



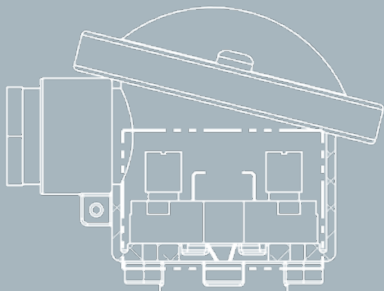
G1/2"

85

G1/2"

SENSORS CATALOGUE

TEMPERATURE MEASUREMENT IN INDUSTRIAL ENVIRONMENTS



Ø 1/2"

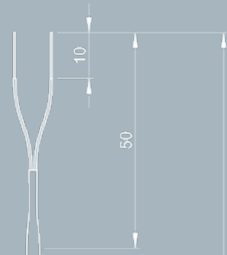
1/2

≈ 35

L3

L2

R45 ≥ Ø 1/2"
R60 ≥ Ø 3/4"



10

50

2000

PG7

Ø 18

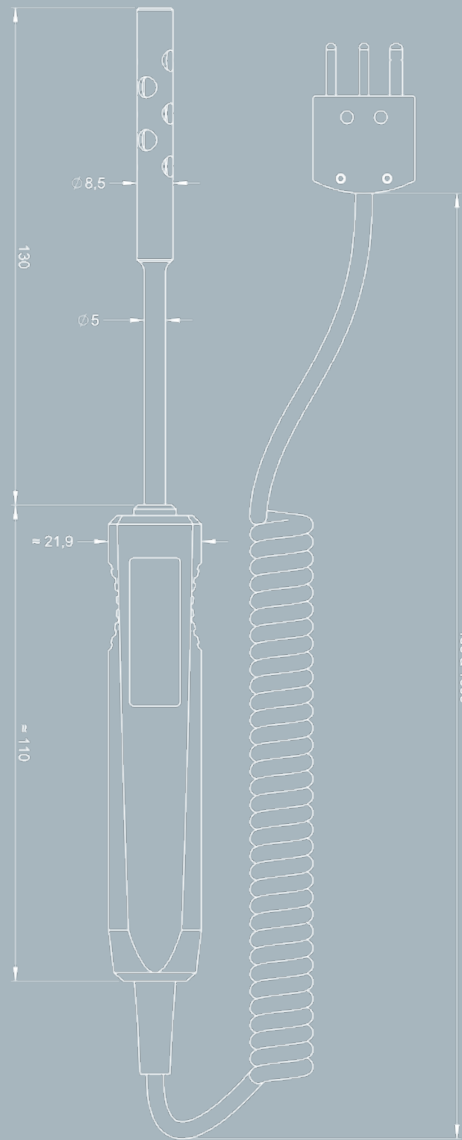
80

100

Ø 15

Ø 6,5

5



Ø 8,5

Ø 5

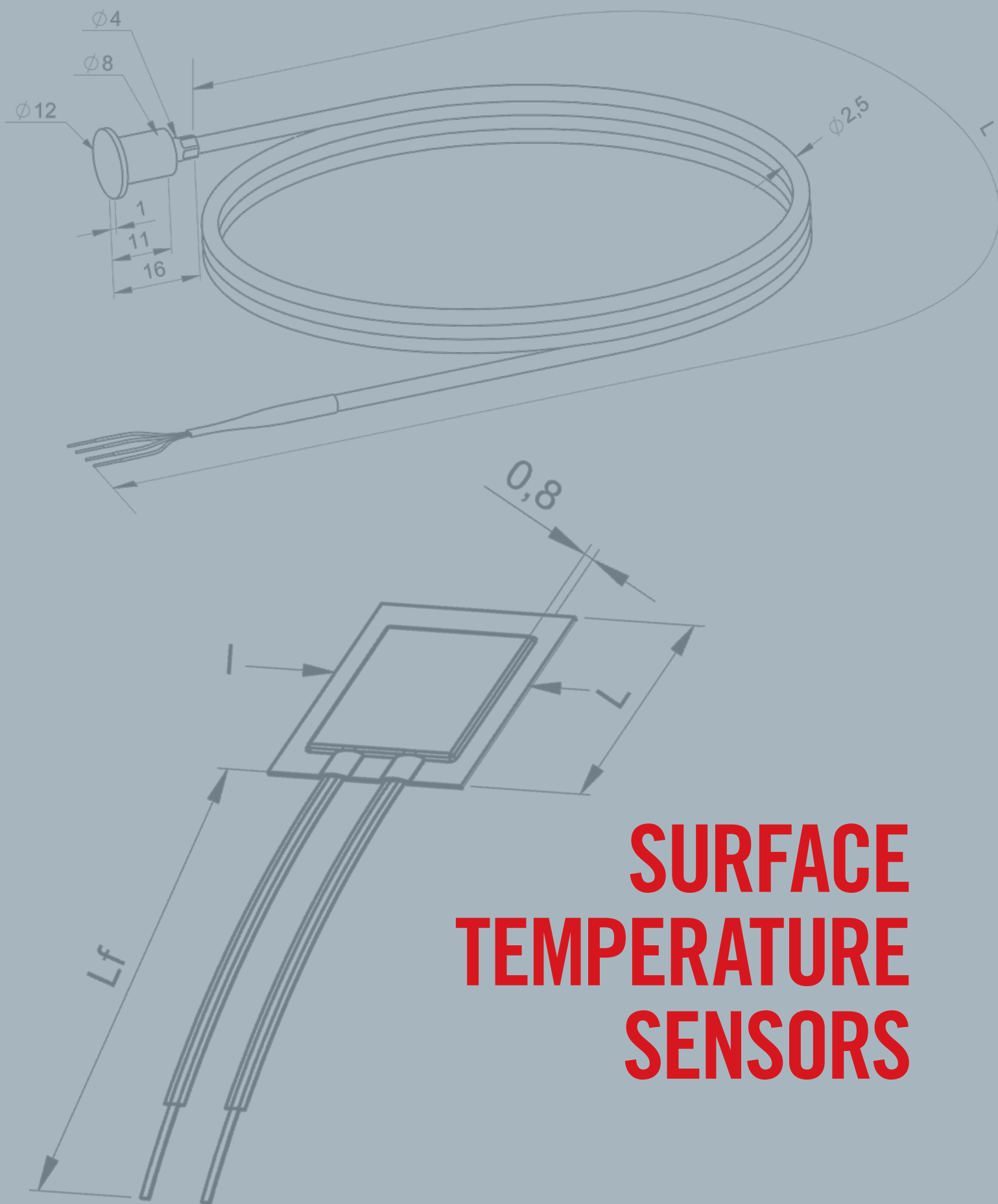
130

≈ 21,9

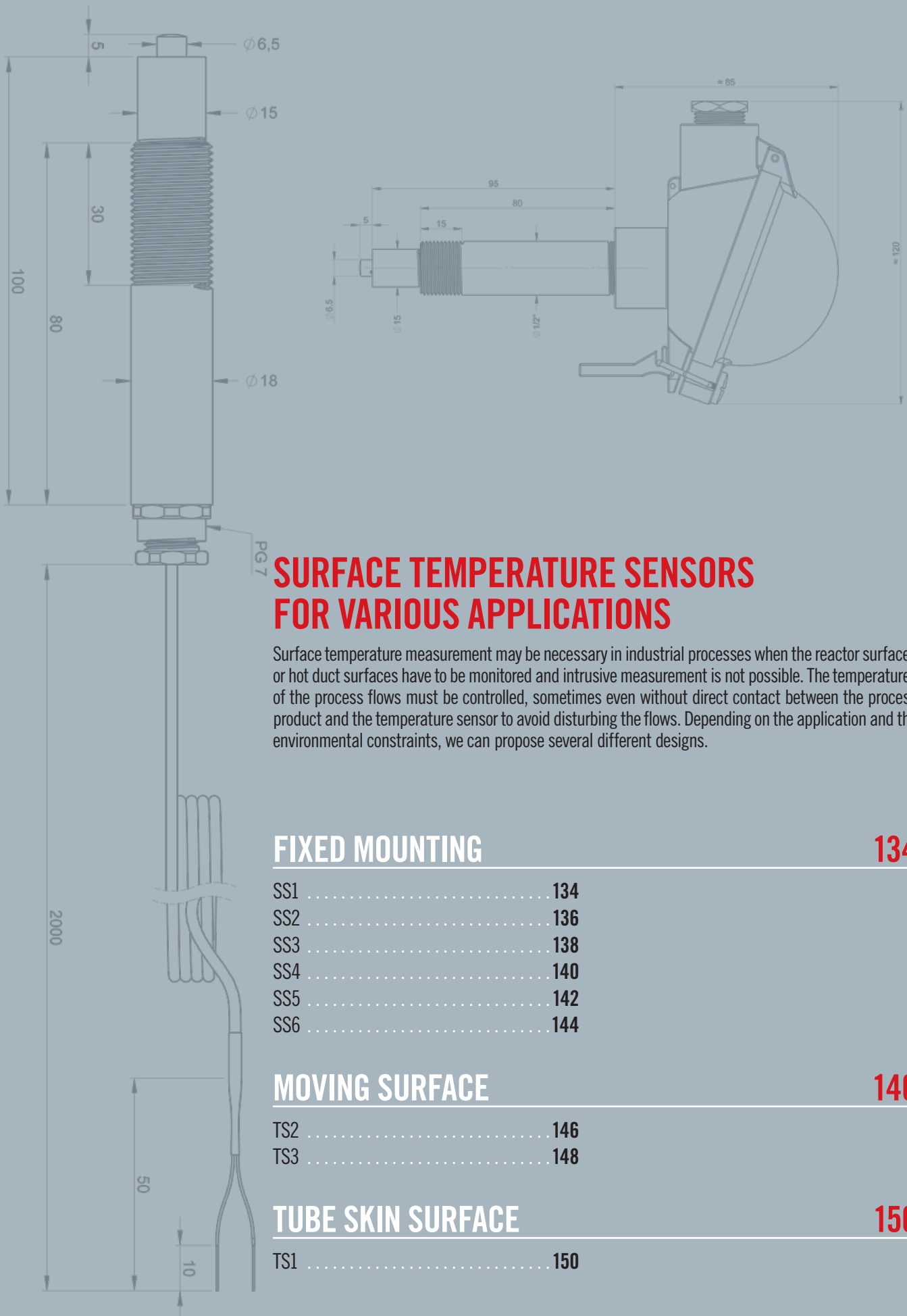
≈ 110

450 à 1000





SURFACE TEMPERATURE SENSORS



SURFACE TEMPERATURE SENSORS FOR VARIOUS APPLICATIONS

Surface temperature measurement may be necessary in industrial processes when the reactor surfaces or hot duct surfaces have to be monitored and intrusive measurement is not possible. The temperatures of the process flows must be controlled, sometimes even without direct contact between the process product and the temperature sensor to avoid disturbing the flows. Depending on the application and the environmental constraints, we can propose several different designs.

FIXED MOUNTING

134

SS1	134
SS2	136
SS3	138
SS4	140
SS5	142
SS6	144

MOVING SURFACE

146

TS2	146
TS3	148

TUBE SKIN SURFACE

150

TS1	150
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SS1

Pt100

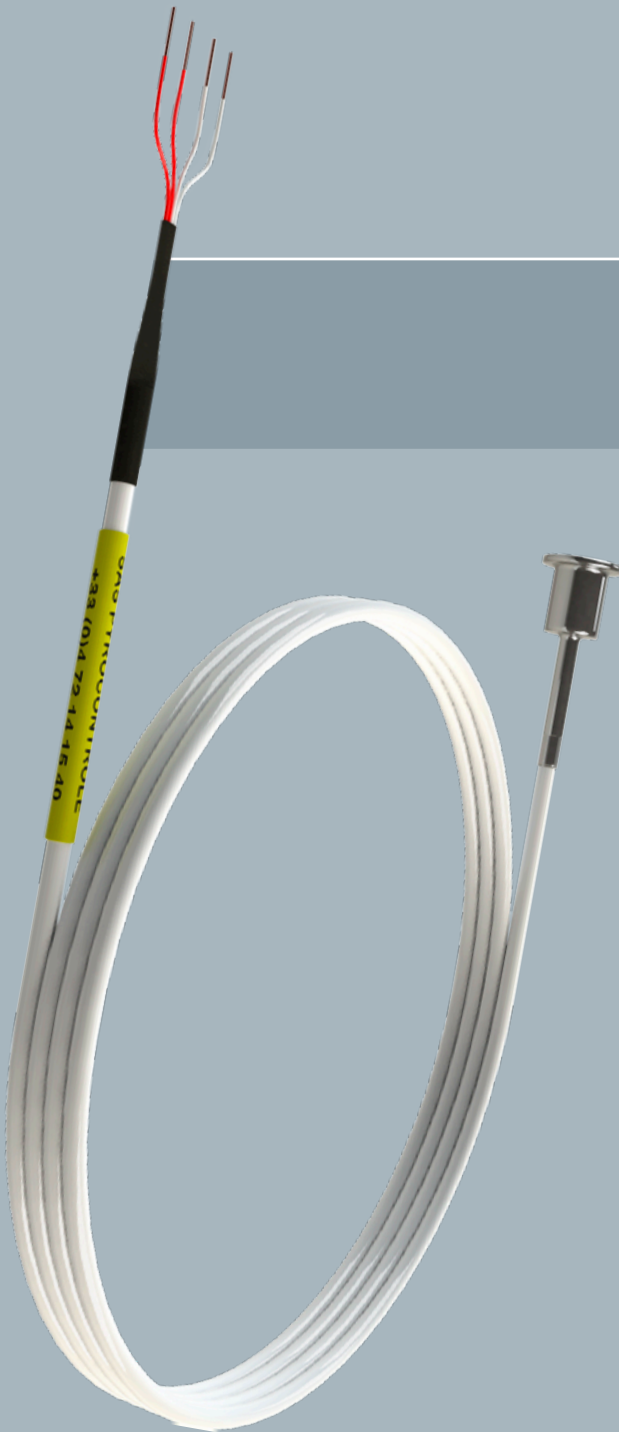
CLASS
B

IEC
60751

DURAL
PLATE



up to
200°C

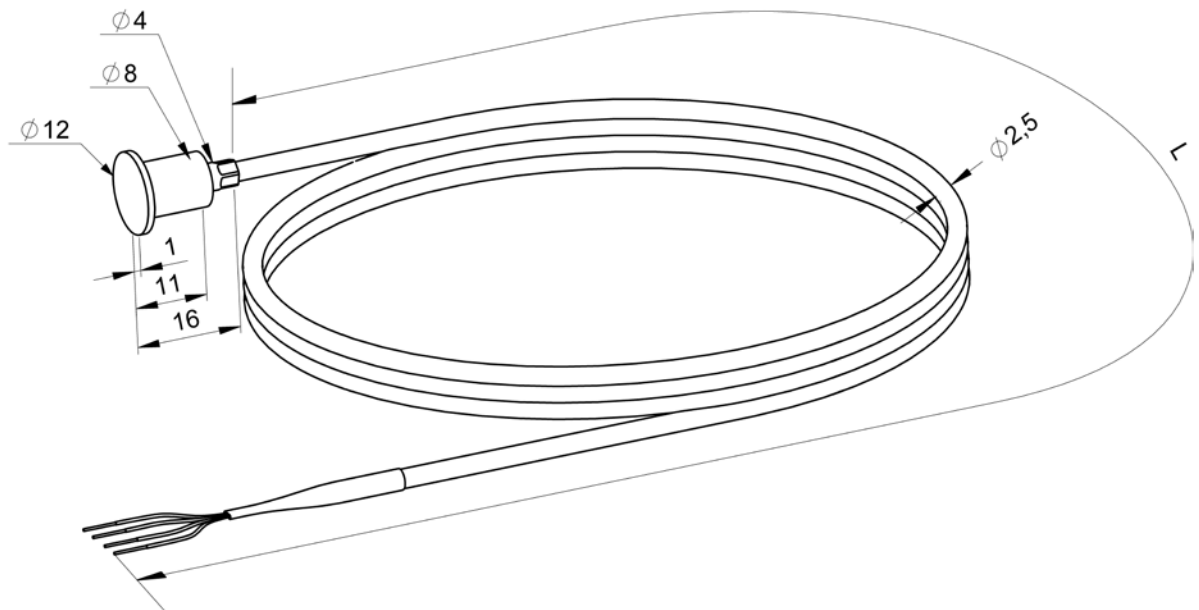


DESCRIPTION

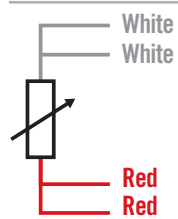
Pt100 sensor, Class B, 4 wires, as per IEC 60751, on Dural plate, output via PTFE cable, for temperature measurement up to 200°C. Fastening by gluing or insertion in the material.

SPECIFICATIONS

Model	SS1	
Compliance with standards	IEC 60751	
Type	Pt100 Ω	
Material	Dural plate, diam.12 mm	
Class	B	
Mounting / Construction	1x4 wires	
Max. surface temp. (°C) (without flow) (theoretical)	200°C	
Output	Sheath	PTFE
	Diameter (mm)	2.5 mm
	Max. temperature	200°C
	Conductors	4 x 0.05 mm ² copper
	Length L (mm)	1,000 / 2,000 / 5,000 mm
	Termination	Insulated bare wires
Fastening	By gluing on the surface or insertion in the material.	

DIAGRAM**REFERENCES**

Cable length L (mm)	Reference
1000	P07604120
2000	P07604121
5000	P07604122

CONNECTION

For any other configuration, please contact us.

SS2

Pt100

CLASS
B

IEC
60751



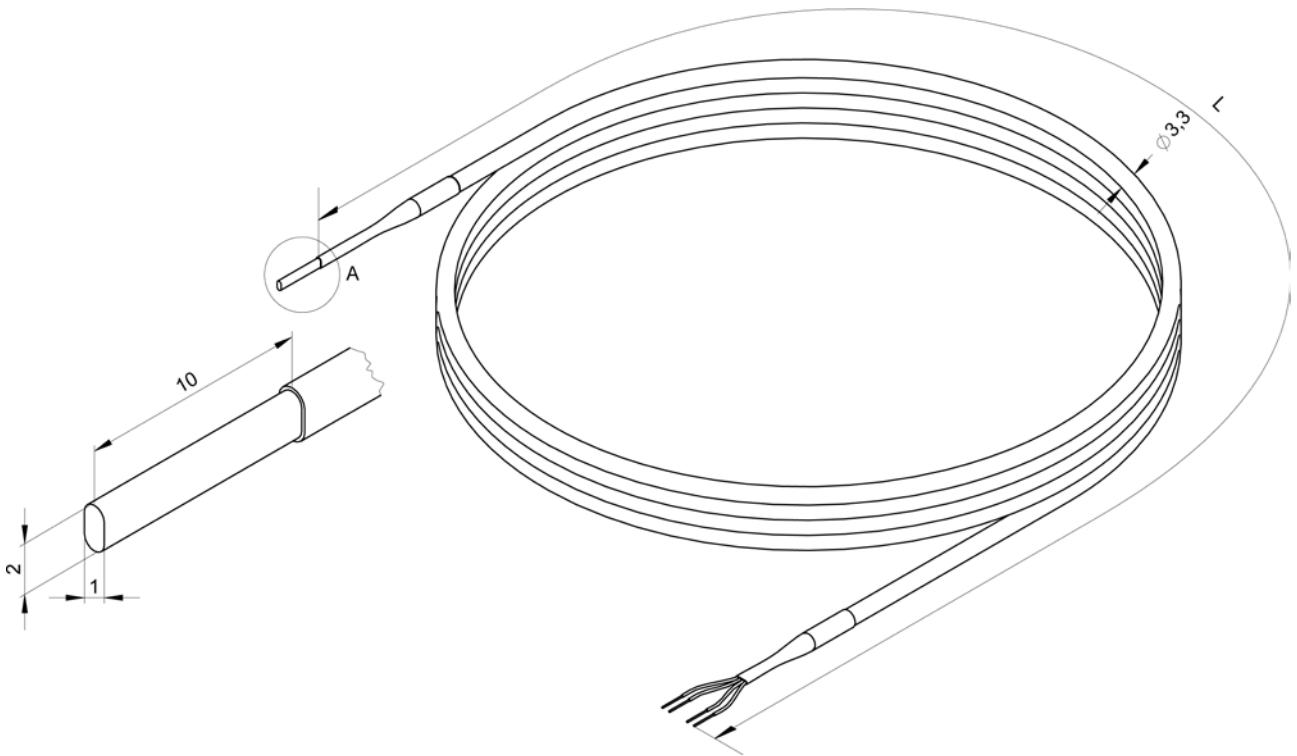
DESCRIPTION

Pt100 sensor, Class B, 4 wires, as per IEC 60751, on alumina substrate, output via PTFE cable, for temperature measurement up to 250°C. Fastening by gluing.

SPECIFICATIONS

Model	SS2	
Compliance with standards	IEC 60751	
Type	Pt100 Ω	
Material	Alumina substrate (10x2x1 mm) (Lxwxh)	
Class	B	
Mounting / Construction	1x4 wires	
Max. surface temp. (°C) (without flow) (theoretical)	250°C	
Output	Sheath	FEP
	Diameter (mm)	3.3 mm
	Max. temperature	200°C
	Conductors	4 x 0.22 mm ² , copper
	Length L (mm)	1,000 / 2,000 / 5,000 mm
	Termination	Insulated bare wires
Fastening	By gluing on the surface	

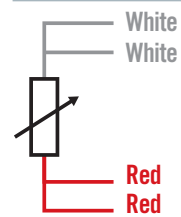
DIAGRAM



REFERENCES

Cable length L (mm)	Reference
1000	P07604115
2000	P07604116
5000	P07604117

CONNECTION



For any other configuration, please contact us.

SS3

Pt100

CLASS
A

IEC
60751



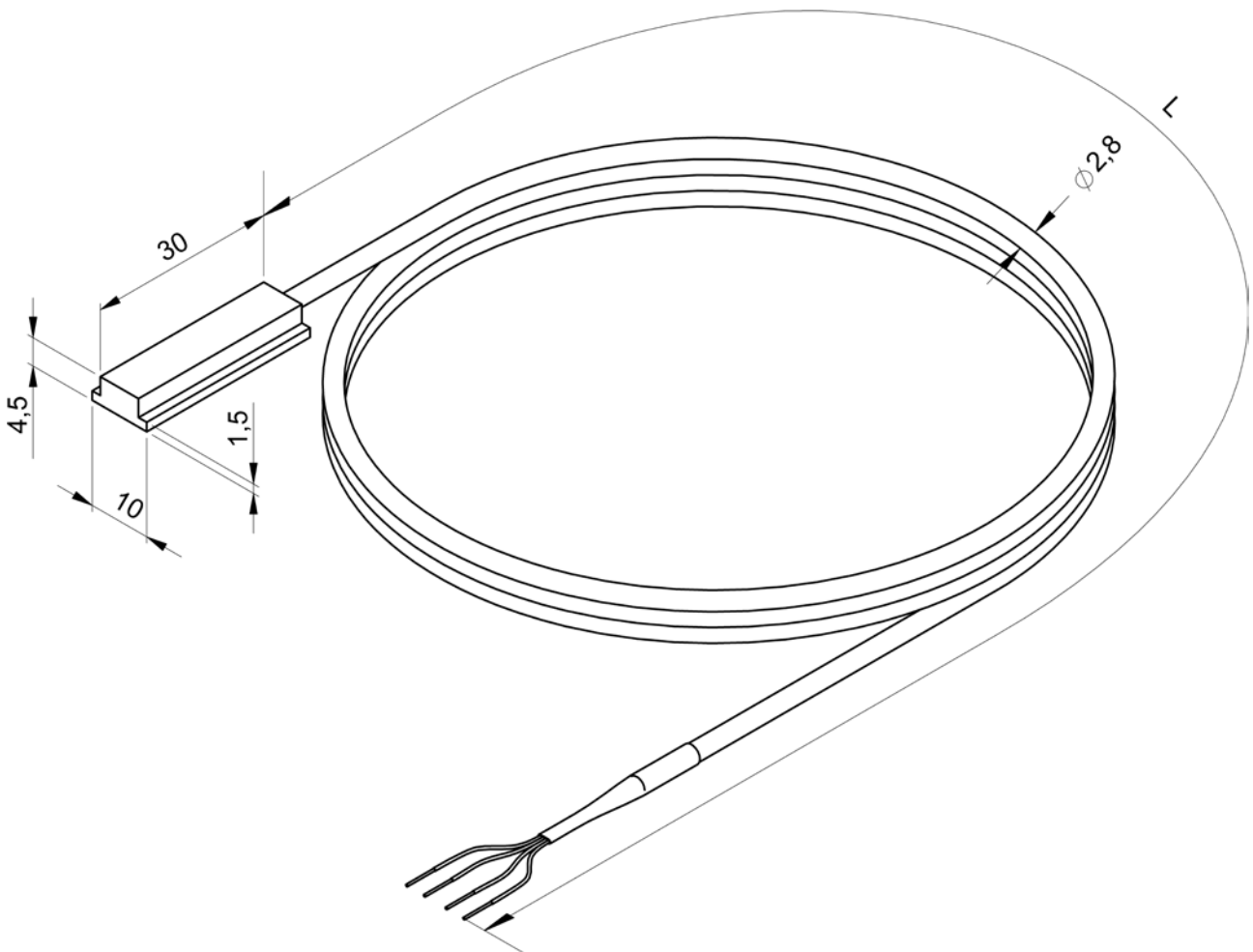
DESCRIPTION

Pt100 sensor, Class A, 4 wires, as per IEC 60751, on Dural plate, output via PTFE cable, for temperature measurement up to 200°C. Fastening by gluing or with clamping screw.

SPECIFICATIONS

Model	SS3	
Compliance with standards	IEC 60751	
Type	Pt100 Ω	
Material	Dural plate, 30x10x4.5mm (Lxwxh)	
Class	A	
Mounting / Construction	1x4 wires	
Max. surface temp. (°C) (without flow) (theoretical)	200°C	
Output	Sheath	PTFE
	Diameter (mm)	2.8 mm
	Max. temperature	200°C
	Conductors	4 x 0.22 mm ² , copper
	Length L (mm)	1,000 / 2,000 / 5,000 mm
	Termination	Insulated bare wires
Fastening	By gluing on surface or with clamping screw.	

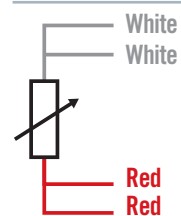
DIAGRAM



REFERENCES

Cable length L (mm)	Reference
1000	P07604123
2000	P07604124
5000	P07604125

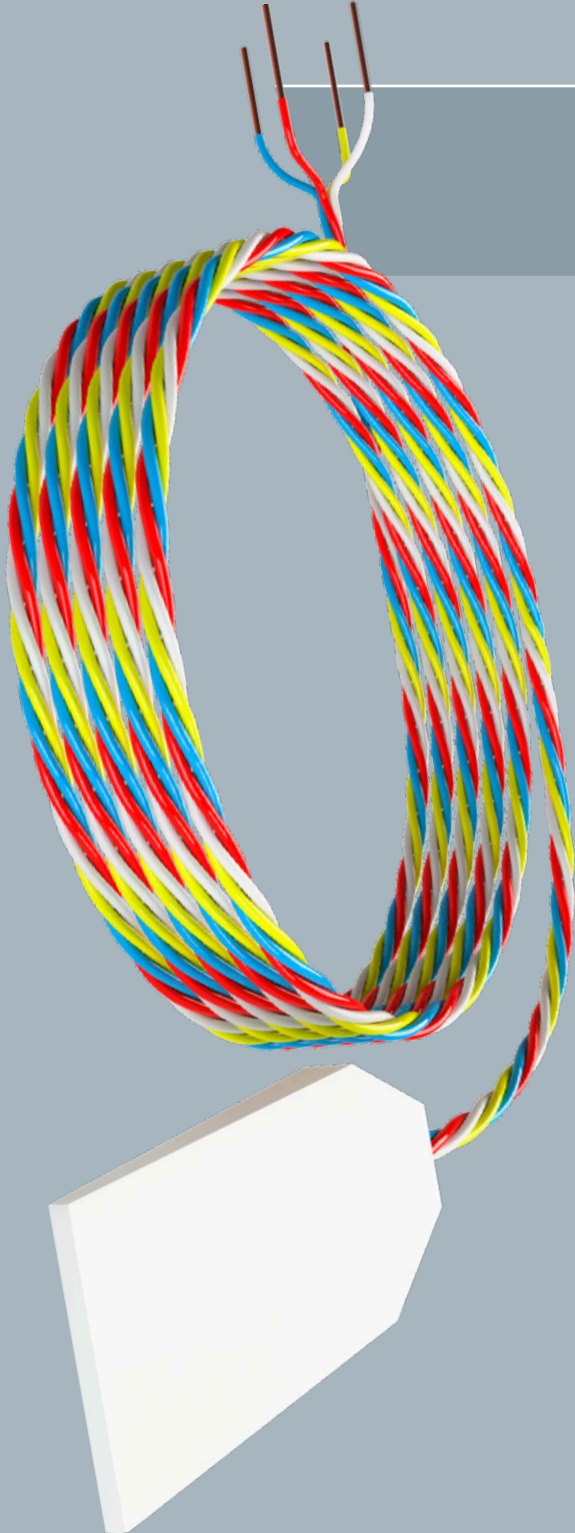
CONNECTION



For any other configuration, please contact us.

SS4

Pt100



**CLASS
B**

**IEC
60751**



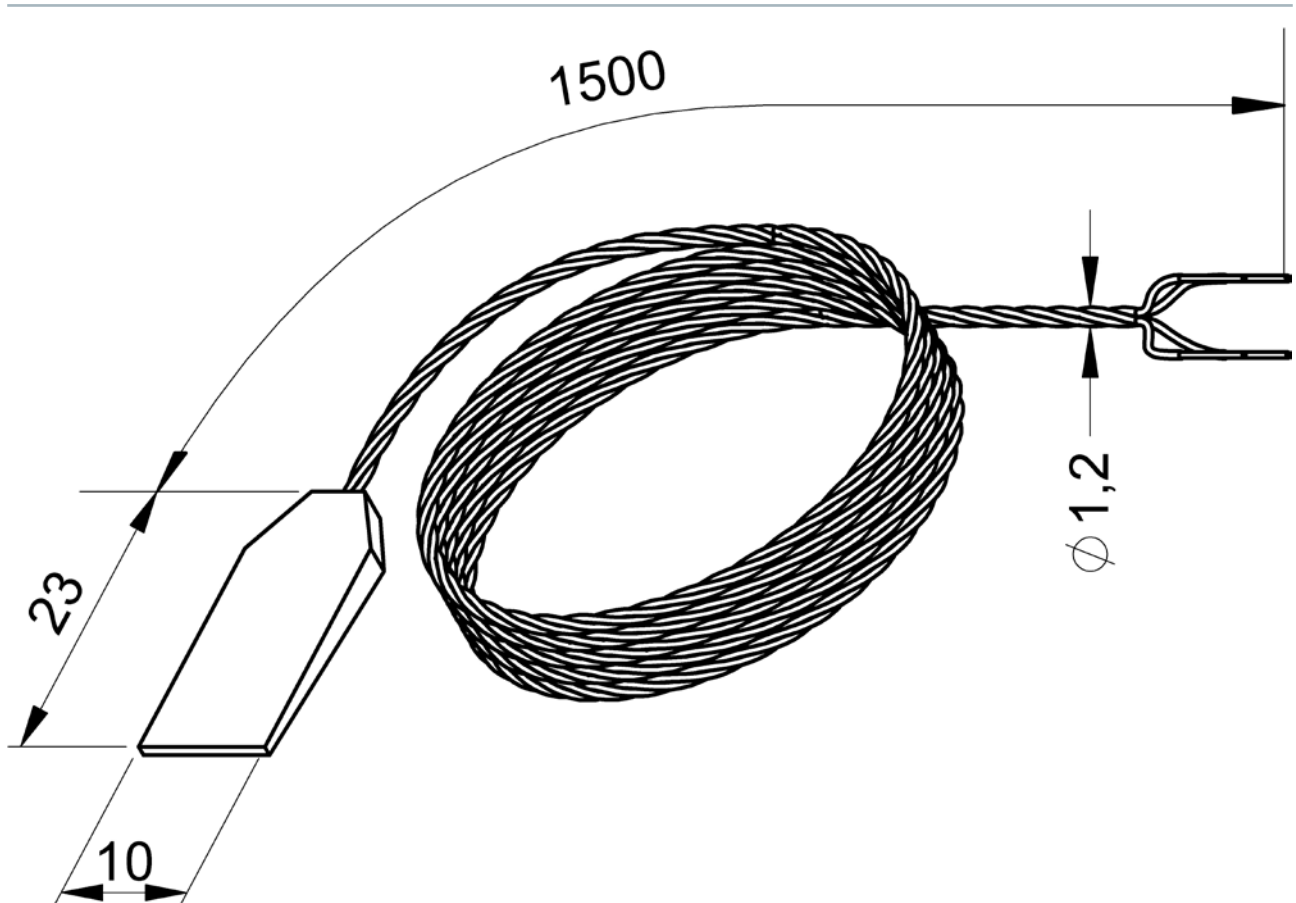
DESCRIPTION

Flat, flexible Pt100 sensor, class B, 4 wires, as per IEC 60751, fastening by gluing.

SPECIFICATIONS

Model	SS4	
Compliance with standards	IEC 60751	
Type	Pt100 Ω	
Material	Silicone elastomer coating, 23x10mm (Lxw)	
Class	B	
Mounting / Construction	1x4 wires	
Max. surface temp. (°C) (without flow) (theoretical)	-70° to +200°C	
Output	Sheath	PTFE / conductor
	Max. temperature	200°C
	Conductors	4 x 0.055 mm ² , silver-plated copper
	Length L (mm)	1,500 mm
	Termination	Insulated bare wires
Fastening	By gluing	

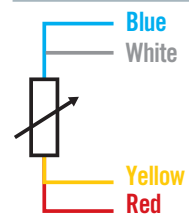
DIAGRAM



REFERENCE

Cable length (mm)	Reference
1500	LOG1822-000

CONNECTION

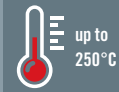


SS5

Pt100

CLASS
B

IEC
60751



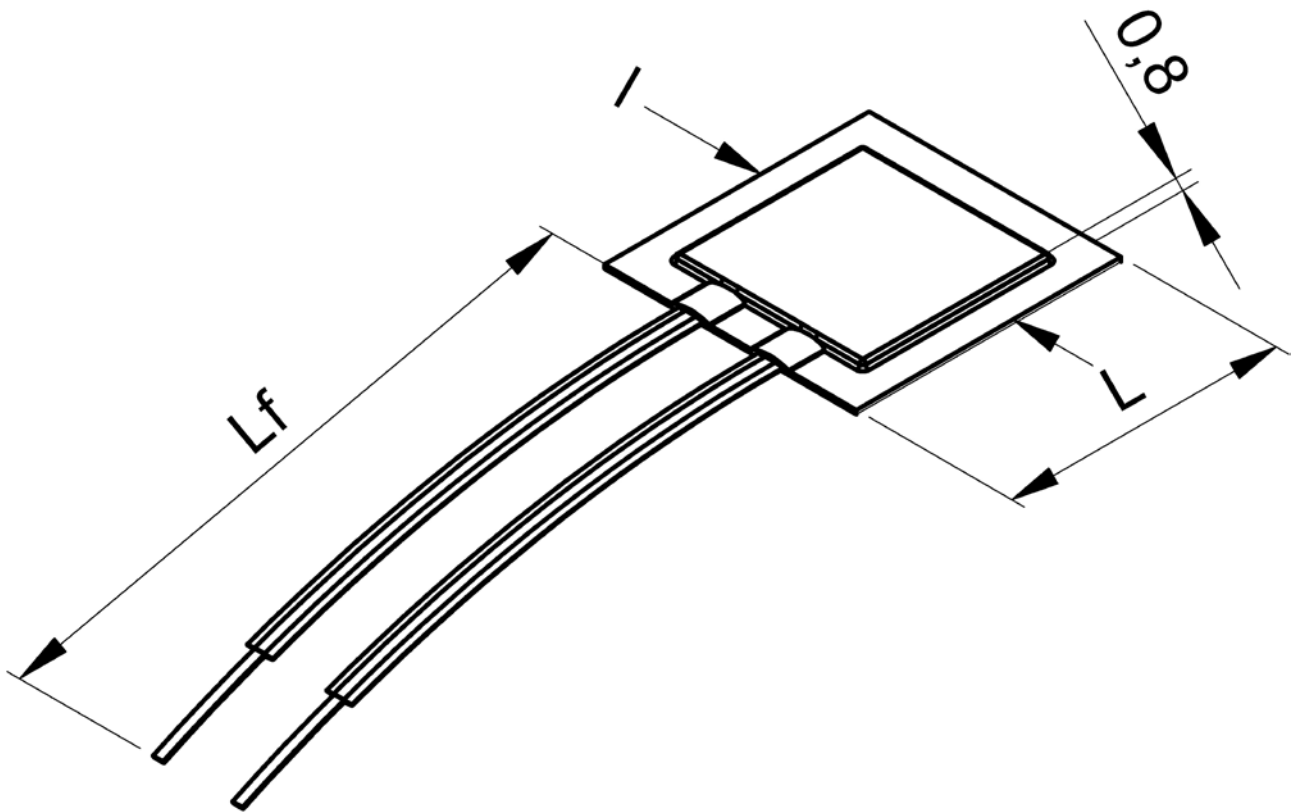
DESCRIPTION

Flat, flexible Pt100 sensor, class B, 2 wires, as per IEC 60751, fastening by gluing.

SPECIFICATIONS

Model	SS5
Compliance with standards	IEC 60751
Type	Pt100 Ω
Material	Glued glass silk coating
Class	B
Mounting / Construction	1x2 wires
Max. surface temp. (°C) (without flow) (theoretical)	-80° to +250°
Output	Silver wire
Fastening	By gluing
Accessories	TBD

DIAGRAM



REFERENCES

Dimensions (Lxwxh)	Length Lf (mm)	Reference
20x20x0.8 mm	40 mm	L061300-000
10x12x0.8 mm	20 mm	L062300-000

For any other configuration, please contact us.



SS6

Pt100

CLASS
A

IEC
60751



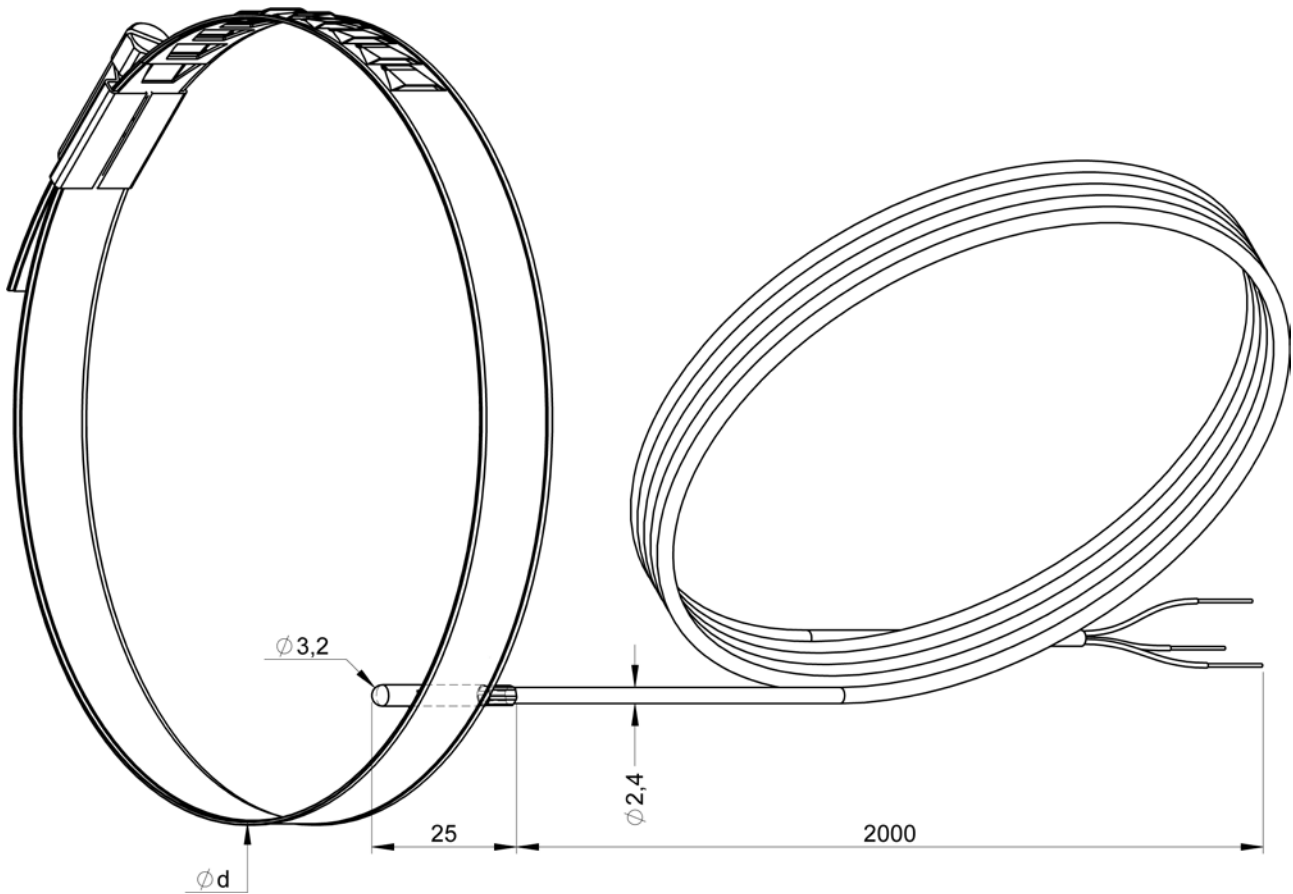
DESCRIPTION

Pt100 sensor, Class A, 3 wires, as per IEC 60751, in stainless-steel 316L sheath, output via PFA cable 2 metres long, for temperature measurement up to 250°C. Fastening on pipe with Serflex clip (supplied).

SPECIFICATIONS

Model	SS6	
Compliance with standards	IEC 60751	
Type	Pt100 Ω	
Material	Stainless-steel 316L tube, diam.3.2 x 25 mm	
Class	A	
Mounting / Construction	1x3 wires	
Max. surface temp. (°C) (without flow) (theoretical)	250°C	
Output	Sheath	PFA
	Diameter (mm)	2.4 mm
	Max. temperature	200°C
	Conductors	3 x 0.05 mm ² , copper
	Length L (mm)	2,000 mm
	Termination	Insulated bare wires
Fastening	By stainless-steel Serflex clip	

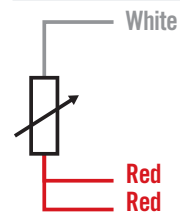
DIAGRAM



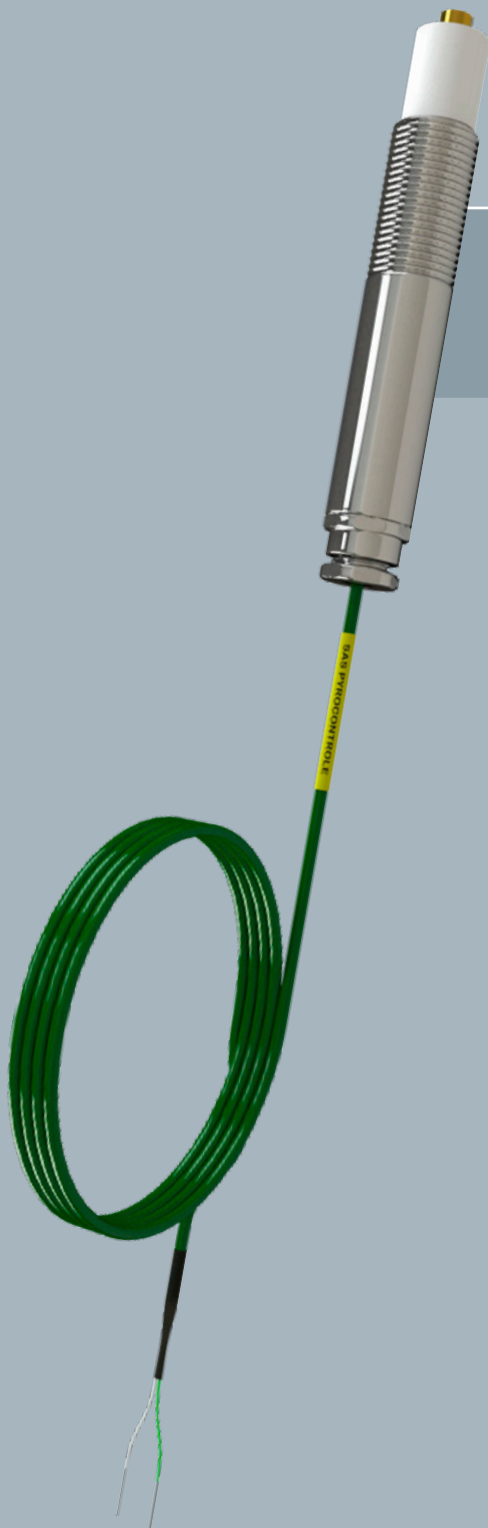
REFERENCES

Pipe diam. (mm)	Reference
10 < d < 15	L918515-001
16 < d < 22	L918515-002
20 < d < 26	L918515-003
26 < d < 34	L918515-004
34 < d < 50	L918515-005
49 < d < 65	L918515-006
64 < d < 80	L918515-007
79 < d < 95	L918515-008

CONNECTION



For any other configuration, please contact us.



TS2

THERMOCOUPLE

CLASS
1

IEC
584-1

NF EN
60584-1

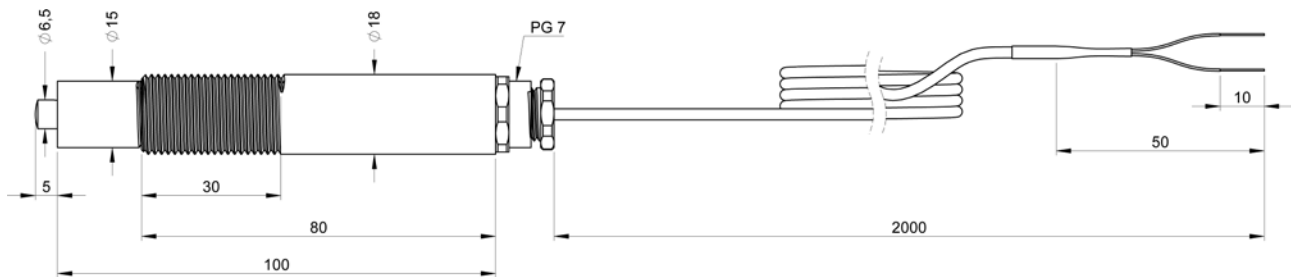


DESCRIPTION

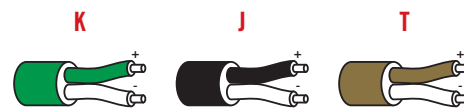
J, K or T thermocouple under brass end-piece and Teflon coating for measurement of moving surface temperatures up to 250°C and a max. linear speed of 5 m/s.

SPECIFICATIONST

Model	TS2		
Compliance with standards	IEC 584-1 / NF EN 60584-1		
Type	J	K	T
Class	1		
Mounting	Brass end-piece diam.7 mm with compression spring (max. travel 5mm) + Teflon coating diam.15 mm. Anti-rotation locking of sensing element.		
Hot junction	Insulated		
Max. surface temp. (°C) (without flow, theoretical)	250°C		
Process connection	Dural extension, diam. 18 mm, length 70 mm.		
Output	Type of cable	Extension	
	Cable sheath	PVC, diam.5 mm	
	Max. temperature	105°C	
	Conductors	2 x 0.2 mm ² , PVC insulation	
	Length Lc (mm)	2,000 mm	

DIAGRAM**REFERENCES**

Thermocouple	Reference
J	P07602313
K	P07602567
T	P07602203

CONNECTION

For any other configuration, please contact us.



TS3

THERMOCOUPLE

CLASS
1

IEC
584-1

NF EN
60584-1



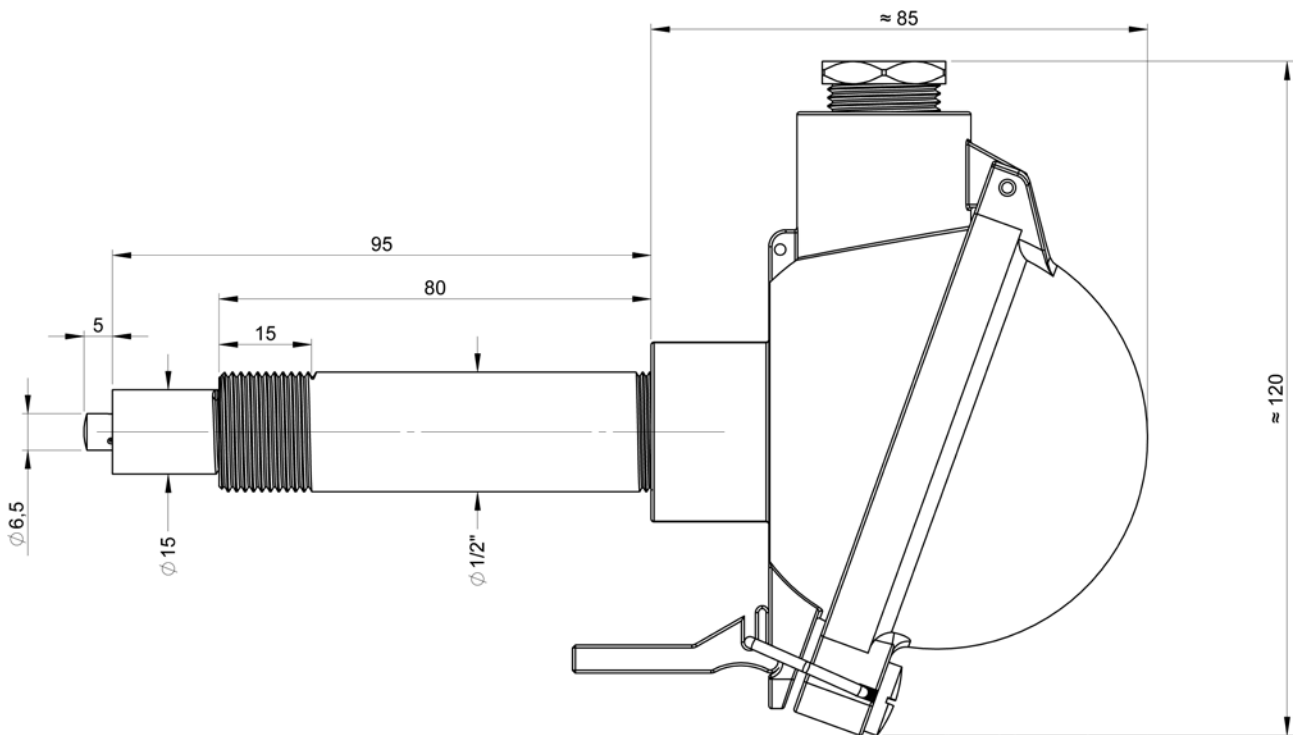
DESCRIPTION

J, K or T thermocouple under brass end-piece with Teflon coating for measurement of moving surface temperatures up to 250°C and a max. linear speed of 5 m/s.

SPECIFICATIONS

Model	TS3		
Compliance with standards	IEC 584-1 / NF EN 60584-1		
Type	J	K	T
Class	1		
Mounting	Brass end-piece, diam. 6.5 mm with compression spring (max. travel 5mm) + Teflon coating diam. 15 mm. Anti-rotation locking of sensing element.		
Hot junction	Insulated		
Max. surface temp. (°C) (without flow, theoretical)	250°C		
Process connection	Dural extension, diam. 21.3 mm, length 80 mm, 1/2"G thread		
Electrical connection	Head type	DAN	
	Material	Light alloy	
	Output	1 cable gland M 20 x 1.5	
	Cable diam.	5.5 mm to 7.5 mm	
	Equipment	Ceramic terminal strip	
	IP	IP54	

DIAGRAM



REFERENCES

Thermocouple	Reference
J	P07602311
K	P07602565
T	P07602201

CONNECTION



For any other configuration, please contact us.

TS1

THERMOCOUPLE

ATEX

NF EN
60584-1

IEC
584-1



DESCRIPTION

Designed to withstand severe environments, this sensor can be used for accurate measurement of the surface temperature of pipes and thereby deduce the temperature of the fluid flowing in it. This non-intrusive contact temperature sensor is equipped with exclusive technology allowing the sensor's sensing element to be changed without unsoldering the blade-shaped support.

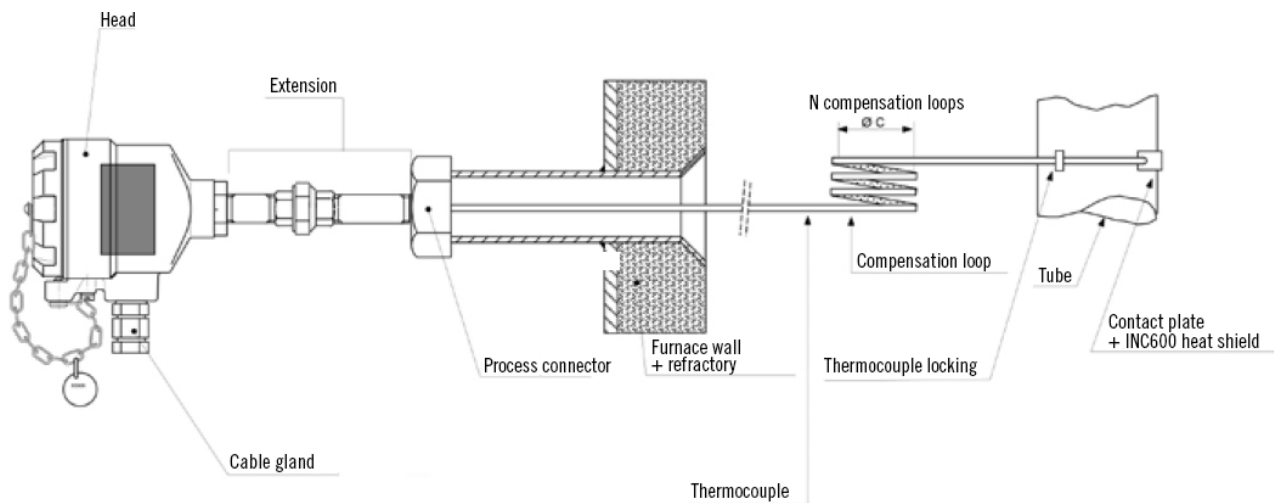
SPECIFICATIONS

Model	TS1	
Compliance with standards	IEC 584-1 / NF EN 60584-1	
Measurement	By contact	
Operating temperature	Up to 1,150°C	
Interchangeable measuring element	Sensor type	Type-K thermocouple
	Sheath metal	Inconel 600
	Protective sheath	Ceramic thimble
	Electrical connection	Transmitter 4/20 mA, Hart®
Connecting head	Head	LSX ADF, made of light alloy and epoxy
	Certification	Complies with ATEX, safety d
	Cable gland	ADF ¼ NPT
Extension	Sleeve	Type M, stainless steel 316L and union joint
	Cable gland	ADF ¼ NPT
Set-up on tube	Protection of sensing element	Contact plate + heat shield
	Locking of sensing element	Hasp - Cable guide

FURNACE AND BOILER APPLICATIONS

For furnaces and boilers requiring this type of sensor, we propose removable systems: the thermocouple is not welded to the contact plate to avoid damaging it when the plate is welded to the surface to be measured. The sensors may be ATEX-compliant, so that they can be used directly in gas furnaces, and are equipped with an insulating protective cover to protect the thermocouple from direct flames and insulate it from the ambient temperature to avoid disturbing the surface measurement. Lastly, we can provide compensation loops to prevent breakage of the sensor when the temperature in the furnace is raised: during heating, the compensation loop expands and the expansion pieces are there to avoid the mechanical stresses linked to this procedure. Our teams of experts are at your disposal to help you design your sensor so that it meets your needs.

SCHEMATIC DIAGRAM



OTHER VERSIONS

Depending on the application, we offer a range of combinations adapted to your requirements, covering the type of measuring element (Type J or N thermocouple), single or duplex mounting, the sheath material (316L, Pyrosil, etc.), the connecting head, etc.

Our R&D team can also develop tailored temperature sensors to match your specifications.

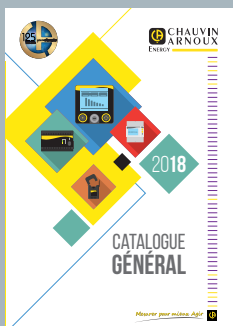
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