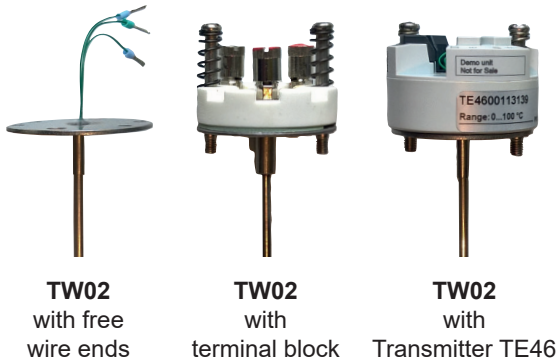


Measuring inserts for resistance thermometers - Types TW01, TW02 - Standard- and sheathed cable



TW02
with free
wire ends

TW02
with
terminal block

TW02
with
Transmitter TE46

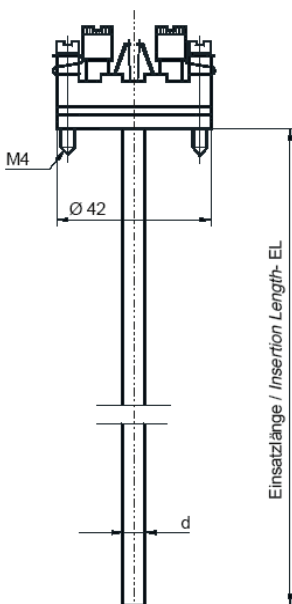
FEATURES

- MEASURING INSERT CLASS A, AA ACCORDING TO DIN EN IEC 60571, INTERCHANGEABLE, STANDARD: CLASS A
- QUICK EXCHANGEABILITY DURING OPERATION WITH MODULAR THERMOMETERS
- HIGH FLEXIBILITY THANKS TO CUSTOMIZED INSERT LENGTHS AND MODULAR SYSTEM
- VERY FAST RESPONSE TIMES
- STANDARD VERSION OR AS A SHEATHED CABLE FOR MEASURING POINTS SUBJECT TO VIBRATION
- OTHER MEASURING RESISTANTS, e.g. Pt1000, Ni100 ON REQUEST

DESCRIPTION

The type TW01 and TW02 measuring inserts are designed for installation in thermowells for resistance thermometers. The measuring inserts can be replaced during operation without opening the process. Various insert lengths and diameters of the measuring inserts are available for application-specific requirements, e.g. short response times. Versions with a further tapered probe tip are also possible. The measuring insert can be supplied with free wire ends (for connection to a transmitter), with a terminal block (for wiring to the control cabinet or PLC) or directly with an attached transmitter.

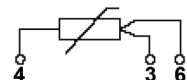
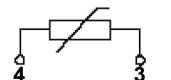
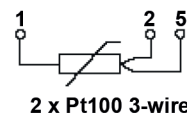
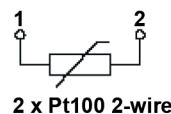
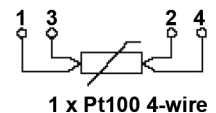
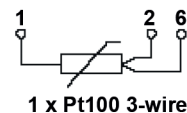
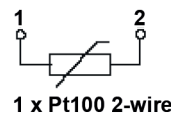
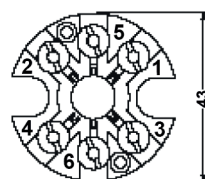
DIMENSIONS



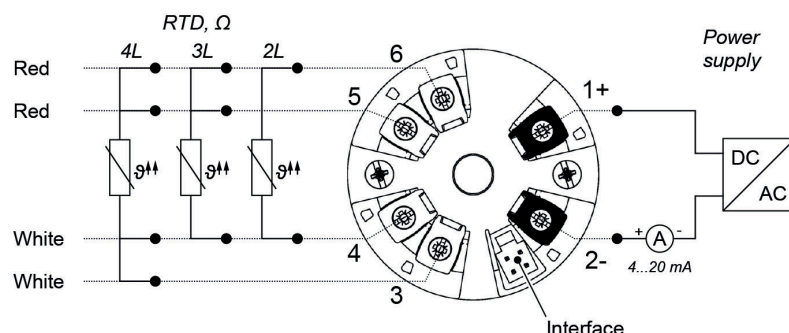
Assembly example
with terminal block

ELECTRICAL CONNECTION

TW02 with terminal block



TW02 with Transmitter TE46



Measuring inserts for resistance thermometers

- Types TW01, TW02 - Standard- and sheathed cable



TECHNICAL DATA

Measuring range limit deviation according to DIN EN IEC 60571

Class	Limit deviation (°C)	Scope of validity(°C)
AA	$\pm [0,10^{\circ}\text{C} + (0,0017x T)]$	-50 bis +250
A	$\pm [0,15^{\circ}\text{C} + (0,0020x T)]$	-100 bis +450
T=Temperature in °C		

RTD resistance thermometer tested according to DIN EN IEC 60751 in flowing water (0,4 m/s and 30°C)

Mounting position: No restrictions.

Installation instructions:

The measuring insert is mounted in thermometers with stainless steel field housing and connection head B. When installed in a thermometer with a thermowell, the measuring insert is fixed in the connection head with spring-loaded screws. This ensures that the tip of the measuring insert is always pressed against the inside of the thermowell, thus guaranteeing good thermal contact. **Do not use the measuring insert without a thermowell.**

ORDERING INFORMATION

Measuring insert TW	
01	diameter = 6mm
02	diameter = 3mm

Basic type	
A	Measuring insert with 1xPt100/2-wire
B	Measuring insert with 1xPt100/3-wire
C	Measuring insert with 1xPt100/4-wire
D	Measuring insert with 2xPt100/2-wire
E	Measuring insert with 2xPt100/3-wire

Version	
L	Standard version ($T_{\max} = 200^{\circ}\text{C}$)
M	with sheathed cable (vibration-resistant, $T_{\max} = 600^{\circ}\text{C}$)

Measuring insert length	
XXXX	Measuring insert length in mm (please indicate)

Connection	
0	with free wire ends
M	ceramic terminal block
A040	with transmitter TE46, 4-20 mA, measuring range 0-100°C
A050	with transmitter TE46, 4-20 mA, measuring range 0-150°C
A060	with transmitter TE46, 4-20 mA, measuring range 0-200°C
A099	with transmitter TE46, 4-20 mA, measuring range X-XXX°C (please indicate)

Measuring accuracy according to DIN EN IEC 60751	
P	Class A (standard)
N	Class AA

TW

Ordering example: TW02_BM0154A050P

Measuring insert TW02 with diameter 3mm (02), Basic type with 1xPt100/3-wire (B), with sheathed cable (M), Measuring insert length = 154mm (XXXX), with Transmitter TE46 4-20 mA 0-150°C (A050), Measuring accuracy Class A (P)

Notes on the document:

This document provides all technical data on the device. The texts and illustrations have been compiled with the utmost care. Nevertheless, incorrect information cannot be ruled out. The system operator is responsible for ensuring material compatibility with the process conditions and peripherals. The devices are not suitable for use in potentially explosive atmospheres or safety-relevant system components (SIL). Our devices are subject to continuous further development and are therefore subject to change.