

YT450020

TEMPERATURE SENSORS • COMPACT SYSTEMS

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)	60 °C
Ambient temperature (MIN)	-20 °C
Degree of protection (IP)	IP65
Housing design	Cuboid
Housing material	PBT
Max. operating temperature	120 °C
Medium temperature (MAX)	120 °C
Medium temperature (MIN)	-40 °C
Pressure resistance	100 bar
Screw-in depth	48 mm
Sensing element material	Stainless steel 1.4571
Sensor height	78 mm
Sensor length	108 mm
Sensor width	50 mm
Thread length	29 mm
Thread pitch	1 mm
Type of pressure connection	G1/2 inch

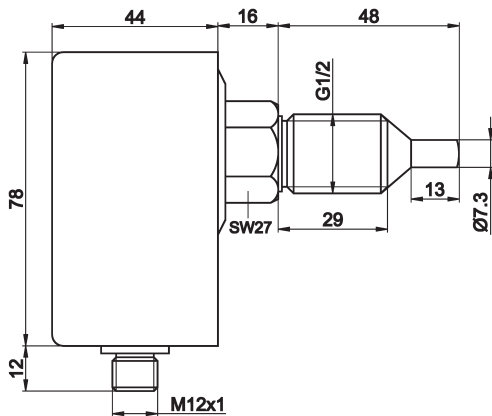
ELECTRICAL DATA

Adjustable measuring range	Yes
Device version	Screwable fitting
Electronic version	Yes
Max. output current	200 mA
No-load current	200 mA
Number of pins	4
Operating voltage (MAX)	26.4 V
Operating voltage (MIN)	21.6 V
Peak value memory	Yes
Reverse polarity protection	Yes

ELECTRICAL DATA

Setting procedure	Parameterization
Short-circuit-proof	Yes
Suitable as 2-point control	Yes
Suitable as limiter	Yes
Suitable as monitor	Yes
Switching output with window function	Yes
Turn-off delay	50 s
Turn-on delay	50 s
Type of analog output	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 drop	2.5 V
With LED display	Yes

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.