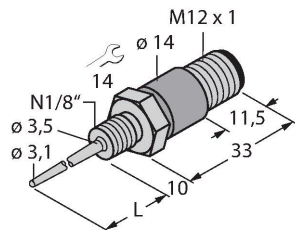


TP-103A-N1/8-H1141-L024

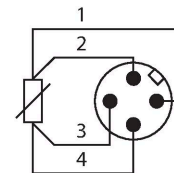
Temperature Detection – Probe



Features

- Pt 100 probe according to DIN EN 60751
- Resistant to vibrations and shocks
- Connectable to TS, TTM, IM34, BL20, BL67
- Max. temperature connector: 120°C
- Connection mode: 4-wire connection
- Process connection 1/8" NPT male thread
- Electrical connection rotatable by 360°

Wiring diagram



Functional principle

Resistance thermometers are used for the detection and monitoring of temperatures to optimize and control a process. Typical applications are in machine and plant construction as well as in the process industry. The core element of the temperature probe is a temperature-dependent resistor.

Technical data

| | |
|---|---|
| Type | TP-103A-N1/8-H1141-L024 |
| ID | 9910766 |
| Temperature range | |
| Measuring range | -50...120 °C |
| Measuring range | -58...248 °F |
| Accuracy | ±0.15 K + 0.002 • t (-30...300 °C) |
| Self-heating | 0.4 K/mW at 0 °C |
| Measuring element | Pt-100 probe, DIN EN 60751, class A, connection mode: 4-wire connection |
| Response time | t 0.5 = 1.5 s / t 0.9 = 6.0 s in water at 0.2 m/s |
| Immersion depth (L) | 24 mm |
| Outer diameter | 3 mm |
| Protection type and class | IP67 |
| Environmental conditions | |
| Ambient temperature | -40...+120 °C |
| Mechanical data | |
| Housing material | Stainless steel, 1.4404 (AISI 316L) |
| Sensor material | Stainless steel, 1.4404 (AISI 316L) |
| Process connection | 1/8" NPT male thread |
| Pressure resistance | 100 bar |
| Electrical connection | Connector, M12 × 1 |
| Reference conditions acc. to IEC 61298-1 | |
| Temperature | 15...+25 °C |
| Atmospheric pressure | 860...1060 hPa abs. |
| Humidity | 45...75 % rel. |

Technical data

| | |
|------------------------|--|
| Auxiliary power | 24 VDC |
| Tests/approvals | |
| Approvals | cULus |
| UL registration number | E345414 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 20 °C |

Accessories

| Dimension drawing | Type | ID | |
|-------------------|---------------|---------|---|
| | WKC4.4T-2/TEL | 6625025 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |
| | RKC4.4T-2/TEL | 6625013 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |
| | RKC4.4T-2/TXL | 6625503 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |
| | WKC4.4T-2/TXL | 6625515 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |