

## Penetration probe with cable

# SFP 50 / SFPD 50

### Transmitter 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,  $R_{25} = 10K\Omega$  Nominal  
Beta value  $B_{25/85} = 3.695K \pm 1\%$
- Storage temperature.....from -20°C to +80°C
- Working temperature of the cable
  - PVC : from -40°C to +120°C
  - Silicone : from -50°C to +180°C
  - Teflon (PFA) : from -50°C to +260°C
  - Glass silk with stainless steel sheet : from -50°C to +400°C

- Probe.....316 L stainless steel, watertight crimping with  
heat shrink tubing. (Except glass silk cable  
with standard mounting on stainless steel duct)

Wire mounting.....single pair 2, 3 or 4 wires

- 4 wires inside 4mm Ø available for PVC only.
- 4 silicone wires inside 6mm Ø not available.

multipair 4 or 6 wires

- 2x2 wires for NTC and PT1000
- 2x3 wires for PT100

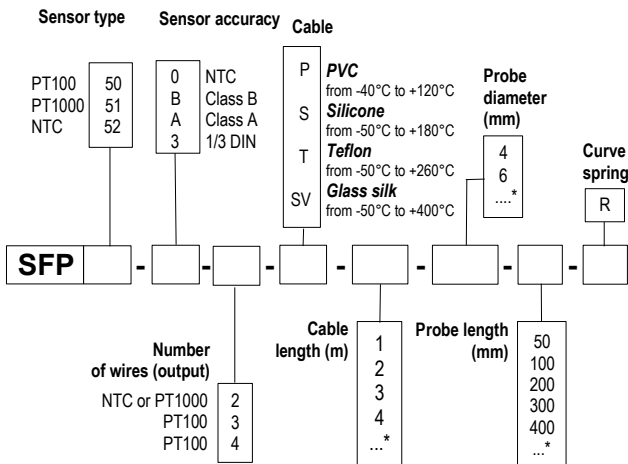
\*all accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

### Probe features

- Stainless steel temperature probes with conductive cable and penetration sheath.
- Measuring range (according to cable)  
from -50°C to +400°C (PT100 and PT1000).  
from -20°C to +120°C (NTC).
- 2 wires for NTC and PT1000 outputs,  
3 or 4 wires for PT100 output.
- For other resistance types PT25, PT50, PT500, PT200 or NI, please contact us.

### Part numbers

#### • SFP 50 – Single pair probe -

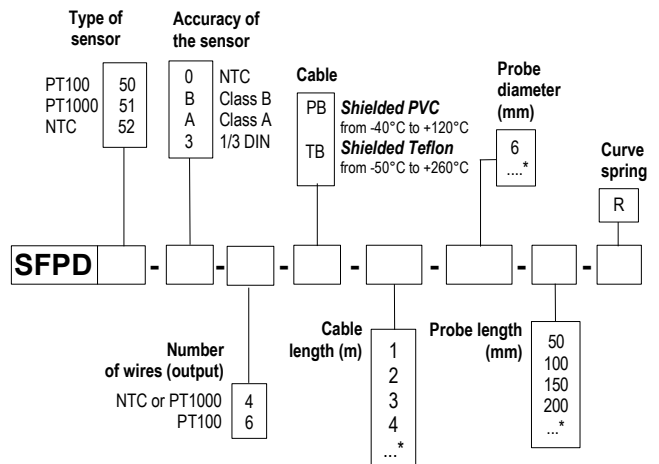


\* Other length available on request

Example : SFP51-B-2-P-1-4-100

Model : Pt 1000 temperature sensor, Class B, 2 wires, PVC cable of 1 m length. Stainless steel protective sheath 4 mm Ø, length 100 mm, without curve spring. Measuring range from -40 to +120°C.

#### • SFPD 50 – Multipair Probe -

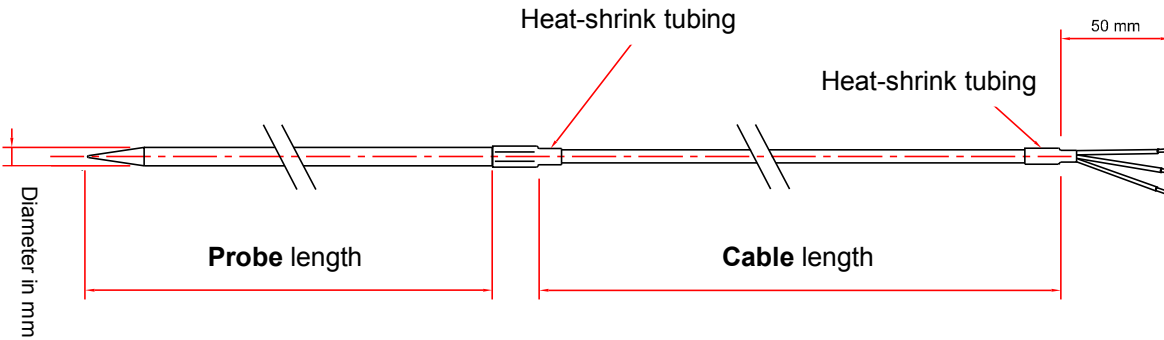


\* Other length available on request

Example : SFPD51-B-4-PB-1-6-100

Model : Temperature sensor PT1000 Class B, 4 wires, shielded PVC cable of 1 m length. Stainless steel protective sheath 6 mm Ø, length 100 mm, without curve spring. Measuring range from -40 to +120°C.

## ■ Probes dimensions



## ■ Tolerance of PT100 and PT1000 probes.

Norms as per IEC 751 (1993).

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

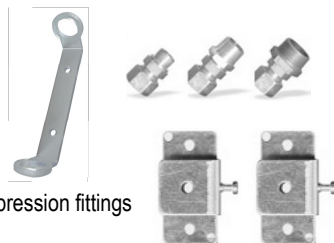
Resistance values for PT1000 (Ω) must be multiplied by 10 for the same corresponding temperature value (°C). I.e : at 0°C for Class B PT1000 ± 0.3°C → ± 1.2 Ω

## ■ 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

## ■ Accessories (See Datasheet)

- Transmitter output 4/20 mA or 0/10V
- Wall mounting support
- Stainless steel mounting brackets
- ¼" or ½" Gas screw nut
- Stainless steel compression fitting
- Teflon or stainless steel ferrule for compression fittings



- Sleeve to weld for food industry
- Stainless steel junction fitting
- ½" Gas or NPT thread cuff
- Thermo-conducting silicone grease
- Calibration certificate
- Thermowell



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Tel : + 33. 1. 60. 06. 69. 25 - Fax : + 33. 1. 60. 06. 69. 29

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