

Temperature sensor suitable for measurement of ambient temperature, mainly in industrial space like warehouses, production halls, etc. as well as under roofs and open spaces. It has an aesthetic housing made of plastic adequate for wall mounting and perforated sheath made of anodized aluminium. Optionally, sensor can be equipped with transmitter converting measured value to 4÷20mA current.

## Specification

### Temperature range / sensing element

-40÷85°C      **Pt100**      class B

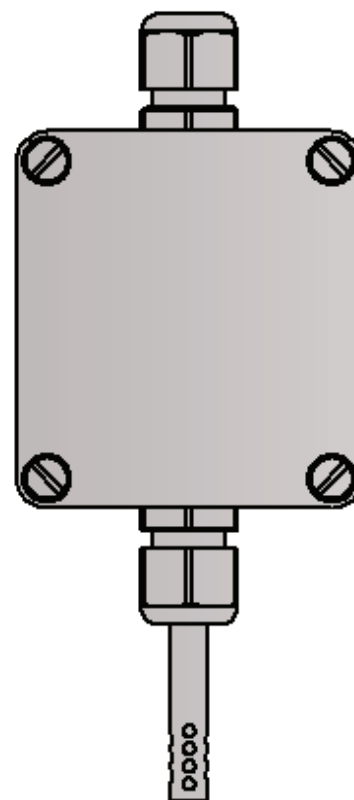
### Sheath

- material: steel 1.4541
- diameter [mm]: 6
- perforated sheath

### Housing

- polycarbonate, IP67
- humidity: max. 85% RH

Other parameters acc. to requirements



## Options

### Temperature transmitter application

Temperature transmitter with standard 4÷20mA, 0÷10V output signals and with the HART or PROFIBUS communication protocols can be mounted in a housing, in place of a terminal strip, or in the control cabinet.

### Non-standard design

RTD parameters can be customized per client request.

**Calibrations performed by Limatherm Sensor Sp. z o.o. are confirmed with the Calibration Certificate of the Accredited Laboratory for Temperature Measurements.**

### Tolerance for classes of sensors with resistors Pt acc. to PN-EN 60751

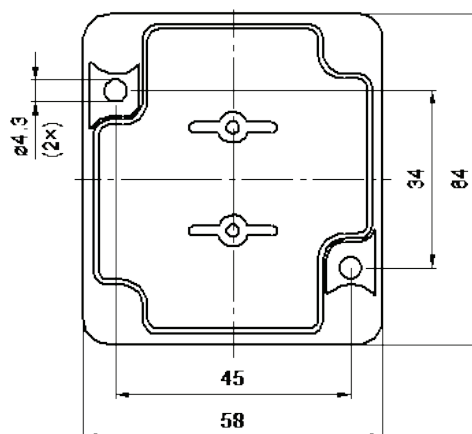
Sensor classes	Range of application [°C]	Formula for calculating acceptable deviations [°C]
AA	0÷150	$T = \pm(0,10 + 0,0017  t )$
A	-30÷300	$T = \pm(0,15 + 0,002  t )$
B	-50÷500	$T = \pm(0,3 + 0,005  t )$

|t| - absolute value of temperature

### Measurement circuit

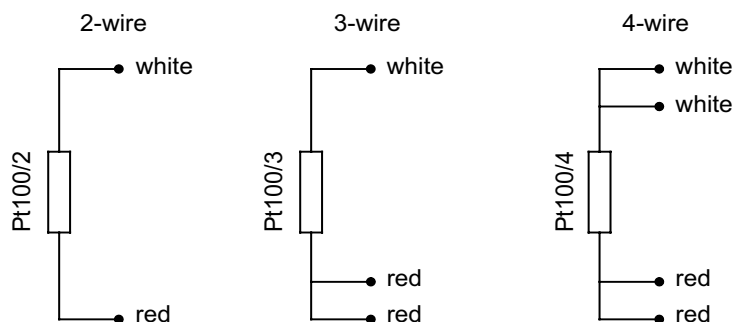
1 x Pt100			2 x Pt100			1 x TC	2 x TC
2-wire	3-wire	4-wire	2-wire	3-wire	4-wire	2-wire	2-wire
✓	✓	✓	x	x	x	✓	x

### Installation type

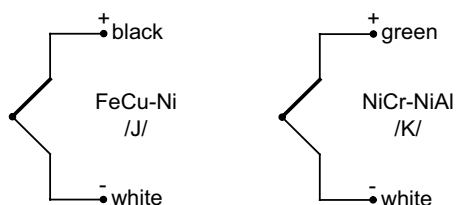


### Connection schemes

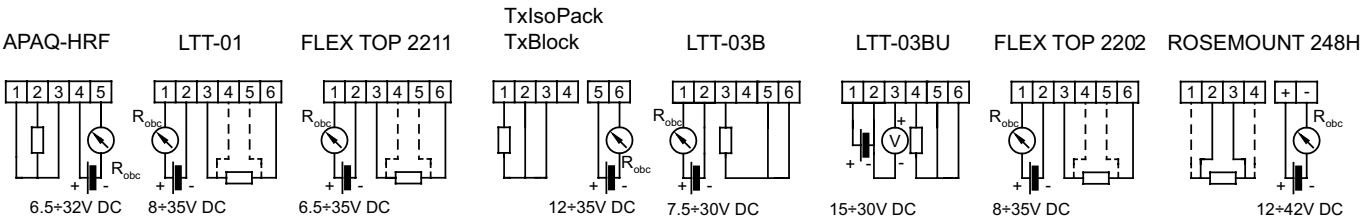
#### Pt100 (thermometric resistor)



#### TC (thermocouple)



Transmitters (only Pt)



Product code

Sensor version	
1	<b>AP</b> with transmitter
	<b>no designation</b> single
Resistor type	
2	<b>P</b> resistor Pt
	<b>N</b> resistor Ni
Resistor type	
3	<b>Pt100</b> Pt100
	other parameters acc. to requirements
Accuracy	
4	<b>A or B</b> for resistor Pt
Measurement circuit	
5	<b>2</b> 2 - wire
	<b>3</b> 3 - wire
	<b>4</b> 4 - wire
Transmitter type (optionally)	
6	<b>TxBlock</b> head mounted transmitter TxBlock
	other parameters acc. to requirements
Temperature range of transmitter	
7	<b>(0÷100°C)</b> transmitter configured for temperature range 0÷100°C
	other parameters acc. to requirements

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TO

O-831

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Ordering example: **APTOPO-831-Pt100-A-3-HRF-(0÷50)°C** RTD sensor with Pt100, class A, 3-wire connection, with transmitter APAQ-HRF, 4÷20 mA