

YT353100

TEMPERATURE SENSORS • SWITCHING AMPLIFIERS

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.



MECHANICAL DATA

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

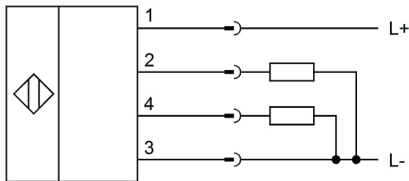
ELECTRICAL DATA

Analog output, current	Yes
Analog output, voltage	Yes
Characteristic curve deviation	0.25 %
Display	LED
Display range	300 °C
Display range	-40 °C
End value measuring range, current	0.02 A
Initial value of measuring range, current	0 A
Max. continuous current	1000 A
Max. output current	1000 mA
No-load current	60 mA
Number of decades	4
Number of switching outputs	2
Rated control supply voltage U_s at DC (MAX)	32 V
Rated control supply voltage U_s at DC (MIN)	12 V
Relative linearity deviation	0.25 %
Relative repeat accuracy	0.1 %
Reverse polarity protection	Yes
Setting procedure	Parameterization

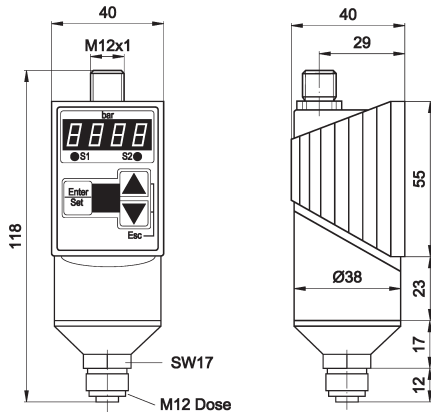
ELECTRICAL DATA

Short-circuit-proof	Yes
Suitable as 2-point control	Yes
Switching frequency	0.12 kHz
Temperature drift	0.02 %/K
Transducer power supply current	20 mA
Transducer power supply voltage	8 V
Turn-off delay	20 s
Turn-on delay	20 s
Type of analog output	0 V ... 10 V / 4 mA ... 20 mA
Type of electrical connection	Connector M12
Type of switching function	Normally closed contact/normally open contact
Type of switching output	PNP
Voltage type	DC
With LED display	Yes
With switching output	Yes

CONNECTION



DIMENSIONAL DRAWING



INSTALLATION



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

DISPOSAL



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.