

# Pt-100 Sensors

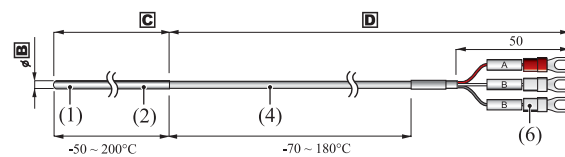


## Sensors for use with RTR-52Pt & TR-81 TR-81XX

unit : millimeters

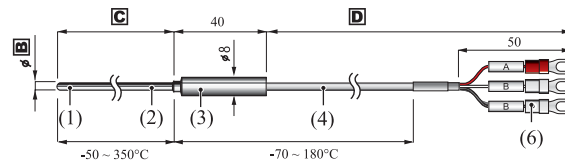
### TR-8100-

Economical Type  
Measurement Range: -50 to 200°C  
Thermal Time Constant:  
In agitated water: about 4.5 seconds \*\*1



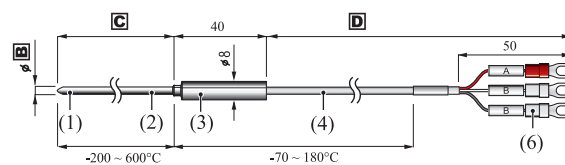
### TR-8110-

Regular Type  
Measurement Range: -50 to 350°C  
Thermal Time Constant:  
In agitated water: about 2 seconds \*\*1



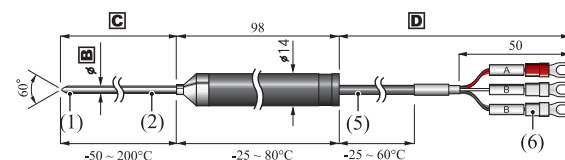
### TR-8120-

Low to High Temp Type  
Measurement Range: -200 to 600°C  
Thermal Time Constant:  
In agitated water: about 2 seconds \*\*1



### TR-8130-

Handy Type  
Measurement Range: -50 to 200 °C  
Thermal Time Constant:  
In agitated water: about 2.5 seconds \*\*1



Materials: (1) Sensor (Pt100) (2) Stainless Protection Pipe (SU316)  
(3) Sleeve (SU304) (4) Teflon Shielded Wires  
(5) Vinyl Coated Wires (6) Crimp Terminals

\*\*1: Stated thermal constant time is for sensors with a protection pipe diameter of 3.2mm.

All Pt-100 sensors supplied by TandD are custom produced to order, therefore please allow three weeks from time of order until shipment.

## Sensor Configuration & Ordering

### Sensor Types

TR-81 **A** - **B** - **C** - **D** M  
Type Protection Pipe Diameter Protection Pipe Length Cable Length

**A** Sensor Type  
00, 10, 20, or 30

**C** Sensor Protection Pipe Length  
The protection pipe is available in 50 millimeter units in lengths from 50mm to 2000mm.

**D** Sensor Cable Length  
The sensor cable is available in 1 meter units in lengths from 1 meter to 99 meters.

### Examples:

TR-8100 with 3.2mm diameter x 100mm sheath with 2m of cable: TR-8100-3.2-100-2M  
TR-8120 with 2.0mm diameter x 200mm sheath with 1m of cable: TR-8120-2.0-200-1M

### ■ Sensor Protection Pipe Diameter

Ⓡ Recommended ○ Available - Not available

Protection Pipe Diameter	TR-8100	TR-8110	TR-8120	TR-8130
2.0mm	-	-	○	-
2.3mm	○	○	-	-
3.0mm	○	○	-	-
3.2mm	Ⓡ	Ⓡ	Ⓡ	Ⓡ
4.8mm	○	○	○	○
6.0mm	○	○	-	-
6.4mm	-	-	○	-

### Sensor Specifications

Sensor Device	Pt100
RTD Type	A
Electrical Current	less than 2 mA

Insulation Resistance	DC500V Over 10 MOhm
Conductor	3 wire type

Range of Error	$\pm(0.15+0.002t)^{\circ}\text{C}$ (t: absolute value of measurement)
Water Resistance	None (only stainless protection pipe is water resistant)

Web Site  
T&D Online

Product information, FAQ and software update downloads. <http://www.tandd.com/>

Colors in the photos in this catalog may be different from real product colors. The specification and designs of the products in this catalog are true as of April 2009.



### T&D Corporation

817-1 Shimadachi, Matsumoto, Nagano  
Japan 390-0852

Please send your inquiries to:  
E-mail : sales@tandd.com  
Facsimile : (+81) 263-40-3152

### ■ Distributor

