



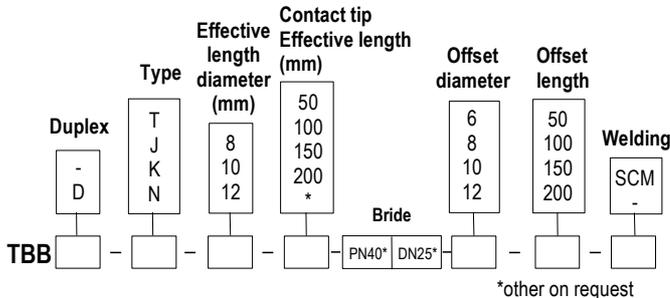
Thermocouple temperature sensor with standard head and mounting flange

TBB K / TBB KI - TBB D K / TBB D KI

- Thermocouple types T, J, K and N.
- Measuring range from -40°C to +1000°C

Stainless steel contact tip max 400°C part numbers

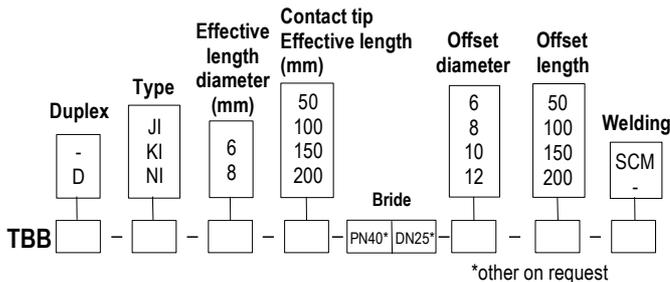
To order, just add the codes to complete the part number.



Example : TBB-T-8-100-PN40DN25-8-50

Model : Thermocouple sensor type T, insulated welding. Stainless steel contact tip with an effective length of 100 mm and 8 mm Ø and with an offset length of 50 mm and 8 mm Ø. Mounting flange type PN40 DN25. Standard measuring range from -40°C to 350°C.

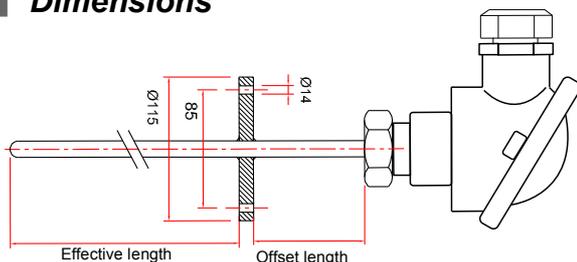
Lined contact tip max 1000°C part numbers



Example : TBB-JI-8-100-PN40DN25-8-50

Model : Thermocouple sensor type T, insulated welding. Inconel contact tip with an effective length of 100 mm and 8 mm Ø and with an offset length of 50 mm and 8 mm Ø. Mounting flange type PN40 DN25. Standard measuring range from -40°C to 400°C.

Dimensions



Technical features

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

Recommended temperature.....According to contact tip Ø in inconel 600
from 0.5 to 1 mm Ø : up to 300°C
from 1.5 to 2 mm Ø : up to 750°C
3 mm Ø : up to 900°C
from 4.5 to 8 mm Ø : up to 1000°C



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

Mounting of welding.....Insulated or to earth hot welding
Single pair or 2x2 wires multipair mounting.

Contact tip.....Stainless steel 316 L or lined inconel 600 for I series
Compacted magnesia and stainless steel 316 L for TBB and TBB D series

Compression fitting.....stainless steel 316 L flange welded on contact tip
PN and DN have to be specify according to use
PN 40 DN 25 in standard.

Electrical connection.....Ceramic block junction 2 or 4 contacts.
Transmitter as option.

Connection head.....Aluminium alloy (max 120°C)
Cable gland : M20/150
IP 65 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° abs
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° abs
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° abs
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° abs

* 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 TYPE	+ CONDUCTOR	- CONDUCTOR	COLOR OF COMPENSATING CABLE
K	Nickel-Chrome 10%	Nickel-Aluminium 5% -Silicium	Ext. color + = GREEN, - = WHITE
T	Copper	Copper-Nickel	Ext. color + = BROWN, - = WHITE
J	Iron	Copper-Nickel	Ext. color + = BLACK, - = WHITE
N	Nickel 84,4% Chromium 14,2% Silicium 1,4%	Nickel 95,6% Silicium 4,4%	Ext. color + = PINK, - = WHITE
R	Platinum-Rhodium 13%	Platinum	Ext. color + = ORANGE, - = WHITE
S	Platinum-Rhodium 10%	Platinum	Ext. color + = ORANGE, - = WHITE
B	Platinum-Rhodium 30%	Platinum-Rhodium 6%	Ext. color + = GREY, - = WHITE

■ Accessories (See data sheet)

- 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

