

# Pt100 M Resistance thermometer



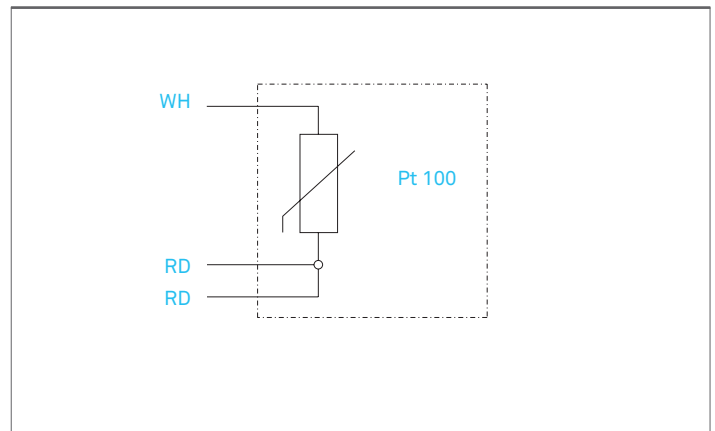
## Technical data

Circuit configuration	3-wire circuit
Measuring tolerance	Class B in conformance to EN 60751

## Electrical data

Capacity (silicone cable)	$\leq 50$ pF/m
Inductance (silicone cable)	$\leq 2$ $\mu$ H/m

## Circuit diagram



- Fast response time
- Flexible connection cable for easy installation
- Compact dimensions, compact design

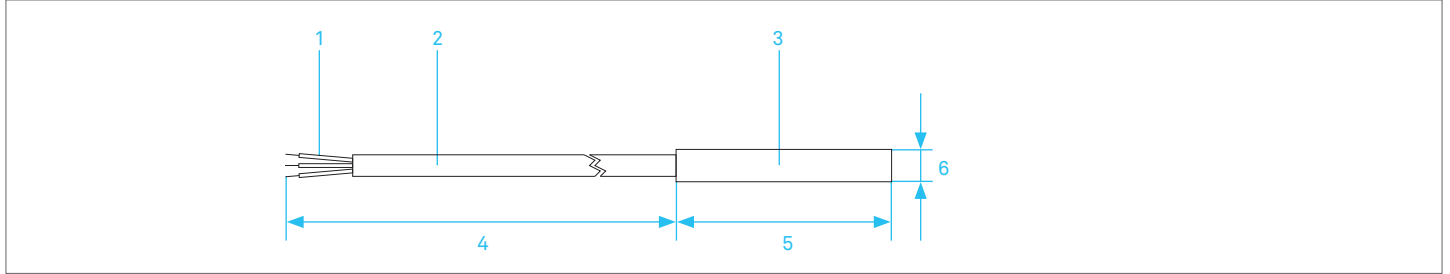
For applications in non-hazardous areas, the Pt100 resistance-measuring sensor is also available as an industrial version. We also supply different versions to suit various temperature requirements. For the different temperature areas you can choose between several versions in three-wire-connection.

## Structure

The Pt100 M sensor is embedded in a stainless steel sleeve. A temperature-resistant supply cable runs into the sleeve. We offer three sleeve versions with different temperature ranges.

**Structure**

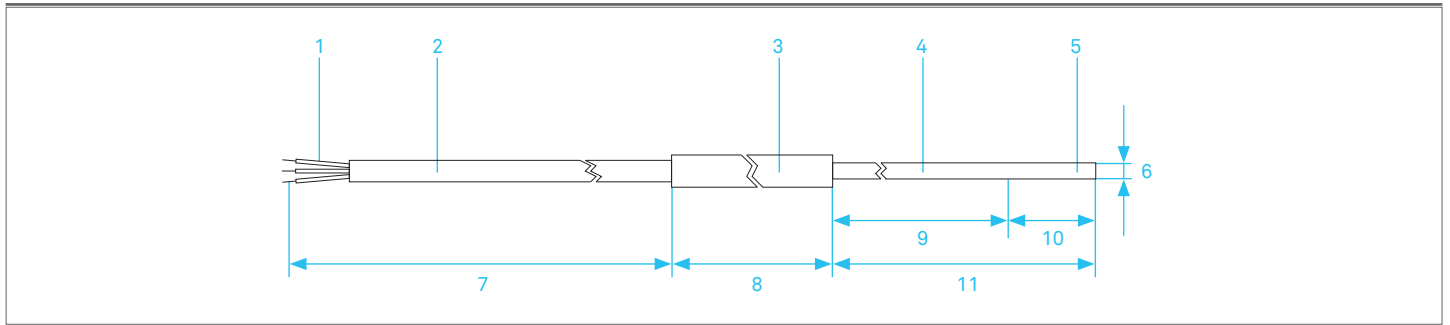
-50 °C to +200 °C / -50 °C to +400 °C



1	Free leads
2	Connecting cable
3	Protected sleeve
4	Connecting cable length
5	Sensor length
6	Sensor diameter

**Structure**

-50 °C to +500 °C



1	Free leads
2	Connection cable
3	Connection sleeve
4	Sheathed cable
5	Protected sleeve
6	Sensor diameter
7	Connection cable length
8	Connection sleeve, length 35 mm
9	Sheathed cable, flexible 970 mm
10	Protected sleeve, rigid 30 mm
11	Sensor length

**Ordering information**

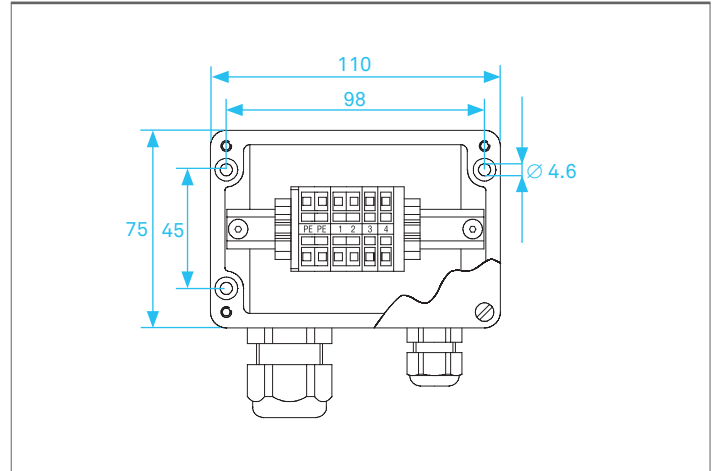
Measuring range	Sensor Length	Connection cable			Operating temperature	Protection class	Order no.
		∅	Length	Material			
-50 °C to +200 °C	40 mm	3,8 mm	1,50 m	silicone	-50 °C to +200 °C	IP 65	03-9040-0006
-50 °C to +200 °C	40 mm	3,8 mm	5,00 m	silicone	-50 °C to +200 °C	IP 65	03-9040-0010
-50 °C to +400 °C	50 mm	6 mm	1,50 m	stainless steel braid	-50 °C to +400 °C	IP 40	03-9040-0016
-50 °C to +500 °C	1000 mm	3,5 mm	1,50 m	silicone	-50 °C to +200 °C	IP 54	03-9040-0017

## Junction boxes for Pt100 M

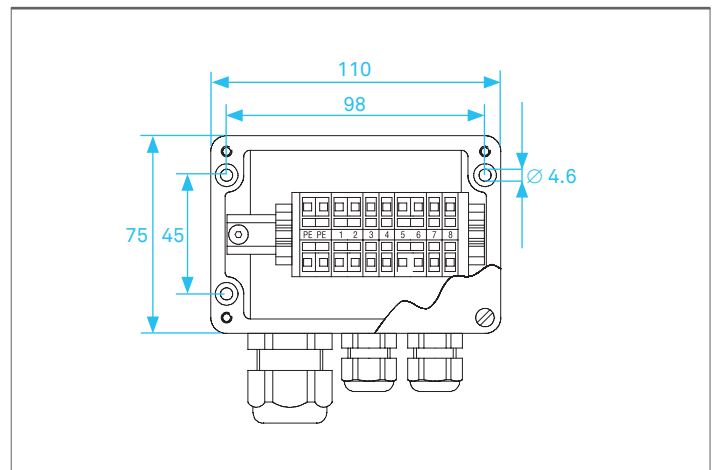


The polyester junction boxes allow one or more two-wire or three-wire Pt100 M resistance thermometers to be connected to the signal line. The enclosures have the appropriate terminals and the required cable glands. Aluminium junction boxes are available upon request.

**Junction box**  
single



**Junction box**  
double



### Technical data

Protection class according to EN 60529	Cover gasket IP 65 Cable gland for power supply cables IP 67
Nominal voltage	max. AC 60 V
Supply cable, cross section	2.5 mm <sup>2</sup>
Impact resistance	7 Nm
Material	polyester, glass-fibre reinforced
Ambient temperature range	-20 °C to +70 °C

### Ordering information

Used for	Junction box	Dimensions mm	Cable gland for the signal line	Cable gland Pt100	Terminals mm <sup>2</sup>	Order no.
Pt100 media-protected	single	110 x 75 x 55	1 x M25 (Ø 8 to 15 mm)	1 x M16 (Ø 2 to 6 mm)	8 x 2.5	07-5177-9082
	double			2 x M16 (Ø 2 to 6 mm)	16 x 2.5	07-5177-9083