Product family overview

TBS

Temperature monitoring made easy

SICK
Sensor Intelligence.

Technical data overview

Accuracy of sensor element	≤ ± (0.15 °C + 0.002 |t|) [1]
Output signals	IO-Link/PNP + PNP 2 x PNP 1 x PNP + 4 mA ... 20 mA IO-Link/PNP + 0 V ... 10 V 1 x PNP + 0 V ... 10 V 2 x PNP + 4 mA ... 20 mA IO-Link/PNP + PNP + 4 mA ... 20 mA 2 x PNP + 0 V ... 10 V IO-Link/PNP + 4 mA ... 20 mA 1 x NPN + 4 mA ... 20 mA 2 x NPN 1 x NPN + 0 V ... 10 V 2 x PNP + 4 mA ... 20 mA IO-Link/PNP + NPN + 4 mA ... 20 mA 2 x NPN + 4 mA ... 20 mA 2 x NPN + 0 V ... 10 V IO-Link/PNP + PNP + 4 mA ... 20 mA IO-Link/PNP + PNP + 0 V ... 10 V (depending on type)
Maximum ohmic load R_A	≤ 100 kΩ Switching outputs < 0.5 kΩ output signal 4 mA ... 20 mA > 10 kΩ output signal 4 mA ... 20 mA > 10 kΩ output signal 0 V ... 10 V

[1] |t| is the absolute value of the temperature in °C.

Product description

The TBS temperature switch is easy to use and has a rugged design. It is designed for temperature measurement and monitoring of operating liquids, such as hydraulic oils, coolant lubricants and cleaning liquids in machine building and manufacturing. With up to two binary outputs and one analog output, it can be used in many applications. A large, well legible display and three pushbuttons facilitate setup. The intuitive menu navigation and display use familiar and standardized features and programming. The switching state of the binary outputs is displayed by highly visible LEDs. During installation, the TBS is uniquely flexible due to its two rotation locations. It is possible to rotate the display and the process connection independently of the sensor body, ensuring both clean cable layout and that the display is facing the user. Temperature measurement is done using a Pt1000 element that is located in the tip of the stainless steel probe.

At a glance

- Large display, IO-Link 1.1
- Individually programmable transistor outputs PNP or NPN, optional analog output 4 mA ... 20 mA or 0 V ... 10 V
- Round connector M12 x 1
- Measuring ranges –20 °C ... +120 °C
- Pt1000 element, accuracy class A (IEC 60751)
- Various insertion lengths and connection threads
- Wetted parts made from corrosion-resistant stainless steel 1.4571
- Enclosure rating IP 65 and IP 67

Your benefits

- Quick and safe set-up through superior ease of use
- Compact dimensions and rotatable housing facilitate integration
- Very reliable: splash-proof housing, high-grade materials, rugged design, and field-proven technology
- Very good long-term stability, accuracy and linearity
- Quick response time
- Versatile configuration allows for optimal solutions for specific requirements

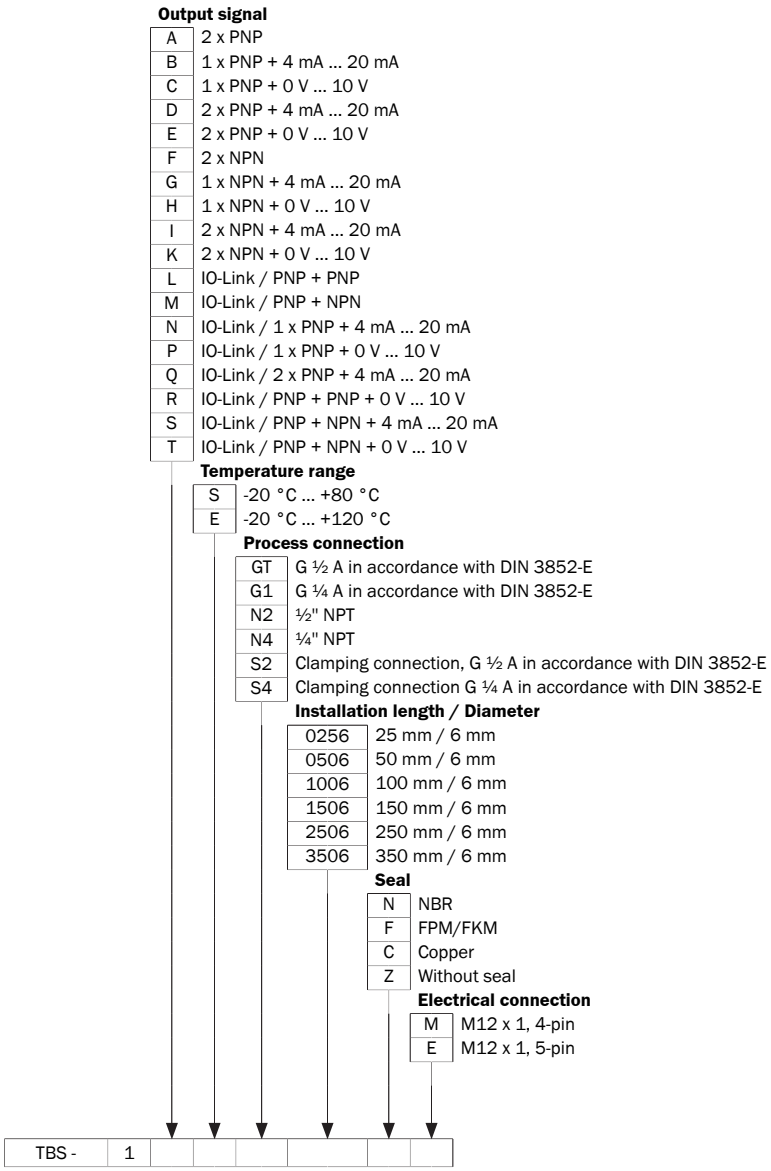
Fields of application

- General industrial temperature measurement
- Continuous temperature measurement and monitoring of temperature limits
- Local temperature display
- Well suited for temperature monitoring of operating liquids, such as hydraulic oils, cooling liquids and cleaning lubricants

Type code

Other models and accessories ➜ www.sick.com/TBS

Type code



Not all variants of the type code can be combined!

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com