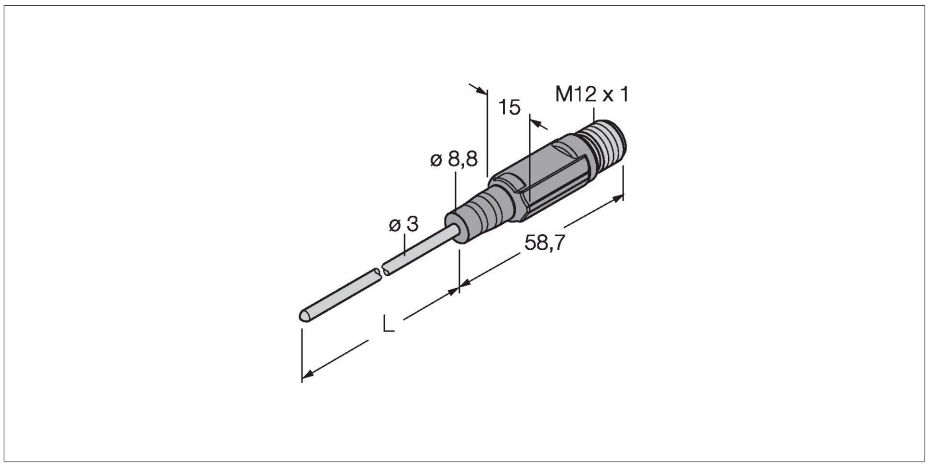
TTM100C-203A-CF-LI6-H1140-L050
Temperature Detection – With Current Output



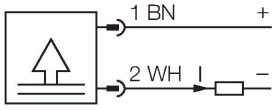
Technical data

Type	TTM100C-203A-CF-LI6-H1140-L050
ID	9910800
Temperature range	
Measuring range	0…100 °C
Measuring range	32…212 °F
Measuring element	Pt-1000 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)	50 mm
Pressure resistance	100 bar
Power supply	
Operating voltage	5…32 VDC
Current consumption	≤ 20 mA
Short-circuit/reverse polarity protection	yes / yes
Insulation class	III
Outputs	
Output 1	Analog output
Output function	Analog output
Analog output	
Current output	4…20 mA
Load	≤ 0.86 kΩ @24 VDC [RLoad=(Vsupply - 5 V)/22 mA] kΩ
Accuracy (Lin. + Hys. + Rep.)	± 0.2 K
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)
Process connection	For compression fittings, thermowell or direct mounting
Electrical connection	Connector, M12 × 1

Features

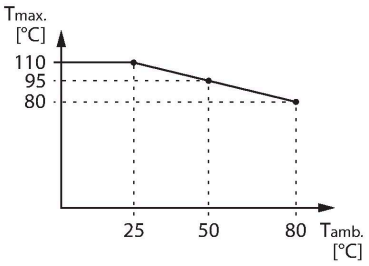
- Miniature design
- Analog output 4…20 mA
- Factory setting 0…100 °C (other settings on request)
- Compression fitting process connection
- Bendable probe (min. bending radius: 3x outer diameter; excluding 30-mm probe tip)

Wiring diagram



Functional principle

The TTM miniature transmitters are available with integrated probe.
Due to the integrated electronics, the limited temperature range must be observed, especially in the area of the M12 connector.



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Technical data

Protection class	IP67
Ambient temperature	-40…+80 °C
Storage temperature	-40…+80 °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
Temperature behaviour	
Temperature coefficient span T_{kS}	± 0.1 % of full scale/10 K
Temperature coefficient zero point Tk0	± 0.1 % of full scale/10 K
MTTF	162 years acc. to SN 29500 (Ed. 99) 40 °C

Technical data

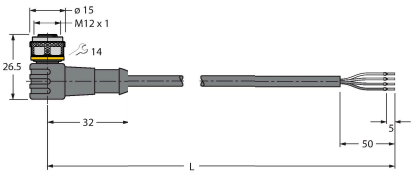
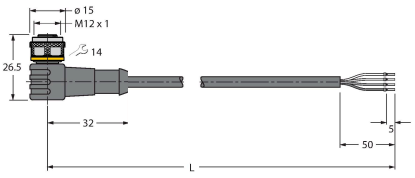
Type	TTM100C-203A-CF-LI6-H1140-L050
ID	9910800
Temperature range	
Measuring range	0…100 °C
Measuring range	32…212 °F
Note	Max. temperature of electronics: 80 °C/176 °F
Measuring element	Pt-1000 probe, DIN EN 60751, class A
Response time	t 0.5 = 1.5 s / t 0.9 = 6.0 s in water at 0.2 m/s
Immersion depth (L)	50 mm
Power supply	
Operating voltage	5…32 VDC
Current consumption	≤ 20 mA
Short-circuit/reverse polarity protection	yes / yes
Protection type and class	IP67 / III
Outputs	
Output 1	Analog output
Output function	Analog output
Analog output	
Current output	4…20 mA
Load	≤ 0.86 kΩ @24 VDC [RLoad=(Vsupply - 5 V)/22 mA] kΩ
Accuracy (Lin. + Hys. + Rep.)	± 0.2 K
Temperature behaviour	
Temperature coefficient zero point Tk0	± 0.1 % of full scale/10 K
Temperature coefficient span T_{kS}	± 0.1 % of full scale/10 K

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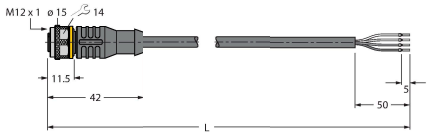
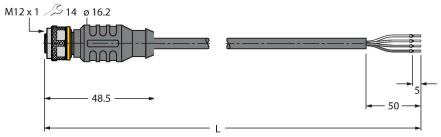
Technical data

Ambient conditions	
Ambient temperature	-40…+80 °C
Storage temperature	-40…+80 °C
Mechanical data	
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L)
Process connection	For compression fittings, thermowell or direct mounting
Pressure resistance	100 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
MTTF	162 years acc. to SN 29500 (Ed. 99) 40 °C

Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TXL	6625503	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TXL	6625515	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com

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Dimension drawing	Type	ID	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	RKC4.4T-P7X2-10/TXL	6626184	Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com

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