

## Screw-in resistance thermometer with transmitter

### Description



### Characteristic features

- Standard signal 4...20mA
- High long-term stability, innovative technique
- Industrial variant in stainless steel housing
- Easy to install
- Robust, media-resistant version
- Calibrated and ready-to-use

### Areas of application

- Industrial measure technology
- Building automation
- Ventilating and air-conditioning systems
- Mechanical and plant engineering

### Features

The temperature probes with 4...20mA output combine a proven and innovative temperature sensor module with a high-quality stainless-steel housing.

The temperature is one of the most measured physical quantities. The high-quality platinum sensor guarantees a high measuring accuracy, drift-stability and environmental resistance as well as an excellent long-term stability. The ASIC provides the measured temperature value with the digital I<sup>2</sup>C interface with high resolution as calibrated and linearized value.

The transducer with high-quality probe housing made of stainless steel with 1/2" external thread is ideally suited for measuring temperature in diverse industrial applications, which are dependent on reliability, accuracy and easy handling.

The transmitter can be connected with the M12 connection cables, which are additionally available.

### Technical Data

#### Screw-in resistance Thermometer

Transducer	Pt100
Measuring range	-20...+125 °C
Accuracy	F 0,3 (former class B) DIN EN 60751
Diameter	Ø 6 mm
Material fitting	Stainless steel 1.4571
Process connection	G1/2", SW27
Electrical connection	M12 connector, 4-polig
Output	4...20 mA
Max. liability	390 Ω
Ingress	IP65
Operating temperature transmitter housing	-30...+70 °C
Voltage supply	+DC 14...24 V
Dimensions	52mm X SW27 see dimensional drawing

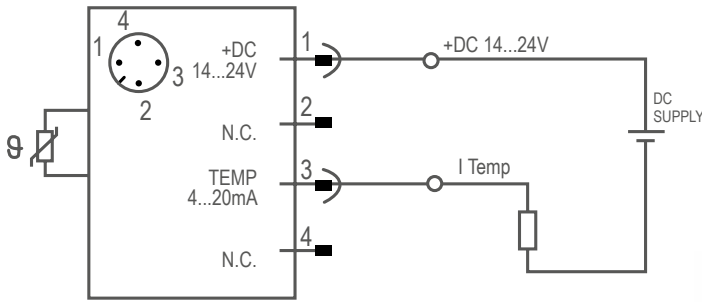
## Screw-in resistance thermometer with transmitter

### Connection

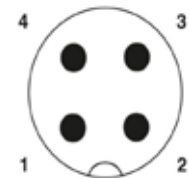
Shielded connection cable should preferably be used for the connection. This is particularly important in an EMI disturbed environment. The shielding must be grounded. Check before connection, whether the supply voltage corresponds to the operating voltage specification in the data sheet. Incorrect connection will lead to malfunction or damage to the electronics!

### Pin assignment

Temperature measurement 4...20 mA



Pin	Fuction	Description
1	VCC	Supply voltage 14...24V DC+
2	NC	---
3	Temp	Temperature signal 4...20mA
4	NC	---



Schematic  
Pole pattern M12 connector,  
4-pin, A-coded, pin header view

### Attention

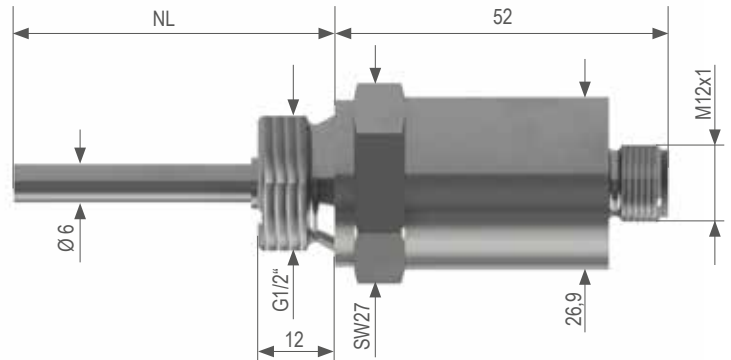
Please avoid extreme mechanical and inappropriate exposure.

The device/product is not suitable for potential explosive areas and medical-technical applications.

Article	Article number
Screw-in resistance thermometer PT100, with built-in transmitter Output 4...20 mA, nominal length 50 mm	0627 0616-96
Screw-in resistance thermometer PT100, with built-in transmitter Output 4...20 mA, nominal length 100 mm	0627 0616-97
Screw-in resistance thermometer PT100, with built-in transmitter Output 4...20 mA, nominal length 150 mm	0627 0616-98
Screw-in resistance thermometer PT100, with built-in transmitter Output 4...20 mA, nominal length 250 mm	0627 0616-99

Accessoires	
M12 connection coupling, 2000mm PVC cable, free ends tinned	0409 1051
M12 connection coupling, 2000mm PUR-cable halogen-free, free ends	0409 3000
M12 connection coupling, 5000mm PUR-cable halogen-free, free ends	0409 3000-01

### Dimensioned drawing



Art-Nr.	NL
0627 0616-96	50 mm
0627 0616-97	100 mm
0627 0616-98	150 mm
0627 0616-99	250 mm