

Resistance thermometers

WTh 20/21



WTh 20

Technical specifications

Version
Plug-in type resistance thermometer

Sensor
1 x Pt 100
2-, 3- or 4-wire
Class B, IEC 751

Probe
Ø 6 mm, length 50 mm
Stainless steel 316 Ti

Electrical connection
Cable with wire ferrules

Cable
PVC (heat-resistant)

Measuring range
With installation type
Fixed: -40/+105 °C
Moving: -5/+105 °C

- Options**
- Coated measuring line
 - Sensor class A
 - Sensor PT 1,000
 - Process connection as adjustable compression fitting or fixed male connection
 - Connector ISO 4400
 - Miniature circular plug
 - Lemos connector
 - Other probe diameters
 - Other probe lengths
 - Other cables:
 - Silicone (-50/+180 °C)
 - PTFE (-200/+260 °C)
 - Glass fibre with stainless steel braiding (-50/+400 °C)
 - Bending protection



WTh 21

Version
Indoor and outdoor resistance thermometer for wall mounting

Sensor
1 x Pt 100
2-, 3- or 4-wire
Class B, IEC 751

Probe
Ø 6 mm, length 42 mm
Stainless steel 316 Ti

Electrical connection
Cable gland

Measuring range
-50/+90 °C

Housing
Impact-resistant plastic
W x H x D 58 x 64 x 36 mm

Degree of protection
IP 65 (EN 60529)

- Open probe
- Sensor class A
- Sensor PT 1,000/Ni 1,000
- Transmitter installation



See page 354 for prices.

Resistance thermometers

WTh 22/23



WTh 22

Description **Version**
Resistance thermometer especially for use in air ducts

Technical specifications **Sensor**
1 x Pt 100
2-, 3- or 4-wire
Class B, IEC 751

Probe
Ø 8 x 1 mm, perforated
Stainless steel 316 Ti

Process connection
Mounting flange Ø 40 mm,
adjustable, stainless steel

Installation lengths
100, 160, 250 mm

Housing
Impact-resistant plastic
W x H x D 58 x 64 x 36 mm

Degree of protection
IP 54 (EN 60529)

Measuring range
0/130 °C

- Options**
- Process connection G $\frac{1}{2}$ B (adjustable compression fitting or fixed male connection)
 - Sensor class A
 - Sensor PT 1,000
 - Transmitter installation (standard: 0/100 °C = 4–20 mA)



WTh 23

Version
Compact screw-in resistance thermometer specially for heating, ventilation and air conditioning applications

Sensor
1 x Pt 100
2-, 3- or 4-wire
Class B, IEC 751

Measuring insert
Not replaceable

Thermowell
Ø 6 mm, stainless steel 316 Ti

Process connection
G $\frac{1}{4}$ B stainless steel 316 Ti

Installation length
100 mm

Connection head (degree of protection)
Type J, aluminium die cast (IP 66)

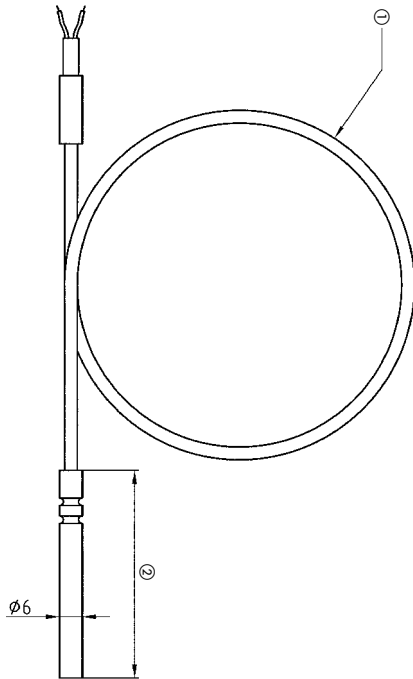
Measuring range
-35/+180 °C

- Sensor class A
- Sensor PT 1,000
- Transmitter installation
- Other thermowell diameters
- Thermowell with bend, measuring tip with spring
- Neck
- Other process connections
- Other installation lengths

Resistance thermometers types WTh 20/21/22/23

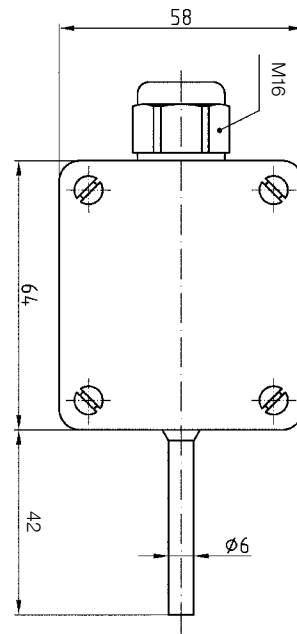
Dimensions (mm)

Type WTh 20

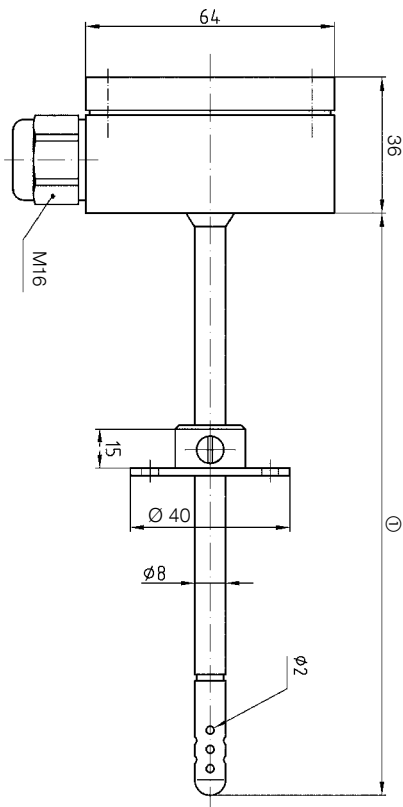


- ① Cable
- ② Probe length

Type WTh 21

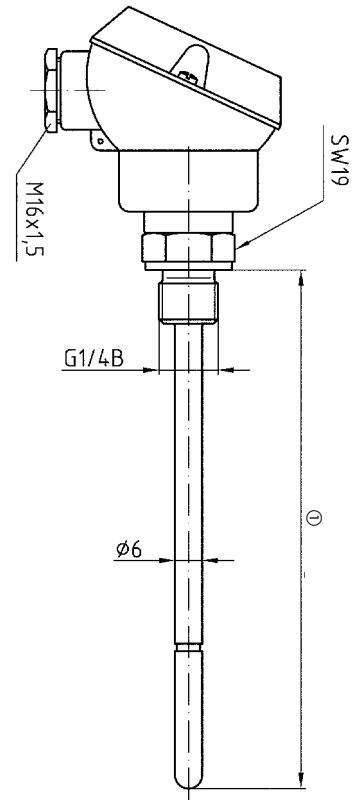


Type WTh 22



- ① Installation length

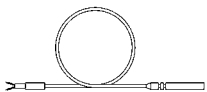
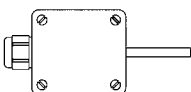
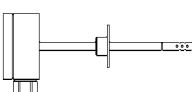
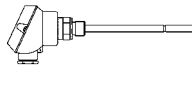
Type WTh 23



- ① Installation length

Resistance thermometers

DG: H, PG: 4

Type	WTh 20	WTh 21	WTh 22	WTh 23
Version				
Sensor	1 x Pt 100 3-wire, class B	1 x Pt 100 3-wire, class B	1 x Pt 100 3-wire, class B	1 x Pt 100 3-wire, class B
Thermowell/probe diameter Material	6 mm Stainless steel 316 Ti	6 mm Stainless steel 316 Ti	Perforated 8 mm Stainless steel 316 Ti	6 mm Stainless steel 316 Ti
Neck	---	---	---	---
Process connection	---	---	Mounting flange Ø 40 mm	G1/4B Stainless steel 316 Ti
Connection head / electrical connection	PVC cable Wire ferrules	Plastic/cable gland	Plastic/cable gland	Type J/cable gland
Measuring range fixed (moving)	-40/+105 °C (-5/+105 °C)	-50/+90 °C	0/130 °C	-35/+180 °C
Installation length	Price € Part no.	Price € Part no.	Price € Part no.	Price € Part no.
44 mm	Probe length 50 mm Up to cable length 2,000 mm 32220 Cable extension per 500 mm	32400	---	---
100 mm		---	32215	32225
160 mm		---	32216	32226
250 mm		---	32217	32227
400 mm		---	---	32228
11 Extra charges (without PG)	Price €	Price €	Price €	Price €
Per additional 100 mm ** installation length	---	---	---	---
1 x Pt 100 4-wire				
2 x Pt 100 2-wire	---	---	---	
Sensor class A				
Connection head Type BBK	---	---		
Transmitter installation* DC 7.5–30 V/4–20 mA	---			

* Applies to standard measuring ranges (-50/+50, 0/50, 0/100, 0/120, 0/150, 0/200, 0/300 °C), extra charge in all other cases € 11.00.

** Applies up to 1000 mm, one-time extra charge for installation length greater than 1000 mm: € 62.00.

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See the catalogue
INDUSTRIAL
TECHNOLOGY for
additional resistance
thermometers.