

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 | -20 °C ... 80 °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 |

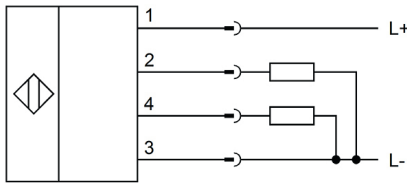
ELECTRICAL DATA

| | |
|---|------------------|
| 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 | 12 V ... 32 V |
| Relative linearity deviation | 0.25 % |
| Relative repeat accuracy | 0.1 % |
| Reverse polarity protection | Yes |
| Setting procedure | Parameterization |
| Short-circuit-proof | Yes |
| Suitable as 2-point control | Yes |

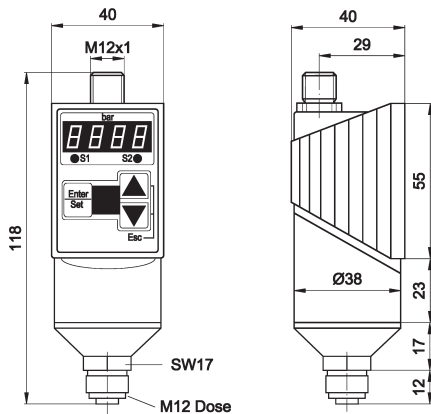
ELECTRICAL DATA

| | |
|---------------------------------|---|
| 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!

