

# JACKETED THERMOCOUPLES WITH CABLE

T02.03en

## DESCRIPTION AND APPLICATION

Thermocouple temperature sensors with attached guidance are designed for measuring temperature of gaseous, liquid or solid substances. Temperature range is up to 1 100 °C depending to the thermocouple type and to the production technology used. The thermocouple temperature sensors are possible to be used for any control systems compatible with selected thermocouple type. The thermocouple temperature sensors meet ingress protection IP 67 in accordance with EN 60529, as amended depending to the thermocouple type and to the production technology used. The case diameter of 1 mm ensures a very fast sensor response to temperature changes. The thermocouple temperature sensors are intended for operation in chemically non-aggressive environment.



## ACCESSORIES

- connectors
- screw with collet or cutting rings – if different lengths of stem immersion of the temperature sensor are set

## DECLARATION, CERTIFICATES, CALIBRATION

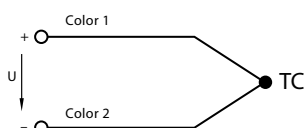
Manufacturer provides **EU Declaration of Conformity**.

**Calibration** – The final metrological inspection – comparison with standards or working instruments – is carried out for all the products. Continuity of the standards and working measuring instruments is ensured within the meaning of the Section 5 of Act no.505/1990 on metrology. The manufacturer offers a possibility to supply the sensors calibrated in an Accredited laboratory.

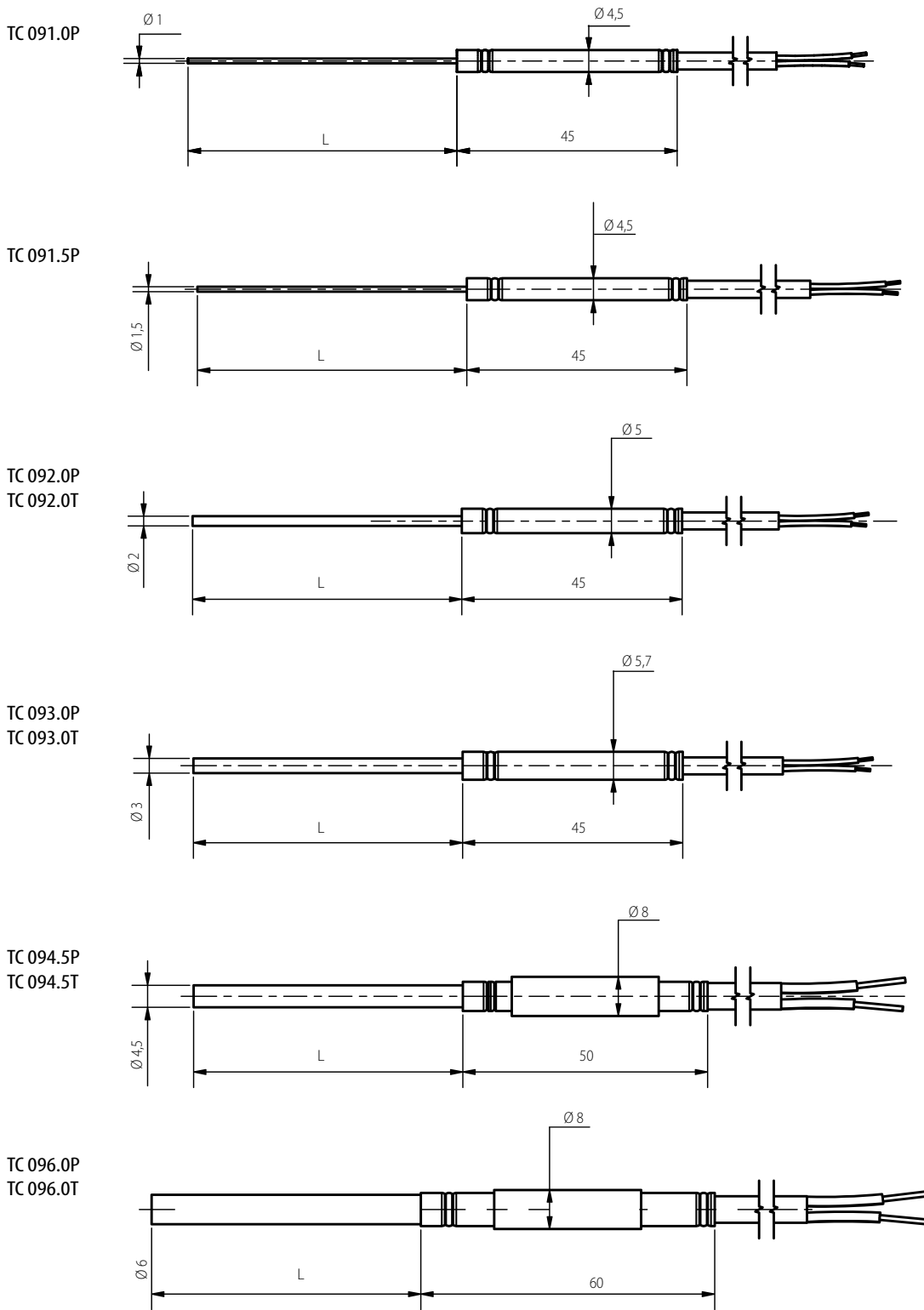
## SPECIFICATIONS

Sensor type	TC 09x.xP	TC 09x.xT
Thermocouple type	"J" and "K" (other on request)	
Ingress protection	IP 55, 54 and 50 in accordance with EN 60529, as amended	IP 67, 64 and 50 in accordance with EN 60529, as amended
Design	jacketed thermocouple with insulated measuring point	with stainless steel jacketing and internal thermocouple leads
Diameter of the jacket	1; 1.5; 2; 3; 4.5 and 6 mm	2; 3; 4.5 and 6 mm
Length of the measuring part	from 20 to 300 mm standardly, other on customer's requirement	
Measuring range - on a measuring point	"K" type up to 1 100 °C - according to the diameter of measuring part "J" type up to 700 °C other depending on the type	-200 to 600 °C
Accuracy class	standardly 2 in accordance with EN 60584 and DIN 43 710, further 1	
Jacket material / Case material	Inconel 2.4816 for TC "K", stainless steel DIN 1.4541 for TC "J"	stainless steel DIN 1.4571 and DIN 1.4301
Sensor body	flexible, shapeable	fixed, non-shapeable
Compensation lines	silicone unshielded 2 x 0.22 mm <sup>2</sup> up to 200 °C, IP 55 / IP 67, as amended PTFE shielded 2 x 0.22 mm <sup>2</sup> up to 260 °C (in short time 300 °C), IP 54 / IP 64, as amended glass + metal braiding 2 x 0.22 mm <sup>2</sup> up to 400 or 600 °C, IP 50, as amended PVC unshielded 2 x 0.22 mm <sup>2</sup> up to 105 °C, IP 55 / IP 67, as amended	

## WIRING DIAGRAM



## DIMENSIONAL DRAFT



## MODIFICATION AND CUSTOMIZATION

- variable stem design – length L1, diameter, case material