



Temperature sensors

TCT-1AAGE0503MZ



Model Name > [TCT-1AAGE0503MZ](#)

Part No. > [6043217](#)



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 316L
- Integrated transmitter with output signal 4 ... 20 mA (2-wire)
- Measurement accuracy
- Various mechanical adaptations and insertion lengths, also available with thermowell
- Circular connector M12x1 (IP 67) or L-connector according to DIN EN 175301-803 A (IP 65)

Your benefits

- Reliable operation through rugged design and high-quality materials
- 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



Features

Measuring range:	-50 °C ... 150 °C
Sensor element:	Pt100
Signal output and maximum ohmic load RA:	4 mA ... 20 mA, 2-wire ($RA \leq (L + 9 \text{ V}) / 0.023 \text{ A [Ohm]}$)

Performance

Accuracy of sensor element:	Class A according to IEC 60751
Transmitter accuracy:	$\leq \pm 0.2 \%$ of span
Transmitter linearity:	$\leq 0.1 \%$ of span

Mechanics/electronics

Process connection:	Thread G 1/2 B
Insertion length/diameter of probe:	50 mm / 3 mm
Housing material:	Stainless steel 1.4571
Wetted parts:	Stainless steel 1.4571
Electrical connection/enclosure rating ¹⁾ :	Plug M12 x 1, 4-pin, IP 67
Measuring current:	0.3 mA ... 1 mA
Electrical safety:	Protection class: III, dielectric strength: 500 V, reverse polarity protection: L+ towards M

Weight:	Ca. 145 g (depending on configuration)
Supply voltage:	10 V DC ... 36 V DC for variant with transmitter 4 mA ... 20 mA
Protection class III:	✓
CE-conformity:	2004/108/EC, EN 61326-2-3
Pressure resistance:	Max. 120 bar

¹⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply while the pressure transmitter is connected with female connectors that provide the corresponding enclosure rating.

Ambient data

Ambient temperature:	-40 °C ... 85 °C
Storage and transport temperature:	-40 °C ... 85 °C
Shock resistance according to IEC 60751:	500 g
Vibration resistance according to IEC 60751:	3 g

Dimensional drawing housing



Dimensional drawing process connection



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