

# Technical Data Sheet

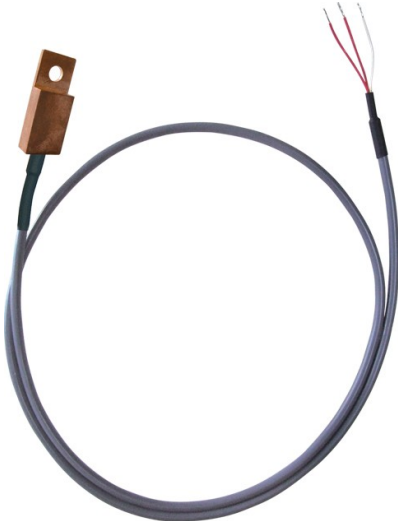
Pressure • Temperature • Humidity • Air Velocity • Airflow • Sound level



## Surface contact wire temperature probe

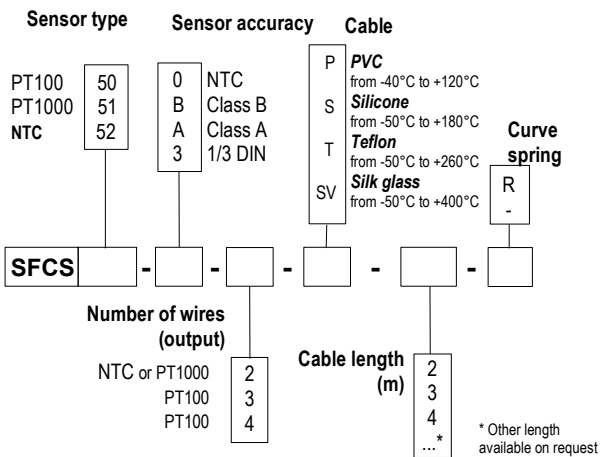
### SFCS 50 / SFCS 50

- Temperature probe with copper tip for surface contact
- Measuring ranges (according to cable) **from -50°C to +400°C** (PT100 and PT1000).  
**from -20°C to +120°C** (NTC)
- Wire mounting: **simple** (2,3 or 4 wires).  
**duplex** (4 or 6 wires)
- For other resistance types (PT25, PT50, PT500, PT200 or NI, please contact us)



### Part numbers

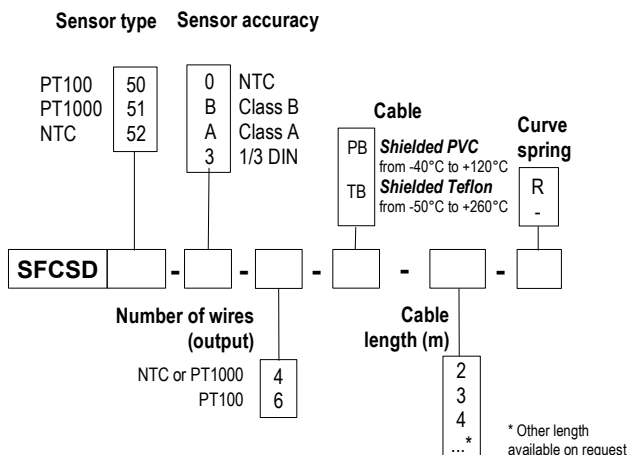
#### • SFCS – Single pair probe -



Example: SFCS50-B-3-P-4

Model: Class B Pt100 temperature probe, 3-wire, PVC cable length 4m, without curve spring. Measuring range from -40 to +120°C.

#### • SFCS 50 – Multipair probe -



Example : SFCS 50-B-6-PB-4

Model : Class B Pt100 temperature probe, 6-wire, shielded PVC cable length 4m without curve spring. Measuring range from -40 to +120°C.

### Transmitter features

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

for SFCS 50 types  
from -50°C to +250°C (PT100 and PT1000)  
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 B25/85 = 3,695K ±1%

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

**multipair 4 or 6 wires**

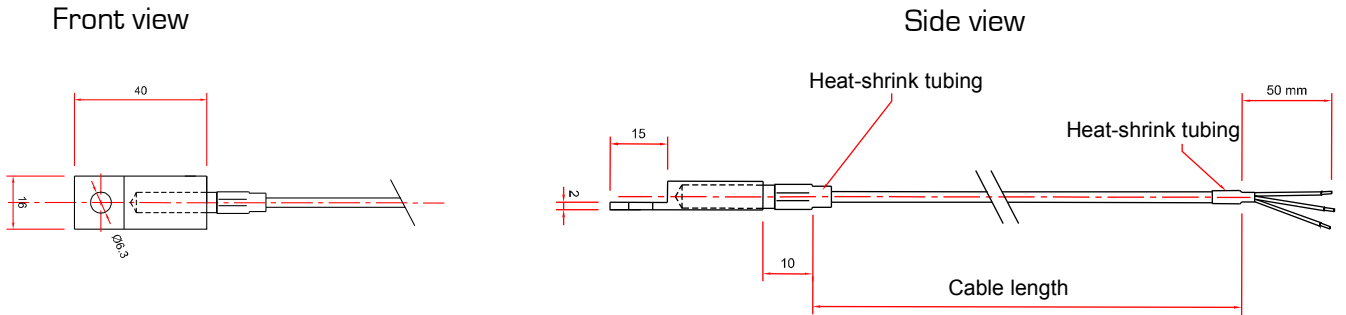
Storage temperature.....from -20°C to +80°C



Contact tip.....40 x 16 x 7,5mm  
Ø 6,3 mm hole  
made of copper

Operating temperature  
for cable.....PVC : from -40°C to +120°C  
Silicone: from -50°C to +180°C  
Teflon (PFA): from -50°C to +260°C  
Silk glass: from -50°C to +400°C

## ■ Dimensions



## ■ Tolerances\* of Pt100 and Pt1000 probes

As per IEC 751 (1993), BS 1904 (1984) and DIN 43760 (1980) norms.

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). For example: at 0°C for Class B Pt1000 ± 0,3°C → ± 1,2 Ω

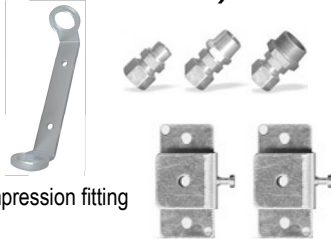
## ■ Tolerances\* of NTC probes

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

\* 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 related data sheet)

- Transmitter output 4-20 mA or 0/10V
- Wall mounting support
- Stainless steel mounting brackets
- 1/4, 1/2 gas screw nut
- Sliding connection
- Teflon or stainless. steel ferrule for compression fitting



- Sleeve to weld for food industry (with 1/2" G female)
- Stainless steel junction fitting
- 1/2 gas or NPT thread cuff
- Thermo-conducting silicone grease
- Calibration certificate
- Thermowell



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