

Head-mounted temperature transmitter type AT-3

- ✓ For sensor Pt100, 2 or 3 wires
- ✓ Possibility of programing measuring range
- ✓ Output signal 4...20mA, two wire
- ✓ LED indicator for failure signalization

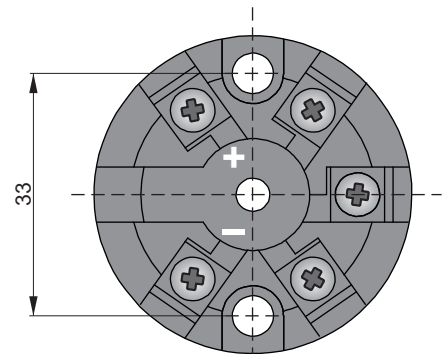
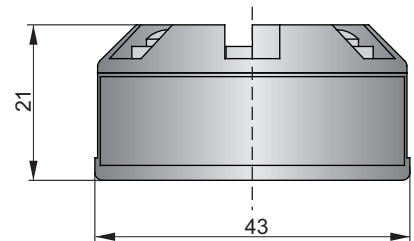
Application and function

The temperature transmitter AT-3 is applicable to converting resistance of temperature sensor Pt100 to standard current signal 4...20mA. Transmitter has function of compensation non linearity of the sensor.

Transmitter can be built in head of sensor. Electrical connection is made with cable cross section up to 1,75 mm².

Transmitter can be ordered with factory set configuration according to customer request. User has also possibility of changing configuration using PC computer with converter USB-AT-3 and special software.

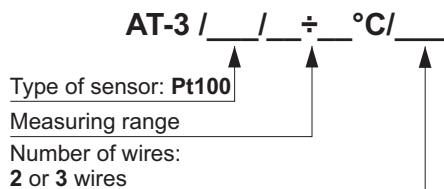
In addition to change measuring range user has possibility of configuration behaviour of transmitter when sensor is broken and setting compensation of resistance in 2 wire sensor.



Technical data

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| Sensor type | Pt100 / 2 or 3 wire |
| Sensor range | -195 ÷ 845°C (18 ÷ 390 Ω) |
| Minimum span | 25°C |
| Output signal | 2 wire 4 ÷ 20 mA current loop |
| Response time | 1 s |
| Update time | 500 ms |
| Power supply (U_Z) | 10...30 V DC |
| Load resistance (R₀) | $R_0 [\Omega] \leq (U_Z - 10 \text{ V}) / 20 \text{ mA}$ |
| Sensor break alarm (configurable) | 3,9 mA or 21,5 mA |
| factory setting | 21,5 mA |
| Measurement accuracy | ±0,2°C ±0,05% of reading |
| Thermal drift | ±0,02% /°C (for 20°C) |
| Loop voltage effect | ±0,2 μA/V |
| Ambient operating range | -40...+85°C |

Ordering procedure



Example: Temperature transmitter type AT-3 for resistance sensor Pt100, measuring range from 0 to 100°C, 2 wires

AT-3 / Pt100 / 0 ÷ 100°C / 2

Electrical diagrams

