



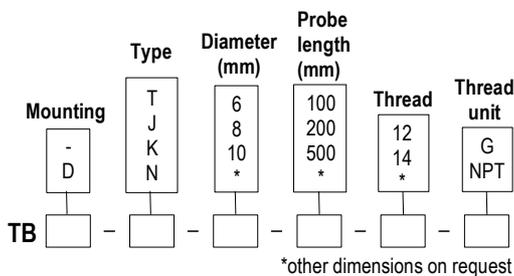
Thermocouple with aluminium connection head

TBK/ TBKI – TBDK / TBDKI

- Thermocouple type T, J, K or N.
- Measuring range from **-40°C to +1000°C**
- With or without compression fitting

Part numbers stainless steel sheath 400°C max.

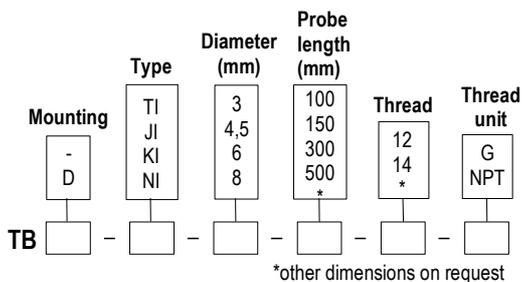
To order, just add the codes to complete the part number.



Example : TBD-T-6-100-12-G

Model : Thermocouple type T with connection head. Sheath of 100 mm and 6 mm Ø with compression fitting ½" G. Mounting of multipair wires.

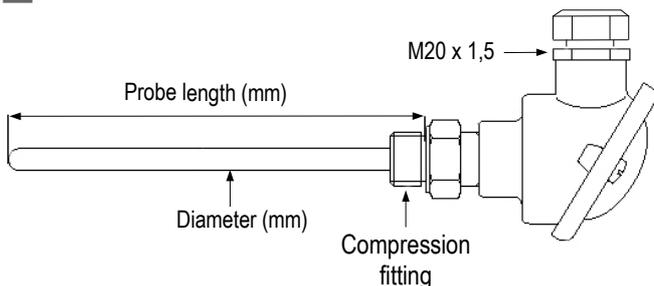
Part numbers mineral insulated sheath 1000°C max.



Example : TBD-TI-6-100-12-G

Model : Thermocouple type T with connection head. Mineral insulated sheath of 100 mm and 6 mm Ø with compression fitting ½" G. Mounting of multipair wires.

Dimensions



Technical features

Working temperature.....For **TBK** category
from -40°C to +350°C for Tc T
from -40°C to +400°C for J, K and N
For **TBKI** category
from -40°C to +350°C for Tc T
from -40°C to +750°C for Tc J
from -40°C to +1000°C for Tc K and Tc N

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

Type of welding.....Ungrounded or grounded hot junction
Single pair or multipair wires (2 x 2 wires).

Sheath.....Inconel 600 mineral insulated or 316 L stainless steel
for TB-I and TBD-I category
316 L stainless steel probe sheathed magnesium oxide construction for TB and TBD category

Compression fitting.....316 L stainless steel

Thread.....With or without compression fitting ½", ¼" G or NPT plug
Electrical connection.....Ceramic block junction 2 or 4 contacts.
Transmitter as option.

Connection head.....Aluminium alloy (Max. 120°C)
Cable gland : M20/150
IP65 protection.

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

Tolerances* of the probe

As per IEC 584-3 norm

TC	Measuring range CLASS 1	TOLERANCE
T	From -40°C to +350°C	From -40°C to +125°C ± 0.5°C From 125°C to +350°C ± 0.004 x T°
J	From -40°C to +750°C	From -40°C to +375°C ± 1.5°C From 375°C to 750°C ± 0.004 x T°
K	From -40°C to +1000°C	From -40°C to +375°C ± 1.5°C From 375°C to 1000°C ± 0.004 x T°
N	From -40°C to +1000°C	From -40°C to +375°C ± 1.5°C From 375°C to 1000°C ± 0.004 x T°

* Performed in laboratory conditions, the above accuracies mentioned in this document will be guaranteed, provided that you use the calibration compensation data or identical calibration conditions.

■ Most common thermocouple types

THERMOCOUPLE TYPES	+ CONDUCTOR	- CONDUCTOR	COLOR OF COMPENSATING CABLE
K	Chromel	Alumel	Ext. color + = GREEN, - = WHITE
T	Copper	Constantan	Ext. color + = BROWN, - = WHITE
J	Iron	Constantan	Ext. color + = BLACK, - = WHITE
N	Nicrosil	Nisil	Ext. color + = PINK, - = WHITE
R	Platinum-13% Rhodium	Platinum	Ext. color + = ORANGE, - = WHITE
S	Platinum-10% Rhodium	Platinum	Ext. color + = ORANGE, - = WHITE
B	Platinum-30%Rhodium	Platinum- 6%Rhodium	Ext. color + = GREY, - = WHITE

■ Accessories (See Datasheet)

- Extension cable
- Compensating cable
- Standard or miniature connector
- Cable seal for plug and socket connector



- Miniature or standard fixed connector
- Miniature or standard connectors panel
- Extension lead
- Converters

