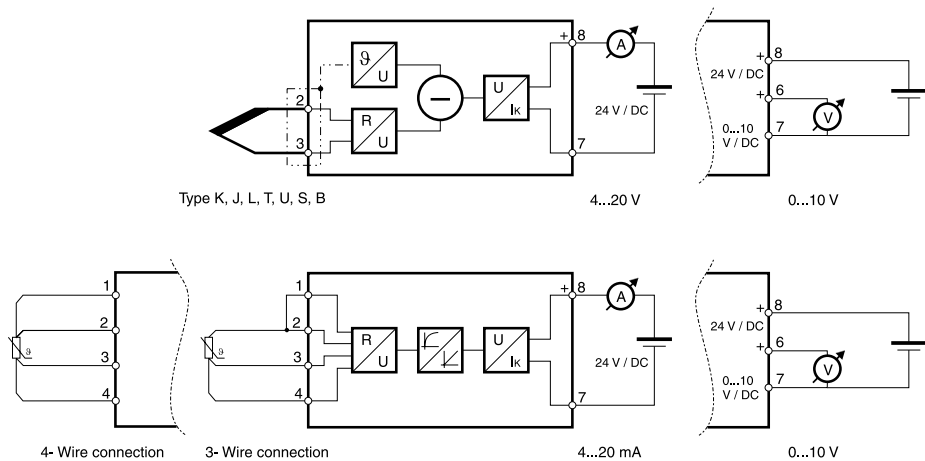
Input	
Ordering - code	H I
Pt 100 DIN ISO	1 1
Pt 1000 DIN ISO	1 4
FeCu / Ni ( J )	2 0
FeCu / Ni ( L )	2 1
Ni / CrNi ( K )	2 2
Pt Rh 10 / Pt ( S )	2 5
Pt Rh 30 / Pt 6 ( B )	2 7
Cu / CuNi ( T )	2 8
Cu / CuNi ( U )	2 9

Output	
Ordering - code	L M
4 ... 20 mA	0 2
0 ... 10 V	0 3
others upon request	

## Case Dimensions



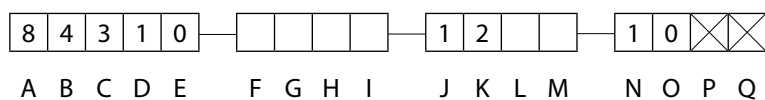
## Schematic diagramm



## Ordering-code :

for ordering please fill out all empty digits in the order code on the right.

The code numbers for all free digits you find in the charts above.



## For ordering please declare in plain language :

Range (notice the minimum spans on page 1)

..... °C to ..... °C correspond to the output signal range