



G1/2"

G1/2"

85

≈ 75

≈ 82

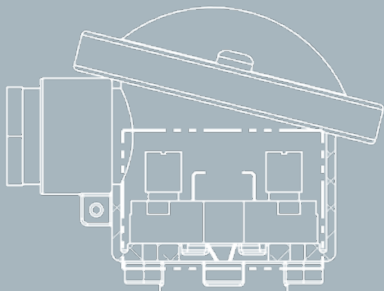
∅ 6

33

∅ 44

SENSORS CATALOGUE

TEMPERATURE MEASUREMENT IN INDUSTRIAL ENVIRONMENTS



∅ 1/2"

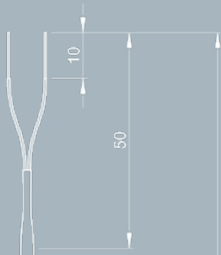
1/2

≈ 35

L3

L2

R45 ≥ ∅ 1/2"
R60 ≥ ∅ 3/4"



10

50

2000

PG7

∅ 18

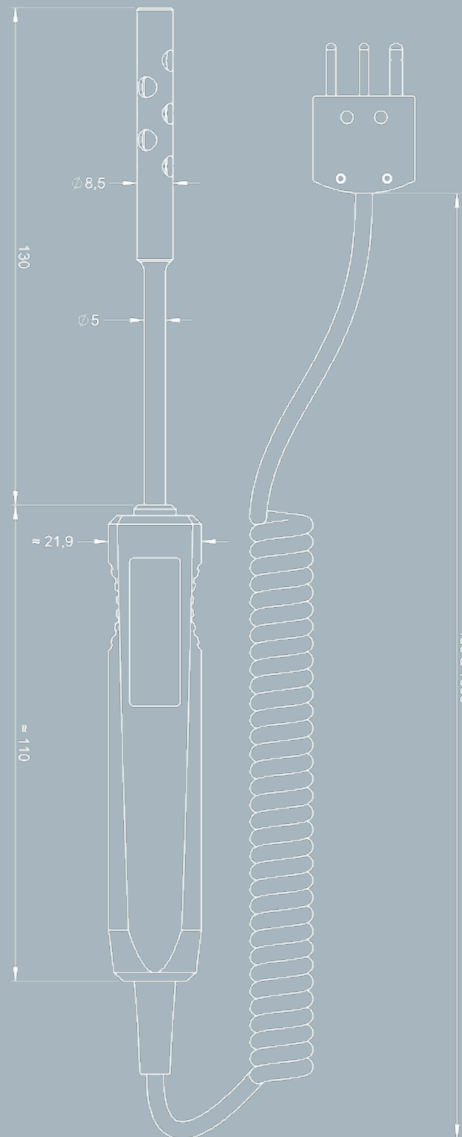
80

100

∅ 15

∅ 6,5

5



∅ 8,5

∅ 5

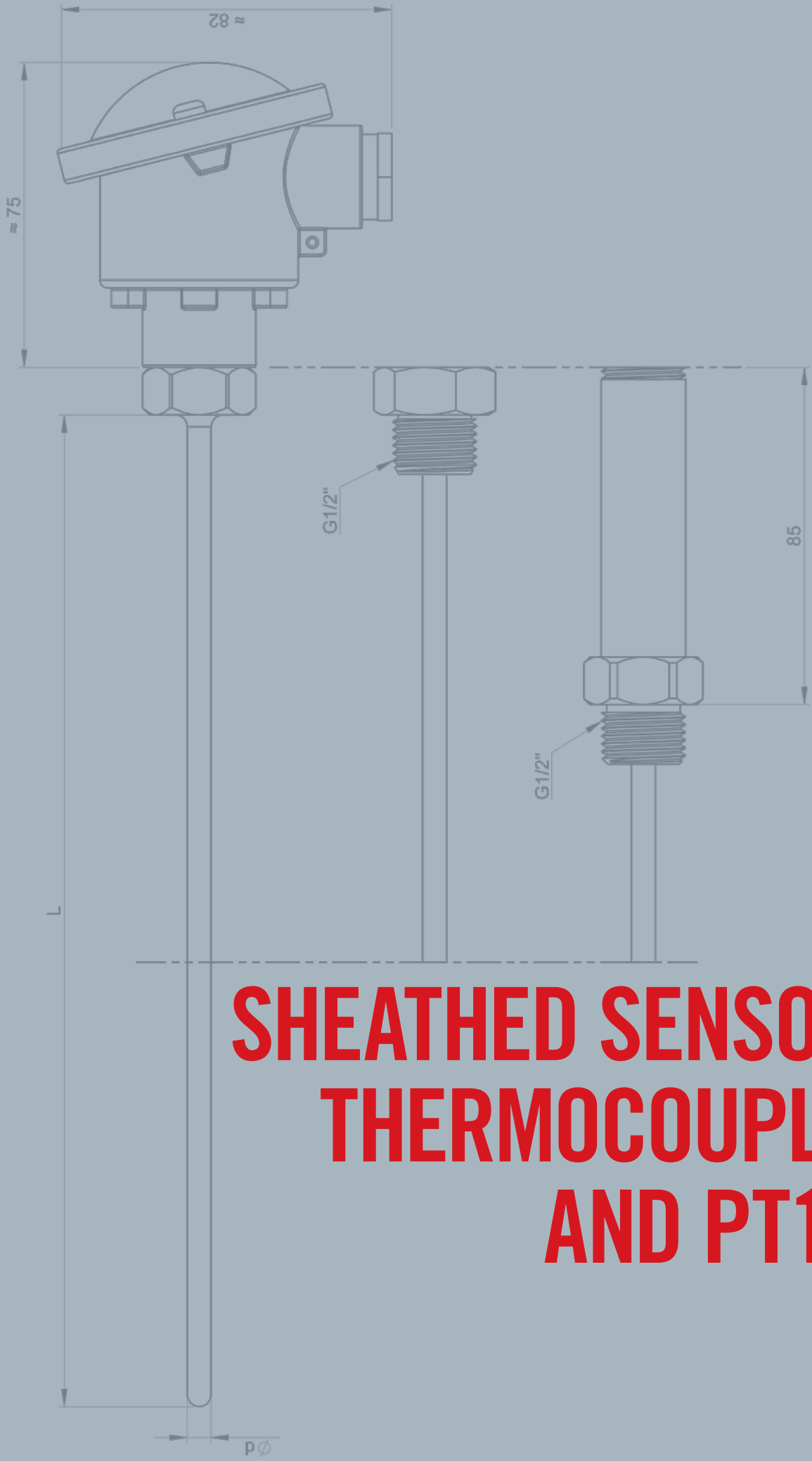
130

≈ 21,9

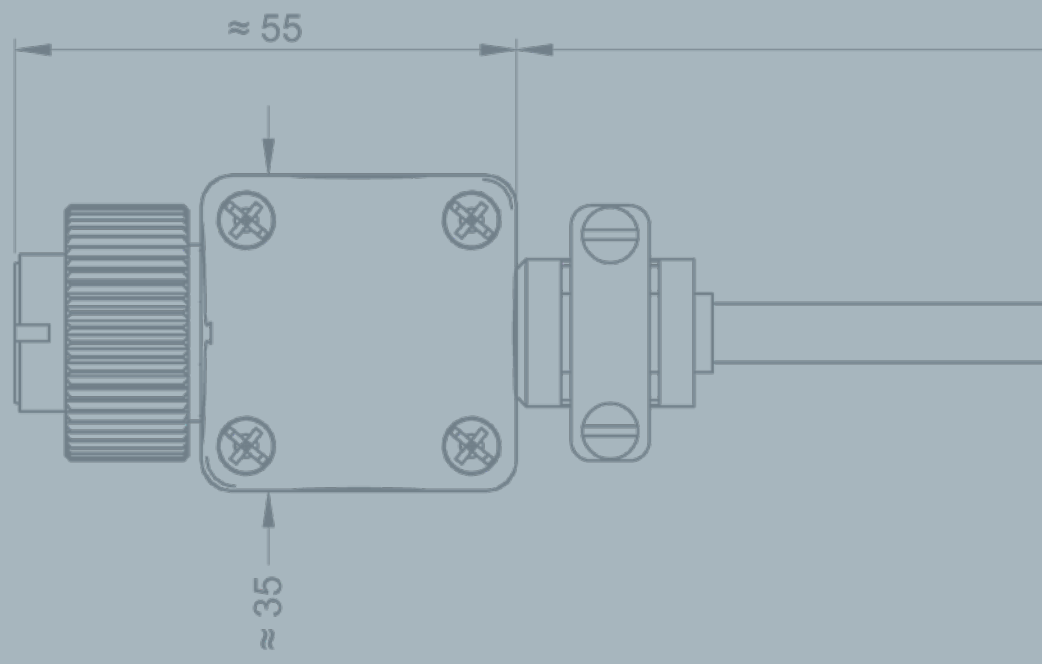
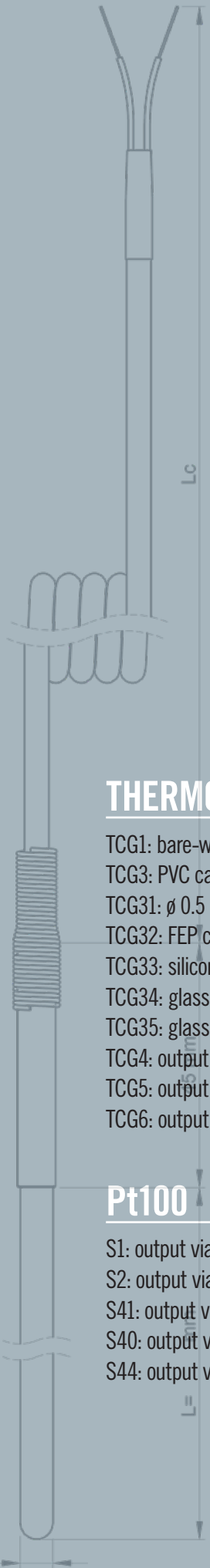
≈ 110

450 à 1000





SHEATHED SENSORS THERMOCOUPLES AND PT100



THERMOCOUPLES

32

TCG1: bare-wire and insulated output.	32	TCG46: output via standard connector - "eco" range.	52
TCG3: PVC cable, withstand 105°C.	34	TCG11: output via miniature connector.	54
TCG31: \varnothing 0.5 mm - FEP wires, withstand 205°C.	36	TCG45: output via miniature connector - "eco" range.	56
TCG32: FEP cable, withstand 205°C.	38	TCG51: MA head output.	58
TCG33: silicone cable, withstand 250°C.	40	TCGx2: DAN head output.	60
TCG34: glass silk cable, withstand 350°C.	42	TCGx3: DIN B head output.	62
TCG35: glass silk cable, withstand 250°C.	44	TA: undemanding industrial applications.	64
TCG4: output via JAEGER connector.	46	TB: demanding industrial applications.	66
TCG5: output via LEMO connector.	48	TMA: abrasive environments.	68
TCG6: output via standard connector.	50	SKxx: for portable thermometers.	70

Pt100

72

S1: output via cable, temperature up to 450°C.	72	S43: output via miniature 3-pin connector.	82
S2: output via cable, temperature up to 200°C.	74	S51: MA head output.	84
S41: output via JAEGER connector.	76	Sx2: DAN head output.	86
S40: output via LEMO connector.	78	Sx3: DIN B head output.	88
S44: output via standard 3-pin connector.	80	SPxx: for portable thermometers.	90

TCG1

THERMOCOUPLE

CLASS
1
IEC
584-1


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time.

Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG1					
Compliance with standards	IEC 584-1 / EN 61515					
Type	K	J	T	N		
Material	Inconel600	316L	316L (single) / 304L (Duplex)	Inconel 600	Pyrosil	
Class	1		2		1	
Diameter (d) (mm)	0,5 / 1 / 1,5 / 2 / 3 / 4,5 / 6 / 8					
Hot junction	Insulated/Earthed					
Thermocouple	Simple / Duplex			Simple		
Length L Min/ Max (mm)	ø 0.5 mm	100 to 2 500mm				
	ø 1 to 2 mm	100 to 36 000 mm				
	ø > 2 mm	100 to 30 000 mm				
Max. temp. in air (°C) (without air flow) (theoretical)	ø 0.5 mm	600°C	250°C	250°C	600°C	650°C
	ø 1 -1.5 mm	650°C	260°C	260°C	650°C	700°C
	ø 2 mm	700°C	440°C	260°C	700°C	900°C
	ø 3 mm	750°C	520°C	315°C	750°C	1000°C
	ø 4.5 mm	800°C	620°C	350°C	800°C	1100°C
	ø 6 mm	1000°C	720°C	350°C	1000°C	1100°C
	ø 8 mm	1100°C	720°C	350°C	1100°C	1150°C
Output	Insulated bare wires					
Lf (wire length) (mm)	15mm if d≤2mm; 15 to 50mm if d≥3mm (standard: 40mm)					
Accessories	Leak-tight fittings, rotating fittings					

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	∅ SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH LF (mm)
TCG1	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5
Possible choice	1T / 1J 1K / 1N 2T / 2J 2K	304L: AB 316L: AC INCONEL 600: CM PYROSIL: DB	0.5 / 1 1.5 / 2 3 / 4.5 6 / 8	L for diam 0.5: 100 to 2,500 mm L for diam 1-1.5-2: 100 to 36,000 mm L for diam 3 - 4.5 - 6 - 8: 100 to 30,000 mm	Insulated: I Earthed: M	15mm if d ≤ 2mm 15 to 50mm if d ≥ 3mm

DIAGRAM

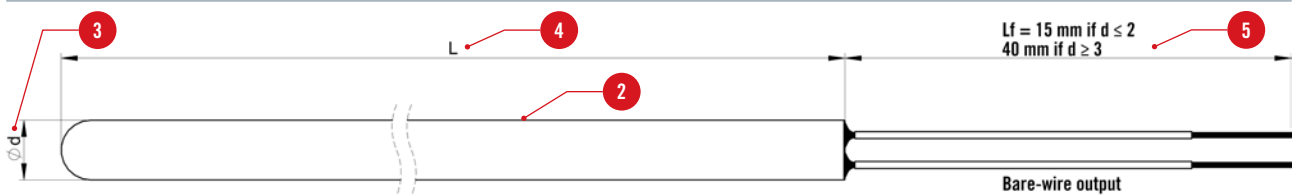
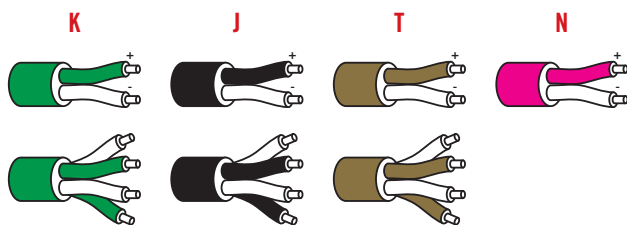


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)							
	0.5	1	1.5	2	3	4.5	6	8
T (Class2)	316L	316L	316L	316L	316L	316L	316L	316L
J	316L	316L	316L	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	-
	-	-	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL
2T (Class 2)	-	-	-	304L	-	304L	304L	-
2J	-	-	316L	316L	316L	316L	316L	316L
2K	-	-	-	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS



For any other configuration, please contact us.

TCG3

THERMOCOUPLE

CLASS
1
IEC
584-1
CÂBLE
PVC


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Equipped with a cable for easy connection even over long distances. The cable must be chosen according to the ambient temperature and the environment in which it is used. Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model		TCG3				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel600	316L	316L (single) / 304L (Duplex)	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		1 / 1.5 / 2 / 3 / 4.5 / 6 / 8				
Hot junction		Insulated/Earthed				
Thermocouple		Simple / Duplex			Simple	
Length L Min/ Max (mm)	ø 1 to 2 mm	100 to 36,000 mm				
	ø > 2 mm	100 to 30,000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	ø 1 -1.5 mm	650°C	260°C	260°C	650°C	700°C
	ø 2 mm	700°C	440°C	260°C	700°C	900°C
	ø 3 mm	750°C	520°C	315°C	750°C	1000°C
	ø 4.5 mm	800°C	620°C	350°C	800°C	1100°C
	ø 6 mm	1000°C	720°C	350°C	1000°C	1100°C
	ø 8 mm	1100°C	720°C	350°C	1100°C	1150°C
Output	Type of cable	Extension				
	Cable sheath	PVC				
	Max. temperature	105°C				
	Conductors	2x0.22 mm ² , insulated PVC				
	Braid	Internal, copper, not connected to sensor sheath				
	Length Lc Min/ Max (mm)	200 to 10,000 mm				
Accessories		Leak-tight fittings, rotating fittings				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH Lc (mm)	CONNECTION	PROTECTIVE SPRING
TCG3	-	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5	6	7
Possible choice	1T / 1J 1K / 1N 2J / 2K	304L: AB 316L: AC INCONEL 600: CM PYROSIL: DB	1 / 1.5 2 / 3 4.5 / 6 8	Diam 1-1.5-2: 100 to 36,000 Diam 3 - 4.5 - 6 - 8: 100 to 30,000	Insulated: I (standard) Earthed: M	Lc: 200 to 10,000 mm (standard: 2,000 mm)	Bare wires: FN (standard) Standard male connector: SM Standard female connector: SF Miniature male connector: MM Miniature female connector: MF	Without: 0 With: 1 (standard)

DIAGRAM

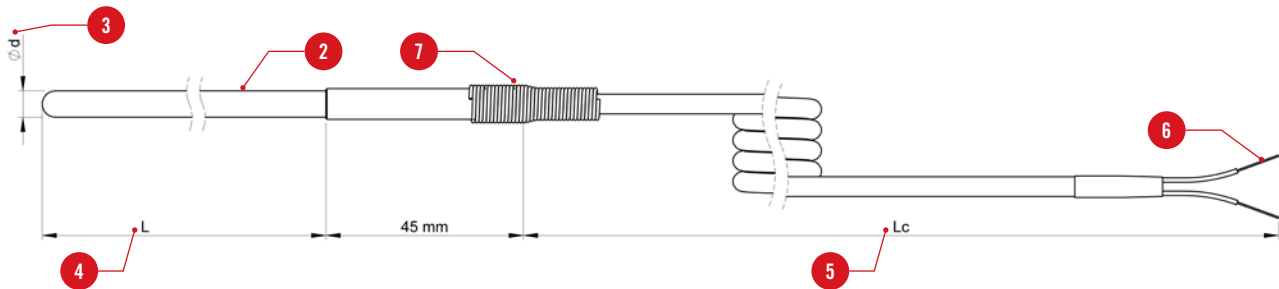
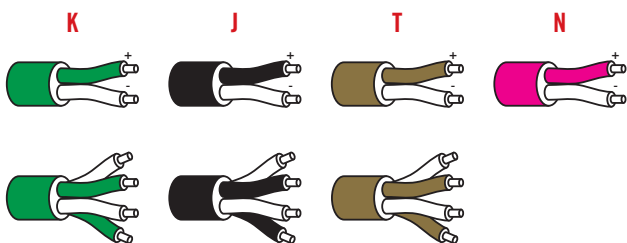


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)							3
	1	1.5	2	3	4.5	6	8	
T (class 2)	316L	316L	316L	316L	316L	316L	316L	
J	316L	316L	316L	316L	316L	316L	316L	
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	
N	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	
	-	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL	2
2T (Class 2)	-	-	304L	-	304L	304L	-	
2J	-	316L	316L	316L	316L	316L	316L	
2K	-	-	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	

CONNECTIONS



For any other configuration, please contact us.

TCG31

THERMOCOUPLE

CLASS
1
IEC
584-1
DIAMETER
0,5 MM
FEP
SHEATHED
WIRES


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Equipped with a cable for easy connection even over long distances. The cable has been chosen to withstand most industrial environments.

Thermocouples must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG31		
Compliance with standards	IEC 584-1 / EN 61515		
Type	K	J	T
Material	Inconel600	316L	316L
Class	1		2
Diameter (d) (mm)	0.5		
Hot junction	Insulated/Earthed		
Thermocouple	Single		
Length L Min/Max (mm)	100 to 2,500mm		
Max. temp. (°C) of air in sensor sheath (without air flow) (theoretical)	600°C	250°C	250°C
Output	Type of cable	extension	
	Cable sheath	FEP	
	Max. temperature	205°C	
	Conductors	2x0.5 mm ² , twisted, flexible.	
	Length Lc Min/Max (mm)	200 to 10,000 mm	
Accessories	Leak-tight fittings, rotating fittings		

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH LC (mm)	CONNECTION
TCG31	-	-	0,5	-	-	-	-
Reference in table and diagram	1	2		3		4	5
Possible choice	1J / 1K IT	316L : AC INCONEL 600 : CM	0,5	100 to 2,500	Insulated: I (standard) Earthed: M	Lc: 200 to 10,000 mm (standard: 2,000 mm)	Bare wires: FN (standard) Standard male connector: SM Standard female connector: SF Miniature male connector: MM Miniature female connector: MF

DIAGRAM

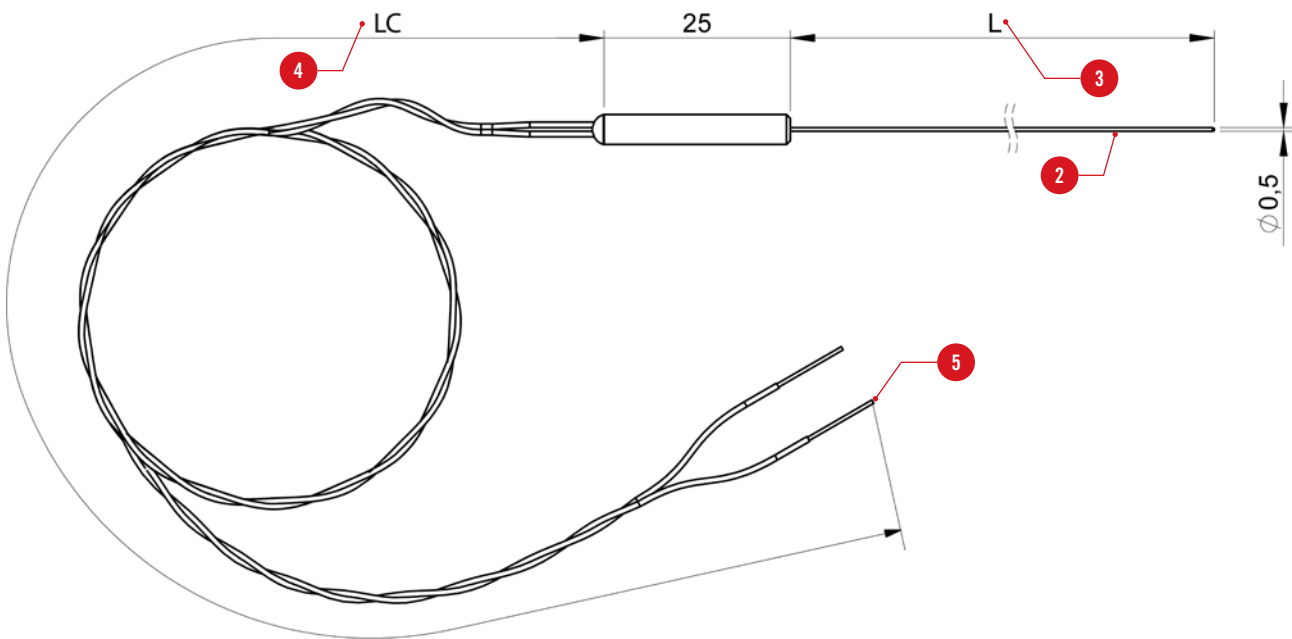
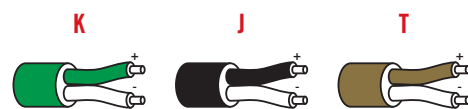


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

1	Sheath diameter (mm)
TC Class 1	0.5
T (Class2)	316L
J	316L
K	INCONEL600

CONNECTIONS



For any other configuration, please contact us.



TCG32

THERMOCOUPLE

CLASS
1

IEC
584-1

FEP
CABLE



DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Equipped with a cable for easy connection even over long distances. The cable must be chosen according to the ambient temperature and the environment in which it is used. The FEP cable withstands chemical agents well and can be used in aggressive environments.

Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model		TCG32	
Compliance with standards		IEC 584-1 / EN 61515	
Type		K	J
Material		Inconel600	316L
Class		1	
Diameter (d) (mm)		1 / 1.5 / 2 / 3 / 4.5 / 6 / 8	
Hot junction		Insulated/Earthed	
Thermocouple		Single	
Length L Min/Max (mm)	∅ 1 to 2 mm	100 to 36,000 mm	
	∅ > 2 mm	100 to 30,000 mm	
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	∅ 1 -1.5 mm	650°C	260°C
	∅ 2 mm	700°C	440°C
	∅ 3 mm	750°C	520°C
	∅ 4.5 mm	800°C	620°C
	∅ 6 mm	1000°C	720°C
	∅ 8 mm	1100°C	720°C
Output	Type of cable	Extension	
	Cable sheath	FEP	
	Max. temperature	205°C	
	Conductors	2x0.22 mm ² , FEP insulation	
	Braid	Internal, copper, not connected to sensor sheath	
	Length Lc Min/Max (mm)	200 mm to 10,000mm	
Accessories		Leak-tight fittings, rotating fittings	

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH LC (mm)	CONNECTION	PROTECTIVE SPRING
TCG32	-	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5	6	7
Possible choice	1J / 1K	316L : AC INCONEL 600 : CM	1 / 1.5 2 / 3 4.5 / 6 8	Diam 1-1.5-2: 100 to 36,000 Diam 3 - 4.5 - 6 - 8: 100 to 30,000	Insulated: I (standard) Earthed: M	Lc: 200 to 10,000 mm (standard: 2,000 mm)	Bare wires: FN (standard) Standard male connector: SM Standard female connector: SF Miniature male connector: MM Miniature female connector: MF	Without: 0 With: 1 (standard)

DIAGRAM

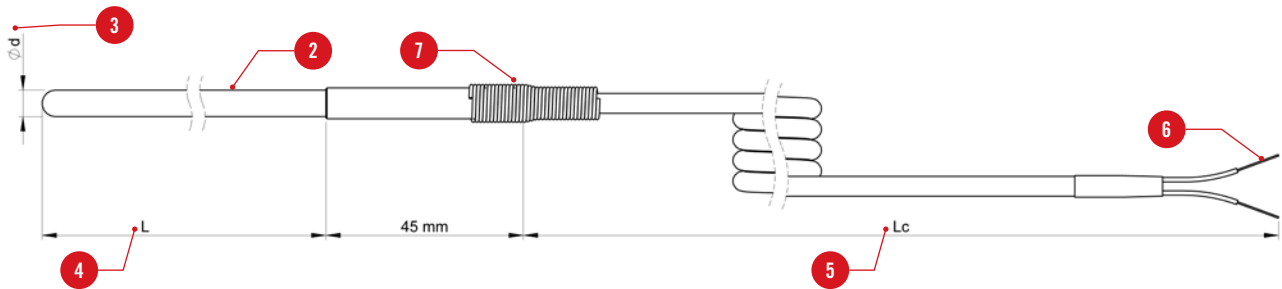
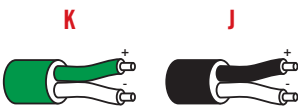


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)						
	1	1.5	2	3	4.5	6	8
J	316L	316L	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS



For any other configuration, please contact us.



TCG33

THERMOCOUPLE

CLASS
1

IEC
584-1

SILICONE
CABLE



DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Equipped with a cable for easy connection even over long distances. The cable must be chosen according to the ambient temperature and the environment in which it is used. Silicone cables are flexible and have a good temperature withstand for use in environments where the ambient temperature is high. Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG33		
Compliance with standards	IEC 584-1 / EN 61515		
Type	K	J	
Material	Inconel600	316L	
Classe	1		
Diameter (d) (mm)	1 / 1.5 / 2 / 3 / 4.5 / 6 / 8		
Hot junction	Insulated/Earthed		
Thermocouple	Single		
Length L Min/ Max (mm)	∅ 1 to 2 mm	100 to 36,000 mm	
	∅ > 2 mm	100 to 30,000 mm	
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	∅ 1 -1.5 mm	650°C	260°C
	∅ 2 mm	700°C	440°C
	∅ 3 mm	750°C	520°C
	∅ 4.5 mm	800°C	620°C
	∅ 6 mm	1000°C	720°C
	∅ 8 mm	1100°C	720°C
Output	Type of cable	Extension	
	Cable sheath	Silicone	
	Max. temperature	250°C	
	Conductors	2 x 0.5 mm ² , glass silk insulation	
	Braid	Internal, copper, not linked to the sensor sheath	
	Length Lc Min/ Max (mm)	200 mm to 10,000 mm	
Accessories	Leak-tight fittings, rotating fittings		

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH LC (mm)	CONNECTION	PROTECTIVE SPRING
TCG33	-	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5	6	7
Possible choice	1J / 1K	316L : AC INCONEL 600 : CM	1 / 1.5 2 / 3 4.5 / 6 8	Diam 1-1.5-2: 100 to 36,000 mm Diam 3 - 4.5 - 6 - 8: 100 to 30,000 mm	Insulated: I (standard) Earthed: M	Lc: 200 to 10,000 mm (standard: 2,000 mm)	Bare wires: FN (standard) Standard male connector: SM Standard female connector: SF Miniature male connector: MM Miniature female connector: MF	Without: 0 With: 1 (standard)

DIAGRAM

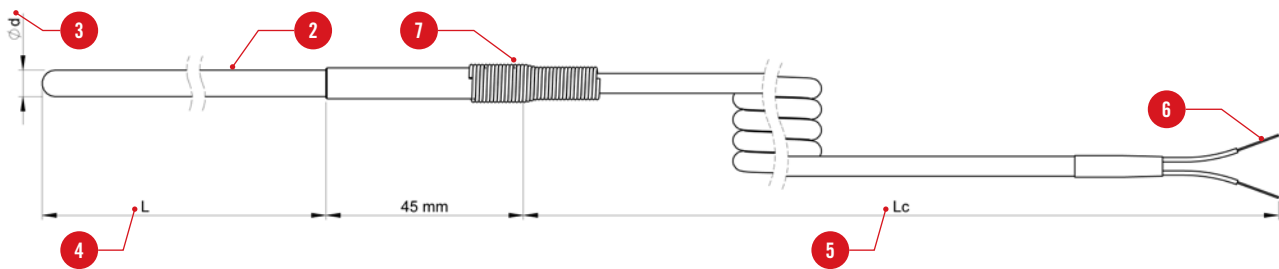
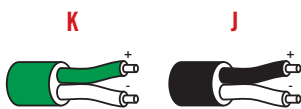


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)							3
	1	1.5	2	3	4.5	6	8	
J	316L	316L	316L	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS



For any other configuration, please contact us.

TCG34

THERMOCOUPLE

CLASS
1
IEC
584-1
GLASS
SILK
CABLE


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Equipped with a cable for easy connection even over long distances. The cable must be chosen according to the ambient temperature and the environment in which it is used. The glass silk cable is protected by a stainless-steel braid and has a high temperature withstand for use in environments where the ambient temperature and mechanical risks are high. Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG34		
Compliance with standards	IEC 584-1 / EN 61515		
Type	K	J	
Material	Inconel600	316L	
Class	1		
Diameter (d) (mm)	1 / 1.5 / 2 / 3 / 4.5 / 6 / 8		
Hot junction	Insulated/Earthed		
Thermocouple	Single / Duplex	Single	
Length L Min/Max (mm)	ø 1 to 2 mm	100 to 36,000 mm	
	ø > 2 mm	100 to 30,000 mm	
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	ø 1 -1.5 mm	650°C	260°C
	ø 2 mm	700°C	440°C
	ø 3 mm	750°C	520°C
	ø 4.5 mm	800°C	620°C
	ø 6 mm	1000°C	720°C
	ø 8 mm	1100°C	720°C
Output	Type of cable	Extension	
	Cable sheath	Glass silk	
	Max. temperature	350°C	
	Conductors	2 x 0.5 mm ² , insulated with glass silk	
	Braid	Internal, glass silk	
	Length Lc Min/Max (mm)	200 mm to 10,000mm	
Accessories	Leak-tight fittings, rotating fittings		

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH Lc (mm)	CONNECTION	PROTECTIVE SPRING
TCG34	-	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5	6	7
Possible choice	1J / 1K 2K	316L : AC INCONEL 600 : CM	1 / 1.5 2 / 3 4.5 / 6 8	Diam 1-1.5-2: 100 to 36000 Diam 3 - 4.5 - 6 - 8: 100 to 30000	Insulated: I (standard) Earthed: M	Lc: 200 to 10000 mm (standard: 2,000 mm)	Bare wires: FN (standard) Standard male connector: SM Standard female connector: SF Miniature male connector: MM Miniature female connector: MF	Without: 0 With: 1 (standard)

DIAGRAM

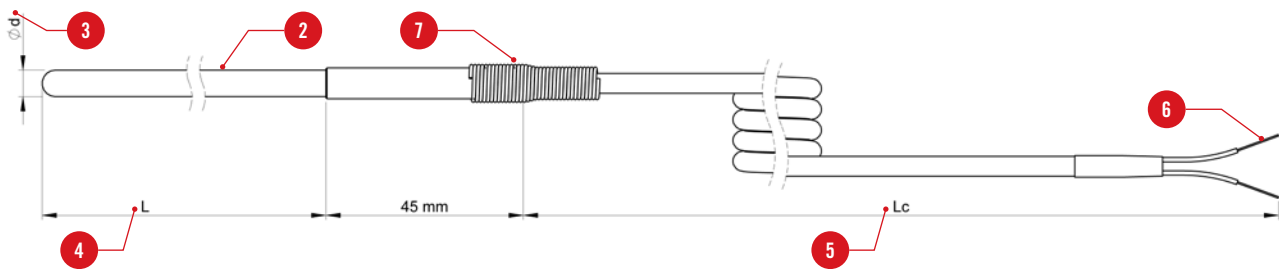
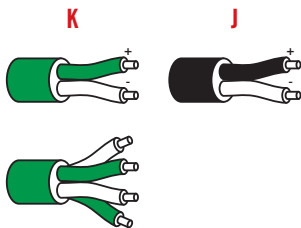


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)							3
	1	1.5	2	3	4.5	6	8	
J	316L	316L	316L	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
2K	-	-	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS



For any other configuration, please contact us.



TCG35

THERMOCOUPLE

CLASS
1

IEC
584-1

GLASS
SILK
CABLE



DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Equipped with a cable for easy connection even over long distances. The cable must be chosen according to the ambient temperature and the environment in which it is used. The glass silk cable is protected by a galvanized steel braid for better mechanical resistance and has a good temperature withstand for use in environments where the ambient temperature and mechanical risks are high. Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG35		
Compliance with standards	IEC 584-1 / EN 61515		
Type	K	J	
Material	Inconel 600	316L	
Class	1		
Diameter (d) (mm)	1 / 1.5 / 2 / 3 / 4.5 / 6 / 8		
Hot junction	Insulated/Earthed		
Thermocouple	Single		
Length L Min/Max (mm)	ø 1 to 2 mm	100 to 36,000 mm	
	ø > 2 mm	100 to 30,000 mm	
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	ø 1 -1.5mm	650°C	300°C
	ø 2 mm	700°C	300°C
	ø 3 mm	750°C	450°C
	ø 4.5mm	800°C	450°C
	ø 6 mm	1000°C	600°C
	ø 8 mm	1100°C	600°C
Output	Type of cable	Extension	
	Cable sheath	Glass silk	
	Max. temperature	250°C	
	Conductors	2 x 1.34 mm ² , insulated with glass silk	
	Braid	External: galvanized steel	
	Length Lc Min/Max (mm)	200 mm to 10,000 mm	
Accessories	Leak-tight fittings, rotating fittings		

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	LENGTH LC (mm)	CONNECTION	PROTECTIVE SPRING
TCG33	-	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5	6	7
Possible choice	1J / 1K	316L : AC INCONEL 600 : CM	1 / 1.5 2 / 3 4.5 / 6 8	Diam 1-1.5-2: 100 to 36000 Diam 3 - 4.5 - 6 - 8: 100 to 30000	Insulated: I (standard) Earthed: M	Lc: 200 to 10,000 mm (standard: 2,000 mm)	Bare wires: FN (standard) Standard male connector: SM Standard female connector: SF Miniature male connector: MM Miniature female connector: MF	Without: 0 With: 1 (standard)

DIAGRAM

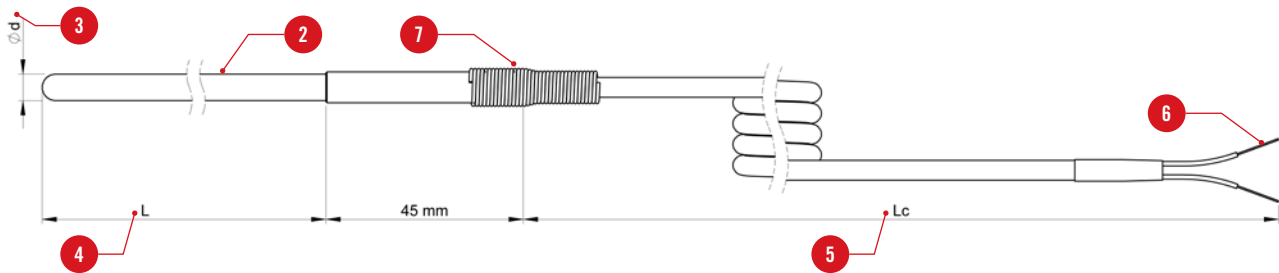


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)							3
	1	1.5	2	3	4.5	6	8	
J	316L	316L	316L	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS



For any other configuration, please contact us.

TCG4

THERMOCOUPLE

CLASS
1

IEC
584-1

JAEGER
CONNECTOR


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Output equipped with a Jaeger plug-in connector for quick connection.

Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG4					
Compliance with standards	IEC 584-1 / EN 61515					
Type	K	J	T	N		
Material	Inconel 600	316L	316L	Inconel 600	Pyrosil	
Class	1		2		1	
Diameter (d) (mm)	1 / 1.5/ 2 / 3 / 4.5/ 6					
Hot junction	Insulated/Earthed					
Thermocouple	Single / Duplex			Single		
Length L Min/Max (mm)	100 to 30,000 mm					
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	∅ 2 mm	700°C	440°C	250°C	700°C	900°C
	∅ 3 mm	750°C	520°C	300°C	750°C	1000°C
	∅ 4.5mm	800°C	620°C	350°C	800°C	1100°C
	∅ 6 mm	1000°C	720°C	350°C	1000°C	1100°C
Output		Male JAEGER plug-in connector, reference 532203 (single) or 532204 (duplex).				
	Option	Extension with female JAEGER plug and cable clamp, reference 42953 (single) or 43085 (duplex), and PVC extension cable, 2x0.22mm ² conductors, PVC insulation, internal copper braid. Withstand 105°C.				
Accessories	Leak-tight fittings, rotating fittings					

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	∅ SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	OPTION EXTENSION CABLE
TCG4						
Reference in table and diagram	1	2	3	4		5
Possible choice	1T / 1J 1K / 1N 2J / 2K	316L : AC INCONEL 600 : CM PYROSIL : DB	2 / 3 4.5 / 6 8	Diam 2: 100 to 36,000 Diam 3 - 4.5 - 6: 100 to 30,000	Insulated: I (standard) Earthed: M	Length Lc: 200 to 25,000 mm

DIAGRAM

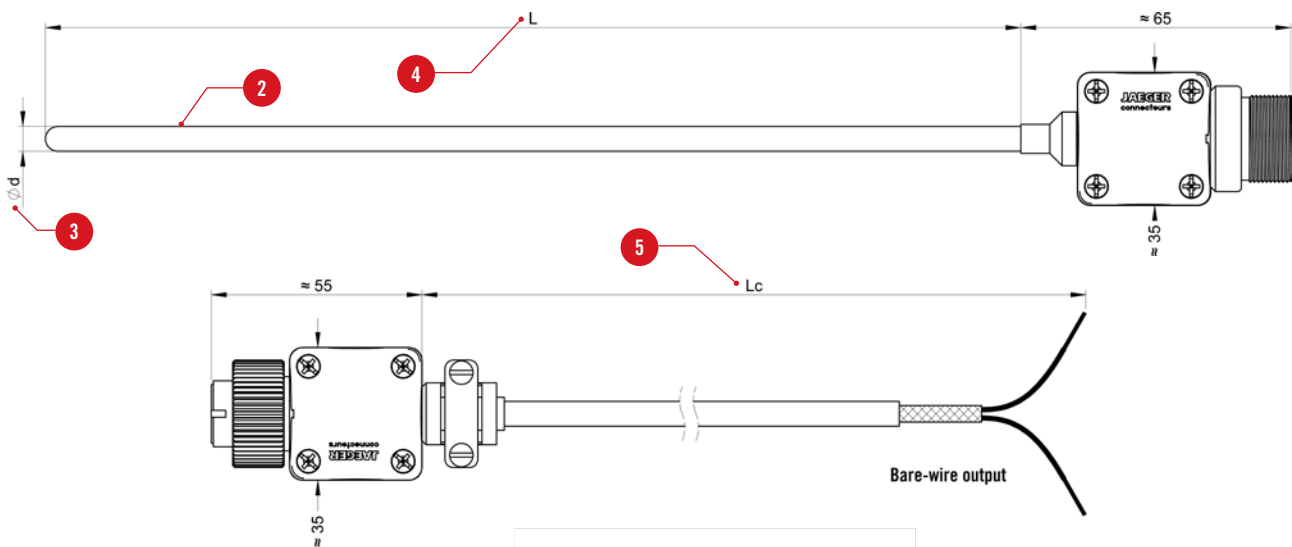
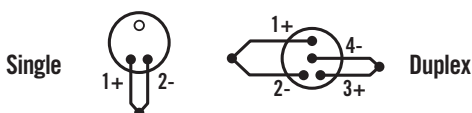


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC	Sheath diameter (mm)				
	1	2	3	4.5	6
T	316L	316L	316L	316L	316L
J	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL
2J	-	316L	316L	316L	316L
2K	-	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS

For any other configuration, please contact us.



TCG5

THERMOCOUPLE

CLASS
1
IEC
584-1
LEMO
CONNECTOR


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Output equipped with a LEMO plug-in connector for quick connection. As an option, the extension with the corresponding plug can be supplied with a PVC cable for a temperature withstand of 105°C.

Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model		TCG5				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L / 304L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		1 / 1.5 / 2 / 3 / 4.5				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Simple	
Length L Min/Max (mm)	∅ 1 to 2 mm	100 to 36,000 mm				
	∅ > 2 mm	100 to 30,000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	∅ 1-1.5mm	650°C	260°C	250°C	650°C	700°C
	∅ 2 mm	700°C	440°C	250°C	700°C	900°C
	∅ 3 mm	750°C	520°C	300°C	750°C	1000°C
	∅ 4.5mm	800°C	620°C	350°C	800°C	1100°C
Output		Male plug-in LEMO PC connector Reference: PC1 for d = 1 to 3 mm Reference: PC2 for d = 4.5 mm				
	Option	Extension with LEMO F plug Reference: F1 for d = 1 to 3 mm Reference: F2 for d = 4.5 mm and PVC extension cable, 2x0.22mm ² conductors, PVC insulation, internal copper braid. Withstand 105°C.				
Accessories		Leak-tight fittings, rotating fittings				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	∅ SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	OPTION LENGTH Lc (mm)
TCG5						
Reference in table and diagram	1	2	3	4		5
Possible choice	1T / 1J 1K / 1N 2T / 2J 2K	304L : AB 316L : AC INCONEL 600 : CM PYROSIL : DB	1 / 1.5 2 / 3 4.5	Diam 1-1.5-2: 100 to 36,000 Diam 3 - 4.5: 100 to 30,000	Insulated: I (standard) Earthed: M	Lc: 200 to 25,000 mm

DIAGRAM

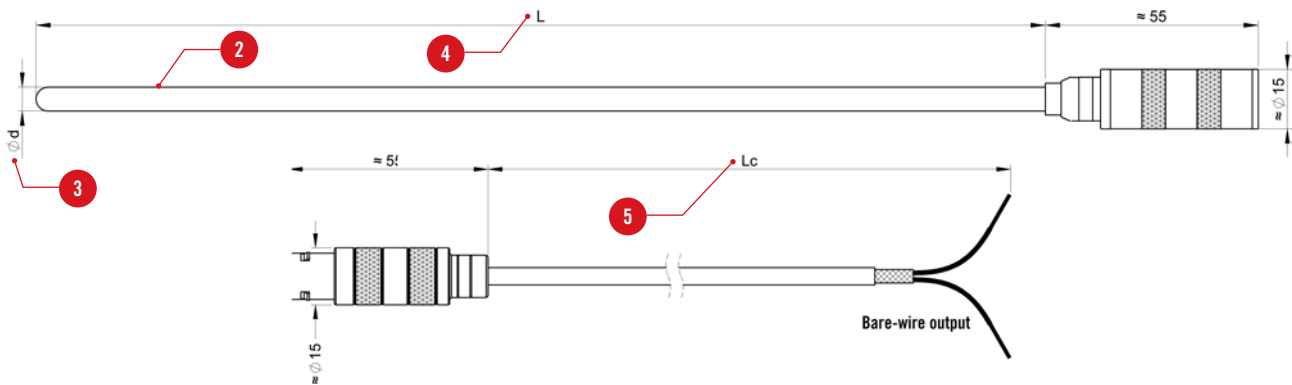
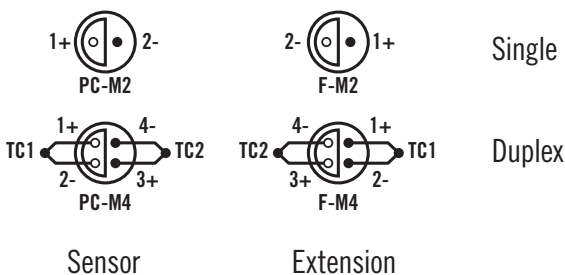


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC	Sheath diameter (mm)				
	1	1.5	2	3	4.5
T	316L	316L	316L	316L	316L
J	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
N	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL
2T	-	-	304L	-	304L
2J	-	316L	316L	316L	316L
2K	-	-	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS

For any other configuration, please contact us.



TCG6

THERMOCOUPLE

CLASS
1

IEC
584-1

STANDARD
CONNECTOR


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Output equipped with a standard plug-in male connector with compensated contacts for quick connection. As an option, the extension with the corresponding female plug can be supplied with a PVC cable for a withstand of 105°C.

Thermocouples up to 3 mm in diameter must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model		TCG6				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L / 304L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		1 / 1.5 / 2 / 3 / 4.5 / 6				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Single	
Length L Min/Max (mm)	Diam. 1 to 2 mm	100 to 36,000 mm				
	Diam. > 2 mm	100 to 30,000 mm				
Max. temp. in air (without air flow) (theoretical)	Diam. 1-1.5mm	650°C	260°C	250°C	650°C	700°C
	Diam. 2 mm	700°C	440°C	250°C	700°C	900°C
	Diam. 3 mm	750°C	520°C	300°C	750°C	1000°C
	Diam. 4.5mm	800°C	620°C	350°C	800°C	1100°C
	Diam. 6 mm	1000°C	720°C	350°C	1000°C	1100°C
Output		Standard plug-in male connector with compensated contacts				
	Option	Extension with standard female plug with compensated contacts and cable clamp, PVC extension cable, 2x0.22mm ² conductors, insulated with PVC, internal copper braid. Withstand 105°C.				
Accessories		Leak-tight fittings, rotating fittings, connectors				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	∅ SHEATH (mm)	LENGTH L (MM)	HOT JUNCTION	OPTION LENGTH Lc
TCG6	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4		5
Possible choice	1T / 1J 1K / 1N 2T / 2J 2K	304L : AB 316L : AC INCONEL 600 : CM PYROSIL : DB	1 / 1.5 2 / 3 4.5 / 6	Diam 1-1.5-2: 100 to 36,000 Diam 3 - 4.5: 100 to 30,000	Insulated: I (standard) Earthed: M	200 to 25,000 mm

DIAGRAM

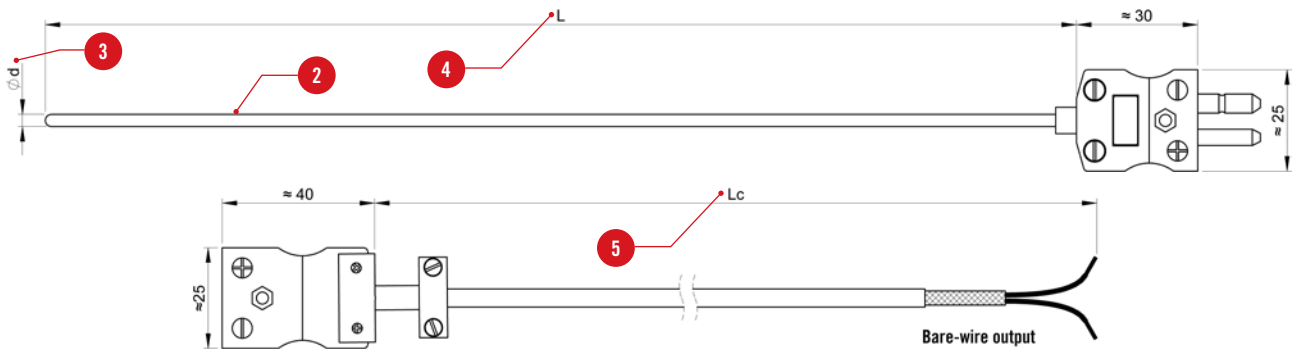
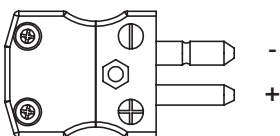


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC	Sheath diameter (mm)					
	1	1.5	2	3	4.5	6
T	316L	316L	316L	316L	316L	316L
J	316L	316L	316L	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600
	-	PYROSIL	PYROSIL	PYROSIL	PYROSIL	PYROSIL
2T	-	-	304L	-	304L	304L
2J	-	316L	316L	316L	316L	316L
2K	-	-	INCONEL600	INCONEL600	INCONEL600	INCONEL600

CONNECTIONS

For any other configuration, please contact us.



TCG46

THERMOCOUPLE

CLASS
1

IEC
584-1

NF EN
60584-1

STANDARD
CONNECTOR



DESCRIPTION

Economical sheathed thermocouple which is bendable and flexible for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Output equipped with a standard moulded plug-in male connector with compensated contacts for quick connection.

SPECIFICATIONS

Model	TCG46	
Compliance with standards	IEC 584-1 / EN 61515	
Type	K	
Material	Inconel 600	
Class	1	
Diameter (d) (mm)	3 / 4.5 / 6	
Hot junction	Insulated	
Thermocouple	Single	
Length L Min/Max (mm)	250 to 4,000 mm	
Max. temp. in air (without air flow) (theoretical)	Diam. 3 mm	750°C
	Diam. 4.5 mm	800°C
	Diam. 6 mm	1000°C
Output	Standard moulded plug-in male connector with compensated contacts	
Accessories	Leak-tight fittings, rotating fittings, connectors	

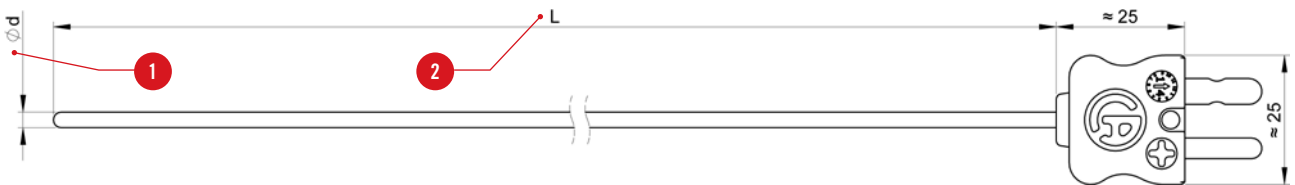
DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	Ø SHEATH (mm)	LENGTH L (mm)
TCG46	-	-
Reference in table and diagram	1	2
Possible choice	3 / 4.5 6	250 500 1000 2000 3000

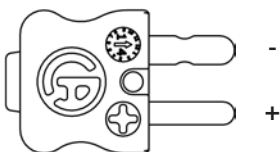
DIAGRAM



CODES FOR ORDERS

Model	Diam.	Length	References
TCG46-3.0-250	3 mm	250 mm	L224655-009
TCG46-3.0-500	3 mm	500 mm	L224655-014
TCG46-3.0-1000	3 mm	1000 mm	L224655-024
TCG46-3.0-2000	3 mm	2000 mm	L224655-034
TCG46-3.0-3000	3 mm	3000 mm	L224655-038
TCG46-4.5-250	4.5mm	250 mm	L224656-009
TCG46-4.5-500	4.5mm	500 mm	L224656-014
TCG46-4.5-1000	4.5mm	1000 mm	L224656-024
TCG46-4.5-2000	4.5mm	2000 mm	L224656-034
TCG46-4.5-3000	4.5mm	3000 mm	L224656-038
TCG46-6.0-250	6 mm	250 mm	L224657-009
TCG46-6.0-500	6 mm	500 mm	L224657-014
TCG46-6.0-1000	6 mm	1000 mm	L224657-024
TCG46-6.0-2000	6 mm	2000 mm	L224657-034
TCG46-6.0-3000	6 mm	3000 mm	L224657-038

CONNECTIONS



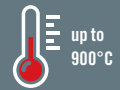
For any other configuration, please contact us.

TCG11

THERMOCOUPLE

CLASS
1

IEC
584-1

MINIATURE
CONNECTOR


DESCRIPTION

Bendable flexible sheathed thermocouple for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Output equipped with a miniature plug-in male connector with compensated contacts for quick connection. As an option, the extension with the corresponding female plug can be supplied with a PVC cable for a withstand of 105°C.

Thermocouples must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model		TCG11				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		1 / 1.5 / 2 / 3				
Hot junction		Insulated/Earthed				
Thermocouple		Single				
Length L Min/Max (mm)		100 to 36,000 mm				
Max. temp. in air (without air flow) (theoretical)	Diam.1 -1.5mm	650°C	260°C	250°C	650°C	700°C
	Diam. 2 mm	700°C	440°C	250°C	700°C	900°C
Output		Standard plug-in male connector with compensated contacts				
	Option	Extension with standard female plug with compensated contacts and cable clamp, PVC extension cable, 2x0.22mm ² conductors, insulated with PVC, internal copper braid. Withstand 105°C."				
Accessories		Leak-tight fittings, rotating fittings, connectors				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	SHEATH TYPE	∅ SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	OPTION LENGTH Lc (mm)
TCG6						
Reference in table and diagram	1	2	3	4		5
Possible choice	1T / 1J 1K / 1N	316L : AC INCONEL 600 : CM PYROSIL : DB	1 / 1.5 2	100 to 36,000	Insulated: I (standard) Earthed: M	Length Lc: 200 to 25,000 mm

DIAGRAM

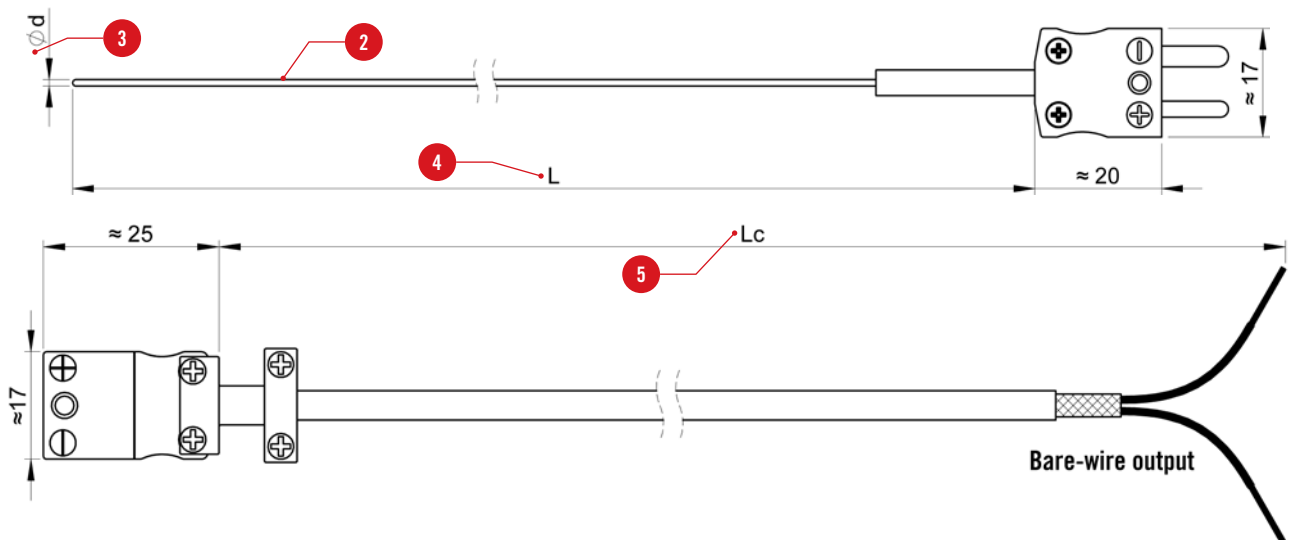
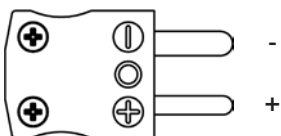


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

1 TC	Sheath diameter (mm)				3
	1	1.5	2	3	
T	316L	316L	316L	316L	
J	316L	316L	316L	316L	
K	INCONEL600	INCONEL600	INCONEL600	INCONEL600	2
N	INCONEL600	INCONEL600	INCONEL600	INCONEL600	
	-	PYROSIL	PYROSIL	PYROSIL	

CONNECTIONS

For any other configuration, please contact us.



TCG45

THERMOCOUPLE

CLASS
1

IEC
584-1

CONNECTOR
MINIATURE



DESCRIPTION

Economical sheathed thermocouple which is bendable and flexible for adaptation to the application, even in confined spaces. Small-diameter sensor with a short response time. Output equipped with a miniature moulded plug-in male connector with compensated contacts for quick connection. Thermocouples must be handled with caution to avoid any breakage.

SPECIFICATIONS

Model	TCG45	
Compliance with standards	IEC 584-1 / EN 61515	
Type	K	
Material	Inconel 600	
Class	1	
Diameter (d) (mm)	1/ 1.5 / 2	
Hot junction	Insulated	
Thermocouple	Single	
Length L Min/Max (mm)	250 to 3,000 mm	
Max. temp. in air (without air flow) (theoretical)	Ø 1-1.5mm	650°C
	Ø 2 mm	700°C
Output	Miniature moulded plug-in male connector with compensated contacts	
Accessories	Leak-tight fittings, rotating fittings, connectors	

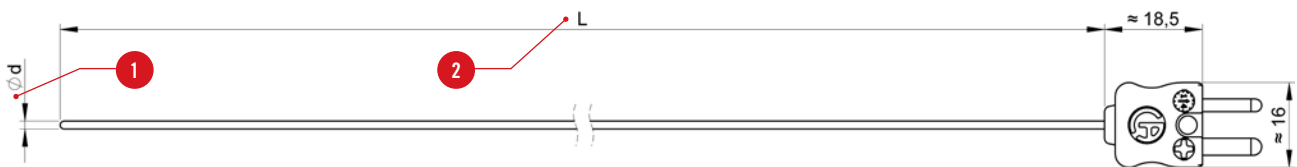
DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	Ø SHEATH (mm)	LENGTH L (MM)
TCG45	-	-
Reference in table and diagram	1	2
Possible choice	1 / 1.5 2	250 500 1000 3000 3000

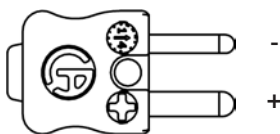
DIAGRAM



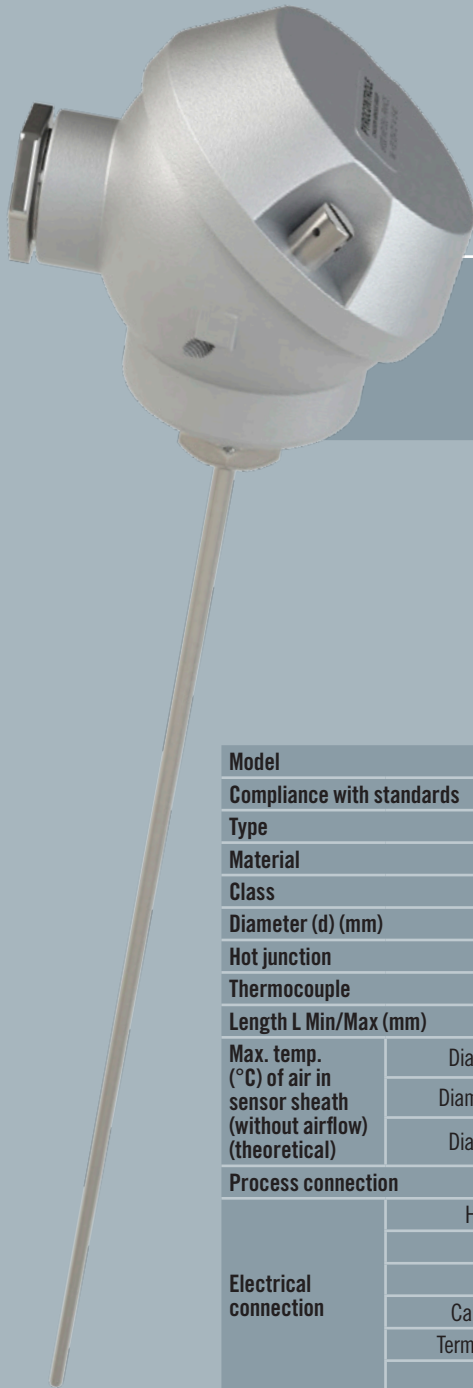
CODES FOR ORDERS

Model	Diam.	Length	References
TCG45-1.0-250	1 mm	250 mm	L224552-009
TCG45-1.0-500	1 mm	500 mm	L224552-014
TCG45-1.0-1000	1 mm	1000 mm	L224552-024
TCG45-1.0-2000	1 mm	2000 mm	L224552-034
TCG45-1.0-3000	1 mm	3000 mm	L224552-038
TCG45-1.5-250	1.5mm	3000 mm	L224553-039
TCG45-1.5-500	1.5mm	500 mm	L224553-014
TCG45-1.5-1000	1.5mm	1000 mm	L224553-024
TCG45-1.5-2000	1.5mm	2000 mm	L224553-034
TCG45-1.5-3000	1.5mm	3000 mm	L224553-038
TCG45-2.0-250	2 mm	250 mm	L224554-009
TCG45-2.0-500	2 mm	500 mm	L224554-014
TCG45-2.0-1000	2 mm	1000 mm	L224554-024
TCG45-2.0-2000	2 mm	2000 mm	L224554-034
TCG45-2.0-3000	2 mm	3000 mm	L224554-038

CONNECTIONS



For any other configuration, please contact us.



TCG51

THERMOCOUPLE

IP
54CLASS
1IEC
584-1

DESCRIPTION

Sheathed thermocouple with output via MA head. For use when the space available for the connecting head is limited.

SPECIFICATIONS

Model		TCG51				
Compliance with standards		IEC 584-1				
Type		K	J	T	N	
Material		Inconel 600	316L	316L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		3 / 4.5 / 6				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Single	
Length L Min/Max (mm)		100 to 30,000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	Diam. 3 mm	750°C	520°C	300°C	750°C	1000°C
	Diam. 4.5mm	800°C	620°C	350°C	800°C	1100°C
	Diam. 6 mm	1000°C	720°C	350°C	1000°C	1100°C
Process connection		without - under G1/2 head - extension + G1/2 fitting				
Electrical connection	Head type	MA				
	Material	Light alloy				
	Output	1 cable gland PG09				
	Cable diam.	4 mm to 6mm				
	Terminal strip	2 to 4 terminals				
	IP	IP54				
Accessories		Leak-tight fittings, rotating fittings				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	PROCESS CONNECTION	HEAD	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (MM)	HOT JUNCTION
TCG	5	1	-	-	-	-	-
Reference in table and diagram		1	2	3	4	5	
Possible choice	Without: 5	MA : 1	1T / 1J 1K / 1N 2K / 2J	316L : AC INCONEL600 : CM PYROSIL : DB	3 4.5 6	100 to 30,000	Insulated: I (standard) Earthed: M

DIAGRAM

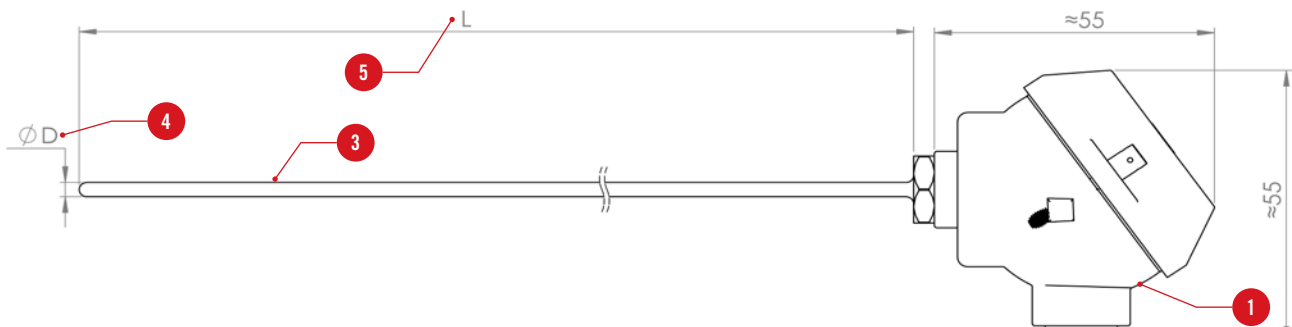
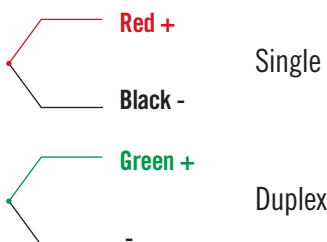


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

TC Class 1	Sheath diameter (mm)		
	3	4.5	6
T (class 2)	316L	316L	316L
J	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	INCONEL600
	PYROSIL	PYROSIL	PYROSIL
2J	316L	316L	316L
2K	INCONEL600	INCONEL600	INCONEL600

CONNECTION

or any other configuration, please contact us.





TCGx2

THERMOCOUPLE

IP
65CLASS
1IEC
584-1

DESCRIPTION

Sheathed thermocouple with output via DAN head. The DAN head is versatile and easy to open with its valve lever and can be equipped with a terminal strip for connection or a 4-20mA transmitter.

SPECIFICATIONS

Model		TCGx2				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		4.5/ 6 / 8				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Single	
Length L Min/Max (mm)		100 to 30,000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	Diam. 4.5mm	800°C	620°C	350°C	800°C	1100°C
	Diam. 6 mm	1000°C	720°C	350°C	1000°C	1100°C
	Diam. 8 mm	1100°C	720°C	350°C	1100°C	1150°C
Process connection		Without - under G1/2 head - extension + G1/2 fitting				
Electrical connection	Head type	DAN				
	Material	Light alloy				
	Output	1 cable gland M20x1.5				
	Cable diam.	5.5 mm to 7.5 mm				
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)				
	Coating	None (standard) or epoxy (option)				
	IP	IP54 (standard) or IP65 (option)				
Accessories		Leak-tight fittings, rotating fittings				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	PROCESS CONNECTION	HEAD	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (mm)	HOT JUNCTION	OPTION		
								TRANSMITTER	TRANSMITTER SCALE	OPTIONS
TCG		2	-	-	-	-	-			
Reference in table and diagram	1	2	3	4	5	6		7		
Possible choice	Without: 5 With extension and G1/2" fitting: 6 With fitting under G1/2" head: 9	DAN : 2	1T 1J 1K 1N 2K 2J	316L : AC INCONEL600 : CM PYROSIL : DB	4,5 6 8	100 to 30,000	Insulated: I (standard) Earthed: M	LC5334A-100 : A LC5331A-321 : B LC5335A-100 : C	IP65 : 1 Epoxy : 2 IP65 + epoxy : 3	

DIAGRAM

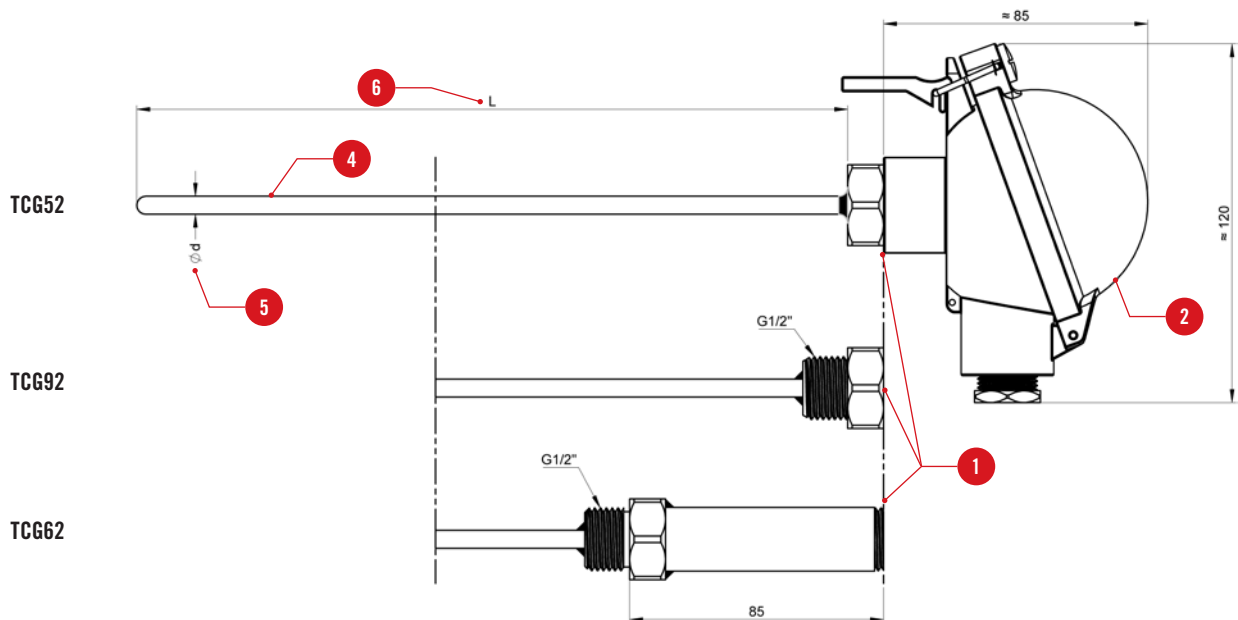


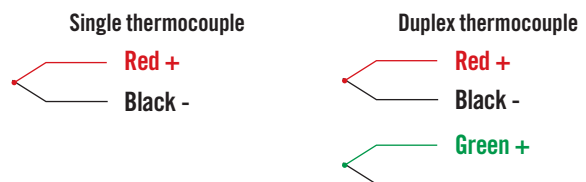
TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

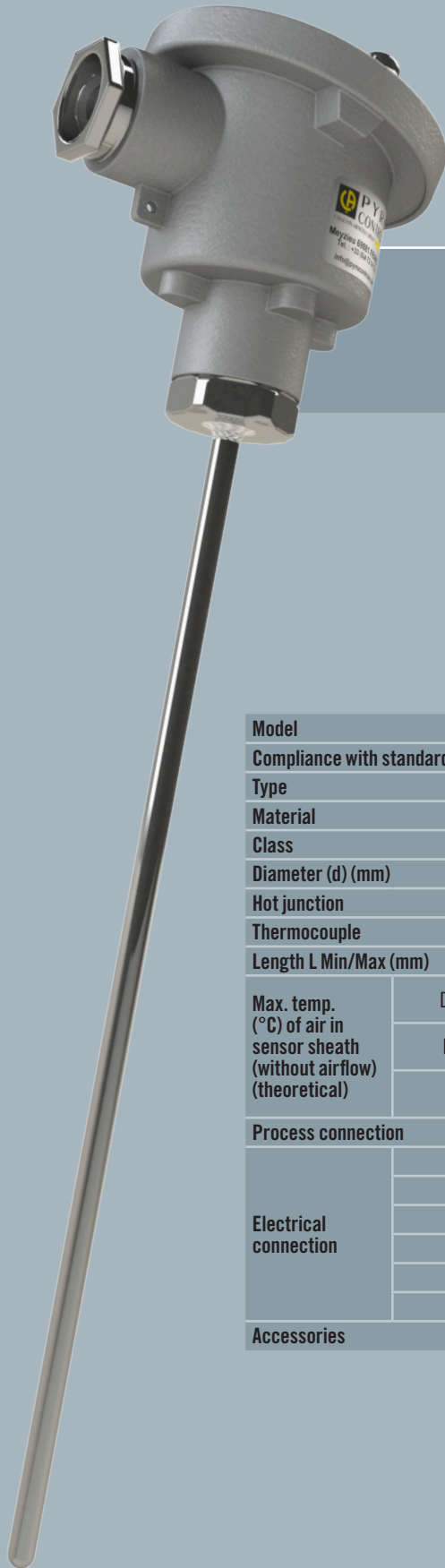
TC Class	Sheath diameter (mm)		
	4.5	6	8
T (class 2)	316L	316L	316L
J	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	-
	PYROSIL	PYROSIL	PYROSIL
2J	316L	316L	316L
2K	INCONEL600	INCONEL600	INCONEL600

TRANSMITTER (NOT COMPATIBLE WITH DUPLEX)

Transmitter			
Input	Output	Galvanic insulation	Reference
TC	4-20mA	1.5kV	LC5334A-100
TC + Pt100	4-20mA	1.5kV	LC5331A-321
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100

CONNECTION





TCGx3

THERMOCOUPLE

IP
54

CLASS
1

IEC
584-1



DESCRIPTION

Sheathed thermocouple with output via DIN B head. The DIN B head is versatile and economical and can be fitted with a terminal strip or a 4-20mA transmitter.

SPECIFICATIONS

Model		TCGx3				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		4.5/ 6 / 8				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Single	
Length L Min/Max (mm)		100 to 30,000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	Diam. 4.5mm	800°C	620°C	350°C	800°C	1100°C
	Diam. 6 mm"	1000°C	720°C	350°C	1000°C	1100°C
	Diam. 8 mm	1100°C	720°C	350°C	1100°C	1150°C
Process connection		Without - under G1/2 head - extension + G1/2 fitting				
Electrical connection	Head type	DIN B				
	Material	Light alloy				
	Output	1 cable gland M20x1.5				
	Cable diam.	5.5 mm to 7.5 mm				
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)				
	IP	IP54				
Accessories		Leak-tight fittings, rotating fittings				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	PROCESS CONNECTION	HEAD	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L (MM)	HOT JUNCTION	OPTION	
								TRANSMITTER	TRANSMITTER SCALE
TCG		3							
Reference in table and diagram	1	2	3	4	5	6		7	
Possible choice	Without: 5 With extension and G1/2" fitting: 6 With fitting under G1/2" head: 9	DIN B : 3	1T / 1J 1K / 1N 2K / 2J	316L : AC INCONEL600 : CM PYROSIL : DB	4.5 6 8	100 to 30,000	Insulated: I (standard) Earthed: M	LC5334A-100 : A LC5331A-321 : B LC5335A-100 : C	

DIAGRAM

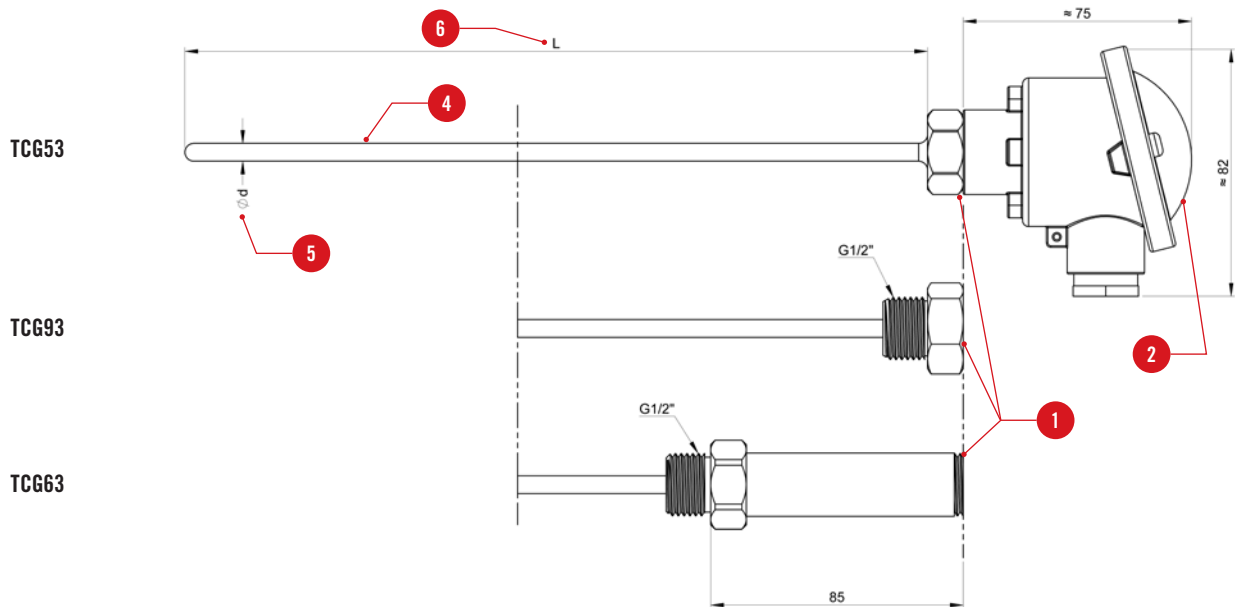


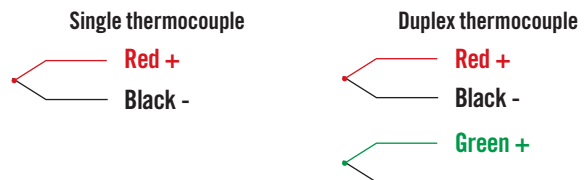
TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

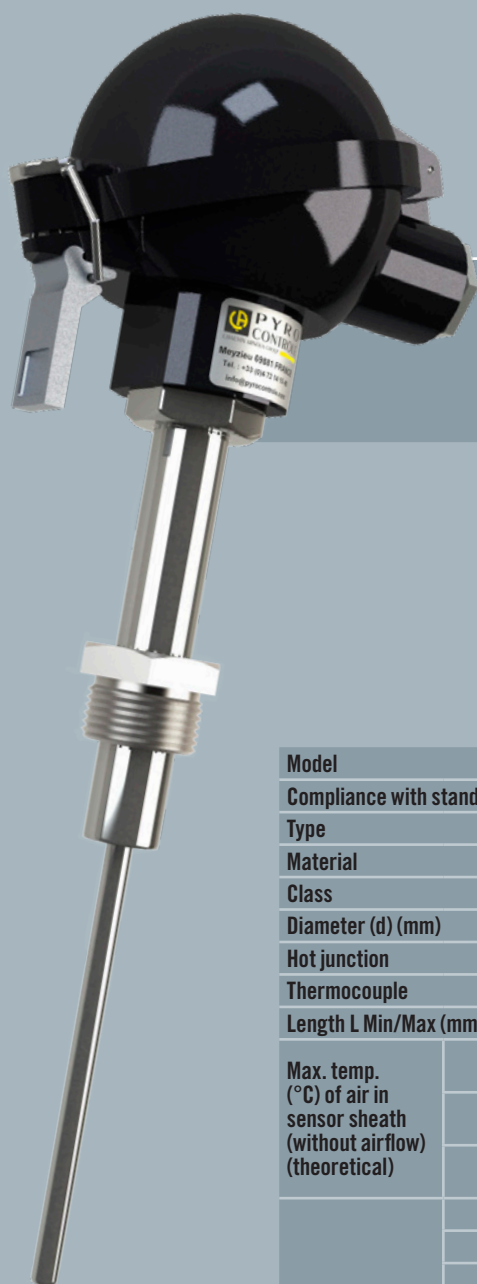
TC Class 1	Sheath diameter (mm)		
	4,5	6	8
T (class 2)	316L	316L	316L
J	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	-
	PYROSIL	PYROSIL	PYROSIL
2J	316L	316L	316L
2K	INCONEL600	INCONEL600	INCONEL600

TRANSMITTER (NOT COMPATIBLE WITH DUPLEX)

Transmitter			
Input	Output	Galvanic insulation	Reference
TC	4-20mA	1.5kV	LC5334A-100
TC + Pt100	4-20mA	1.5kV	LC5331A-321
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100

CONNECTION





TA

THERMOCOUPLE

IP
54IP
65

Option

CLASS
1IEC
584-1up to
1150°C

DESCRIPTION

Sensor for industrial applications. The TA assembly is a rugged product for undemanding applications.

SPECIFICATIONS

Model		TA				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		4.5/ 6 / 8				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Single	
Length L Min/Max (mm)		100 to 30,000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	Diam. 4.5mm	800°C	620°C	350°C	800°C	1150°C
	Diam. 6 mm	1000°C	720°C	350°C	1000°C	1150°C
	Diam. 8 mm	1050°C	720°C	350°C	1100°C	1150°C
Electrical connection	Head type	DIN B ou DAN				
	Material	Light alloy				
	Output	1 cable gland M20x1.5				
	Cable diam.	5.5 mm to 7.5 mm				
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)				
	Coating	Without (standard) or epoxy (DAN option)				
	IP	IP54 (standard) or IP65 (DAN option)				
Accessories		Cables, cable gland				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	HEAD	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L1 (MM)	HOT JUNCTION	FASTENING		
TA	-	-	-	-	-	-	-		
Reference in table and diagram	1	2	3	4	5		6		
Possible choice	DAN : 2 DIN B : 3	1T / 1J 1K / 1N 2K / 2J	316L : AC INCONEL600 : CM PYROSIL : DB	4,5 6 8	100 to 30,000	Insulated: I (standard) Earthed: M	Without: 0 Threaded connector under head: 1 Welded threaded connector: 2 Compression fitting: 3 Sleeve threaded at one end: 4 EBA flange: 5		
THREAD: FLANGE SIZE	LENGTH L2 (MM)	Ø SLEEVE	LENGTH L3 (MM)	OPTION			TRANSMITTER	TRANSMITTER SCALE	OPTIONS*
G 1/2" : A 1/2" NPT : B 3/4" NPT : C	100 to 500 mm	1/4" : 1 3/8" : 2 1/2" : 3	10 to 300 mm				LC5334A-100 : A LC5331A-321 : B LC5335A-100 : C		IP65: 1 Epoxy: 2 IP65 + epoxy: 3 (*): if DAN head

DIAGRAM

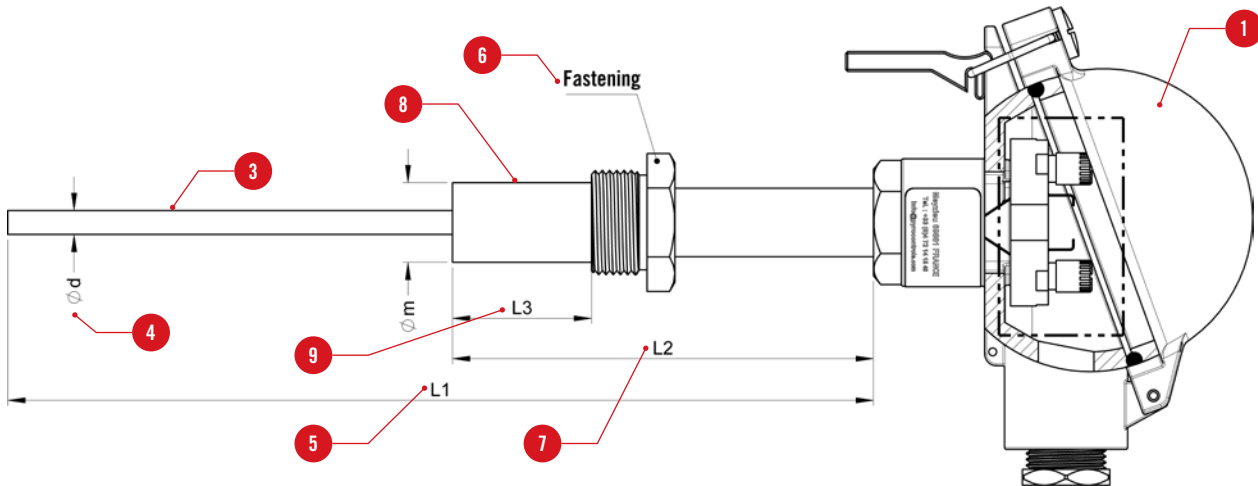


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

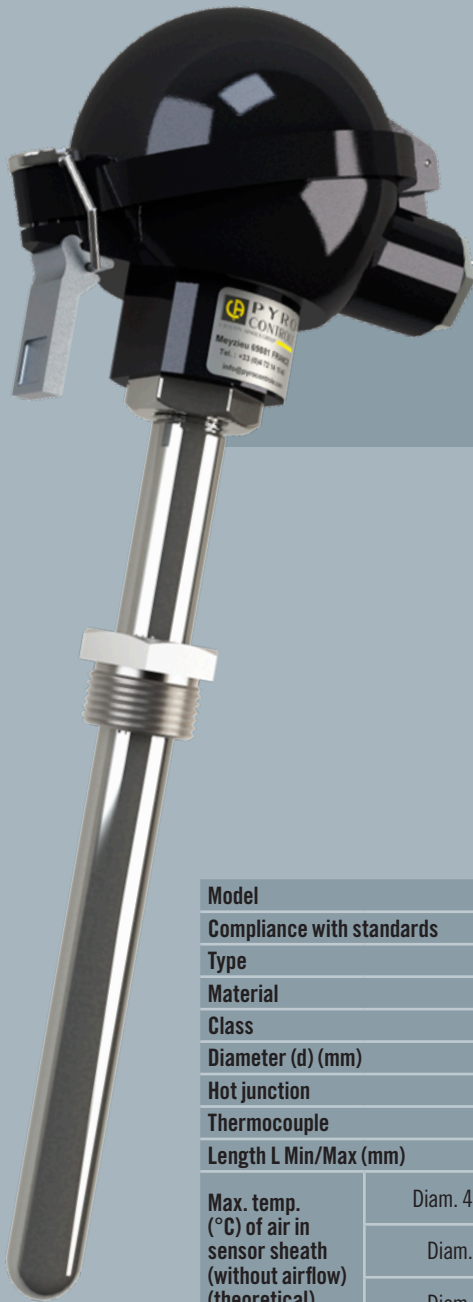
TC Class 1	Sheath diameter (mm)		
	4.5	6	8
T (class 2)	316L	316L	316L
J	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600
	INCONEL600	INCONEL600	-
N	PYROSIL	PYROSIL	PYROSIL
	316L	316L	316L
2J	316L	316L	316L
2K	INCONEL600	INCONEL600	INCONEL600

TRANSMITTER (NOT COMPATIBLE WITH DUPLEX)

Transmitter			
Input	Output	Galvanic insulation	Reference
TC	4-20mA	1.5kV	LC5334A-100
TC + Pt100	4-20mA	1.5kV	LC5331A-321
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100

CONNECTION





TB

THERMOCOUPLE

IP
54CLASS
1IEC
584-1

DESCRIPTION

Sensor designed for applications in demanding environments such as powders in motion, sand, granulates, mixing of bitumen or rubber. The thermocouple is protected by a protective tube to improve its withstand.

SPECIFICATIONS

Model		TB				
Compliance with standards		IEC 584-1 / EN 61515				
Type		K	J	T	N	
Material		Inconel 600	316L	316L	Inconel 600	Pyrosil
Class		1		2	1	
Diameter (d) (mm)		4.5 / 6 / 8				
Hot junction		Insulated/Earthed				
Thermocouple		Single / Duplex			Single	
Length L Min/Max (mm)		100 to 3000 mm				
Max. temp. (°C) of air in sensor sheath (without airflow) (theoretical)	Diam. 4.5 mm	800°C	620°C	350°C	800°C	1100°C
	Diam. 6 mm	1000°C	720°C	350°C	1000°C	1100°C
	Diam. 8 mm	1100°C	720°C	350°C	1100°C	1150°C
Electrical connection	Head type	DIN B or DAN				
	Material	Light alloy				
	Output	1 cable gland M20x1.5				
	Cable diam.	5.5 mm to 7.5 mm				
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)				
	Coating	Without (standard) or epoxy (DAN option)				
Accessories	IP	IP54 (standard) or IP65 (DAN option)				
		Cables, cable gland				

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	HEAD	TC	SHEATH TYPE	Ø SHEATH (mm)	LENGTH L1 (mm)	HOT JUNCTION	FASTENING
TB	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4	5		6
Possible choice	DAN : 2 DIN B : 3	1T / 1J 1K / 1N 2K / 2J	316L : AB INCONEL600 : BA PYROSIL : DA	4.5 / 6 8	100 to 3000	Insulated: I (standard) Earthed: M	G1/2" : A 1/2NPT : B 3/4 NPT : C

PROT. TUBE	PROT. TUBE DIAM.	LENGTH L2 (mm)	TRANSMITTER	TRANSMITTER SCALE	OPTIONS*
7	8	9	10		
316L : AC 304L : AB AR25/20 : AK AISI446 : BB Inconel 600 : CM	4 mm / 6 mm 8 mm / 10 mm 13.5 mm / 17.2 mm 21.3 mm	50 to 2950 mm	LC5334A-100 : A LC5331A-321 : B LC5335A-100 : C		IP65: 1 Epoxy: 2 IP65 + epoxy: 3 (*):if DAN head

DIAGRAM

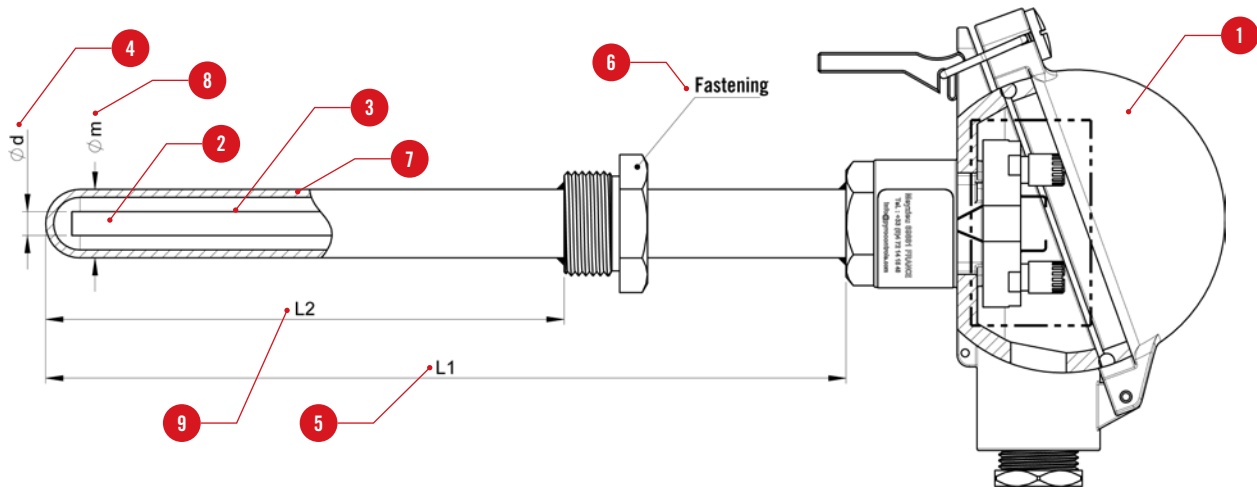


TABLE OF CONDUCTOR TYPE - SHEATH DIAMETER

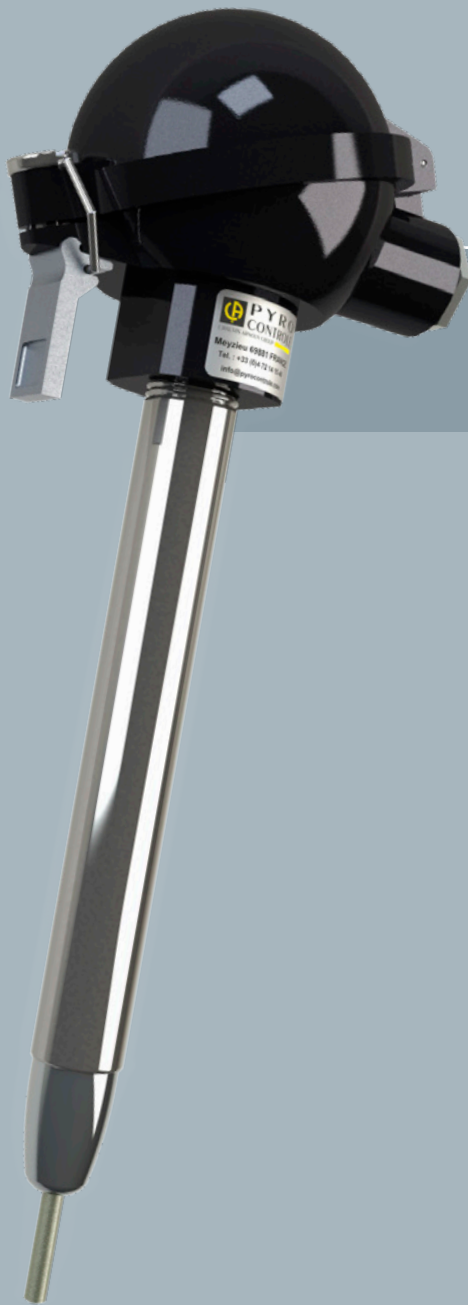
TC Class 1	Sheath diameter (mm)		
	4.5	6	8
T (class 2)	316L	316L	316L
J	316L	316L	316L
K	INCONEL600	INCONEL600	INCONEL600
N	INCONEL600	INCONEL600	-
	PYROSIL	PYROSIL	PYROSIL
2J	316L	316L	316L
2K	INCONEL600	INCONEL600	INCONEL600

TRANSMITTER (NOT COMPATIBLE WITH DUPLEX)

Transmitter			
Input	Output	Galvanic insulation	Reference
TC	4-20mA	1.5kV	LC5334A-100
TC + Pt100	4-20mA	1.5kV	LC5331A-100
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100

CONNECTION





TMA

THERMOCOUPLE

IP
54CLASS
1IEC
584-1up to
500°C

DESCRIPTION

Sensor designed for applications in abrasive environments such as powders in motion, sand, granulates, mixing of bitumen, rubber, etc. The thermocouple's hot junction is connected to the earth for a quick response time and is protected by a tungsten carbide end-piece to ensure mechanical resistance to abrasion.

SPECIFICATIONS

Model		TMA
Compliance with standards		IEC 584-1
Type		K J
Class		1
Hot junction		Earthed
Thermocouple		Single
Material	End-piece	Tungsten carbide
	Connector	Hard chromium
	Extension	AISI 310L
Diameter (mm)	End-piece	5
	Extension	21
Length L Min/Max (mm)		150 to 500 mm
Fastening		Without (standard) or threaded fitting on sheath diam.21mm or flange (option)
Max. temp. (°C) (without flow) (theoretical)		500°C
Electrical connection	Head type	DAN
	Material	Light alloy
	Output	1 cable gland M20x1.5
	Cable diam.	5.5 mm to 7.5 mm
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)
	Coating	Without (standard) or epoxy (DAN option)
Accessories	IP	IP54 (standard) or IP65 (option DAN)
		Cables, cable gland

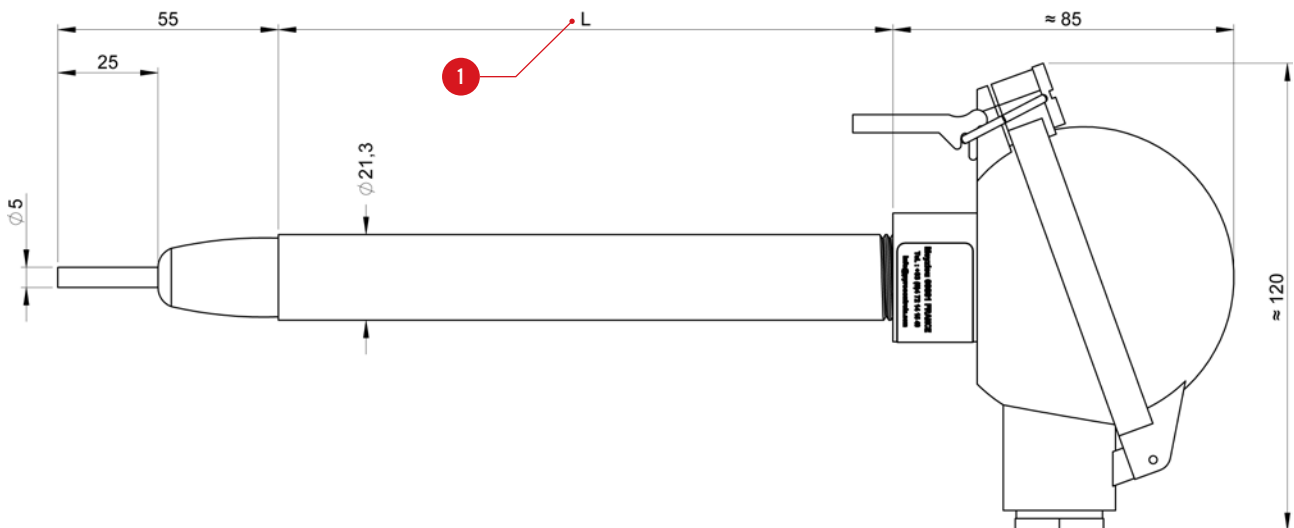
DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	TC	LENGTH L1 (mm)	TRANSMITTER	OPTION	
				TRANSMITTER SCALE	DAN HEAD OPTIONS
TMA	-	-	-	-	-
Reference in table and diagram		1	2		
Possible choice	1J 1K	100 to 500	LC5334A-100 : A LC5335A-100 : C		IP65 : 1 Epoxy : 2 IP65+Epoxy : 3

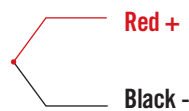
DIAGRAM



TRANSMITTER

Transmitter			
Input	Output	Galvanic insulation	Reference
TC	4-20mA	1.5kV	LC5334A-100
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100

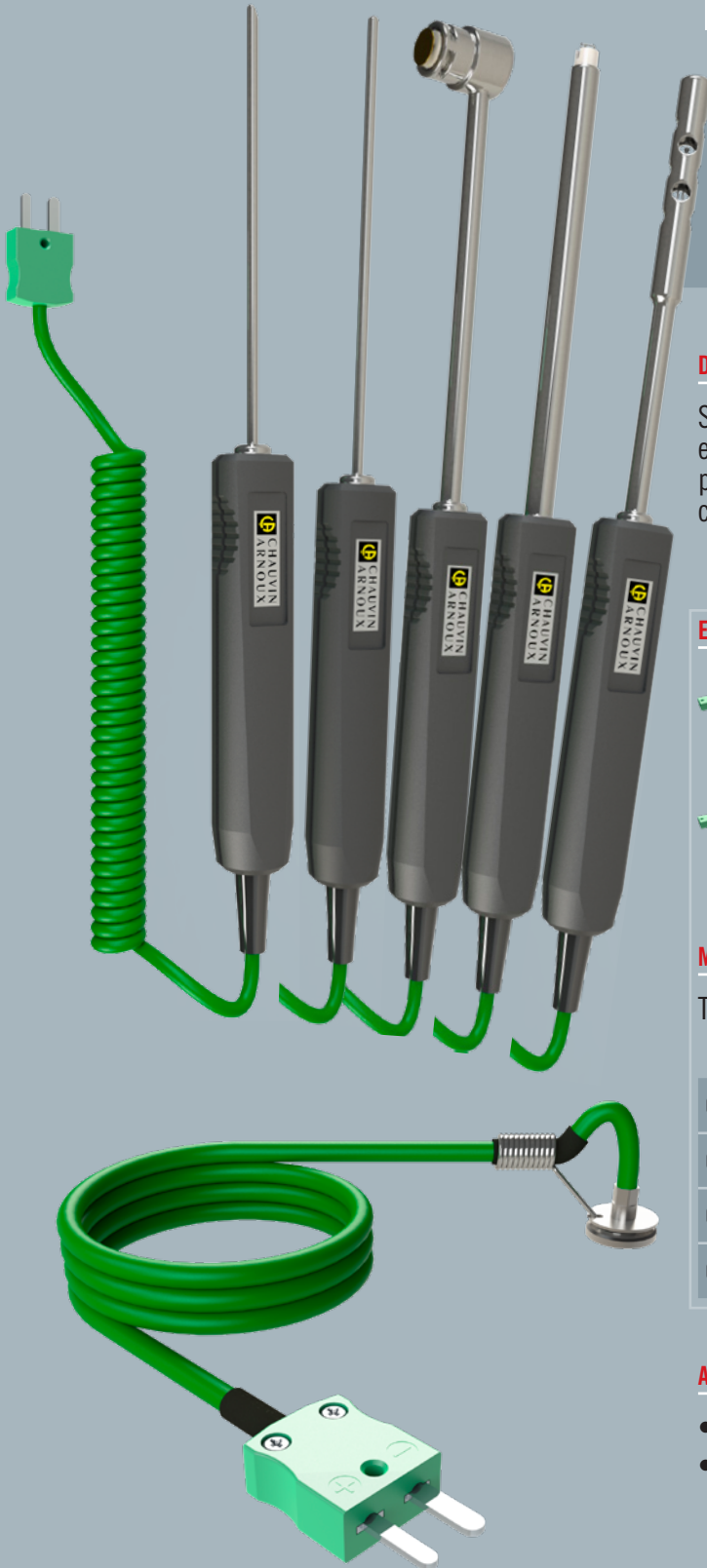
CONNECTION



For any other configuration, please contact us.

SKxx

THERMOCOUPLE

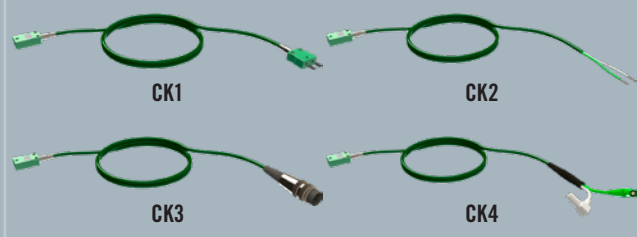


IEC 584-1	IP 54	CLASS 1	 up to 1000°C
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DESCRIPTION

SKxx, a complete range of K-thermocouple sensors and extensions for measuring ambient, surface or immersion/ penetration temperatures. Equipped with miniature male compensated connectors, these sensors are interchangeable.

EXTENSIONS



MODELS


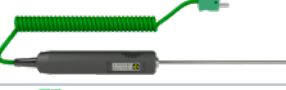






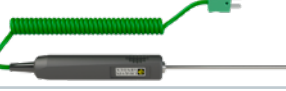






Temperature withstand of extensions: -40 °C to +100 °C

	Description	Diameter	Length	Référence
CK1	Terminated by male plug / female plug	4 mm	1 m	P03652909
CK2	Terminated by male plug / 2 bare wires	4 mm	1 m	P03652910
CK3	Terminated by 5-pin DIN plug / female socket	4 mm	1 m	P03652913
CK4	Terminated by 2 banana plugs / female socket	4 mm	1 m	P03652914

ACCESSORIES / REPLACEMENT PARTS

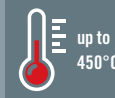
- PP1 handle for CK extension P03652912
- Miniature 2-pole male compensated connector P03652925

SPECIFICATIONS AND CODES FOR ORDERS

Model	Model	Description	Measurement range	Tolerance class	63% response time	Plunger diameter	Plunger length	Ref.
	SK20	Sheathed sensor as per the NF EN 61615 standard. Hot junction insulated from the earth. Inconel 600 protective sheath	-40 °C to +450 °C	Cl.1	1 s	1.5mm	1 m	P01655010
	SK13	Sensor with stainless-steel sheath	-50 °C to +1100 °C	Cl.2	6 s	3 mm	30 cm	P03652918
	SK3	Slightly bendable sensor with stainless-steel sheath	-50 °C to +1000 °C	Cl.2	2 s	4.5mm	50 cm	P03652903
	SK2	Bendable sensor with stainless-steel sheath. Bend radius > 4 mm	-50 °C to +1000 °C	Cl.2	3 s in environment	2 mm	1 m	P03652902
	SK6	"General-purpose" sensor recommended for measurements when access is difficult. Do not use in liquids (tip not leak-tight)	-50 °C to +285 °C	Cl.2	1 s by contact	1 mm	1 m	P03652906
	SK7	In "calm" environments without moving air, shake the sensor to favour thermal exchange	-50 °C to +250 °C	Cl.2	12 s	5 mm	15 cm	P03652907
	SK17	In "calm" environments without moving air, shake the sensor to favour thermal exchange	-50 °C to +600 °C	Cl.2	5 s	6 mm	13 cm	P03652921
	SK1	Sensor with stainless-steel sheath for penetration (20 mm min.) in pasty, viscous or liquid substances	-50 °C to +800 °C	Cl.2	1 s	3 mm	15 cm	P03652901
	SK11	Sensor with stainless-steel sheath for penetration (20 mm min.) in pasty, viscous or liquid substances	50 °C to +600 °C	Cl.2	12 s	3 mm	13 cm	P03652917
	SK4	Sheathed sensor with stainless-steel sensing element and Teflon base. For small, flat surfaces. Silicone grease can be used to improve contact quality.	0 °C to +250 °C	Cl.2	1 s	5 mm	15 cm	P03652904
	SK14	For surface temperatures when access is difficult	-50 °C to +450 °C	Cl.2	8 s	6 mm	13 cm	P03652919
	SK5	For flat surfaces. The spring ensures optimum contact even if the sensor is not placed perpendicularly. Silicone grease can be used to improve contact quality.	-50 °C to +500 °C	Cl.2	1 s	5 mm Ø in contact 8.5 mm	15 cm	P03652905
	SK15	For flat surfaces. The spring ensures optimum contact even if the sensor is not placed perpendicularly. Silicone grease can be used to improve contact quality.	-50 °C to +900 °C	Cl.2	2 s	8 mm	13 cm	P03652920
	SK8	For measurements on pipes. The copper sheet is applied to the clean, dry pipe, with the double-sided Velcro ribbon ensuring contact by winding.	-50 °C to +140 °C	Cl. 2	10 s on stainless steel pipe	Ø 10-90 mm 12 mm in diameter	32 cm	P03652908
	SK19	Sensor with magnet for flat metal surfaces.	-50 °C to +200 °C	Cl.2	7 s	4 mm	1 m	P03652922

S1

Pt100

**CLASS
A**
**IEC
60751**

**SINGLE
OR
DUPLEX**

DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, output via cable, for temperature measurement up to 450°C in low pressure and low flow-rate environments.

SPECIFICATIONS

Model		S1		
Compliance with standards		IEC 60751		
Type		Pt100 Ω		
Material		316L		
Class		A		
Mounting / Construction		Single: 1x3 wires or 1x4 wires - Duplex: 2x2 wires or 2x3 wires		
Diameter (d) (mm)		1.6 / 3 / 4.5 / 6 / 8		
Length L Min/Max (mm)		See table opposite		
Max. temp. in air (°C)		450°C		
Output	Sheath	PVC	FEP	SILICONE
	Max. temperature	105°C	200°C	200°C
	Conductors	3. 4 or 6 x 0.22 mm, PVC insulation	3. 4 or 6 x 0.22 mm, FEP insulation	3. 4 or 6 x 0.22 mm, FEP insulation
	Shielding braid	•	•	
	Length Lc Min/Max (mm)	200 to 10,000 mm		
Termination		Insulated bare wires		
Accessories		Leak-tight fittings, rotating fittings		

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	NO. PT100	MOUNTING	Ø SHEATH (mm)	LENGTH L (mm)	CABLE	LENGTH LC (mm)	CONNECTION	PROTECTIVE SPRING
S1	-	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4	5	6	7	8
Possible choice	1 - 2	1x3 wires: B 1x4 wires: C 2x2 wires: D 2x3 wires: E	1.6 3 4.5 6 8	As per table below	PVC: PVC FEP: FEP Silicone: SIL	200 to 10,000 mm	Bare wires: FN (standard) Standard 3-pin male connector: SM Miniature 3-pin male connector: MM Size-2 PC2M3 LEMO connector: LE Size 1 Jaeger connector: JA	Without: 0 With: 1 (standard)

DIAGRAM

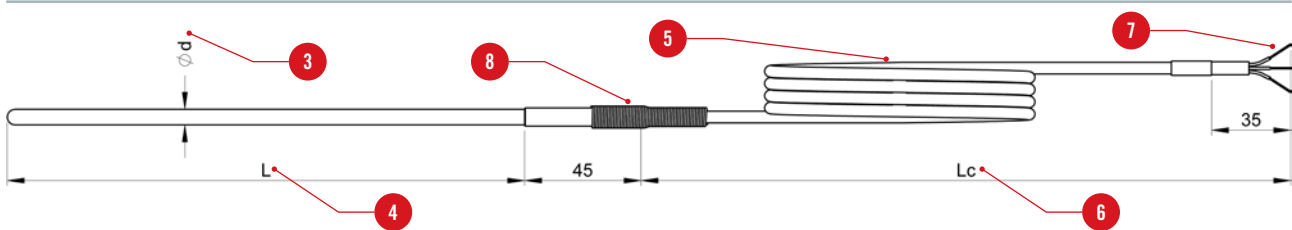
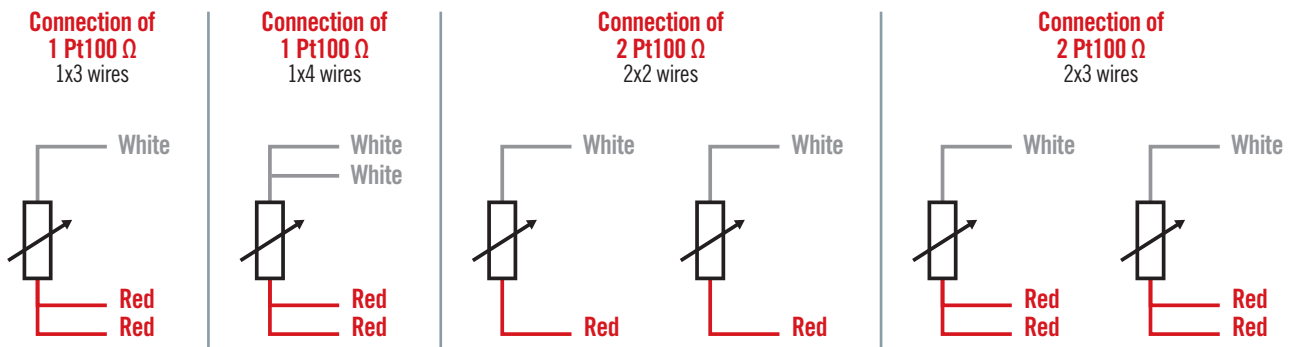


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

Number of Pt100	Mounting	Length min./max. (mm)				
		Sheath diameter (mm)				
		1.6	3	4.5	6	8
1	1x3 wires	50 / 250	50 / 1500	50 / 1500	50 / 1500	50 / 1500
	1x4 wires	50 / 250	50 / 1500	50 / 1500	50 / 1500	50 / 1500
2	2x2 wires	-	-	50 / 250	50 / 250	50 / 250
	2x3 wires	-	-	50 / 1500	50 / 1500	50 / 1500

CONNECTIONS



For any other configuration, please contact us.

S2

Pt100

**CLASS
A**
**IEC
60751**

**SINGLE
OR
DUPLEX**

DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, with cable output, for temperature measurement up to 200°C. Economical assembly designed for use in low-pressure, low flow-rate environments.

SPECIFICATIONS

Model	S2x			
Compliance with standards	IEC 60751			
Type	Pt100 Ω			
Material	316L			
Class	A			
Mounting / Construction	Single: 1x3 wires or 1x4 wires - Duplex: 2x2 wires or 2x3 wires			
Diameter (d) (mm)	3 / 4.5/ 6 / 8			
Length L Min/Max (mm)	As per table opposite			
Max. temp. in air (°C)	Max according to cable (see below)			
Output	Sheath	PVC	FEP	SILICONE
	Max. temperature	105°C	200°C	200°C
	Conductors	3, 4 or 6 x 0.22 mm, PVC insulation	3, 4 or 6 x 0.22 mm, FEP insulation	3, 4 or 6 x 0.22 mm, FEP insulation
	Shielding braid	•	•	
	Length Lc Min/Max (mm)	200 to 10,000 mm		
Termination	Insulated bare wires			
Accessories	Leak-tight fittings, rotating fittings			

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	CABLE	NO. PT100	MOUNTING	∅ SHEATH (mm)	LENGTH L (mm)	LENGTH Lc (mm)	CONNECTION
S2	-	-	-	-	-	-	-
Reference in table and diagram	1	2	3	4	5	6	7
Possible choice	PVC: 0 FEP: 2 Silicone: 1	1 - 2	1x3 wires: B 1x4 wires: C 2x2 wires: D 2x3 wires: E	3 4.5 / 6 8	as per table below	200 to 10,000 mm	Bare wires: FN (standard) Standard 3-pin male connector: SM Miniature 3-pin male connector: MM Size-2 PC2M3 LEMO connector: LE Size 1 Jaeger connector: JA

DIAGRAM

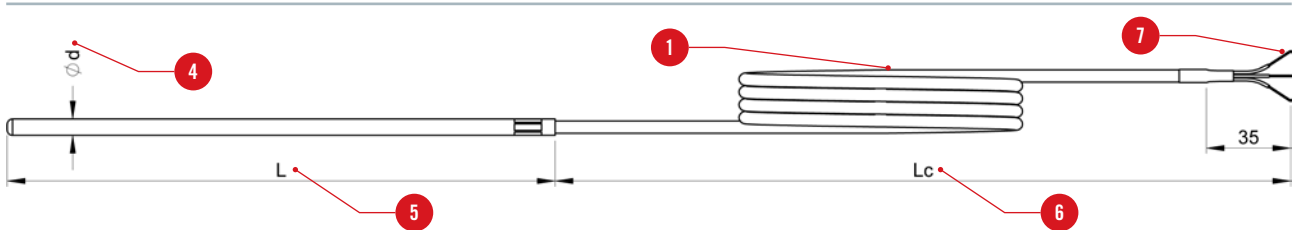
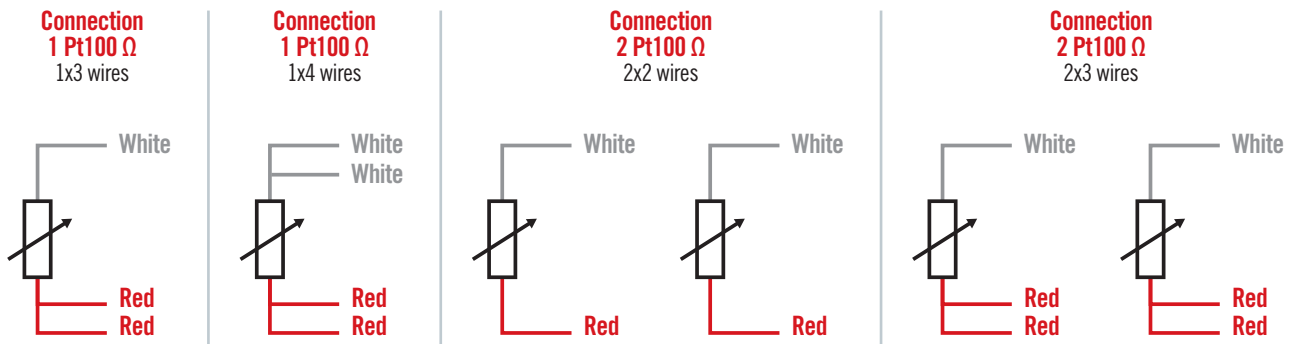


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

Number of Pt100	Mounting	Min./max. length (mm)		
		Sheath diameter (mm)		
		3	4.5	6
1	1x3 wires	50 / 1500	50 / 1500	50 / 1500
	1x4 wires	50 / 1500	50 / 1500	50 / 1500
2	2x2 wires	-	50 / 250	50 / 250
	2x3 wires	-	-	50 / 1500

BRANCHES



For any other configuration, please contact us.



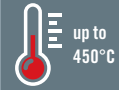
S41

Pt100

**CLASS
A**

**IEC
60751**

**JAEGER
CONNECTOR**



DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, output via Jaeger connector, for temperature measurement up to 450°C in low-pressure and low flow-rate environments.

SPECIFICATIONS

Model		S41			
Compliance with standards		IEC 60751			
Type		Pt100 Ω			
Material		316L			
Class		A			
Mounting / Construction		Single: 1x3 wires or 1x4 wires - Duplex: 2x2 wires or 2x3 wires			
Diameter (d) (mm)		3 / 4.5/ 6			
Length L Min/Max (mm)		50 ... 1500			
Max. temp. in air (°C)		200 or 450°C			
Output		Connector Jaeger size 1 ref. 0532.203			
Extension option		Extension with female JAEGER plug and cable clamp with PVC, FEP or silicone extension cable			
		Sheath	PVC	FEP	SILICONE
		Max. temperature	105°C	200°C	200°C
		Conductors	3, 4 or 6 x 0.22 mm, PVC insulation	3, 4 or 6 x 0.22 mm, FEP insulation	3, 4 or 6 x 0.22 mm, FEP insulation
		Shielding braid	•	•	
		Length Lc Min/Max (mm)	200 to 10,000 mm		
Termination		Insulated bare wires			
Accessories		Leak-tight fittings, rotating fittings			

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	OPERATING TEMP. (°C)	MOUNTING	β (mm)	LENGTH L (mm)	OPTION	
					EXTENSION CABLE	LENGTH LC (mm)
S41	-	-	-	-	-	-
Reference in table and diagram						
		1	2	3	4	5
Possible choice		200 450	1x3 wires: B 1x4 wires: C 2x2 wires: D 2x3 wires: E	3 4.5 6	50 to 1,500	PVC: PVC FEP: FEP Silicone: SIL 200 to 10,000 mm

DIAGRAM

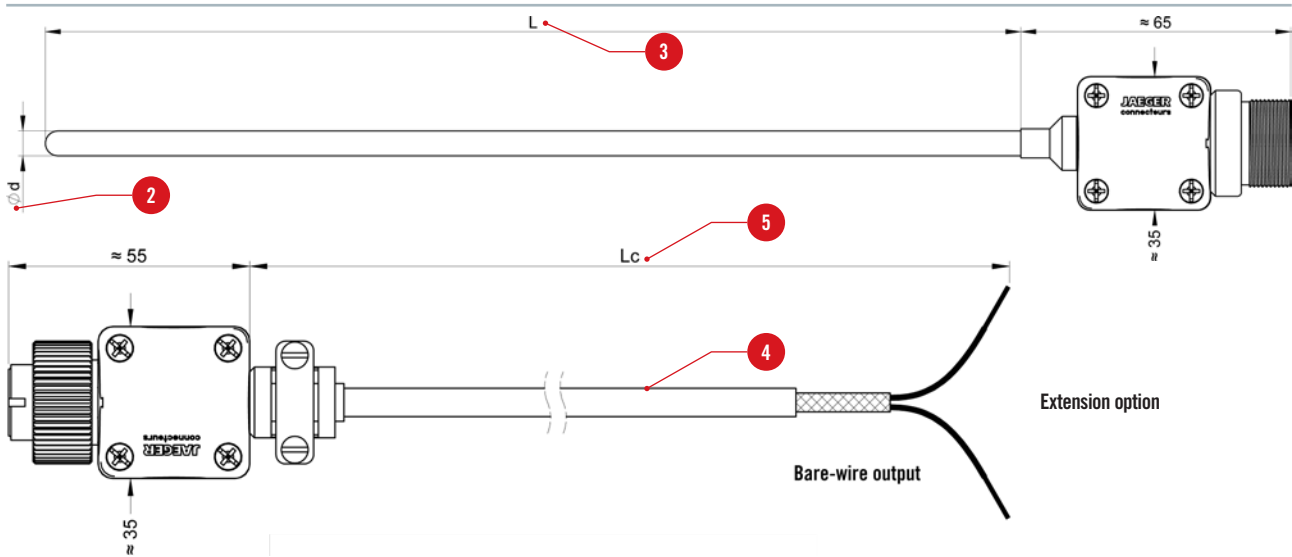
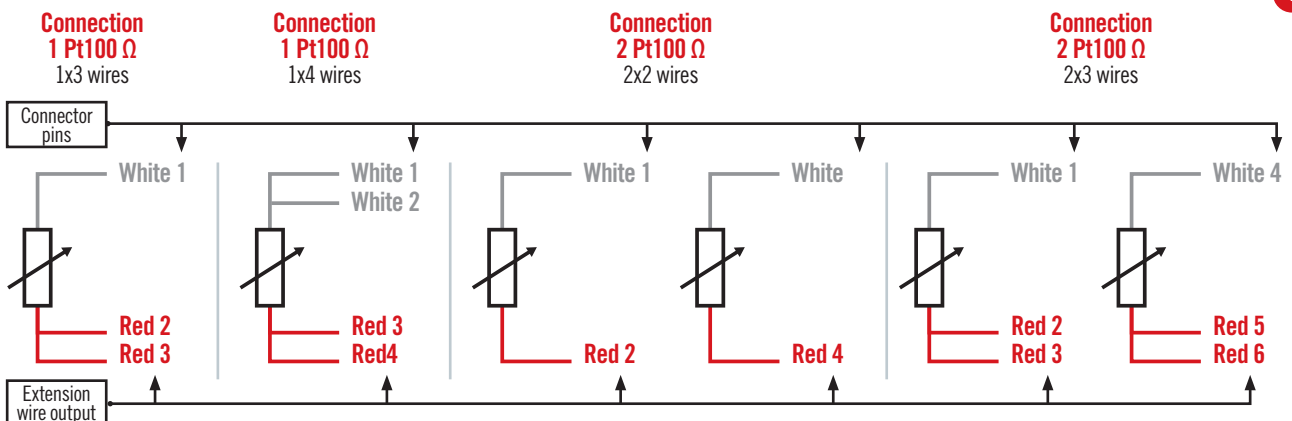
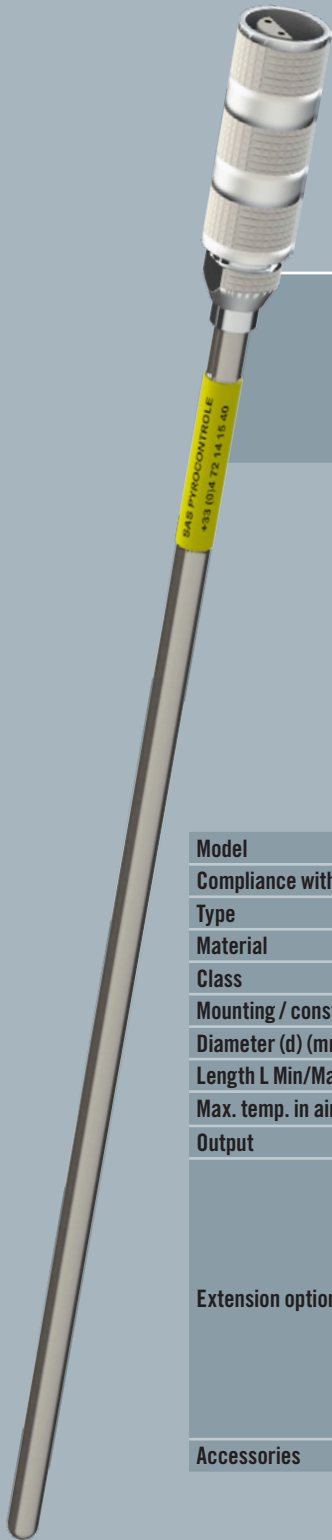


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

Diameter (mm)	1 Pt100		2 Pt100	
	1x3 wires	1x4 wires	2x2 wires	2x3 wires
3	•	•	-	-
4.5	•	•	•	•
6	•	•	•	•

CONNECTIONS





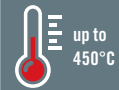
S40

Pt100

**CLASS
A**

**IEC
60751**

**LEMO
CONNECTOR**



DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, output via Jaeger connector, for temperature measurement up to 450°C in low-pressure and low flow-rate environments.

SPECIFICATIONS

Model	S40			
Compliance with standards	IEC 60751			
Type	Pt100 Ω			
Material	316L			
Class	A			
Mounting / construction	Single: 1x3 wires or 1x4 wires - Duplex: 2x2 wires or 2x3 wires			
Diameter (d) (mm)	3 / 4.5 / 6			
Length L Min/Max (mm)	50 ... 1500			
Max. temp. in air (°C)	200 or 450°C			
Output	Connector	LEMO size 2 ref. PC2M3		
Extension option	Extension with female LEMO plug and PVC, FEP or silicone extension cable.			
	Sheath	PVC	FEP	SILICONE
	Max. temperature	105°C	200°C	200°C
	Conductors	3, 4 or 6 x 0.22 mm, PVC insulation	3, 4 or 6 x 0.22 mm, FEP insulation	3, 4 or 6 x 0.22 mm, FEP insulation
	Shielding braid	•	•	
	Length Lc Min/Max (mm)	200 to 10,000 mm		
Termination	Insulated bare wires			
Accessories	Leak-tight fittings, rotating fittings			

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	OPERATING TEMP. (°C)	MOUNTING	β (mm)	LENGTH L (mm)	OPTION	
					EXTENSION CABLE	LENGTH Lc (mm)
S40	-	-	-	-	-	-
Reference in table and diagram		1	2	3	4	5
Possible choice	200 450	1x3 wires: B 1x4 wires: C 2x2 wires: D 2x3 wires: E	3 4.5 6	50 to 1,500	PVC: PVC FEP: FEP Silicone: SIL	200 to 10,000 mm

DIAGRAM

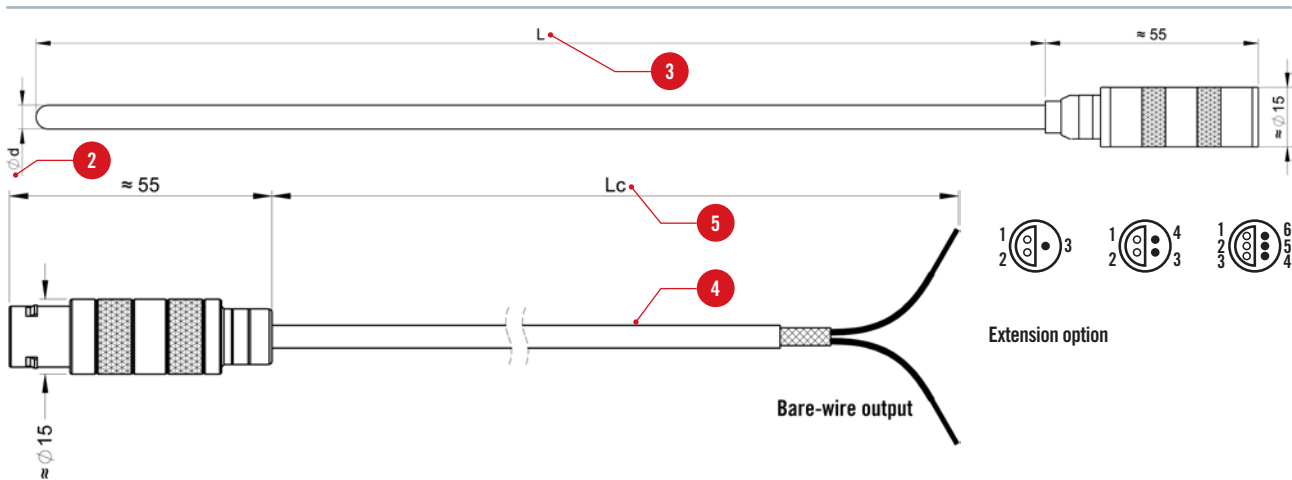
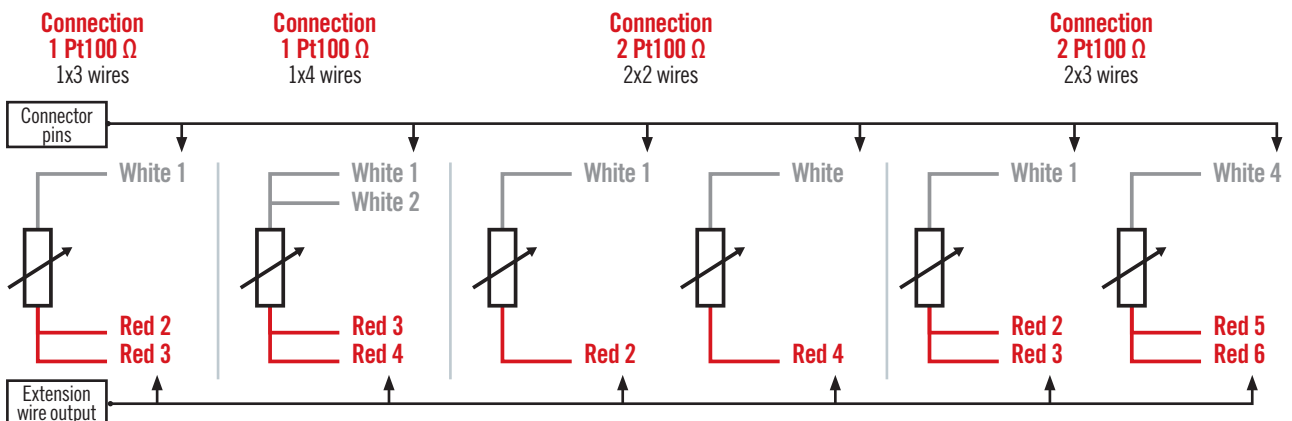
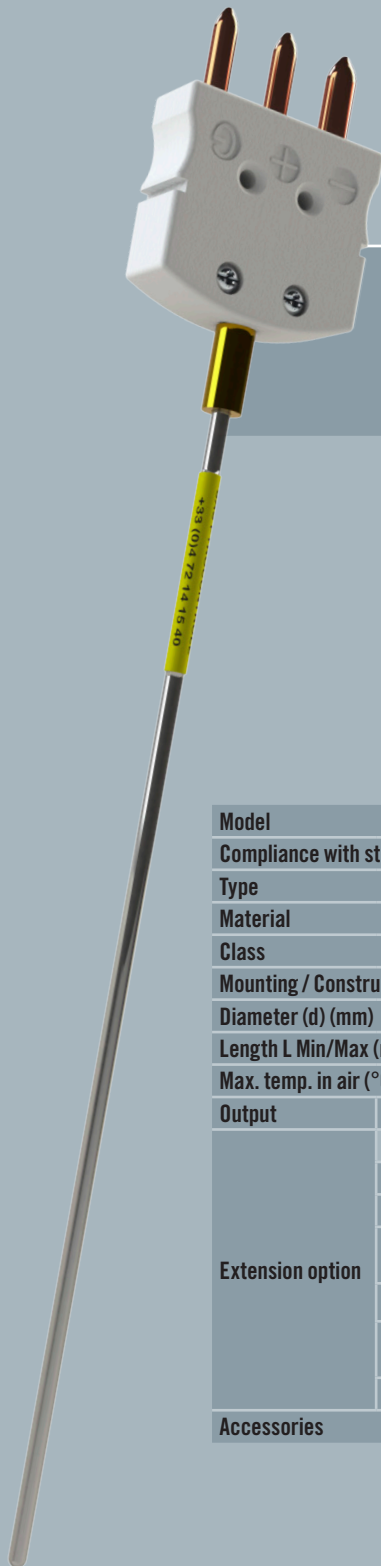


TABLE OF CONDUCTOR TYPE - WIRE DIAMETER

Diameter (mm)	1 Pt100		2 Pt100	
	1x3 wires	1x4 wires	2x2 wires	2x3 wires
3	50/1500	50/1500	-	-
4.5	50/1500	50/1500	50/250	50/1500
6	50/1500	50/1500	50/250	50/1500

BRANCHING





S44

Pt100

**CLASS
A**

**IEC
60751**

**STANDARD
CONNECTOR**



DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, output via standard 3-pin male connector, for temperature measurement up to 450°C in low-pressure and low flow-rate environments.

SPECIFICATIONS

Model		S44			
Compliance with standards		IEC 60751			
Type		Pt100 Ω			
Material		316L			
Class		A			
Mounting / Construction		Single: 1x3 wires			
Diameter (d) (mm)		3 / 4.5/ 6			
Length L Min/Max (mm)		50 ... 1500			
Max. temp. in air (°C)		200 or 450°C			
Output		Connector Standard 3-pin male			
Extension option		Extension with standard 3-pin female plug with PVC, FEP or silicone extension cable			
		Sheath	PVC	FEP	SILICONE
		Max. temperature	105°C	200°C	200°C
		Conductors	3 x 0.22 mm, PVC insulation	3 x 0.22 mm, FEP insulation	3 x 0.22 mm, FEP insulation
		Shielding braid	•	•	
		Length Lc Min/Max (mm)	200 to 10,000 mm		
Termination		Insulated bare wires			
Accessories		Leak-tight fittings, rotating fittings			

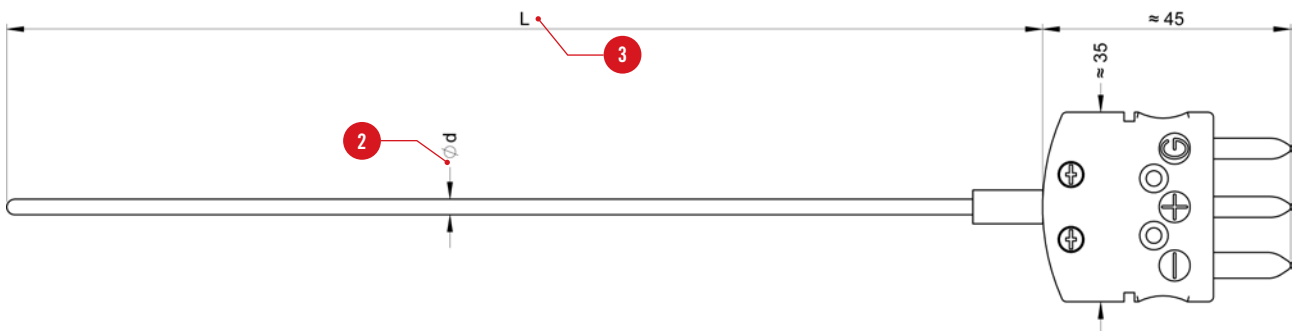
DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	OPERATING TEMP. (°C)	β (mm)	LENGTH L (mm)	OPTION	
				EXTENSION CABLE	LENGTH LC (mm)
S44	-	-	-	-	-
Reference in table and diagram	1	2	3		
Possible choice	200 450	3 / 4,5 / 6	50 to 1,500	PVC : PVC FEP : FEP Silicone : SIL	200 to 10,000 mm

DIAGRAM

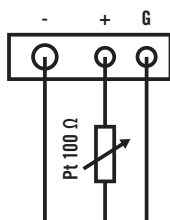


OPERATING TEMPERATURE LIMIT ACCORDING TO DIAMETER

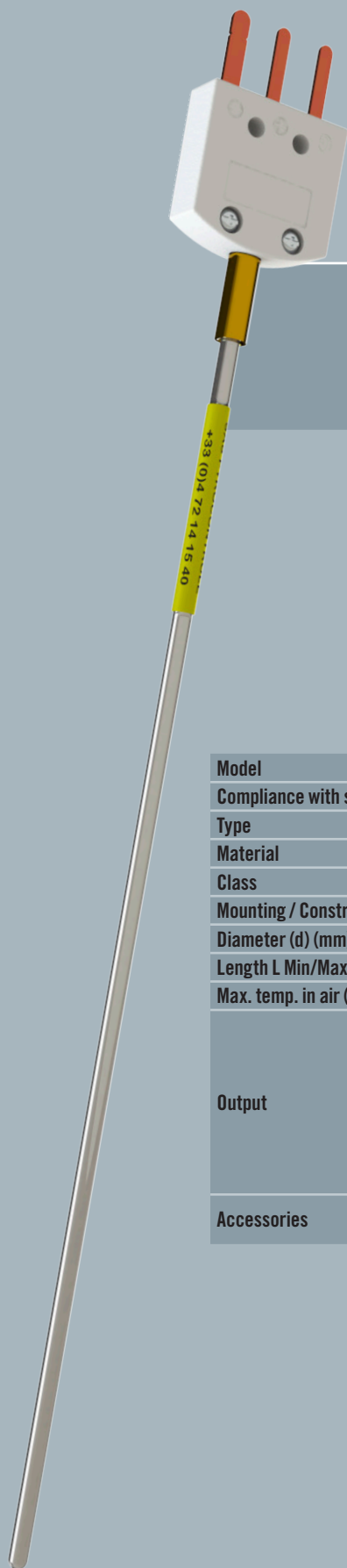
Diameter (mm)	Temperature	
	200°C	450°C
3	•	-
4.5	•	•
6	•	•

CONNECTION

Standard 3-pin connector



For any other configuration, please contact us.



S43

Pt100

**CLASS
A**

**IEC
60751**

**MINIATURE
CONNECTOR**



DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, output via miniature 3-pin connector, for temperature measurement up to 450°C in low-pressure and low flow-rate environments.

SPECIFICATIONS

Model		S43
Compliance with standards		IEC 60751
Type		Pt100 Ω
Material		316L
Class		A
Mounting / Construction		Single: 1x3 wires
Diameter (d) (mm)		3
Length L Min/Max (mm)		50 ... 1500
Max. temp. in air (°C)		450°C
Output	Connector	3-pin miniature male
	Format	Miniature
	Dimensions (Lxwxh) (mm)	19 x 24 x 8
	Temperature withstand	-50... + 210°C
	Material	Pins: Copper - Body: glass-fibre reinforced nylon
Accessories		Cable clamp for connector, female connector, leak-tight fittings, rotating fittings

DESIGN YOUR SENSOR

CONFIGURATOR CODE

Parameters to be indicated when ordering

MODEL	LENGTH L (mm)
S43	-

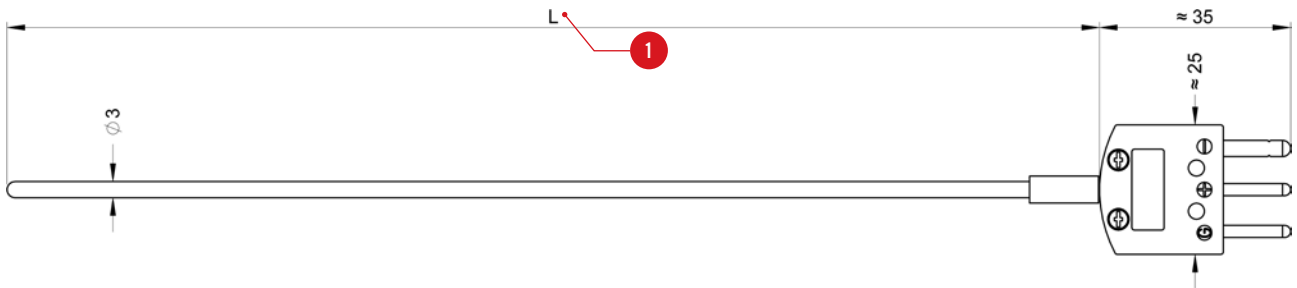
Reference in table and diagram

1

Possible choice

50 to 1,500

DIAGRAM

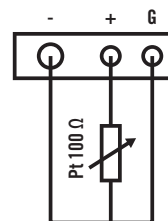


STANDARD REFERENCES

Designation	Reference
S43-50	L334312-003
S43-100	L334312-006
S43-150	L334312-007
S43-200	L334312-008
S43-300	L334312-010
S43-500	L334312-014

CONNECTION

Standard 3-pin connectors

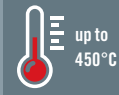


For any other configuration, please contact us.



S51

Pt100

IP
54CLASS
1IEC
60751up to
450°CSINGLE
OR
DUPLEX

DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, with output via MA head for temperature measurement up to 450°C in low-pressure and low flow-rate environments. For use when the space available for the connecting head is limited.

SPECIFICATIONS

Model	S51	
Compliance with standards	IEC 60751	
Class	A	
Mounting / Construction	Single: 1x3 wires or 1x4 wires Duplex: 2x2 wires	
Diameter (d) (mm)	3 / 6	
Length L Min/Max (mm)	50 ... 1500	
Min./max. operating temperature (°C)	-40...+200°C / -40...+450°C	
Process connection	Without	
Electrical connection	Head type	MA
	Material	Light alloy
	Output	1 cable gland PG 9 x 1.5
	Cable diameter	diam.5 et 6
	Terminal strip	2 to 4 terminals
	IP	IP54
Accessories	Leak-tight fittings, rotating fittings	

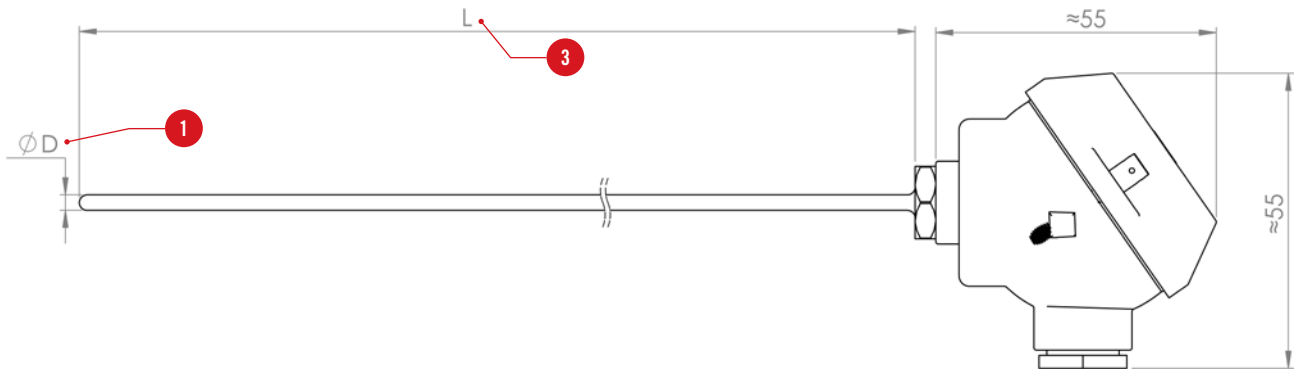
DESIGN YOUR SENSOR

CONFIGURATOR CODE

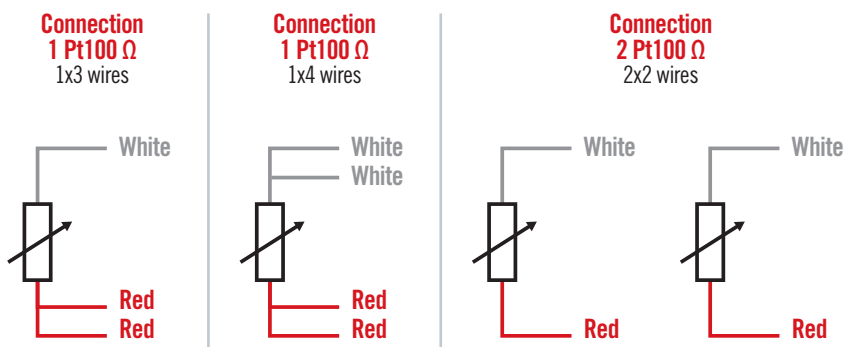
Parameters to be indicated when ordering

MODEL	TEMPERATURE	\varnothing (mm)	MOUNTING	LENGTH L (mm)
S51	-	-	-	-
Reference in table and diagram		1	2	3
Possible choice	200°C 450°C	3.0 6.0	1x3 wires: B 1x4 wires: C 2x2 wires: D	100 to 1,500 see table

DIAGRAM



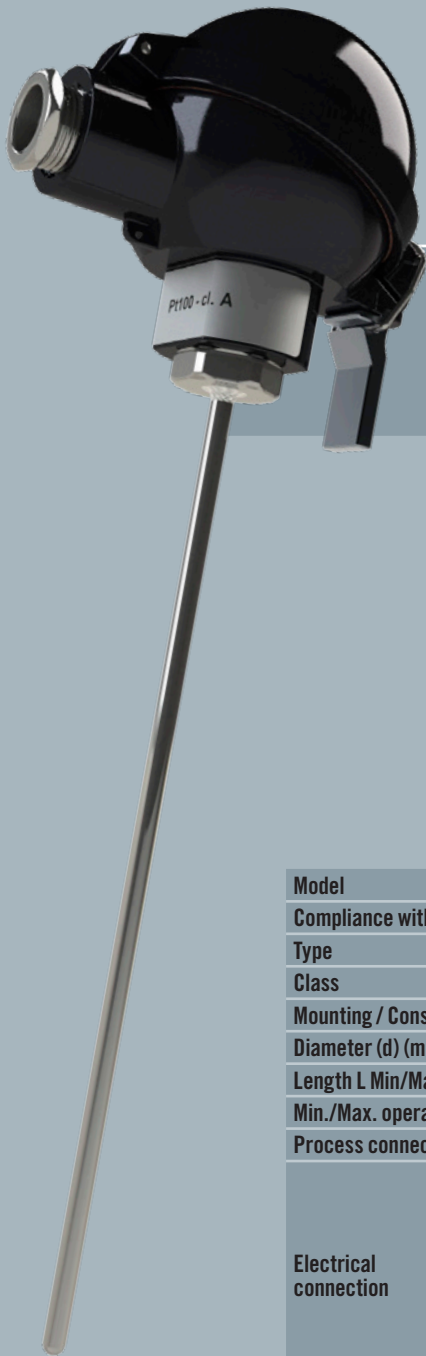
CONNECTIONS



LENGTH ACCORDING TO MOUNTING TYPE AND SHEATH DIAMETER

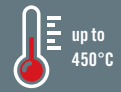
Number of Pt100	1		2
	Type of mounting		
Diameter (mm)	1x3 wires	1x4 wires	2x2 wires
3	50/1500	50/1500	-
6	50/1500	50/1500	50/250

For any other configuration, please contact us.



Sx2

Pt100

IP
65CLASS
AIEC
60751SINGLE
OR
DUPLEX

DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, with output via DAN head for temperature measurement up to 450°C in low-pressure and low flow-rate environments. The DAN head is versatile and easy to open with its valve lever and can be equipped with a terminal strip for connection or a 4-20mA transmitter.

SPECIFICATIONS

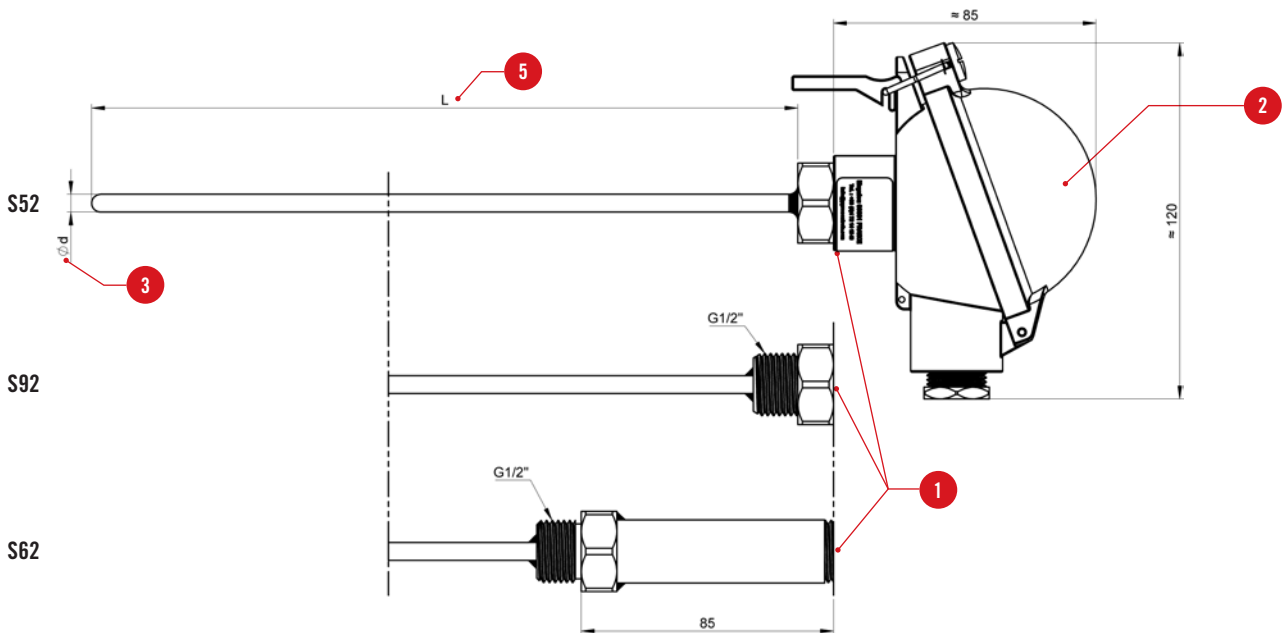
Model		Sx2
Compliance with standards		IEC 60751
Type		Pt100 Ω
Class		A
Mounting / Construction		Single: 1x3 wires or 1x4 wires - Duplex: 2x2 wires or 2x3 wires
Diameter (d) (mm)		3 / 4.5/ 6 / 8
Length L Min/Max (mm)		50 ... 1,500
Min./Max. operating temp. (°C)		-40...+200°C / -40...+450°C
Process connection		Without - under G1/2 head - extension + G1/2 fitting
Electrical connection	Head type	DAN
	Material	Light alloy
	Output	1 cable gland M 20 x 1.5
	Cable diameter	5.5 to 7.5 mm
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)
	Coating	None (standard) or epoxy (option)
	IP	IP54 (standard) or IP65 (option)
Accessories		Leak-tight fittings, rotating fittings

CONFIGURATOR CODE

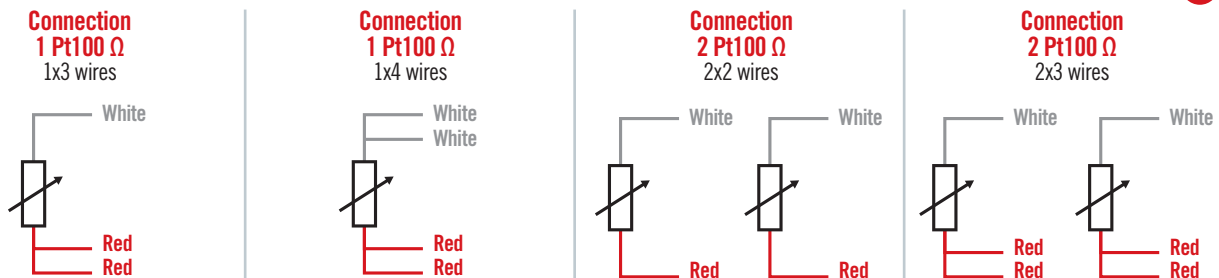
Parameters to be indicated when ordering

MODEL	PROCESS CONNECTION	HEAD	TEMP.	∅ (mm)	MOUNTING	LENGTH L (mm)	OPTION		
							TRANSMITTER	TRANSMIT. SCALE	OPTIONS
S		2							
Reference in table and diagram	1	2		3	4	5	6		
Possible choice	Without: 5 With extension and G1/2" fitting: 6 With G1/2" fitting under head: 9	DAN	200°C 450°C	3 4.5 6 8	1x3 wires: B 1x4 wires: C 2x2 wires: D 2x3 wires: E	100 to 1,500*	LC5331A-321 : B LC5335A-100 : C LC5333A-100 : D		IP65 : 1 Epoxy : 2 IP65 + epoxy : 3

DIAGRAM



CONNECTIONS

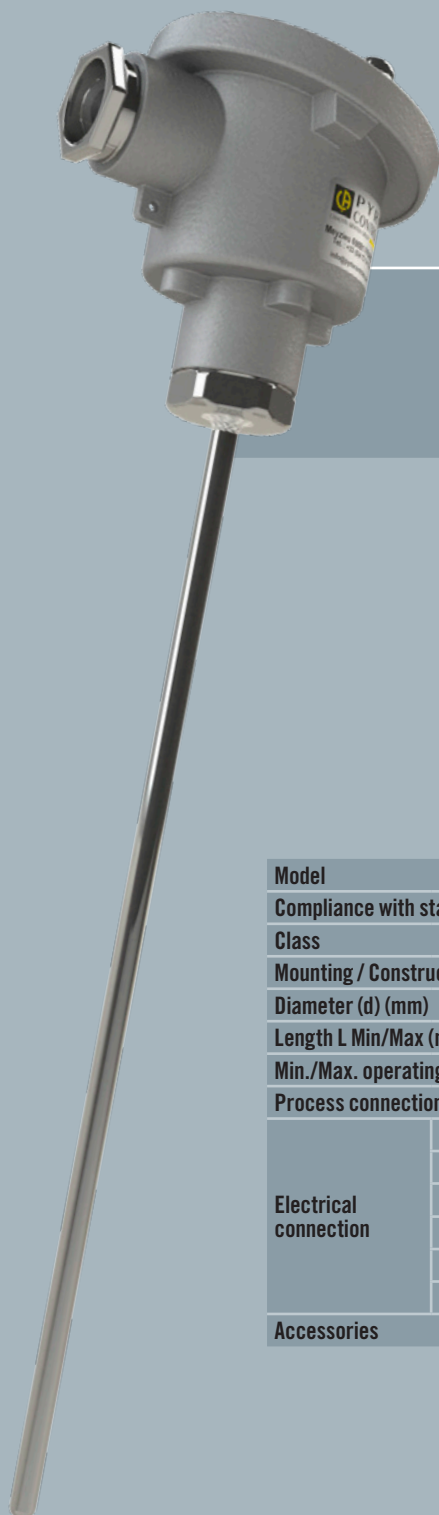


TRANSMITTER (only with 1 Pt 100) - OPTION

Transmitter			
Input	Output	Galvanic insulation	Reference
TC + Pt100	4-20mA	1.5kV	LC5331A-321
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100
Pt100	4-20mA	no	LC5333A-100

For any other configuration, please contact us.

*2x2-wire mounting: length L limited to 250 mm



Sx3

Pt100

IP
54CLASS
AIEC
60751SINGLE
OR
DUPLEX

DESCRIPTION

Sheathed Pt100 sensor, Class A as per IEC 60751, with output via DIN B head for temperature measurement up to 450°C in low-pressure and low flow-rate environments. The DIN B head is economical and versatile and can be equipped with a terminal strip for connection or a 4-20mA transmitter.

SPECIFICATIONS

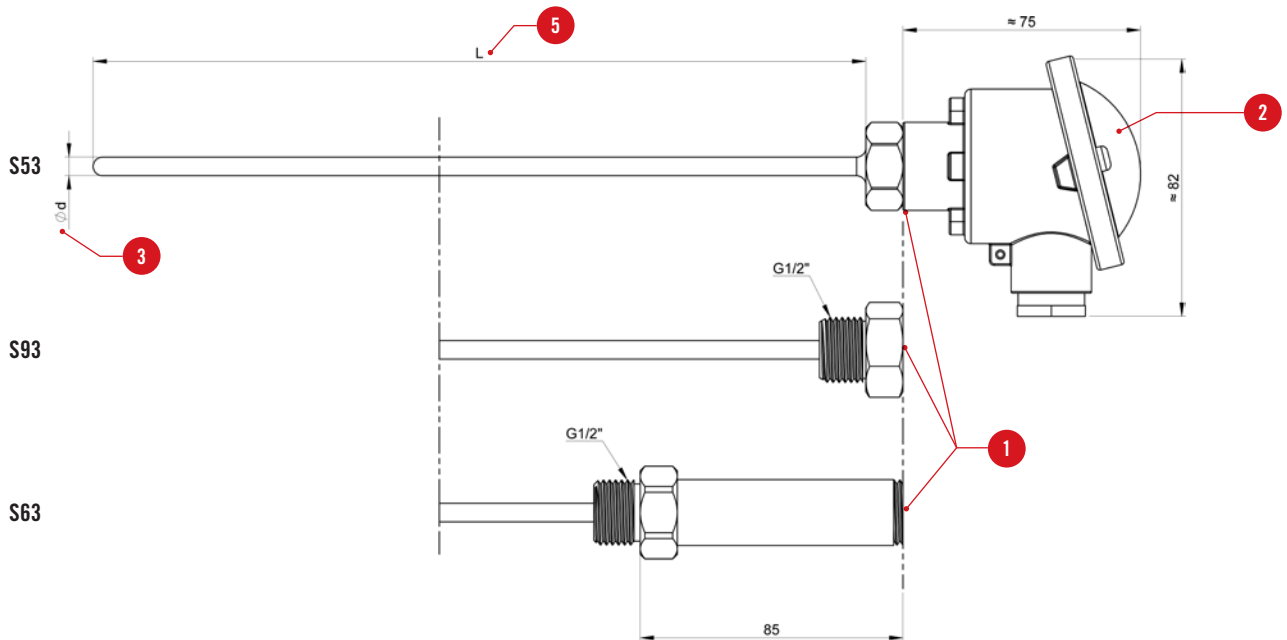
Model		Sx3
Compliance with standards		IEC 60751
Class		A
Mounting / Construction		Single: 1x3 wires or 1x4 wires - Duplex: 2x2 wires or 2x3 wires
Diameter (d) (mm)		4.5/ 6 / 8
Length L Min/Max (mm)		50 ... 1500
Min./Max. operating temp. (°C)		-40...+200°C / -40...+450°C
Process connection		without - under G1/2 head - extension + G1/2 fitting
Electrical connection	Head type	DIN B
	Material	Light alloy
	Output	1 cable gland M 20 x 1.5
	Cable diameter	5.5 to 7.5 mm
	Equipment	Ceramic terminal strip (standard) or 4-20mA transmitter (option)
IP		IP54
Accessories		Leak-tight fittings, rotating fittings

CONFIGURATOR CODE

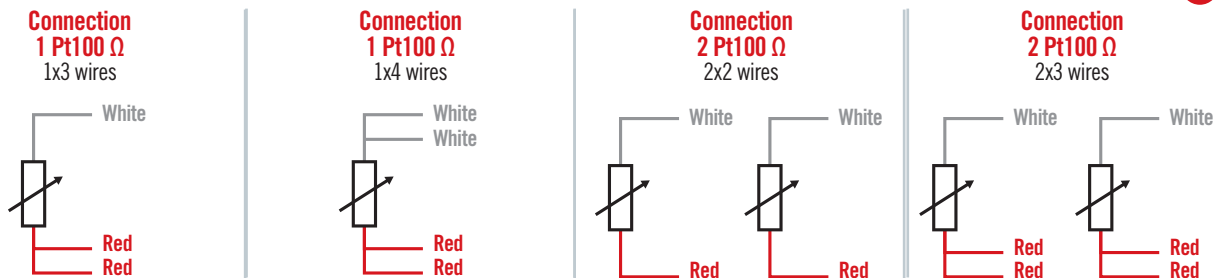
Parameters to be indicated when ordering

MODEL	PROCESS CONNECTION	HEAD	TEMP.	ϕ (mm)	MOUNTING	LENGTH L (mm)	OPTION	
							TRANSMITTER	TRANSMIT. SCALE
S		3						
Reference in table and diagram	1	2		3	4	5	6	
Possible choice	Without: 5 With extension and G1/2" fitting: 6 With G1/2" fittings under head: 9	DIN B	200°C 450°C	4.5 6 8	1x3 wires: B 1x4 wires: C 2x2 wires: D 2x3 wires: E	100 to 1,500*	LC5331A-321 : B LC5335A-100 : C LC5333A-100 : D	

DIAGRAM



CONNECTIONS



TRANSMITTER (only with 1 Pt 100) - OPTION

Transmitter			
Input	Output	Galvanic insulation	Reference
TC + Pt100	4-20mA	1.5kV	LC5331A-321
TC + Pt100	4-20mA + HART	1.5kV	LC5335A-100
Pt100	4-20mA	no	LC5333A-100

For any other configuration, please contact us.

*2x2-wire mounting: length L limited to 250 mm

SPxx

Pt100

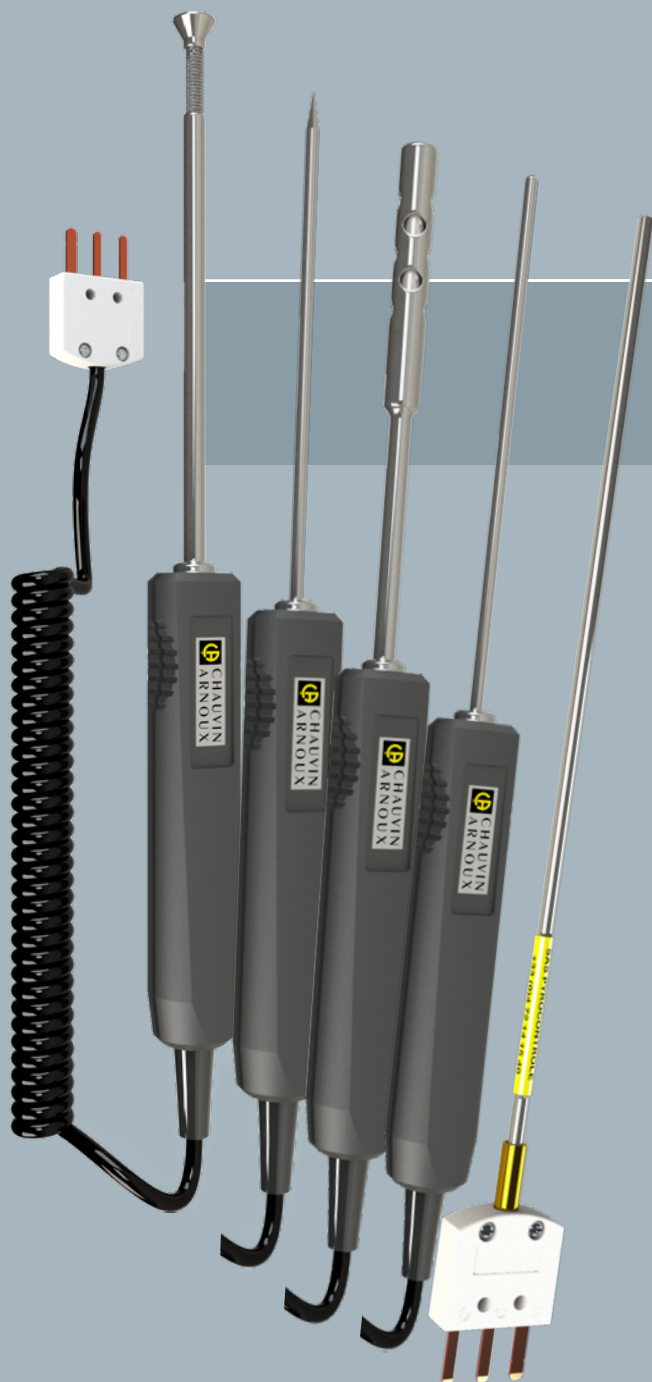
CLASS
A

IEC
60751








DESCRIPTION

SPxx is a comprehensive range of Pt100 resistive sensors for measuring ambient, surface or immersion / penetration temperatures. The Class A/B Pt100 sensors fulfil a wide range of requirements: temperature measurement of ambient air, liquid, pasty, viscous or industrial products in the range from -100 °C to 600 °C. Each sensor is equipped with a handle and spiral cable for manual measurement (45 cm to 1 m) and a miniature male connector with 3 flat pins.



SPECIFICATIONS AND CODES FOR ORDERS

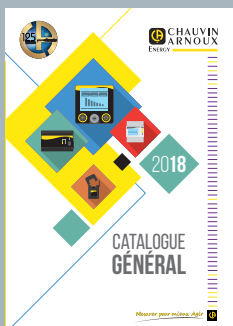
Model	Model	Description	Measurement range	Tolerance class	63% response time	Plunger diameter	Plunger length	Ref.
	SP14	General-purpose sensor. Stainless-steel sheath	-40 °C to 450 °C	Cl. A	7 s	3 mm	20 cm	P01655020
	SP10	Surface sensor with spring	-50 °C to 200 °C	Cl. B	6 s	5 mm	13 cm	P03652712
	SP11	Stainless-steel needle sensor for penetration	-100 °C to 600 °C	Cl. B	7 s	3 mm	13 cm	P03652713
	SP12	Air sensor	-100 °C to 600 °C	Cl. B	5 s	5 mm	13 cm	P03652714
	SP13	Stainless-steel sensor for immersion	-100 °C to 600 °C	Cl. B	7 s	3 mm	13 cm	P03652715



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