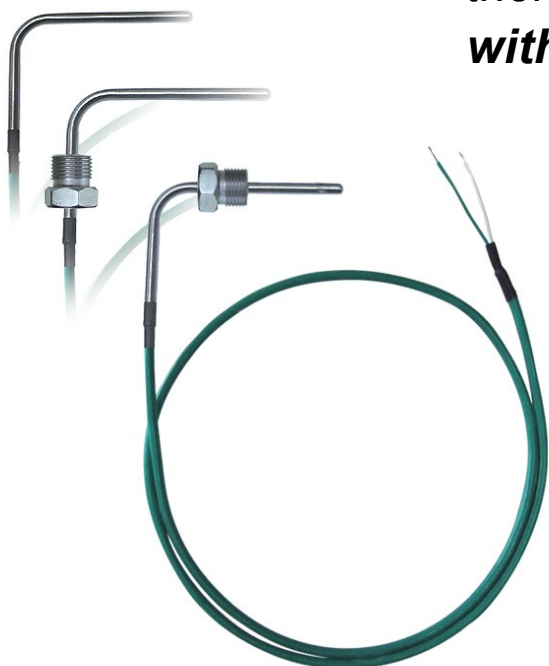


Wire and angled or lined inconel thermocouple temperature sensor with or without fitting

CE



Type SFC K et SFCR K

SFC K – SFCD K – SFCR K – SFCRD K

■ Sensor features

- Temperature sensor mounted on conductor cables with angled contact tip with or without stainless steel compression fitting.
- Thermocouple types T, J, K and N
- Measuring range from -40°C to +1000°C
- Mounting with 316 L stainless steel contact tip or inconel 600

■ Technical features

Working temperature.....*For SFCK and SFCRK series*
 (According to cable) from -40°C to +105°C for PB output
 from -40°C to +260°C for TB output
 from -40°C to +400°C for SVB output
 from -40°C to +550°C for SVB (Tc K) output

For SFCKI and SFCRKI series
 from -40°C to +750°C for Tc J
 from -40°C to +1000°C for Tc K and Tc N

Recommended temperature.....*According to contact tip Ø in inconel 600*
 from Ø 0.5 to 1 mm : until 300°C
 from Ø 1.5 to 2 mm : until 750°C
 Ø 3 mm : until 900°C
 from Ø 4.5 to 8 mm : until 1000°C



Accuracy for class 1.....See "Tolerances" table

Mounting of the welding.....Insulated hot welding in standard
 Add SCM to part number for a mounting at hot welding to earth.
 from -20°C to +80°C

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


Output.....stripped wires, male miniature connector or standard on request

Contact tip and fitting.....*For SFCK and SFCRK series*
 316 L stainless steel
 Angled at 90° (Other on request)
 Waterproof crimping with heat-shrink tubing
 (Unless glass silk cable with single crimping on stainless steel sheath)
 Curve spring as option

For SFCKI and SFCRKI series
 Inconel contact tip 600 T max. 1000°C
 Stainless steel compression fitting 316L T max. 800°C
 Angled at 90° (Other on request)

Thread of the fitting.....1/2" or 1/4" au pas Gaz

Mounting of the fitting.....On L2 length (See schema) : 12 or 14 corresponding to 1/2" G and 1/4" G compression fitting
 On L1 length (See schema) : 12L1 or 14L1 corresponding to 1/2" G et 1/4" G compression fitting

 T° maxi of L2 : 800 °C for this specific case

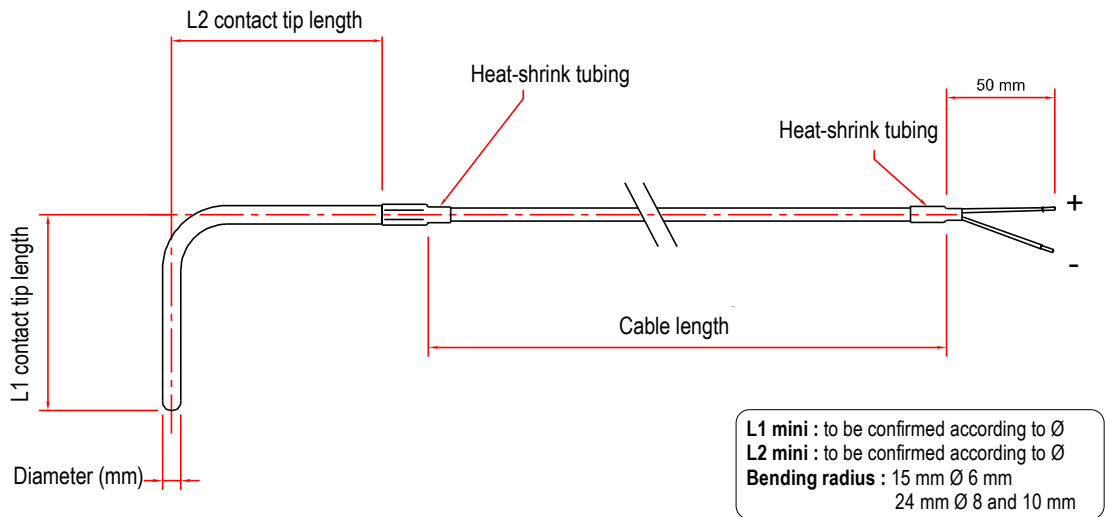


SFC & SFC-I

Angled wire probe or lined inconel



Dimensions



Part numbers

• SFC - Stainless steel contact tip -

Type	Cable	Cable length (m)	Diameter (mm)	L1 contact tip (mm)	L2 contact tip (mm)	Angle	Curve spring	Connector
T	PB	1	4	50	50	90	R	MM Male miniature
J	TB	2	6	100	100			FM Female miniature
K	SVB	3	8	150	150			MS Male standard
N	*	4	*	200	200			FS Female standard
								- Without connector

*other on request

Insulated To earth
SCM

Example : SFCJ-SVB-4-4-100-100-90-MM-SCM

Model : J thermocouple sensor welded to earth with stainless steel contact tip Ø 4 mm angled at 90° and L1 and L2 lengths of 100 mm, without curve spring and mounted on shielded glass silk cable ended by a male miniature connector.

• SFC-I – Inconel contact tip -

Type	Cable	Cable length (m)	Diameter (mm)	L1 contact tip (mm)	L2 contact tip (mm)	Angle	Curve spring	Connector
J	PB	1	6	50	50	90	R	MM Male miniature
K	TB	2	8	100	100			FM Female miniature
I	SVB	3	*	150	150			MS Male standard
N	*	4	*	200	200			FS Female standard
								- Without connector

*other on request

Insulated To earth
SCM

Example : SFCJI-SVB-4-6-100-100-90-MM

Model : J thermocouple sensor, insulated welding with lined inconel contact tip of 6 mm Ø angled at 90° and L1 and L2 lengths of 100 mm, without curve spring and mounted on shielded glass silk cable ended by a male miniature connector.

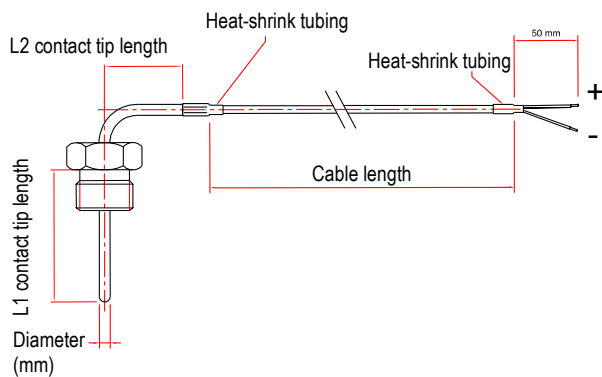
SFCR & SFCR-I

Angled wire probe or lined inconel
with fitting

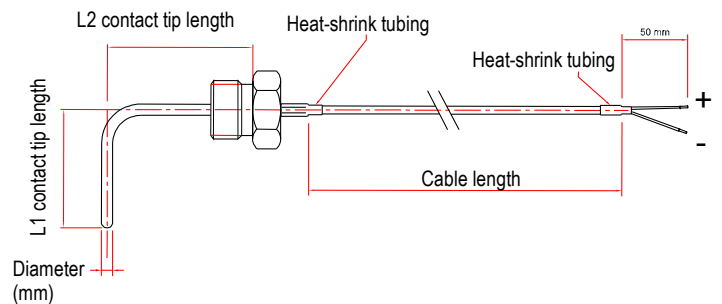


Dimensions

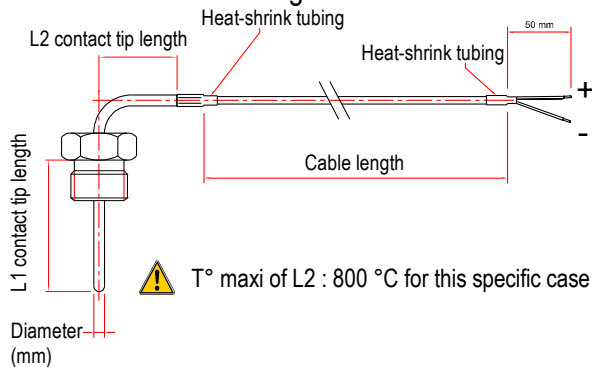
Stainless steel with fitting on L1



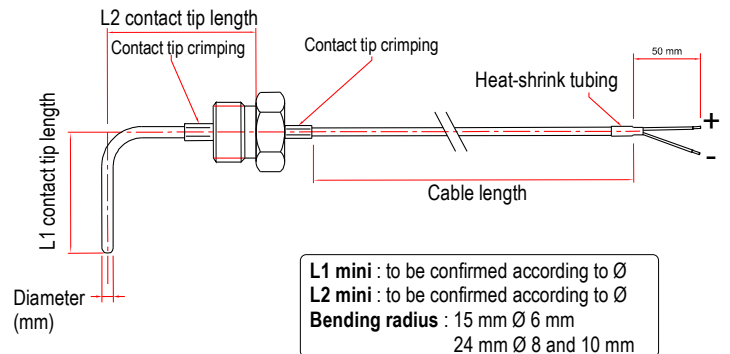
Stainless steel with fitting on L2



Lined inconel with fitting on L1



Lined inconel with fitting on L2



Part numbers

SFCR - Stainless steel contact tip -

Type	Cable length (m)	Cable Diameter (mm)	L1 contact tip (mm)	L2 contact tip (mm)	Fitting	Connector
T	1	4	50	50	12	MM Male miniature
J	2	6	100	100	14	FM Female miniature
K	3	8	150	150	12L1	MS Male standard
N	4	*	200	200	14L1	FS Female standard
	SVB	*	*	*		- Without connector

Angle 90

SFCR - [] - [] - [] - [] - [] - [] - [] - [] - [] - []

*other on request

Curve spring R

Insulated To earth SCM

Example : SFCRJ-SVB-4-4-100-100-90-12-MM

Model : J thermocouple sensor, insulated hot welding with stainless steel contact tip Ø 4 mm angled at 90° and L1 and L2 lengths of 100 mm, without curve spring with ½G thread union fixed on L2. Contact tip mounted on shielded glass silk cable ended by a male miniature connector.

SFCR-I - Inconel contact tip -

Type	Cable length (m)	Cable Diameter (mm)	L1 contact tip (mm)	L2 contact tip (mm)	Fitting	Connector
J	1	6	50	50	12	MM Male miniature
K	2	8	100	100	14	FM Female miniature
I	3	*	150	150	12L1	MS Male standard
	4	*	200	200	14L1	FS Female standard
	SVB	*	*	*		- Without connector

Angle 90

SFCR - [] - [] - [] - [] - [] - [] - [] - [] - [] - []

*other on request

Curve spring R

Insulated To earth SCM

Example : SFCRJI-SVB-4-6-100-100-90-12-MM

Model : J thermocouple sensor, insulated hot welding with lined inconel contact tip of 6 mm Ø angled at 90° and L1 and L2 lengths of 100 mm, without curve spring with ½G thread union fixed on L2. Contact tip mounted on shielded glass silk cable ended by a male miniature connector.

■ Tolerances of the probe

TC	Measuring range Class 1	TOLERANCE
T	From -40°C to +350°C	From -40°C to +125°C $\pm 0.5^{\circ}\text{C}$ From 125°C to +350°C $\pm 0.004 \times T^{\circ}\text{abs}$
J	From -40°C to +750°C	From -40°C to +375°C $\pm 1.5^{\circ}\text{C}$ From 375°C to 750°C $\pm 0.004 \times T^{\circ}\text{abs}$
K	From -40°C to +1000°C	From -40°C to +375°C $\pm 1.5^{\circ}\text{C}$ From 375°C to 1000°C $\pm 0.004 \times T^{\circ}\text{abs}$
N	From -40°C to +1000°C	From -40°C to +375°C $\pm 1.5^{\circ}\text{C}$ From 375°C to 1000°C $\pm 0.004 \times T^{\circ}\text{abs}$

■ Most common thermocouple types

THERMOCOUPLE TYPES	+ CONDUCTOR	- CONDUCTOR	COLOR OF COMPENSATING CABLE
K	Nickel-Chrome 10%	Nickel-Aluminium 5% -Silicium	Ext. color + = GREEN, - = WHITE
T	Copper	Copper-Nickel	Ext. color + = BROWN, - = WHITE
J	Iron	Copper-Nickel	Ext. color + = BLACK, - = WHITE
N	Nickel 84,4% Chromium 14,2% Silicium 1,4%	Nickel 95,6% Silicium 4,4%	Ext. color + = PINK, - = WHITE
R	Platinum-Rhodium 13%	Platinum	Ext. color + = ORANGE, - = WHITE
S	Platinum-Rhodium 10%	Platinum	Ext. color + = ORANGE, - = WHITE
B	Platinum-Rhodium 30%	Platinum-Rhodium 6%	Ext. color + = GREY, - = WHITE

■ Accessories (See data sheet)

- Extension cable
- Compensating cable
- Standard or miniature connector
- Cable seal for plug and socket connector
- Miniature or standard connectors panel
- Miniature or standard connectors panel
- Extension lead
- Converters



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