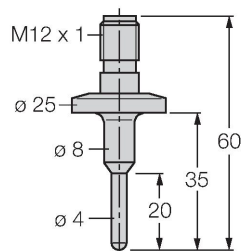


TP-504A-TRI3/4-H1141-L035

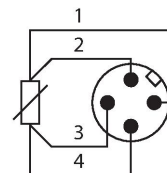
Temperature Detection – Probe



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 G 3/4" Tri-Clamp

Wiring diagram



Technical data

Type	TP-504A-TRI3/4-H1141-L035
ID no.	9910429
Temperature range	
Measuring range	-50...120 °C
Temperature operating range	-58...248 °F
Accuracy	± 0.15 °C + 0.002 • t (-30...350 °C)
Measuring element	Pt-100 probe, DIN EN 60751, class A
Self-heating	0.4 K/mW at 0 °C
Response time	t 0.5 = 3 s / t 0.9 = 10 s in water at 0.2 m/s
Immersion depth (L)	35 mm
Process Pressure	40 bar
Output function	4-wire
Housing material	Stainless steel, 1.4404 (AISI 316L)
Roughness	R _{as} 0.8 µm
Process connection	Tri-Clamp 3/4"
Electrical connection	Connector, M12 × 1
Protection class	IP67
Ambient temperature	-40...+120 °C
Reference conditions acc. to IEC 61298-1	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC

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

MTTF	2283 years acc. to SN 29500 (Ed. 99) 20 °C
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Protection type and class	IP67
Output function	4-wire
Ambient conditions	
Ambient temperature	-40...+120 °C
Housing	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L), R _{aze} 0.8 µm
Process connection	Tri-Clamp 3/4"
Process Pressure	40 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.
Auxiliary power	24 VDC
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