

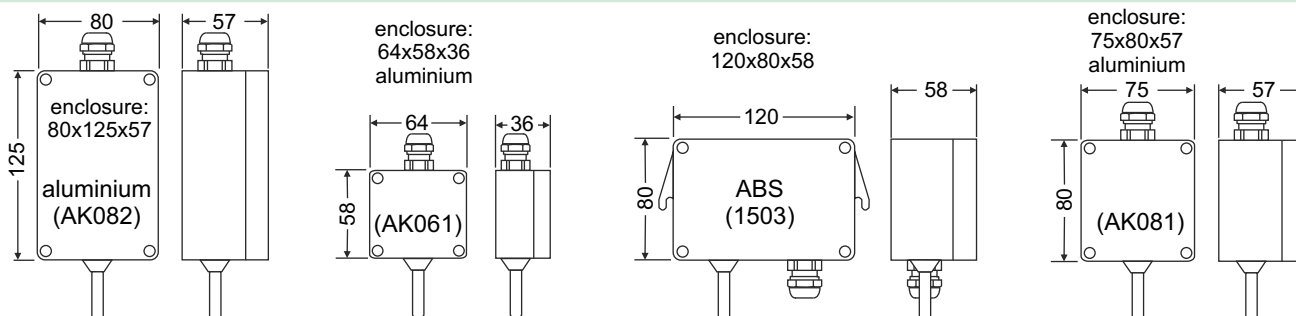
Room resistance thermometer

Characteristics



Measuring element: Pt100; Pt1000 (2-, 3-, 4-wire) or semiconductor
 Measuring range: -50...+100°C
 Tolerance class: A - B - 1/2 - 1/3 - 1/5 - 1/10 DIN
 Optional: transmitter 4...20 mA / 2...10 V / 0...10 V
 Optional: transmitter with II 1G EEx ia IIC T4 / T5 / T6
 Protection tube: stainless steel 1.4571 or chemically stable synthetic
 Degree of protection: IP 66
 Enclosure: diecast aluminium: 80x125x57 / 64x58x36 / 75x80x57
 plastics ABS: 120x80x58 (with collateral brackets)
 Connection: terminal screws up to 2,5 mm² / cable entry: customized

Dimensions

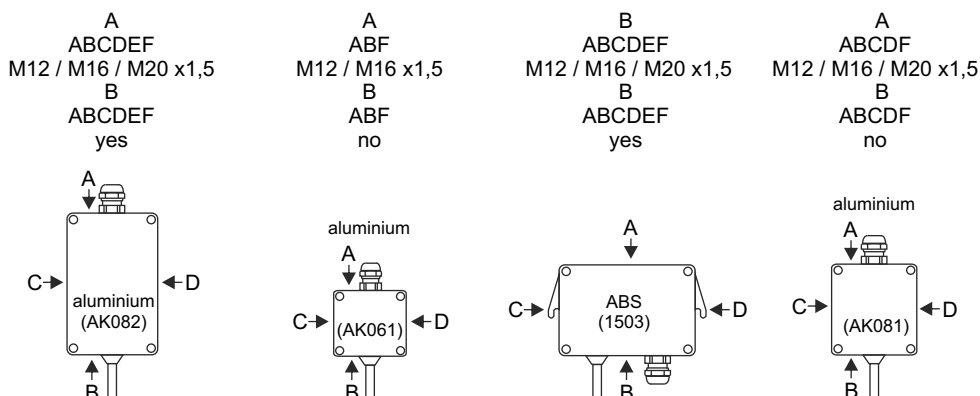


Position cable entry, sensor

Side cable gland standard
 Side cable gland selectable
 Size cable gland
 Side sensor standard
 Side sensor selectable
 Transmitter possible

Bottom: side E
 Cover: side F

With enclosures AK082 and 1503 the sewed cable gland of side E (bottom) can be mounted internally.



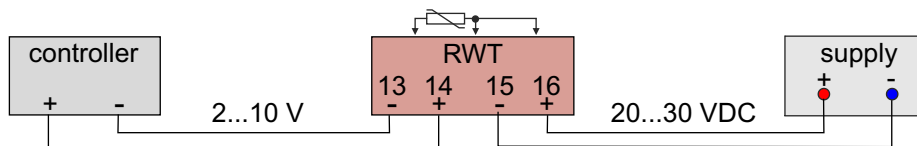
Connection (examples)

1x RTD (Pt 100) (2-wire)
 RW00... / RW10...

out1



1x RTD (Pt 100) (2-wire)
 transmitter: 2...10 V
 type: TAP2L
 RW01xxx3-xxx



Applications

This sensor is for use in climating and cold storage technics (eg marine refrigeration plants, climatic cabinets, building technics). With the different models it can be fitted to the local conditions.



photo: www.pixelquelle.de

Ordering code

R	W	X	X	X	X	X	X	-	X	X	X
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Input:	RTD (1x Pt100)	0									
	RTD (1x Pt1000)	1									
	RTD (2x Pt100)	2									
	RTD (2x Pt1000)	3									
	NTC	4									
	RTD (3x Pt100 2-wire)	5									
Type RTD (Pt100(0)):	2-wire	0									
	3-wire	1									
	4-wire	2									
Material sensor:	stainless steel 1.4571	0									
	Delrin POM	1									
Accuracy RTD (Pt100(0)):	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									
Enclosure:*	diecast aluminium, 80 x 125 x 57	0									
	diecast aluminium, 64 x 58 x 36	1									
	plastics ABS, 120 x 80 x 58	2									
	diecast aluminium, 75 x 80 x 57	3									
Transmitter:**	without	0									
	4...20 mA / current loop / type: TAP2L	1									
	4...20 mA / EEx / current loop / type: TMRO	2									
	2...10 V / type: TAP2L	3									
	2...10 V / EEx / type: TMRO	4									
	0...10 V / type: TAP2L	5									
	4...20 mA / current loop / type: TMRO	6									
	2...10 V / type: TMRO	7									
Other / accessories:	special model										0

*Please indicate position of sensor and screwed cable gland.

**Please indicate range of transmitter. Technical data of transmitters see corresponding data sheet.

Technical data

Input

Sensor RTD:	1x Pt100 / 2 x Pt 100 (2-, 3-, 4-wire) 1x Pt1000 / 2 x Pt 1000 (2-, 3-, 4-wire) 3x Pt100 (2-, 3-wire)
Other:	NTC
With transmitter:	1x Pt100 (2-, 3-wire)

Output

Transmitter:	4...20 mA / 2...10 V / 0...10 V
Range:	customized

Accuracy

Pt100, Pt1000:	class B, A / 1/2, 1/3, 1/5, 1/10 DIN
Transmitter:	TAP2L: $\pm 0,2\%$ FS / $\pm 0,2K$ TMRO (EEx): $\pm 0,2\%$ vom FS TMRO: $\pm 0,5\%$ FS

Power supply

Transmitter:	TAP2L: 7,5...30 VDC (4...20 mA) TAP2L: 20...30 VDC (2...10 V) TAP2L: 15...30 VDC (0...10 V) TMRO: 10...30 VDC (4...20 mA) TMRO: 22...30 VDC (2...10 V)
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The transmitter with 4...20 mA are supplied out of current loop.

Ambient conditions

Operating temperature:	aluminium enclosure: -50...+100°C ABS enclosure: -50...+85°C transmitter: -40...+85°C
Storing temperature:	aluminium enclosure: -50...+100°C ABS enclosure: -50...+85°C transmitter: -50...+85°C

Mechanics

Enclosure:	aluminium: 80 x 125 x 57 mm (AK082) aluminium: 75 x 80 x 57 mm (AK081) aluminium: 64 x 58 x 36 mm (AK061) plastics: 120 x 80 x 58 mm (1503)
Material:	diecast aluminium plastics ABS
Colour:	aluminium: grey RAL 7032 ABS: bottom part black, cover light grey
Weight:	aluminium 80/125/57: approx. 500g aluminium 75/80/57: approx. 400 g aluminium 64/58/36: approx. 225g ABS 120/80/58: approx. 275g
Protection:	degree IP 66
Connection:	terminal screw up to 2,5 mm ²
Cable entry:	screwed cable gland (according giving)