



TCT

Compact, rugged, precise

SICK
Sensor Intelligence.



Technical data overview

Temperature measuring range	-50 °C +150 °C -50 °C +250 °C
Accuracy of sensor element	Class A according to IEC 60751
Accuracy of the opt. measuring transducer	± 1,0 % of span
Output signals	Pt100, 4-wire / 4 mA ... 20 mA, 2-wire (depending on type)
Maximum ohmic load R_A	$R_A \leq (L^+ - 9 V) / 0.023 A$ [Ohm]
Electrical connection	Round connector M12 x 1, 4-pin, IP67

Product description

The TCT is a universal Pt100 resistance thermometer in a compact stainless steel housing for temperature measurement in liquids and gases. Available with a variety of process connections and insertion lengths, it can be adapted to specific applications. The TCT is available with or without compression fittings and with various connection threads, for example. Designs with protective pipe can also be supplied. The Pt100 element is located inside the tip of the probe. Wetted parts are made from high-grade stainless steel 1.4571. The TCT is available with Pt100 output or an integrated measuring transducer with 4 mA ... 20 mA output signal.

At a glance

- Pt100 element, accuracy class A according to IEC 60751
- Measuring ranges -50 °C ... +150 °C and -50 °C ... +250 °C
- Wetted parts made from corrosion resistant stainless steel 1.4571
- Various mechanical adaptations and insertion lengths, also available with thermowell
- Pt100 (4-wire) or 4 mA ... 20 mA (2-wire)
- Circular connector M12 x 1 (IP 67)

Your benefits

- Reliable operation through rugged design and high-quality materials
- Very good long-term stability, accuracy and linearity
- Quick and safe installation
- Convenient system integration through compact dimensions and industry-standard output signals
- Optimal solutions for individual requirements due to versatile configurability

Fields of application

- Temperature measurement of liquids and gases in industrial applications
- Monitoring of cooling water temperatures
- Monitoring of hydraulic oil temperatures
- Tank and tote construction
- Machine and plant engineering
- Heating systems

Type code

Other models and accessories → www.sick.com/TCT

Type code

Output signal

P	Output signal Pt100, 4-wire
A	Measuring transducer 4 ... 20 mA, 2-wire

Measuring range

A	-50 ... +150 °C
B	-50 ... +250 °C

Process connection

ZZ	Without process connection
G1	Thread G ¼ B
GE	Thread G ½ B
N4	Thread ¼" NPT
N2	Thread ½" NPT
S1	Clamping connection G ¼ B, CrNi steel clamping ring
SE	Clamping connection G ½ B, CrNi steel clamping ring
S4	Clamping connection ¼" NPT, CrNi steel clamping ring
S2	Clamping connection ½" NPT, CrNi steel clamping ring
P1	Clamping connection G ¼ B, PTFE clamping ring
PE	Clamping connection G ½ B, PTFE clamping ring
P4	Clamping connection ¼" NPT, PTFE clamping ring
P2	Clamping connection ½" NPT, PTFE clamping ring
T1	Protective pipe, thread G ¼ B
TE	Protective pipe, thread G ½ B
T4	Protective pipe, thread ¼" NPT
T2	Protective pipe, thread ½" NPT

Installation length / Diameter

0253	25 mm / 3 mm
0503	50 mm / 3 mm
1006	100 mm / 6 mm
1506	150 mm / 6 mm
2506	250 mm / 6 mm
3506	350 mm / 6 mm
1006	100 mm / 6 mm (protective pipe)
1506	150 mm / 6 mm (protective pipe)
2506	250 mm / 6 mm (protective pipe)
3506	350 mm / 6 mm (protective pipe)

Electrical connection / Enclosure rating

M	M12 x 1, 4-pin, IP 67
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Special features of the version

Z	Without special features of the version
G	Oil- and grease-free

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Not all variants of the type code can be combined!

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com