

YT900121

Temperature sensors • Temperature transmitter

Temperature sensor, Ø6mm 50long, G1/2", analog 2-wire, 4-20mA, medium temperature -20-120°C, M12 plug connector



Temperature measurement is of great importance in many industrial applications. We distinguish between two different measuring principles: 1. contactless and 2. media-contacting. Contactless measurement takes place via infrared radiation, which allows temperatures of up to 1800°C to be determined, as no peripherals of the system, such as the sensor, require contact with the medium or object. For this reason, these devices are often used in forges, rolling mills or steel processing companies in general. The measurement in contact with the medium is usually carried out in combination with a PT100 thermal resistor, which is then connected to the evaluation electronics or display devices. Areas of application for these system variants include cooling circuits, storage tanks, exhaust gas systems, extraction systems or ventilation systems.

Electrical features

Type of analog output	4 - 20mA
Type of electrical connection	Connector M12
Type of signal output	Two-wire
Residual ripple	10 %
Operating voltage (DC)	10 - 30 V
ardTEEL_Genauigkeit_Enum	Genauigkeit Messelement: $\pm(0,3 + 0,005 * t) ^\circ\text{C}$ (Klasse B nach IEC 60751) Genauigkeit Elektronik: $\pm 0,5\%$ der Messspanne

Mechanical features

Type of process connection	G1/2 inch
Design	Cylinder, screw-thread
Pressure resistance	50 bar
Diameter	6 mm
Installation depth	50 mm
Sensor material	Stainless steel 1.4571
Storage temperature	-20 - 70 °C
Length	50 mm
Medium temperature	-20 - 120 °C
Degree of protection (IP)	IP65
Vibration resistance, acceleration	10 g
Ambient temperature	-40 - 85 °C
ardTEME_Umgebungsbestaendigkeiten	Vibrationsfest nach IEC 60068-2-6 / IEC 60068-2-64

Other features

Version	Temperature sensor
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Classification

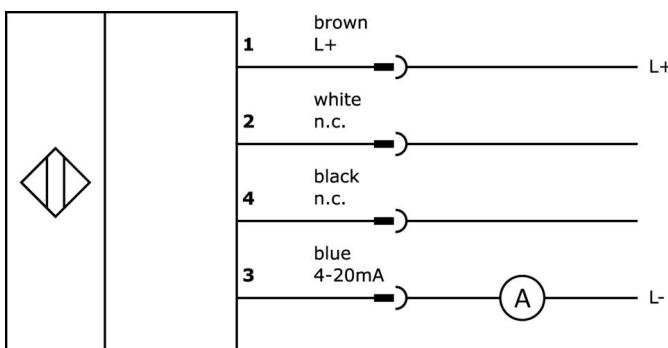
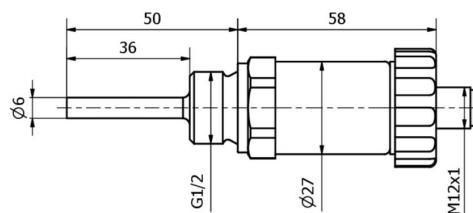
ETIM 8

More

IPF Product Group	310 temperature sensors
packaging dimensions	165 x 100 x 38 mm
gross weight	148 g
Customs tariff number	90251900
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Important notes

I Gesamtgenauigkeit(Genauigkeit Messelement + Genauigkeit Elektronik): $\pm(0,3 + 0,005 * 150[\text{Messstofftemperatur}]) + 0,5/100 * 200[\text{Messbereich}] = \pm 2,05 \text{ }^{\circ}\text{C}$

Connection**Dimensional drawing**

Extract accessories program**VK205321**

Connection cable, 2m, M12
Female (socket) 4pin Angular, Free
conductor end, 4x0.34mm², PUR
(Polyurethane), Ø5.5mm, 250V, -
25-90°C, IP67, Shielded, Suitable
for trailing chain and torsion
resistant, Oil and cooling
lubricants, Welding area, Silicon...

VK205325

Connection cable, 2m, M12
Female (socket) 4pin Straight, Free
conductor end, 4x0.34mm², PUR
(Polyurethane), Ø5.5mm, 250V, -
25-90°C, IP67, Shielded, Suitable
for trailing chain and torsion
resistant, Oil and cooling
lubricants, Welding area, Silicon...

VK003020

Cable socket, angular, self-
assembly, screw connection, Ø3.6-
5mm, 4A, 240V, -25-90°C, M12
socket 4-pin, IP67, PBT

VK003024

Cable socket, Straight, Suitable for
self-assembly, Screw connection,
Ø3.6-5mm, 4A, 240V, -25-90°C,
M12 Female (socket) 4pin, IP67,
PBT

AD000019

Accessories pressure, profile seal
G1/2", Ø24mm 1.5high,
fluorocarbon rubber FKM, green

You can find further accessories on our homepage

**Installation**

Mounting / installation may only be carried
out by a qualified electrician!

**Disposal**

WEEE number according to § 6 para. 3
ElektroG: 40951076

Safety warnings

I Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

I Never use these devices in applications where the safety of a person depends on their functionality.