

## YT450020

### Temperature sensors • Compact systems

sensor temperature, 78x108x50mm, G1/2 inch, 48mm, -40-120°C, PNP NC/NO, 4-20mA, Screw connection 4pin, IP65, PBT

including Sealing ring



The temperature measurement is of great importance in many industrial applications. It is distinguished between two different measurement principles: 1. contactless and 2. media contacting. A contactless measurement is carried out via infrared radiation. It allows a measurement of temperatures up to 1800°C, as no periphery of the system, such as the probe, requires contact to the medium or object. As a result these devices are often used in forges, rolling mills or generally in steel processing companies. The media contacting measurement is usually performed in combination with a PT100 thermal resistance, which is then connected to the evaluation electronics or display devices. Areas of application for these system versions can be found in cooling systems, storage tanks, exhaust systems, extraction or ventilation systems.

#### Electrical features

Display	LED display
Type of switching function	Normally closed contact/normally open contact
Type of analog output	4 - 20mA
Type of electrical connection	Clamped terminal connection
Type of switching output	PNP
Type of sensor	Rod sensor
Turn-off delay	0 - 50 ms
Rated switching current	200 mA
Readiness delay	10000 ms
Turn-on delay	0 - 50 s
Setting procedure	Parameterization
Short-circuit protection	Yes
No-load current	200 mA
Number of pins	4
Voltage drop	2.5 V
Reverse polarity protection	Yes
Operating voltage (DC)	21,6 - 26,4 V
Suitable as 2-point control	Yes
Suitable as limiter	Yes
Suitable as monitor	Yes

**Mechanical features**

Type of process connection	G1/2 inch
Design	Cuboid
Width	50 mm
Pressure resistance	100 bar
Screw-in depth	48 mm
Thread length	29 mm
Thread pitch	1 mm
Height	78 mm
Length	108 mm
Medium temperature	-40 - 120 °C
Degree of protection (IP)	IP65
Housing material	PBT
Sensing element material	Stainless steel 1.4571
Ambient temperature	-20 - 60 °C

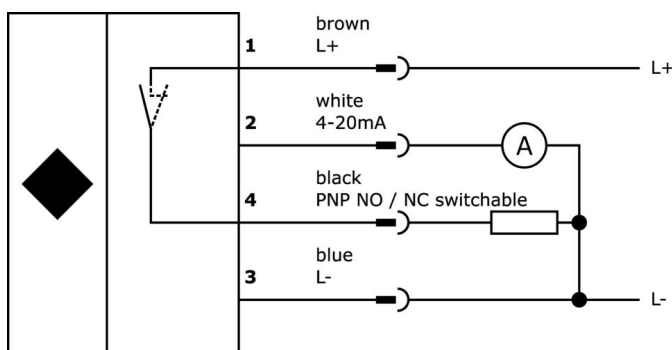
**Classification**

ETIM 8	EC002616 Temperature switch
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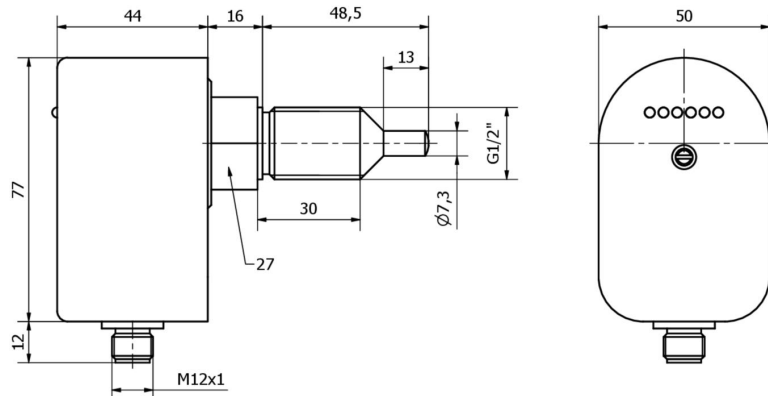
**More**

IPF Product Group	310 temperature sensors
packaging dimensions	210 x 138 x 95 mm
gross weight	480 g
Customs tariff number	90251900
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**




**Dimensional drawing**




**Extract accessories program**


**VK205321**

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


**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

**VK200321**

 Connection cable, 2m, M12  
Female (socket) 4pin Angular, Free conductor end, 4x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.7mm, 250V, -40-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

**VK200325**

 Connection cable, 2m, M12  
Female (socket) 4pin Straight, Free conductor end, 4x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.7mm, 250V, -40-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

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**

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

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