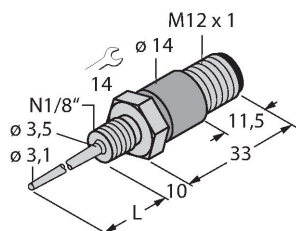


TP-103A-N1/8-H1141-L013

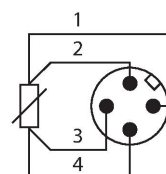
Temperature Detection – Probe



Features

- Pt-100 probe acc. to DIN EN 60751
- Vibration and shock-resistant
- Connectable to TS, TTM, IM34, BL20, BL67
- Max. temperature connector: 120°C
- 4-wire connection technology
- Process connection 1/8" NPT male thread
- Electrical connection rotatable by 360°

Wiring diagram



Technical data

Type	TP-103A-N1/8-H1141-L013
Ident. no.	9910765
Temperature range	
Measuring range	-50...120 °C
Temperature operating range	-58...248 °F
Accuracy	0.15 °C + 0.002 · t (-30 ... 350 °C)
Self-heating	0.4 K/mW at 0 °C
Measuring element	Pt-100 probe, DIN EN 60751, class A
Response time	t 0.5 = 1.5 s / t 0.9 = 6.0 s in water at 0.2 m/s
Immersion depth (L)	13 mm
Protection type and class	IP67
Output function	4-wire
Ambient conditions	
Ambient temperature	-40...+120 °C
Housing	
Housing material	Stainless steel, V4A (1.4404)
Sensor material	Stainless steel, 1.4404 (316L)
Process connection	NPT # inch male thread
Process Pressure	100 bar
Electrical connection	Connector, M12 × 1
Reference conditions acc. to IEC 61298-1	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.

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

Humidity	45...75 % rel.
Auxiliary power	24 VDC
MTTF	2283 years acc. to SN 29500 (Ed. 99) 20 °C