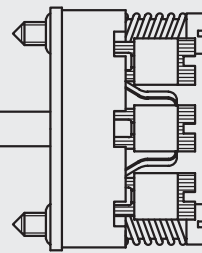


Industrial resistance thermometer

FOR USE WITH THERMOWELLS

PCC-PCB-PCA-PFA
CONFIGURATIONS

Ex ia RTD



RODAX^o
new temperature solutions

Product series PT100RI/WI

Table 1: Measuring inserts main models

	Terminal	Total spring	
PCC	Ceramic spring loaded terminal block 2/3/4/6 or 8 terminals	10 mm We recommend a spring loading of +/-5 mm	
PCB	Hi-tech spring loaded thermoplast (moisture and shock proof) terminal block 2/3/4 or 6 terminals	40 mm We recommend a spring loading of +/-20 mm	
PCA	Hi-tech spring loaded thermoplast (moisture and shock proof) terminal block 2/3/4 or 6 terminals	10 mm We recommend a spring loading of +/-5 mm	
PFA	Spring loaded mounting plate with flying leads of 150 mm	10 mm We recommend a spring loading of +/-5 mm	

Features assembly

High quality resistance temperature element with MgO mineral insulated metal sheathed cable, providing excellent stability and reproducibility.

The unique properties make this basic element ideally suited for a wide range of applications up to 550 °C.

The PT100 is bendable over the total length except on the tip over 50 mm. High vibration resistant models **are** available.

Table 2: Equipment for potentially explosive atmospheres

Certification

A	ATEX
I	IECEX
G	GOST-R

Explosive atmosphere

G	Gas
D	Dust

Table 3: Measuring inserts details

Details

- Maximum temperature: 550 °C
- Minimum insulation resistance: 1000 MOhm at 500VDC, T_{amb}=20 °C
- Conductors: material Cu
- Metal sheath: SS321 / 1.4541

PT100 element

S	D	Option	HV
Single	Double		High vibration

Diameter ØD

D3	D3,2	D4,5	D4,8	D6	D6,35	D8	D9,53	D12,7	Other diameters on request
3,0 mm	3,2 mm	4,5 mm	4,8 mm	6,0 mm	6,35 mm	8,0 mm	9,53 mm	12,7 mm	

Electrical connection

W2	W3	W4 (*)	(*) for OD 3 mm: dual sensors max 2x3 wire
2 wire	3 wire	4 wire	

Accuracy

A1	A3	A5	A6	A10	Other accuracies on request
Class A IEC EN 60751 $\pm(0.15+0.002 t)^{\circ}\text{C}$	1/3 DIN 1/3 class B	1/5 DIN 1/5 class B	1/6 DIN 1/6 class B	1/10 DIN 1/10 class B	

Table 4: Certification possibilities

Certificates

Following tests and certificates are possible and are either done in-house or done by an external party.

Code	Certificates
Q04210	Functional test report sensor
Q04230	Calibration report (measuring points to be indicated) E.g. 0/100 °C
Q05220	Calibration report by accredited calibration lab retraceable (measuring points to be indicated)
Q05230	Calibration report by accredited calibration lab ISO/IEC 17025 (BELAC) (measuring points to be indicated)
Q02040	Test report EN10204-2.2
Q04250	Transmitter programming. Range and burn-out settings to be indicated




Addenda

Thermal data related to product series PT100RI/WI

The maximum process temperature T_p (in °C) and the relation to the temperature class is as follows:

Maximum process temperature T_p (°C)	75	90	125	190	285	435	>435
Temperature class (°C)	T6	T5	T4	T3	T2	T1	T_p+10
Maximum surface temperature T of the Assembly (°C)	85	100	135	200	300	450	T_p+10

Certificates for product series PT100RI/WI

ATEX 2014/34/EU	ATEX EU-type examination certificate 18ATEX0060 X	
IECEX 02	IECEX DEK 18.0032 X	
GOST-R	GOST EAC RU C-BE.ГБ05B.00211	

HOW TO ORDER (example)

Code		Example	Your code
Main model	See table 1	PCA	
Certification	See table 2	A	
Explosion atmosphere	See table 2	G	
Pt100 element	See table 3	S	
Diameter ØD	See table 3	D6	
Electrical connection	See table 3	W3	
Accuracy	See table 3	A1	
Insertion length Le	In mm	Le150	
Options (transmitters, etc.)			

Ordering code example:

PCA A G S D6 W3 A1 Le150

For all options: please contact Rodax

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