



RealProbe^{Temp}

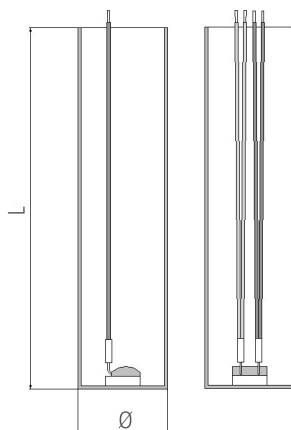
RTD Platinum Sensor in Stainless Steel Probe

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

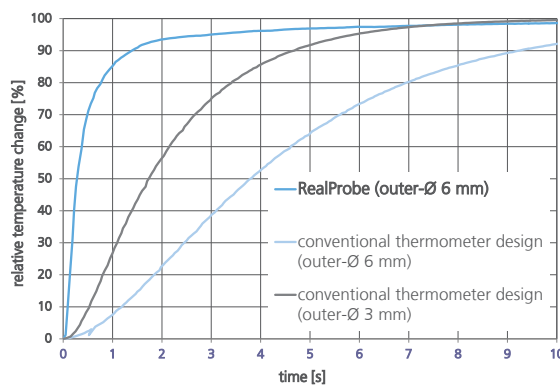
Operating temperature range:	-50 °C to +200 °C
Nominal resistance:*	100 Ω at 0 °C 500 Ω at 0 °C 1000 Ω at 0 °C
Characteristics curve:*	3850 ppm/K
Long term stability:	< 0.04 % at 1000 h at maximal operating temperature
Response time:	< 1.5 s (in water, 0.4 m/s, assembled, immersion depth 80 mm to 100 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



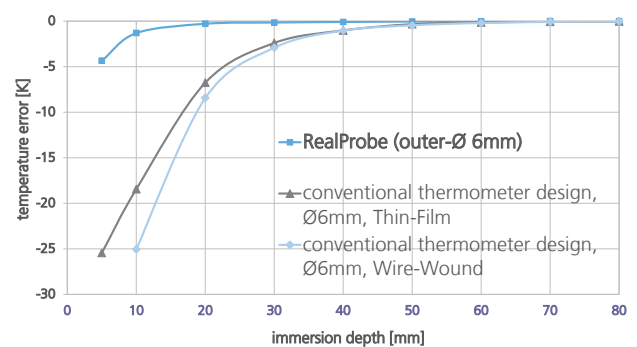
Connection:*	4 x AWG 28/7, Cu/Ag-stranded wire, PTFE-insulated, 5 mm stripped
Wire lengths:*	375 mm or 1175 mm
Wire color coding:*	class A: 2 x red, 2 x white; class B: 2 x red, 2 x blue
Deep drawing sheath:*	material: 1.4404 / 316L, wall thickness: 0.4 mm, length: 25 mm, outer Ø: 6 mm
Recommended applied 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		010.03592	010.03593
625	6 x 25	RPT0K1.625.2K.A.1175-4.H	Upon request
Order code		010.03654	
Nominal resistance: 500 Ω at 0 °C			
625	6 x 25	RPT0K5.625.2K.A.385-4.H	Upon request
Order code		010.03594	
Nominal resistance: 1000 Ω at 0 °C			
625	6 x 25	RPT1K0.625.2K.A.800-4.H	RPT1K0.625.2K.B.800-4.H
Order code		010.03595	010.03597



Additional Documents

Document name:

Application Note:

ATP_E



Innovative Sensor Technology IST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland
Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: info@ist-ag.com | www.ist-ag.com

All mechanical dimensions are valid at 25 °C ambient temperature, if not differently indicated • All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics • Technical changes without previous announcement as well as mistakes reserved • The information on this data sheet was examined carefully and will be accepted as correct; No liability in case of mistakes • Load with extreme values during a longer period can affect the reliability • The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner • Typing errors and mistakes reserved • Product specifications are subject to change without notice • All rights reserved