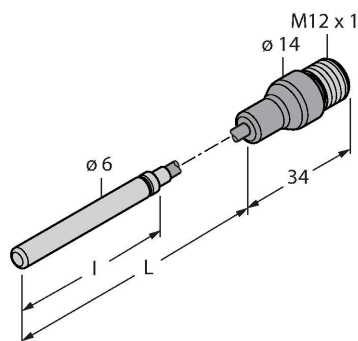


TP-306A-CF-H1141-L5000

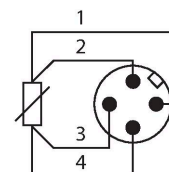
Temperature Detection – Probe



Features

- Max. temperature connector: 120°C
- Connection mode: 4-wire connection

Wiring diagram



Technical data

Type	TP-306A-CF-H1141-L5000
ID	9910481
Temperature range	
Measuring range	-50...105 °C
	-58...221 °F
Accuracy	±0.15 K + 0.002 • t (-30...300 °C)
Measuring element	Pt100, DIN EN 60751, class A; connection mode: 4-wire connection
Self-heating	0.4 K/mW at 0 °C
Response time	t 0.5 = 8 s / t 0.9 = 20 s in water at 0.2 m/s
Immersion depth (L)	5000 mm
Mechanical data	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Process connection	For compression fittings, for direct mounting
Electrical connection	Connector, M12 × 1
Protection class	IP67
Tests/approvals	
UL registration number	E345414
Reference conditions acc. to IEC 61298-1	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.

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

Auxiliary power	24 VDC
MTTF	2283 years acc. to SN 29500 (Ed. 99) 20 °C

Technical data

Type	TP-306A-CF-H1141-L5000
ID	9910481
Temperature range	
Measuring range	-50...105 °C
	-58...221 °F
Accuracy	$\pm 0.15 \text{ K} + 0.002 \cdot t $ (-30...300 °C)
Self-heating	0.4 K/mW at 0 °C
Measuring element	Pt100, DIN EN 60751, class A; connection mode: 4-wire connection
Response time	$t_{0.5} = 8 \text{ s}$ / $t_{0.9} = 20 \text{ s}$ in water at 0.2 m/s
Immersion depth L	5000 mm
Outer diameter	6 mm
Length sleeve (l)	50 mm
Protection class	IP67
Mechanical data	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L)
Process connection	For compression fittings, for direct mounting
Electrical connection	Connector, M12 × 1
Core cross-section	4 mm ²
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
Tests/approvals	
Approvals	cULus
UL registration number	E345414
MTTF	2283 years acc. to SN 29500 (Ed. 99) 20 °C