

Temperature transmitter is an integral element of temperature sensor, available also as a separate component. It converts temperature sensor signal to analogue 4÷20mA, voltage 0÷10V or different signal. Transmitter can be placed directly in connection head or on TS-35mm rail.

## Specification

### Characteristic

- universal transmitter
- accurate calibration
- mounting in connection head BA: 248H
- mounting on a 35 mm rail: 248R
- with HART protocol
- intrinsically safe version ATEX II 1G Ex ia IIC T5/T6

### Input

RTD	Pt100, Pt500, Pt1000
Ni	Ni120
TC	L, J, U, T, K, E, S, R, B

### Output

4÷20 mA

### Measuring range

Pt100..1000:	-200÷850°C 2-, 3-, 4-wire
Ni120:	-70÷150°C
TC:	-10÷100 mV

### Min. span

for TC: 2,5 mV

### Accuracy

≤0,1% of range

### Zero point adjustment

in full range

### Time response

< 1 s

### Galvanic isolation

500V AC

### Max. loop resistance

$$R_L \max = (U_{\text{supply}} - 18) / 0,022 \text{ [}\Omega\text{]}$$

### Lead wire connection

<1,75 mm<sup>2</sup>

### Power supply

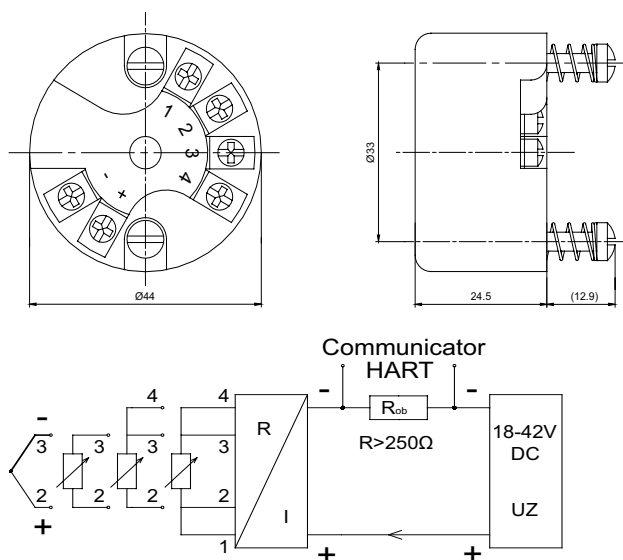
18÷42V DC

### Operating conditions

temperature: -40÷85°C  
humidity: up to 95% RH non-condensing



## CONNECTION SCHEMES



**Product code**

1	<input type="text"/>	<b>Transmitters version</b>	
		<b>H</b>	head mounted
2	<input type="text"/>	<b>R</b>	35mm rail mounted
		<b>Temperature range</b>	
3	<input type="text"/>	<b>(0÷100)°C</b>	(0÷100)°C
			other parameters acc. to requirements
4	<input type="text"/>	<b>Input type</b>	
		<b>Pt100</b>	Pt100
		<b>J</b>	J
		<b>K</b>	K
		<b>L</b>	L
		<b>N</b>	N
		<b>T</b>	T
5	<input type="text"/>		other parameters acc. to requirements
		<b>RTD connection</b>	
6	<input type="text"/>	<b>3</b>	3 - wire
		<b>4</b>	4 - wire
7	<input type="text"/>	<b>Producer's calibration certificate</b>	
		<b>no designation</b>	none
		<b>C4</b>	3 point
		<b>Q4</b>	5 point

1      2      3      4      5

248  A - I-1 -  -

Ordering example:

**Transmitters Rosemount 248HA-I1-K-(0÷500)°C**