



RealProbe^{Temp}

RTD Platinum Sensor in Stainless Steel Probe



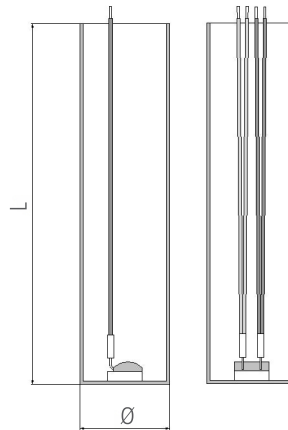
INNOVATIVE SENSOR TECHNOLOGY

For outstanding thermal coupling and probe assemblies

Benefits & Characteristics

- Minimum immersion depth (< 10 mm)
- Fast response time
- Resistant against vibrations
- Tip reacts to very small changes
- Fast accurate measurement
- Isolated thermal conductivity
- Customer specific sensor available upon request

Illustration¹⁾



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	



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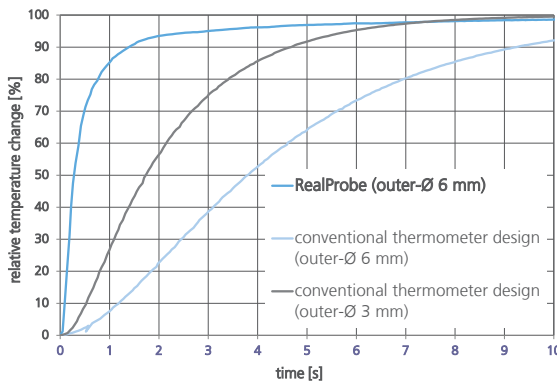
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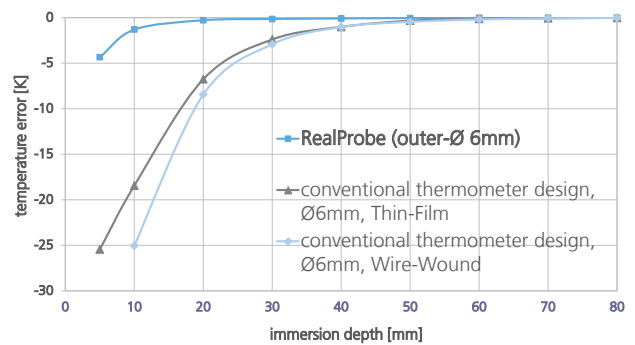
Wire color coding:*	class A: 2 x red, 2 x white; class B: 2 x red, 2 x blue
Deep drawing sheath:*	material: 1.4404 / 316L, wall thickness: 0.4 mm, length: 25 mm, outer Ø: 6 mm
Recommended applied current: ¹⁾	1 mA at 100 Ω
¹⁾ Self-heating must be considered	0.5 mA at 500 Ω
	0.3 mA at 1000 Ω

* Customer specific alternatives available

Measurements of comparison



Response time 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 x 25	RPT0K1.625.2K.A.385-4.H	RPT0K1.625.2K.B.385-4.H
Order code		600.00033	600.00034
Nominal resistance: 500 Ω at 0 °C			
625	6 x 25	RPT0K5.625.2K.A.385-4.H	Upon request
Order code		600.00045	
Nominal resistance: 1000 Ω at 0 °C			
625	6 x 25	RPT1K0.625.2K.A.800-4.H	Upon request
Order code		600.00050	



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Additional Documents



Document name:

Application Note:

ATP_E



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