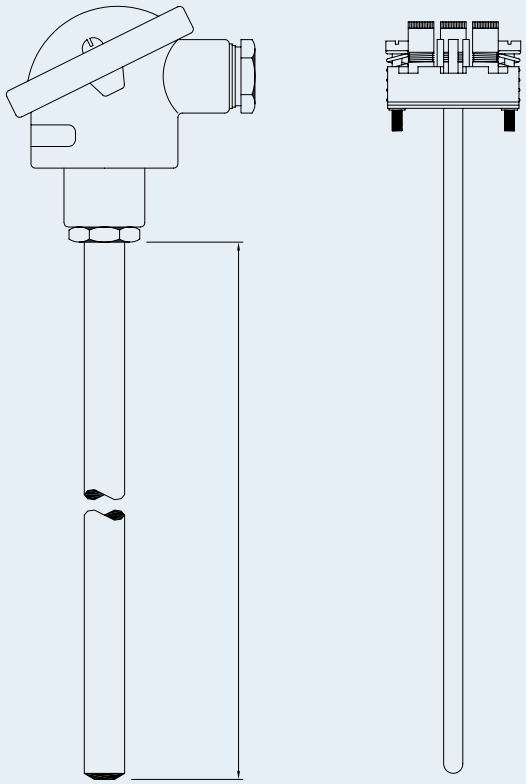
2.1.1

TA

CHARACTERISTICS

General use thermocouple.
Sheath material: AISI-316, AISI-310, AISI-446, Alloy 600 or Alloy 800 depending on type of selected thermocouple.
Connexion to the process can be adjustable through compression fitting, free insertion without coupling, or thermowell.

Ceramic support, optional transmitter 4…20 mA.



APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Process connexion	BSP, NPT, METRIC, ETC...
Sensor tube diameter	6 or 8mm
Sensing element	K, J, N, E
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)

2.1.2

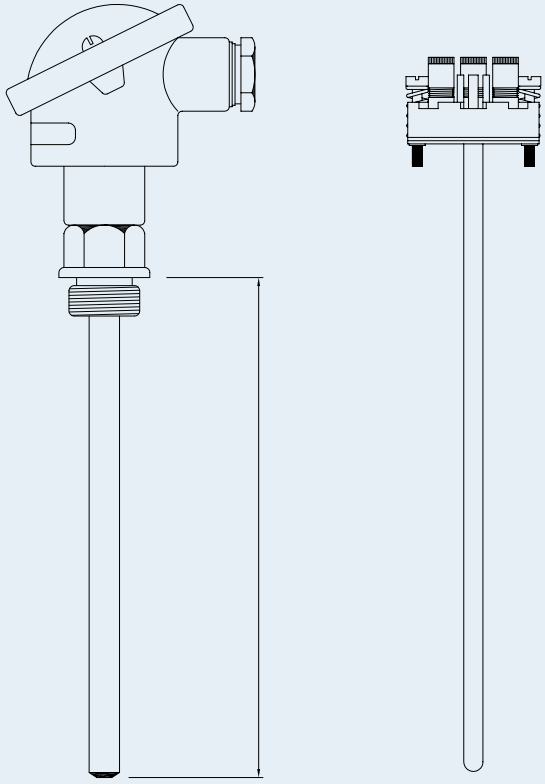
TGN

CHARACTERISTICS

General use thermocouple.
Sheath material: AISI-316, AISI-310, AISI-446, Alloy 600, or Alloy 800 depending on type of selected thermocouple.
This model can be used in the process directly or through thermowell.
Coupling under connexion head GAS ,NPT, METRIC, etc…

Removable measuring unit, TUM model.

Ceramic support, optional transmitter 4…20 mA.



APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Process connexion	BSP, NPT, METRIC, ETC...
Sensor tube diameter	6 or 8mm
Sensing element	K, J ,N, E
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)

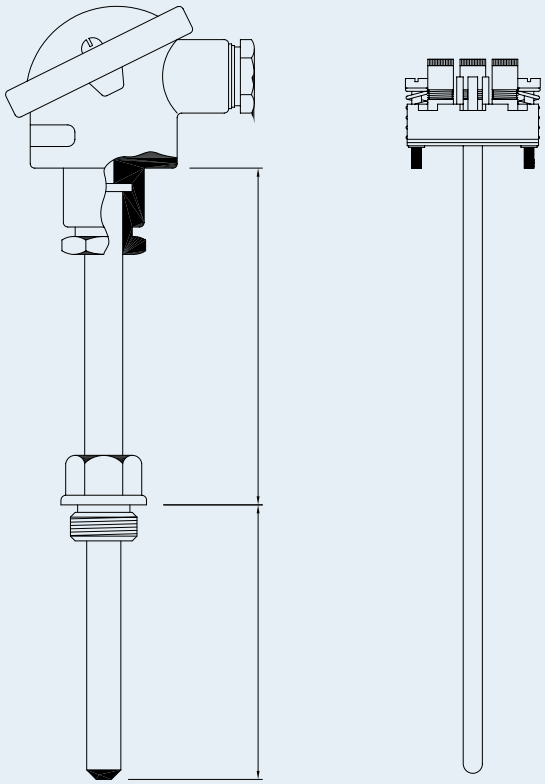
2.1.3

TGB

CHARACTERISTICS

General use thermocouple.
Sheath material: AISI-316, AISI-310, AISI-446, Alloy 600 or Alloy 800 depending on type of selected thermocouple.
This model can be used in the process directly or through thermowell.
With cooling neck for insulation pipe of high temperature installations.
Cooling neck length 100-145mm under connexion head.
Coupling under cooling neck BSP, NPT , METRIC, etc…

Ceramic support, optional transmitter 4…20 mA.



APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Process connexion	BSP, NPT, METRIC, ETC...
Sensor tube diameter	6 or 8mm
Sensing element	K, J ,N, E
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)

2.1.4

TUM

CHARACTERISTICS

General use thermocouple.
Sheath material: AISI-316, AISI-310, AISI-446, Alloy 600 or Alloy 800 depending on type of selected thermocouple.
This model is suitable for all our thermocouples and is designed for various mounting configurations with load springs.

Thermowell connexion accessories:

- Nipple
- Three-part screw

(Accessories conform to ATEX standard optional).

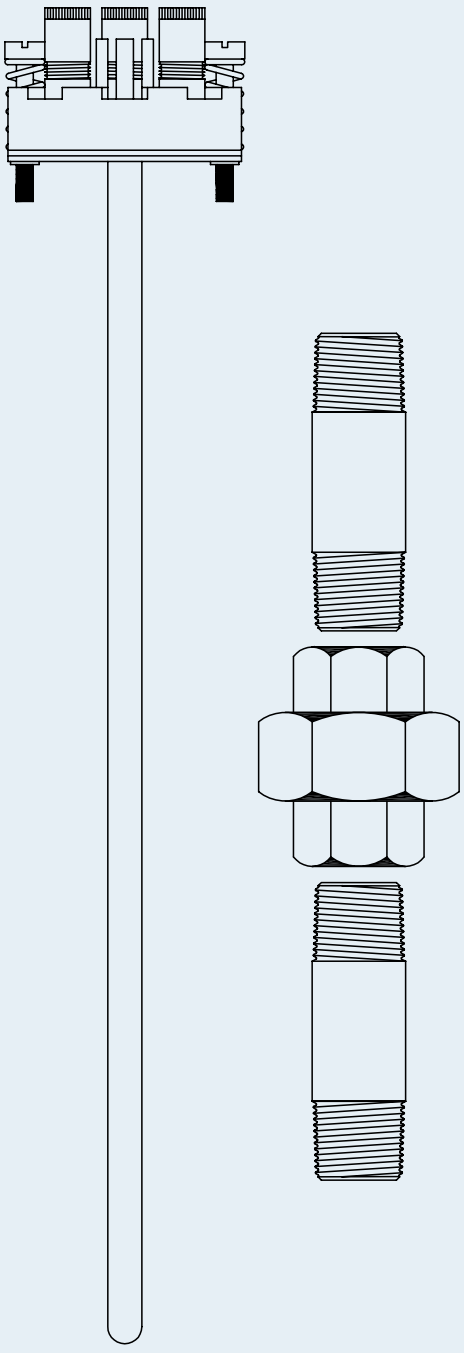
Ceramic support, optional transmitter 4…20 mA.

APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Sensor tube diameter	3, 4, 5, 6 or 8mm
Sensing element	K, J ,N, E
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)



2.1.5

TSA

CHARACTERISTICS

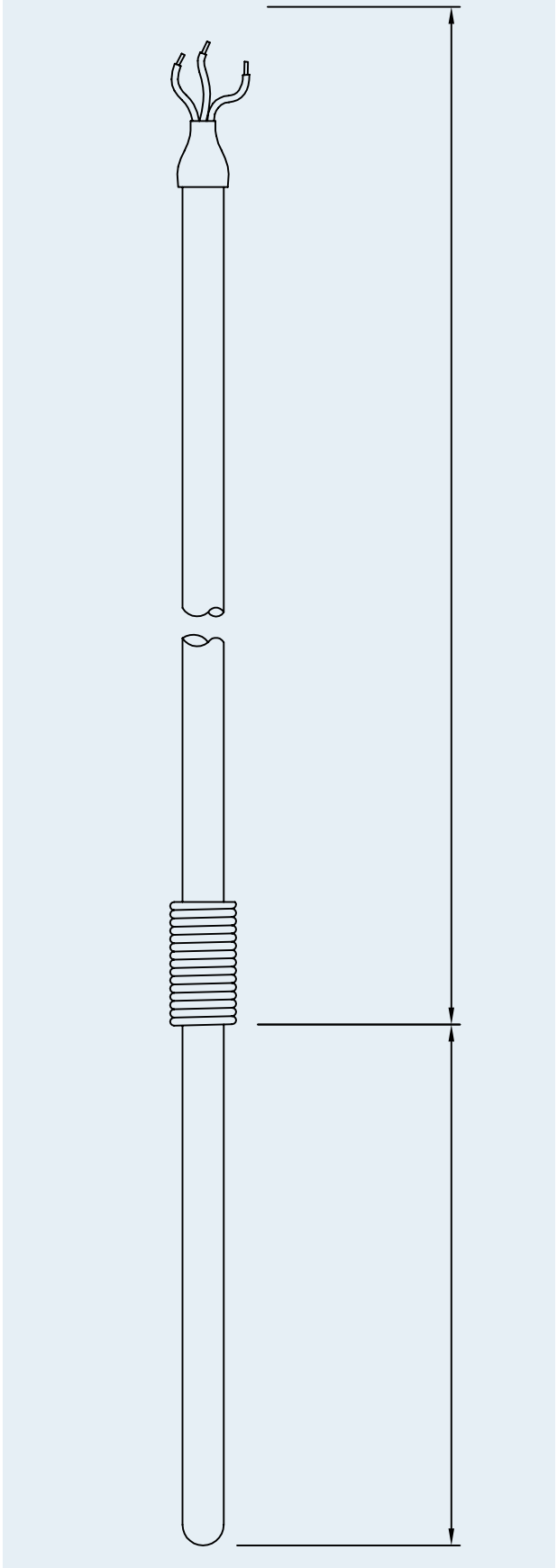
General use sensor.
Output cable 2, 4, or 6 wires in PFA, PVC, FI+FI+MESH, or silicon.
Sheath Ø3, 4, 5, 6 or 8mm in AISI-316.
Anti-vibration protector spring.
Connexion to the process is adjustable using compression fitting, or free insertion without coupling.

APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Sensor tube diameter	3, 4, 5, 6 or 8mm
Sensing element	K, J ,N, E
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)



2.1.6

TSN

CHARACTERISTICS

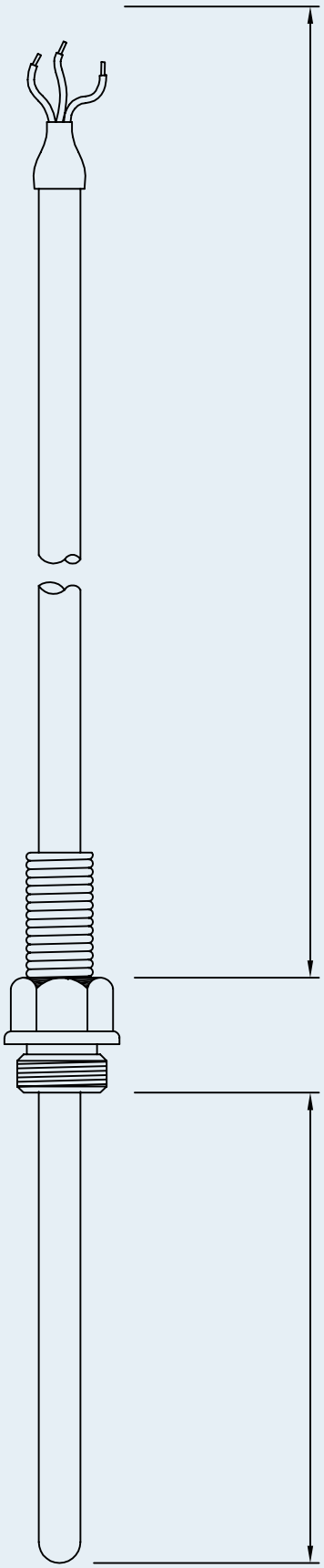
General use sensor.
Output cable 2, 4, or 6 wires in PFA, PVC, FI+FI+MESH, or silicon.
Sheath Ø3, 4, 5, 6 or 8mm in AISI-316.
Anti-vibration protector spring.
Connexion under spring BSP, NPT, METRIC, ETC…

APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Sensor tube diameter	3, 4, 5, 6 or 8mm
Sensing element	K, J ,N, E
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)



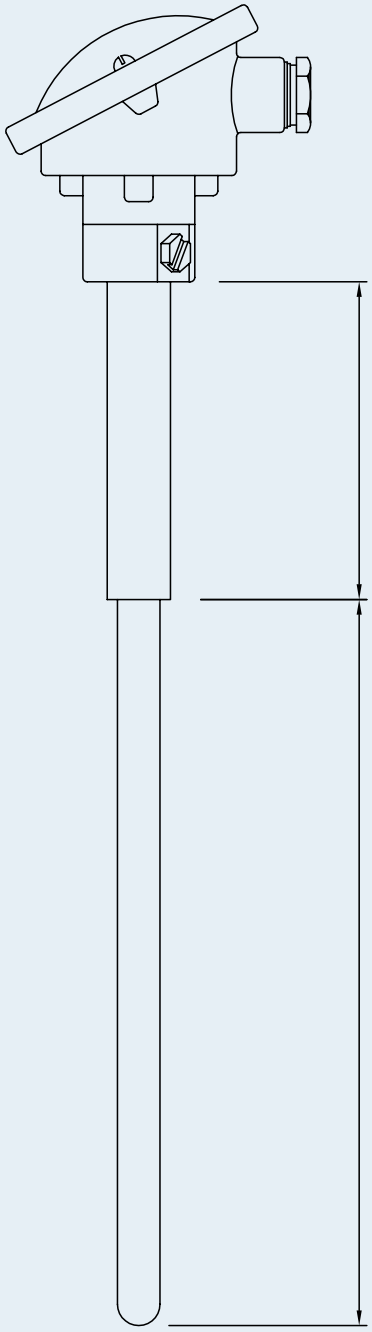
2.2.1

TK

CHARACTERISTICS

These thermocouples are used in measuring high temperatures. Available in type K with a protective alumina sheath of type 610 ($Al_2 O_3$ 60%), or type R or S with an alumina sheath of type 710 ($Al_2 O_3$ 99,7%). Stainless steel long neck joined to connexion head.
Connexion to the process can be adjustable through compression fitting,
free insertion without coupling, thermowell, or mounting flange.

Ceramic support, optional transmitter 4…20 mA.



APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Process connexion	BSP, NPT, METRIC, ETC…
Sensor tube diameter	8, 10,12,15,17,20, 24mm
Ceramic sheath	KER610 and KER710 types
Sensing element	K, S, R
Connexions	2, 4 wires
Working temperature range	-200ºC to +1400ºC (depending on selected thermocouple)

2.2.2

TM

CHARACTERISTICS

General use thermocouple for a maximum temperature of 1100ºC.
Sheath material: AISI-316, AISI-310, AISI-446, Alloy 600 or Alloy 800 depending on type of selected thermocouple.
Connexion to the process can be adjustable through compression fitting,
free insertion without coupling, thermowell, or mounting flange

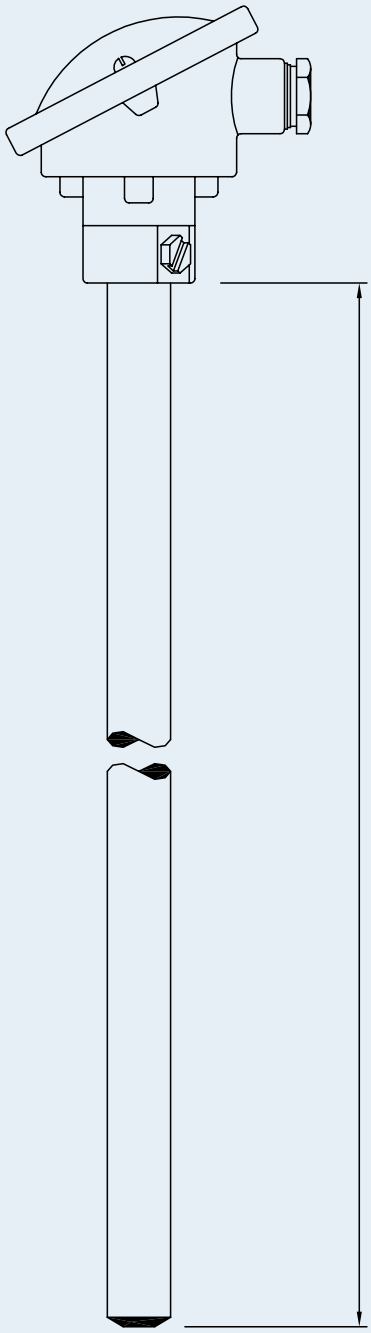
Ceramic support, optional transmitter 4…20 mA.

APPLICATIONS

Kilns, furnaces, burners, galvanizing baths, heat treatment baths and all high temperature thermal processes.

SPECIFICATIONS

Process connexion	BSP, NPT, METRIC, etc..
Sensor tube diameter	12.7, 13.7, 15.9, 17.1, 21.3, 27.9mm
Sensing element	K, S, R
Connexions	2, 4 wires
Working temperature range	-200ºC to +1200ºC (depending on selected thermocouple)



2.3

ATEX USE

The thermocouples were designed and developed to be used in industries with explosion hazard of categories 1 and 2 for gases and powders, meeting the requirements of the 94/9/EC directive (ATEX).

They reach an advanced ATEX certification, not only because of their electronic, but also because of their probe, and that's why they have to be considered as more than "simple elements".

APPLICATIONS

- Industries
- Laboratories
- Food sector
- Sanitary sector