

# 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

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

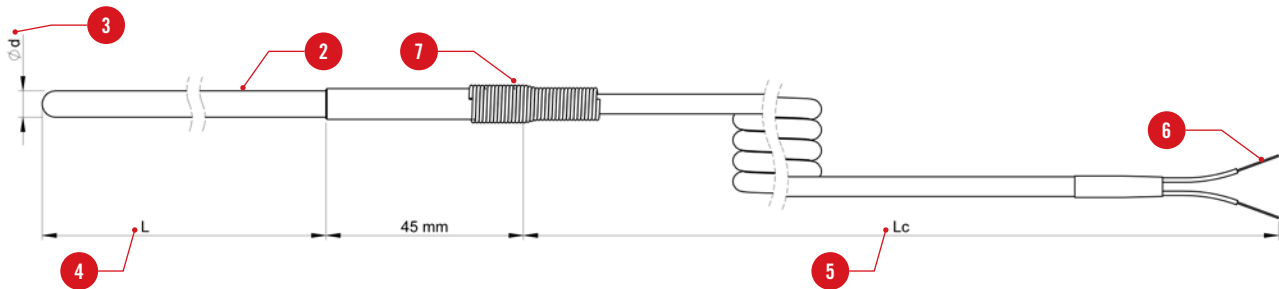
# DESIGN YOUR SENSOR

## 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 2I / 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)

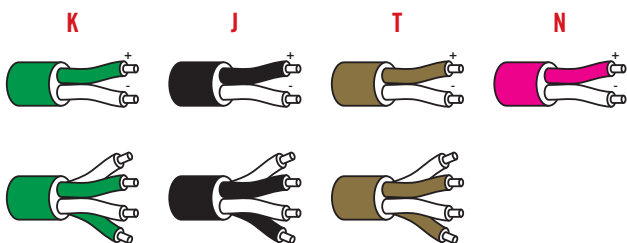
## DIAGRAM



## 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	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	PYROSIL
2T (Class 2)	-	-	304L	-	304L	304L	304L	-
2I	-	316L	316L	316L	316L	316L	316L	316L
2K	-	-	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600	INCONEL600

## CONNECTIONS



For any other configuration, please contact us.