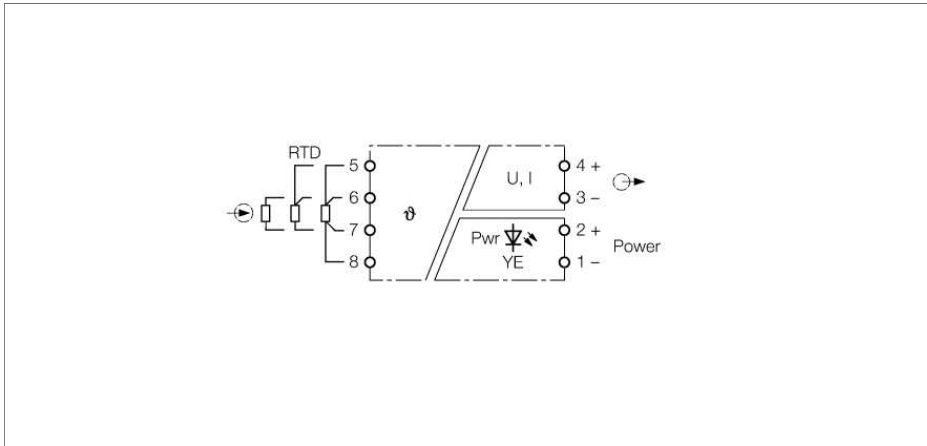


**Temperature measuring amplifier
1-channel
IMS-TI-PT100/24V**



The 1-channel temperature measuring amplifier IMS-TI-PT100/24V is designed to evaluate the temperature-dependent variations of Pt100 resistance temperature detectors, to separate them galvanically and to output them as temperature-linear voltage or current signals of 0...10 V, 0...20 mA or 4...20 mA.

Alternatively, Pt100 resistors in 2, 3 or 4-wire-technology can be operated at the measuring amplifier's input circuit.

The number of Pt100 wires, the transfer characteristic (0...20 mA, 4...20 mA or 0...10 V) as well as the measuring range are adjusted via DIP switch.

Wire-break and short-circuit are detected. In the event of error, 12 V or 22 mA are provided at the output and the error is additionally signalled by the flashing power LED .

The following measuring ranges can be adjusted:

- 50...+150 °C
- 0...+100 °C
- 0...+200 °C

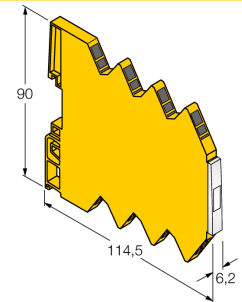
In the event of error (wire-break or short-circuit), 12 V or 22 mA are provided at the output and the error is additionally signalled by the flashing power LED.

The IM34 temperature measuring amplifiers from TURCK offer more solutions for applications with other measuring ranges and temperature probes.

- Temperature measuring amplifier, 1-channel
- Temperature probe PT100
- Output circuit: 0/4...20 mA or 0...10 V
- Linearity < 0.1 % f.s.
- Accuracy < 0.3 % f.s.
- UL: Class1; Div 2; Group A,B,C,D
- Complete galvanic separation
- 6.2 mm width

**Temperature measuring amplifier
1-channel
IMS-TI-PT100/24V**

Dimensions



Type code	IMS-TI-PT100/24V
Ident no.	7504012
Nominal voltage	24 VDC
Operating voltage range	19...29 VDC
Power consumption	≤ 0.32 W
Residual ripple	≤ 5 mV _{ss}
Pt100	-50...150°C; 0...100°C; 0...200°C
Input resistance (voltage)	1000 kΩ
Output circuits	
Output current	0/4...20 mA
Output voltage	0...10 V
Load resistance voltage output	≥ 1 kΩ
Load resistance current output	≤ 0.4 kΩ
Limit frequency	≤ 10 Hz
Rise time (10-90%)	≤ 30 ms
Dropout time (90...10%)	≤ 30 ms
Measuring accuracy	≤ 0.3 % of full scale
Linearity deviation	≤ 0.1 % of full scale
Temperature drift	≤ 0.00015 % / K
Galvanic separation	
Test voltage	1.5 kV
Rated voltage	50 V
Indication	
Operational readiness	green
Mechanical Data	
Protection class	IP20
Ambient temperature	-20...+60 °C
Storage temperature	-40...+80 °C
Dimensions	114.5x 6.2x 90 mm
Weight	60 g
Mounting instruction	For mounting on DIN rail
Housing material	Polycarbonate/ABS
Electrical connection	Screw terminals
Terminal cross-section	2.5 mm ²
Tightening torque	0.5 Nm