

## YT353100

### Temperature sensors • Switching amplifiers

Measuring transducer, temperature sensor, 118x40x40mm, -40-300°C, PT100, 4 digits, 12-32V DC, 2x PNP NC/NO, 0-10V/4-20mA, M12 plug connector, IP65, PA 6.6 (plastic), LED



The article YT353100 is a highly developed temperature sensor from the switching amplifier group that has been specially designed to meet the requirements of the automation industry. This intelligent temperature sensor offers a wide range of functions and technical possibilities that are particularly important for professionals in the industrial and trade sectors.

The outstanding technical data of the YT353100 includes the temperature display range, which extends from -40 to 300 °C. This makes the sensor extremely versatile, as it can reliably measure both extremely low and high temperatures. The temperature measuring range is identical to the display range and ensures precise recording of temperature data.

The YT353100 can be operated in an ambient temperature range of -20 to 80 °C, which facilitates its application in various industrial environments and under different climatic conditions. The connection to the electrical system is made via a robust M12 connector, which enables easy and safe integration into existing systems.

In terms of dimensions, the width of the sensor is 40 mm, the height is 118 mm and the length is also 40 mm. These compact dimensions enable flexible installation in confined spaces and easy handling. Furthermore, the YT353100 has a degree of protection of IP65, which means that it is dust-tight and also protected against water jets from any direction. This makes it ideal for use in harsh industrial environments.

The sensor can be operated with an operating voltage of 12 to 32 V diagnostic coverage, which makes it compatible in many systems. The switching function is also noteworthy, as the YT353100 can act as both normally closed (nc) and normally open (nc). This offers additional flexibility in the application and allows it to be adapted to specific user needs. The rated switching current is 1 A, which allows safe control (unit) of various electrical loads.

The sensor is easily installed using a clamp mounting, which enables stable attachment and easy installation and removal. This detailed technical design makes the YT353100 particularly suitable for precise temperature monitoring in ovens, liquid and air machines and other applications where accurate temperature measurements are required.

In summary, the YT353100 temperature sensor's versatile functions, robust technical features and ease of operation make it an excellent choice for electrical engineering professionals looking for reliable solutions in the automation industry. With its high measuring accuracy, flexible application options and well thought-out features, the YT353100 offers everything required for modern and efficient operation.

**Electrical features**

Number of decades	4
Number of switching outputs	2
Display	LED display
Display range, temperature	-40 - 300 °C
Type of switching function	Normally closed contact/normally open contact
Type of analog output	0 - 10V   4 - 20mA
Type of analog input	PT100
Type of electrical connection	Connector M12
Type of switching output	PNP
Turn-off delay	0 - 20 ms
Rated switching current	1000 mA
Turn-on delay	0 - 20 s
Setting procedure	Parameterization
Characteristic curve deviation	0.25 %
Short-circuit protection	Yes
No-load current	60 mA
Max. continuous current	1 A
Measuring range, temperature	-40 - 300 °C
Relative linearity deviation	0.25 %
Relative repeat accuracy	0.1 %
Switching frequency	0.12 Hz
Temperature drift, percent per Kelvin	0.02 %/K
Reverse polarity protection	Yes
Operating voltage (DC)	12 - 32 V
Suitable as 2-point control	Yes

**Mechanical features**

Width	40 mm
Height	118 mm
Length	40 mm
Mounting method	Mounting clip
Degree of protection (IP)	IP65
Degree of protection (IP), front side	IP65
Housing material	PA 6.6 (synthetic)
Ambient temperature	-20 - 80 °C

**Other features**

Version	Temperature sensor
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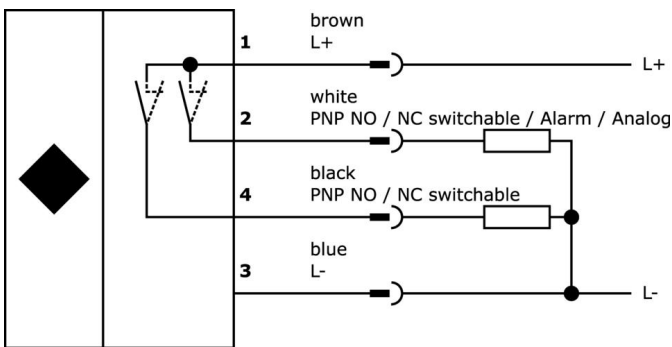
**Classification**

ETIM 8	EC002475 Current transducer
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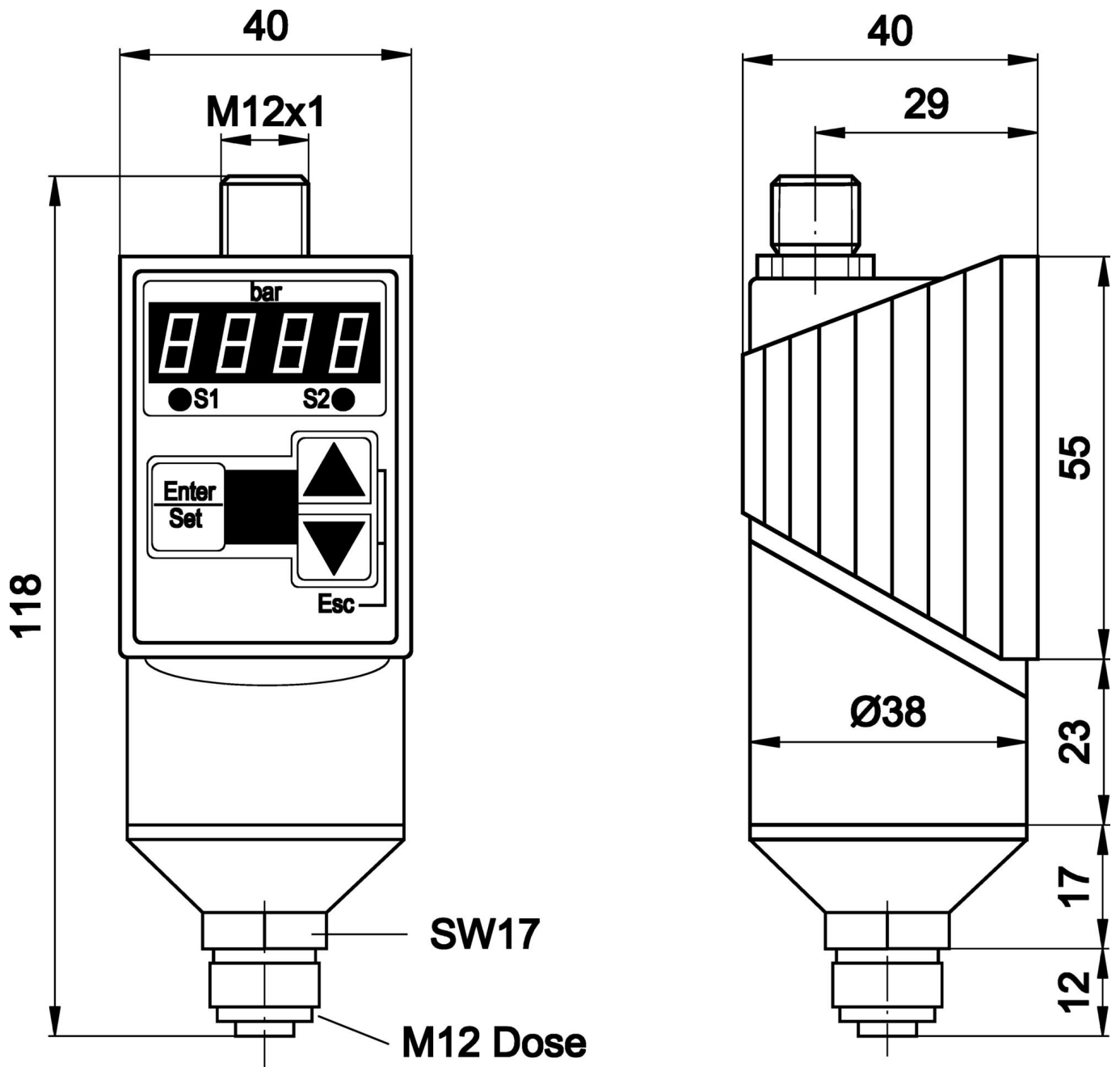
**More**

IPF Product Group	310 temperature sensors
packaging dimensions	160 x 99 x 60 mm
gross weight	330 g
Customs tariff number	85437090
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
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...

**YT036020**




Temperature sensor, Ø3mm  
100long, PT100, 4-wire, medium temperature -30-350°C, connection to amplifier, M12 plug connector

**YT036021**




Temperature sensor, Ø3mm  
150long, PT100, 4-wire, medium temperature -30-350°C, connection to amplifier, M12 plug connector

**AY000152**




accessories sensor, Ø38mm,  
Plastic, For sensor 38mm, for Wall mounting, Screw mounting

**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

**VK030F21**



Connection cable, 0.3m, M12 socket 4-pin angular, M12 connector 4-pin straight, 4x0.34mm<sup>2</sup>, 240V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

**VK030F25**



Connection cable, 0.3m, M12 socket 4-pin straight, M12 connector 4-pin straight, 4x0.34mm<sup>2</sup>, PUR (polyurethane), 240V, IP67, suitable for trailing chain and torsion resistant, oils 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.

**/** Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)