Temperature transmitters

simex

SPT-85-G

- **fully programmable, low cost temperature transmitter**
- **universal measuring input**
- **any temperature range within limits**
- **output linear with temperature**
- **in-built, programmable digital filter**
- **in-head mounting**

Programmable temperature transmitters series **SPT-85-G** are designed to work with RTD and TC sensors, potentiometers and thermistors. Cooperate with temperature sensors by changing the measured value into the linear output signal 4 - 20 mA. Transducers can be mounted in a standard, "B" type head of temperature sensor.
SPT-85 transmitter is easy to program by using the specialized configuration software with no need of power supply. Thanks to its large capabilities and low price, **SPT-85** can be very useful in different industrial applications requiring temperature conversion before following measurement and control.
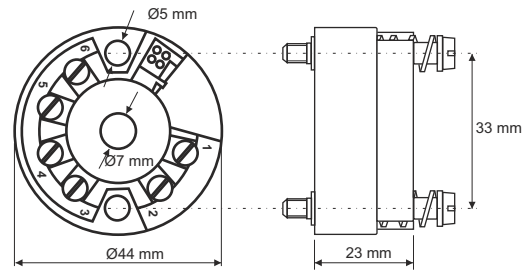
TRANSMITTER'S CAPABILITIES

- select sensor and input signal type (4 RTD types, 6 thermocouples and 3 linear signals);
- select and adjust input range;
- perform offset correction and device calibration;
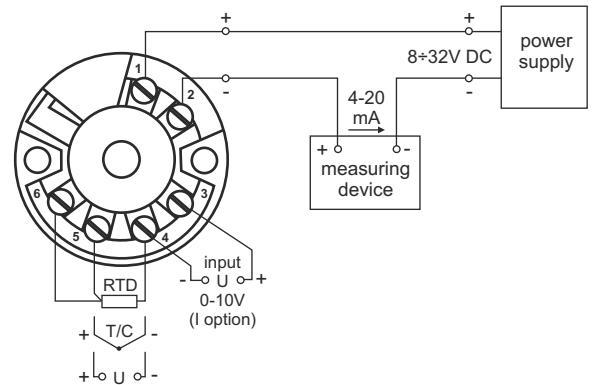- select output reaction on sensor break;
- adjust the digital filter.

TECHNICAL DATA

Power supply	8 ÷ 32V DC ±10%
Input signal and ranges	Pt 100 (w=1.385), 3-wire: -100 ... +850°C Pt 1000 (w=1.385), 3-wire: -100 ... +600°C PTC, 3-wire: -50 ... +150°C (1kΩ, 2kΩ at 25 °C) thermocouple „T" (Cu-CuNi): -40 ... +400°C thermocouple „J" (Fe-CuNi): -20 ... +1000°C thermocouple „K" (NiCr-Ni): -20 ... +1300°C thermocouple „R" (PtRh13-Pt): 0 ... +1700°C thermocouple „S" (PtRh10-Pt): 0 ... +1700°C thermocouple „B" (PtRh30-PtRh6): 200 ... +1800°C linear voltage: 0-100 mV DC custom linear (AUX): 0-10 V DC (option: 0-20mA, 4-20mA)
Output signal	2-wire, 4-20 mA, programmable
Minimum range width	50°C (for RTD/PTC); 100°C (for TC)
Maximum line load	max. 750 Ω at 24 VDC / 20 mA
Measurement error	0.3 % from span, accuracy: ± 0.1%
Temperature drift	± 0.01% from span for 1°C
Resolution	4 µA (12-bit)
Sensor break reaction	< 3.8 or > 20.2 mA, programmable
Communication interface	RS-232
Programmability	with configuration software "TraCon" (option)
Environmental conditions	operating temperature: -20°C to +85°C humidity: 0 to 90% RH, non-condensing
Protection class	IP 20
Dimensions	Ø44 x 23 mm
Weight	40 g

DIMENSIONS

Ø5 mm
Ø7 mm
Ø44 mm
33 mm
23 mm

WIRING

power supply
8÷32V DC
4-20 mA
measuring device
input U 0-10V (I option)
RTD
T/C

ORDERING

SPT-85-G-X-X-X

type of input:
Pt100
PT1000
PTC
T
J
K
R
S
B
0-20 mA
4-20 mA
0-10 V
0-100 mV

end of measuring range according to 20 mA

beginning of measuring range according to 4 mA

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