

Room resistance thermometer

Characteristics



Measuring element Pt100, Pt1000 (2-, 3-, 4-wire) or semiconductor

Measuring range -50...+100°C

Tolerance class A or B, optionally 1/2, 1/3, 1/5 or 1/10 DIN

Optional transmitter 4...20 mA / 2...10 V, in EEx ib II T5 / T6, too

Protection tube made of stainless steel 1.4571 or chemically stable synthetic

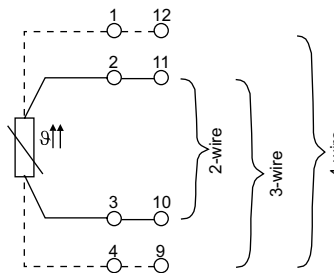
Degree of protection: IP 67

Connection

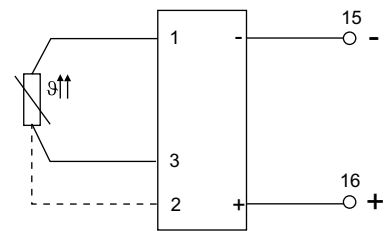
Connection with terminal screw via cable entry



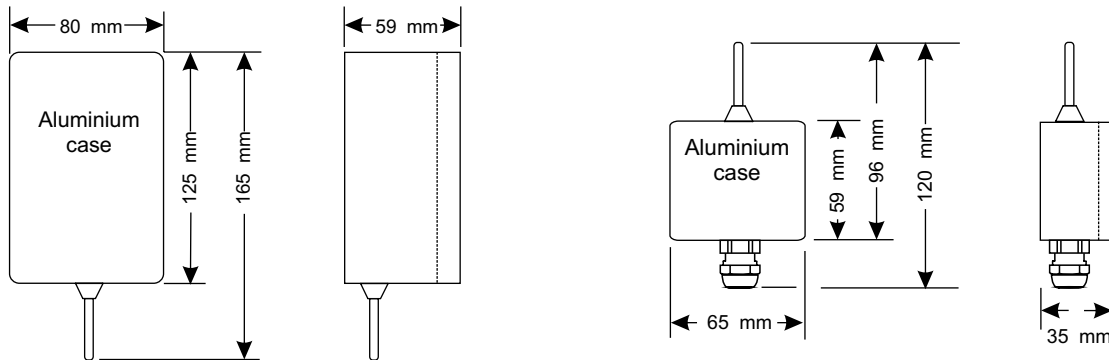
Example of connection



Example of connection with transmitter in current loop

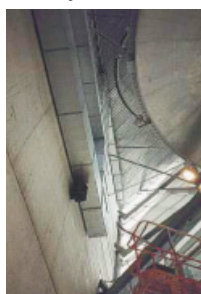


Dimensions



Applications

This sensor is for use in climating and cold storage technics (eg marine refrigeration plants, climatic cabinets, building technics). With a cable entry to the back, the thermometer is suitable for USBH installations in the food processing industry.



Ordering code

R	W	X	X	X	X	X	X	-	X	X	X
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Measuring element:	Pt 100	0
	Pt 1000	1
	2x Pt 100	2
	2x Pt 1000	3
	NTC	4
Type Pt 100(0):	2-wire	0
	3-wire	1
	4-wire	2
Material sensor:	stainless steel, 1.4571	0
	Delrin POM	1
Accuracy:	class B, DIN	0
	class B, 1/2 DIN	1
	class B, 1/3 DIN	2
	class B, 1/5 DIN	3
	class B, 1/10 DIN	4
	class A, DIN	5
Case:	aluminium, 125 x 80 x 60	0
	aluminium, 65 x 60 x 37	1
	synthetic ABS, 121 x 80 x 57	2
Transmitter:	without	0
	4...20 mA	1
	4...20 mA, Eex	2
	2...10 V	3
	2...10 V, EEx	4
Cable entry:	please indicate, e.g. M18x1,5	

Technical data

Input

Measuring elements:	Resistance thermometer 1 x Pt 100 2 x Pt 100 types 2-, 3- or 4-wire 1 x Pt 1000 2 x Pt 1000 types 2-, 3- or 4-wire Semiconductor NTC
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Ambient conditions

Operating temperature:	with case aluminium: -50...+100°C with case ABS: -50...+85°C with transmitter: -50...+85°C
Storing temperature:	with case aluminium: -50...+100°C with case ABS: -50...+85°C with transmitter: -50...+85°C

Output

Transmitter	4...20 mA, 2-wire 4...20 mA EEX, 2-wire 2...10 V, 4-wire 2...10 V EEX, 4-wire
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Mechanics

Case:	aluminium: 125 x 80 x 60 mm aluminium: 65 x 60 x 37 synthetics: 121 x 80 x 57
Material:	diecast aluminium synthetic material ABS
Colour:	aluminium: grey ABS: bottom part: black, case cover: light grey
Weight:	aluminium 125/80/60 approx. 500g aluminium 65/60/37 approx. 225g ABS 121/80/57 approx. 275g
Degree of protection:	IP 67
Connections:	via cable entry to terminal screws

Accuracy

Resistance thermometer:	Class B, class A 1/2 DIN, 1/3 DIN, 1/5 DIN, 1/10DIN
Transmitter:	0,1% of end scale value

Power supply

Transmitter:	14...30 V, supply out of current loop
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