

Threaded resistance thermometer

Type Pt-100

Accuracy: DIN IEC 751 Class B

Features

- High accuracy
- 2, 3 or 4 wires
- Integrated converter to 4-20 mA possible
- Dual sensor Pt-100 possible
- Compatibility with many media

Ranges

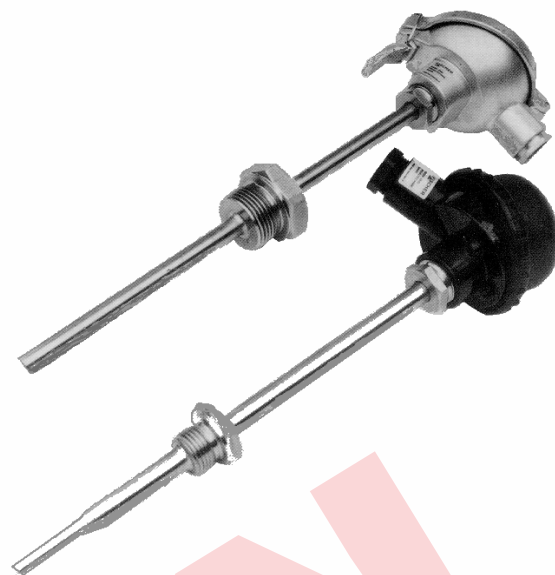
-50 ... 0 °C up to 0 ... 400 °C

Applications

HVAC

Process technology and energy systems

Machine construction



Technical data	Pt-100
Sensitive element	According DIN 43 762, resistance element 1 or 2 Pt-100 (DIN IEC 751)
Overrange capability	max. 400 °C
Terminal head	Standard housing according DIN 43 729 Form B
Material	Aluminum others on request
Process connection	According DIN 43 763 Form B
Probe	9 mm
Probe diameter	160 250 400 mm, other lengths on request
Probe length	9 mm
Neck extension diameter	145 mm
Neck extension length	
Connection thread	G ½ male according DIN 3852 Part 2 ½ NPT male according ANSI/ASME B1.20.1
Material	
Probe and connection	Stainless steel 1.4571 (316Ti)
Neck extension	Stainless steel 1.4571 (316Ti)
Maximum flow velocity	
Air	25 m/s
Water	3 m/s
Maximum process pressure	
L = 160 mm	50-(T*0,0355 K ⁻¹) bar
L = 250 mm	50-(T*0,0355 K ⁻¹) bar, but max. 40 bar
L = 400 mm	max. 18 bar
Power supply	24 VDC for integrated transmitter
Output signal	4 ... 20 mA, 2-wire (Pt-100 2-, 3-, 4-wire)
Maximum loop resistance for 4 ... 20 mA	≤ 800 Ω
Supply current	max. 20 mA for 4 ... 20 mA output signal
Accuracy class	DIN IEC 751 Class B
Supply influence	≤ 0,005 % / V (Nominal supply 24 VDC)
Temperature influence	±0,04 % / K
Mounting position influence	negligible
Range adjustability	Zero and Span both ±10 % (only with transmitter)
Temperature ranges	
Operating temperature	-10 ... 70 °C
Media temperature	-50 ... 400 °C
Storage temperature	-20 ... 100 °C
Protection class acc. EN 60 529/IEC 529	IP54, optional IP65
Weight [kg]	0,7
Accessories, options	Indicators

United Kingdom
Unit 5 William James House
Cowley Road, Cambridge CB4 0WX
Tel.: +44 (0) 12 23 39 55 00. **Fax:** +44 (0) 12 23 39 55 01