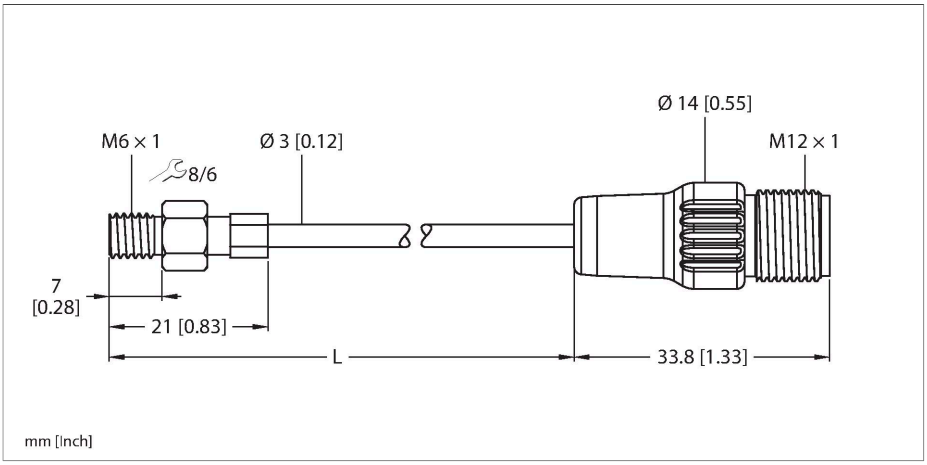
TP-203A-M6-H1141-L100-I7
Temperature Detection – Probe



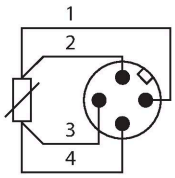
Technical data

Type	TP-203A-M6-H1141-L100-I7
ID	100041106
Temperature range	
Measuring range	-50…500 °C
	-58…932 °F
Accuracy	±0.15 K + 0.002 • |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 = 6 s / t 0.9 = 15 s in water at 0.2 m/s
Bar length (L)	100 mm
Immersion length (I)	7 mm
Outer diameter	3 mm
Protection class	IP67
Environmental conditions	
Ambient temperature	-40…+120 °C
Storage temperature	-40…+85 °C
Mechanical data	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L)
Process connection	M6 × 1 male thread
Pressure resistance	100 bar
Electrical connection	Connector, M12 × 1
Core cross-section	4 mm^2

Features

- Max. temperature connector: 120°C
- Connection mode: 4-wire connection
- Process connection: M6 × 1 male thread at probe tip

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.

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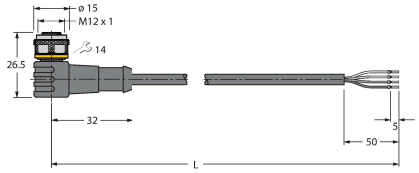
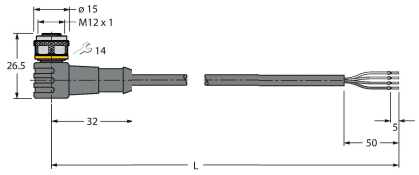
Technical data

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
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

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