

T handle temperature probe with cable at resistive element

SFPPT 50 / SFPPTD 50

Technical features

Operating temperature.....from -50°C to +400°C (PT100 and PT1000)
(according to cable) from -20°C to +120°C (NTC)

Accuracy *.....PT100 or PT1000 : see "Tolerances" table
NTC : see "Tolerances" table

Sensor type.....PT100 or PT1000 : class B, class A, 1/3 DIN
as per DIN IEC751
NTC : resistance at 25°C, R₂₅ = 10KΩ Nominal
Beta value B25/85 = 3,695K ±1%

Storage temperature.....from -20°C to +80°C

Operating temperature

of cable.....Shielded PVC : from -40°C to +120°C

Silicone : from -50°C to +180°C

Shielded Teflon (PFA) : from -50°C to +260°C

Silk glass with stainless steel braid : from -50°C to +400°C

Mounting of cable outlet.....With shrinking type penetration end piece : unremovable PE output
With corkscrew type penetration end piece : detachable Jack output

Contact tip.....Ø 4.5 or 8 mm in stainless steel 316 L, choice of length

Sewing contact tip

corkscrew (to screw) : contact tip diameter 8 mm Ø only

Shrinking : contact tip Ø 4.5 mm and shrinking Ø 3 mm

Probe features

Temperature probe à piquer mounted on T handle.

Measuring ranges (according to cable):

from -50°C to +400°C (PT100 and PT1000).

from -20°C to +120°C (CTN).

2-wire output (SFPPT) or

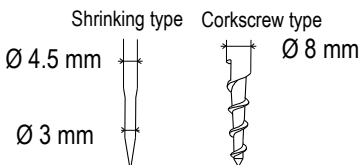
4-wire output (SFPPTD) for NTC and PT1000

3-4 wire output (SFPPT) or

6-wire output (SFPPTD) for PT100.

For other resistance types PT25, PT50, PT500, PT200 or NI, please contact us.

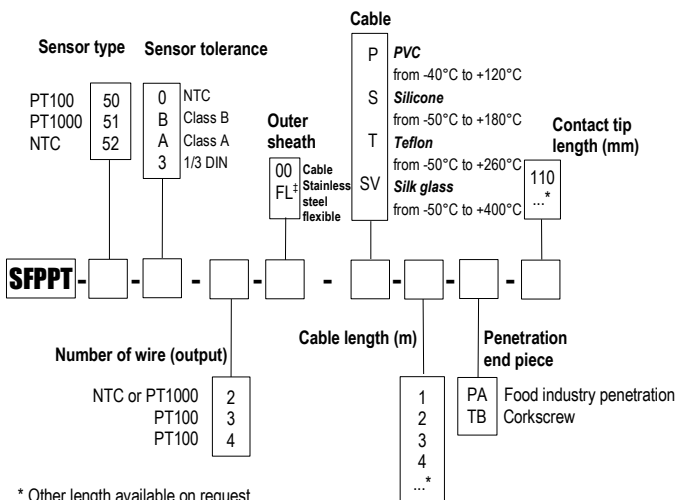
Penetration end piece



Part numbers

T handle probes are available with simple pair or multipair electrical assembly :

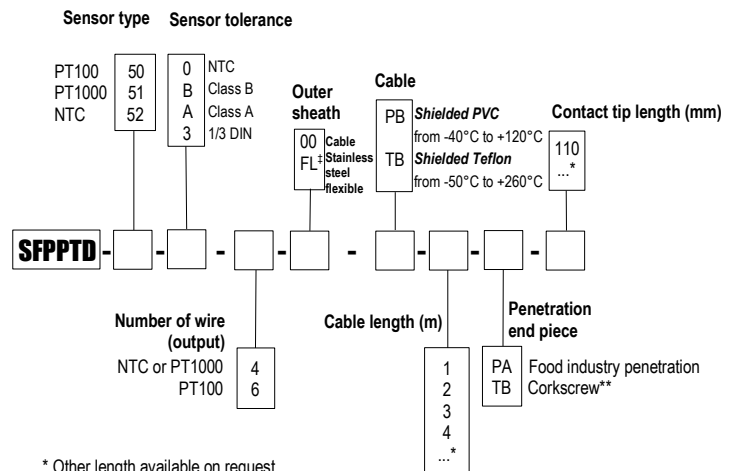
Single pair probe – Ref. SFPPT 50



* Other length available on request

‡ impossible for probe with corkscrew contact tip

Multipair probe – Ref. SFPPTD 50



* Other length available on request

‡ impossible for probe with corkscrew contact tip

**No Jack plug output

Example : SFPPT50-B-3-00-P-2-PA-110

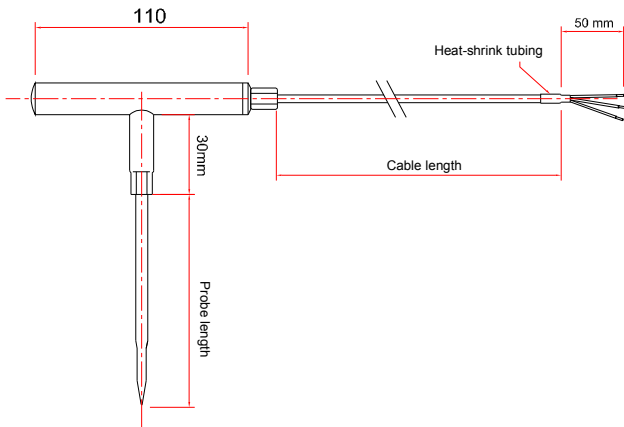
Model : PT100 temperature probe, Class B, 3 wires, outer sheath in PVC cable of length 2 m. Stainless steel contact tip 4,5 mm Ø for food industry penetration of length 110 mm with shrinking type penetration end piece. **Measuring range from -40 to +120°C.**

Example : SFPPTD50-A-6-00-TB-2-PA-110

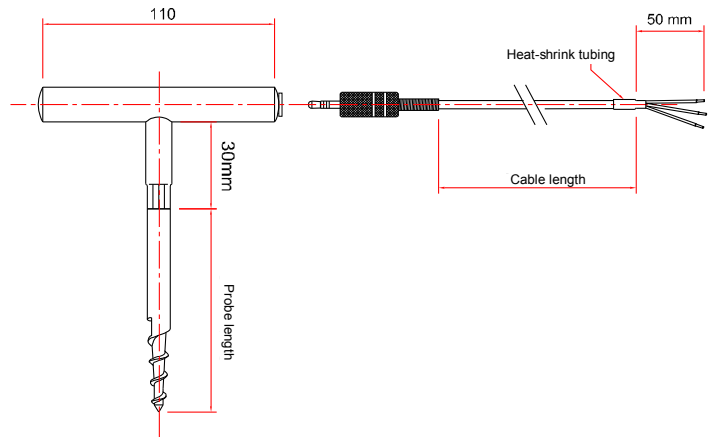
Model : PT100 temperature probe, Class A, multipair assembly 6 wires, outer sheath in shielded Teflon cable of length 2m. Stainless steel contact tip 4,5 mm Ø for food industry penetration of length 110 mm with shrinking type penetration end piece. **Measuring range from -50 to +260°C.**

■ Dimensions probes

Probe with smooth contact tip



Probe with corkscrew contact tip



■ Tolerance* of PT100 and PT1000 probes.

As per IEC 751 (1993) norm.

| Temp °C | Tolerances | | | | | |
|---------|------------|-------------|-----------|-------------|-----------|-------------|
| | Class B | | Class A | | 1/3 DIN | |
| -100 | ± 0,8 °C | ± 0,32 Ohms | ± 0,35 °C | ± 0,14 Ohms | ± 0,27 °C | ± 0,11 Ohms |
| -50 | ± 0,55 °C | ± 0,22 Ohms | ± 0,25 °C | ± 0,1 Ohms | ± 0,19 °C | ± 0,08 Ohms |
| 0 | ± 0,3 °C | ± 0,12 Ohms | ± 0,15 °C | ± 0,06 Ohms | ± 0,1 °C | ± 0,04 Ohms |
| 100 | ± 0,8 °C | ± 0,3 Ohms | ± 0,35 °C | ± 0,13 Ohms | ± 0,27 °C | ± 0,1 Ohms |
| 200 | ± 1,3 °C | ± 0,48 Ohms | ± 0,55 °C | ± 0,2 Ohms | ± 0,44 °C | ± 0,16 Ohms |
| 300 | ± 1,8 °C | ± 0,64 Ohms | ± 0,75 °C | ± 0,27 Ohms | ± 0,6 °C | ± 0,21 Ohms |
| 400 | ± 2,3 °C | ± 0,79 Ohms | ± 0,95 °C | ± 0,33 Ohms | ± 0,77 °C | ± 0,26 Ohms |

Resistance values for PT1000 (Ω) must be multiplied by 10 for the same corresponding temperature
 i.e : at 0°C for PT1000 Class B $\pm 0,3^\circ\text{C} \rightarrow \pm 1,2 \Omega$

■ Tolerances* of NTC probes

| Measuring range °C | Tolerances °C |
|----------------------|---------------|
| From -20°C to 0°C | ± 0,5°C |
| From 0°C to +70°C | ± 0,2 °C |
| From +70°C to +100°C | ± 0,5 °C |

* Performed in laboratory conditions, the above accuracies mentioned in this document will be guaranteed, provided that you use the calibration compensation data or identical calibration conditions.

■ Accessories (See data sheet)

DIN Rail transmitter output 4/20 mA or 0/10V
 Calibration certificate