



RealProbe^{Temp}

RTD Platinum Sensor in Stainless Steel Probe

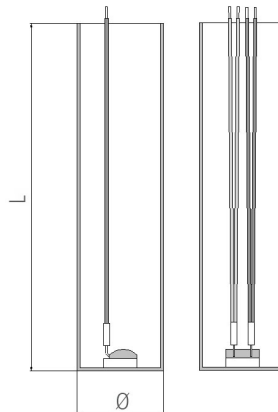
For outstanding thermal coupling and probe assemblies

Benefits & Characteristics

- Very good thermal coupling – very small immersion depths possible
- Suitable for applications with limited space and high temperature gradients
- Fast response time
- Resistant against vibrations (verified according IEC 60751)
- Customer-specific solution available upon request

Illustration¹⁾

The RealProbe^{Temp} is a pre-assembled component (semi-finished product) for the production of temperature probes.



1) For actual size, see dimensions

Technical Data

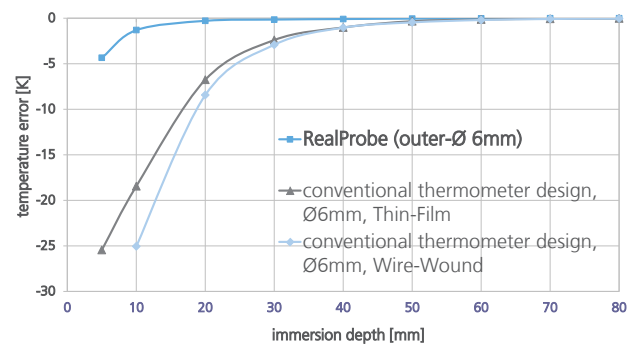
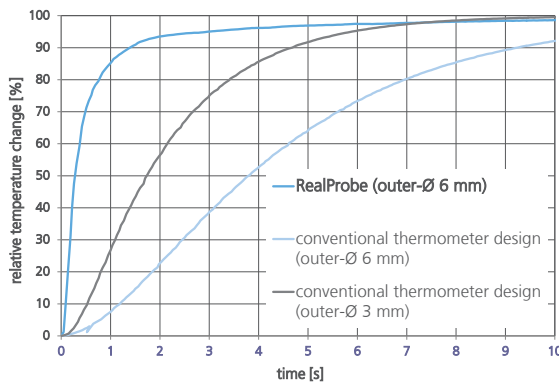
Operating temperature range:	-50 °C to +200 °C
Nominal resistance: *	100 Ω at 0 °C 500 Ω at 0 °C 1000 Ω at 0 °C
Characteristics curve: *	3850 ppm/K
Long term stability:	< 0.04 % at 1000 h at maximal operating temperature
Response time:	< 1.5 s (in water, 0.4 m/s, assembled, immersion depth 80 mm to 100 mm)
Maximal allowed pressure:	100 bar
Electrical strength:	1000 V _{DC} , 1 s



Tolerance class (dependent on temperature range):*	IST AG reference
	IEC 60751 F0.15 A
	IEC 60751 F0.3 B
Connection:*	4 x AWG 28/7, Cu/Ag-stranded wire, PTFE-insulated, 5 mm stripped
Wire lengths:*	375 mm or 1175 mm
Wire color coding:*	class A: 2 x red, 2 x white; class B: 2 x red, 2 x blue
Deep drawing sheath:*	material: 1.4404 / 316L, wall thickness: 0.4 mm, length: 25 mm, outer Ø: 6 mm
Recommended applied current: ¹⁾	1 mA at 100 Ω
¹⁾ Self-heating must be considered	0.5 mA at 500 Ω
	0.3 mA at 1000 Ω

* Customer-specific alternatives available

Measurements of comparison



Response time of RPT compared with standard RTDs

Minimized immersion depth compared with standard RTDs

Order Information - 4x AWG 28/7, Cu/Ag-stranded wire, PTFE-insulated, 5 mm stripped

Size	Dimensions (Ø x L in mm) Ø ±0.1 mm, L ±0.3 mm	F0.15 (class A)	F0.3 (class B)
Nominal resistance: 100 Ω at 0 °C			
625	6.0 x 25.0	RPT0K1.625.2K.A.385-4.H	RPT0K1.625.2K.B.385-4.H
Order code		101931	101932
Former order code		010.03592	010.03593
625	6.0 x 25.0	RPT0K1.625.2K.A.1175-4.H	Upon request
Order code		101983	
Former order code		010.03654	



Nominal resistance: 500 Ω at 0 °C

625	6.0 x 25.0	RPT0K5.625.2K.A.385-4.H	Upon request
Order code		101933	
Former order code		010.03594	

Size	Dimensions (Ø x L in mm) Ø ±0.1 mm, L ±0.3 mm	F0.15 (class A)	F0.3 (class B)
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Nominal resistance: 1000 Ω at 0 °C

625	6.0 x 25.0	RPT1K0.625.2K.A.800-4.H	RPT1K0.625.2K.B.800-4.H
Order code		101934	101936
Former order code		010.03595	010.03597

Additional Documents

Application Note:	Document name: ATP_E
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