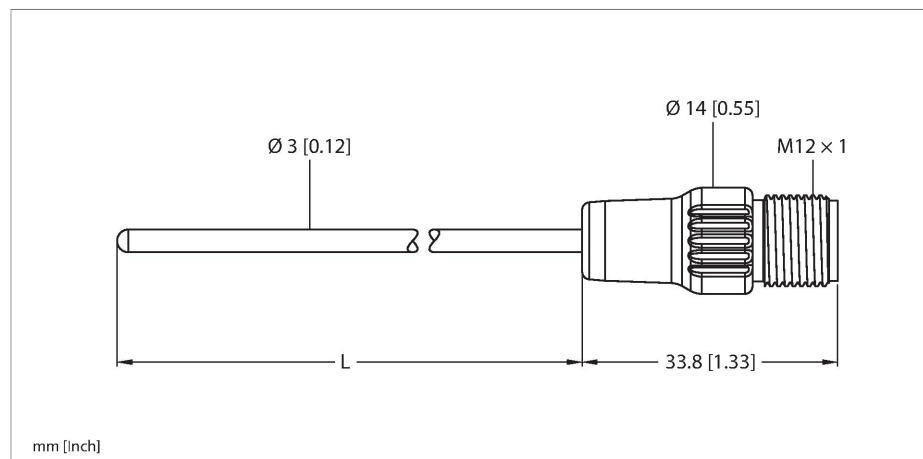


TP-203B-CF-H1141-L200/D805

Temperature Detection – Probe



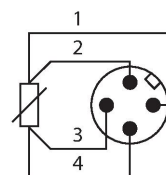
Technical data

Type	TP-203B-CF-H1141-L200/D805
ID	9910520
Special version	D805 Corresponds to: Pt100 for -200 °C
Temperature range	
Measuring range	-200...500 °C
	-328...932 °F
Accuracy	±0.3 K + 0.005 • t (-50...500 °C)
Measuring element	Pt100, DIN EN 60751, class B; connection mode: 4-wire connection
Self-heating	0.4 K/mW at 0 °C
Response time	t 0.5 = 1.5 s / t 0.9 = 6.0 s in water at 0.2 m/s
Immersion depth (L)	200 mm
Process Pressure	100 bar
Mechanical data	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Process connection	For compression fittings, thermowell or direct mounting
Electrical connection	Connector, M12 × 1
Protection class	IP67
Environmental conditions	
Ambient temperature	-20...+120 °C
Tests/approvals	
UL registration number	E345414

Features

- Operating temperature of the connector: -20 ... 120 °C
- 4-wire connection technology

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

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
MTTF	2283 years acc. to SN 29500 (Ed. 99) 20 °C

Technical data

Type	TP-203B-CF-H1141-L200/D805
ID	9910520
Special version	D805 Corresponds to:Pt100 for -200 °C
Temperature range	
Measuring range	-200...500 °C
	-328...932 °F
Accuracy	±0.3 K + 0.005 • t (-50...500 °C)
Self-heating	0.4 K/mW at 0 °C
Measuring element	Pt100, DIN EN 60751, class B; 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	200 mm
Outer diameter	3 mm
Protection class	IP67
Environmental conditions	
Ambient temperature	-20...+120 °C
Mechanical data	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L)
Process connection	For compression fittings, thermowell or direct mounting
Process Pressure	100 bar
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.

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