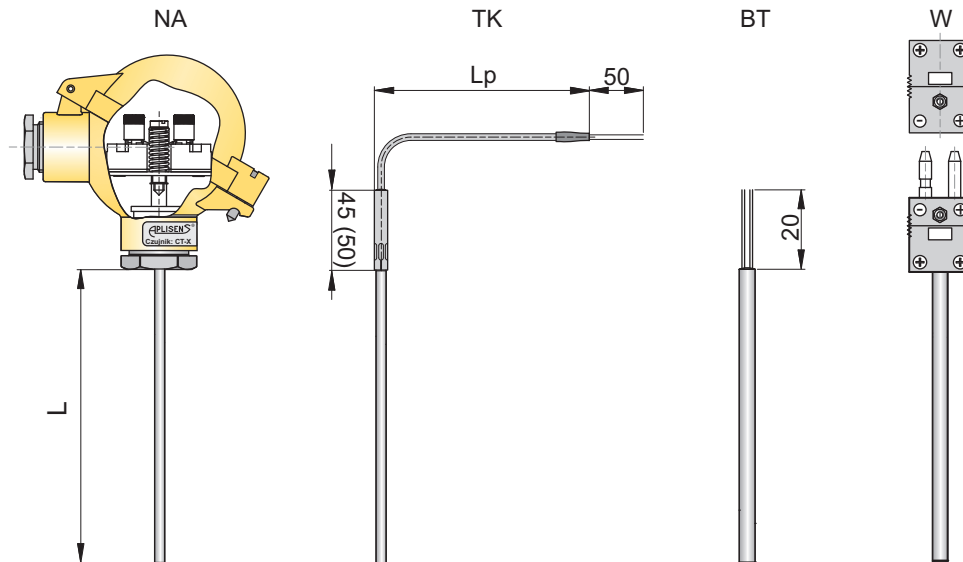


# TEMPERATURE SENSORS WITHOUT ADDITIONAL PROTECTION TUBE TYPE CT X

- ✓ RTD (Pt100, Pt1000) and TC sensors
- ✓ ATEX Exia certificate



## Features

Temperature sensors CT X are offered as Pt100/Pt1000 resistance thermometers or thermocouples.

In resistance sensors (RTD) platinum resistors change their electrical resistance as a function of temperature. RTD, the most commonly used sensors in industry, are suitable for applications between  $-200...+600^{\circ}\text{C}$ . The accuracy classes A and B are available with a tolerance acc. to IEC60751.

Thermocouples are made of two different conductors joined at the end. The temperature difference between junction, placed in measuring point (hot junction), and wire ends (cold junction), generate voltage proportional to the difference of temperature between these junctions.

The accuracy classes 1 and 2 are available with tolerance acc. to IEC60584.

## Description



Temperature sensors model CT X are offered without additional protection tube.

Small diameters and flexibility of process part allow for assembling in not easily accessible places.

Sensors are suitable only for non-aggressive or abrasive liquids and gases. Usually are mounted directly into the process. Sensors can be mounted also into thermowells, in this case is recommended assembling with spring-loaded fitting or using transmission liquid.

Sensors are offered with various screwed connections or for insertion, with fitting elements like union nuts. Typical application are:

- machine building
- temperature measurement in motors, bearings

| Ordering procedure |                              |   |                                |
|--------------------|------------------------------|---|--------------------------------|
| CTX                |                              |   |                                |
|                    | <b>Diameter of sensor</b>    |   |                                |
|                    | 3                            | 3mm   |                                |
|                    | 6                            | 6mm   |                                |
|                    | 8                            | 8mm   |                                |
|                    | <b>Certificate</b>           |   |                                |
|                    | x                            | standard version, no certificates   |                                |
|                    | Exia /II                     |  II 1/2 G Ex ia IIC T6...T1 Ga/Gb<br>II 1D Ex ia IIIC T75°C Da |                                |
|                    | Exia /I                      |  I M1 Ex ia I Ma   | available with KO housing only |
|                    | <b>Measuring element</b>     |   |                                |
|                    | Pt                           | Pt100   |                                |
|                    | 2xPt                         | 2xPt100   |                                |
|                    | J                            | TC type J   |                                |
|                    | 2xJ                          | 2x TC type J  |                                |
|                    | K                            | TC type K   |                                |
|                    | 2xK                          | 2xTC type K   |                                |
|                    | <b>Class of element</b>      |   |                                |
|                    | A/3                          | TR sensor, Class A, 3 wires   |                                |
|                    | A/4                          | TR sensor, Class A, 4 wires   |                                |
|                    | B/2                          | TR sensor, Class B, 2 wires   |                                |
|                    | 1/O                          | TC sensor, Class 1, ungrounded junction   |                                |
|                    | 2/O                          | TC sensor, Class 2, ungrounded junction   |                                |
|                    | <b>Length</b>                |   |                                |
|                    | L= ....                      | required length of immersion [mm]   |                                |
|                    | <b>Process connection</b>    |   |                                |
|                    | X                            | Without threaded connection   |                                |
|                    | UG/G1/2"                     | clamping grips with thread G1/2"  |                                |
|                    | UG/1/2"NPT                   | clamping grips with thread 1/2"NPT  |                                |
|                    | UG/G1/4"                     | clamping grips with thread 1/4"NPT  |                                |
|                    | <b>Electrical connection</b> |   |                                |
|                    | BT                           |   |                                |
|                    | TK                           |   |                                |
|                    | W                            |   |                                |
|                    | NA                           |   |                                |