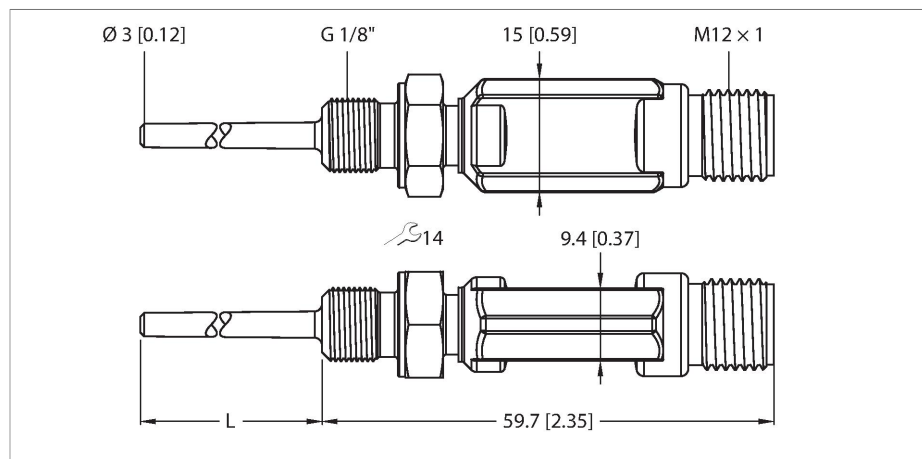


TTM100C-103A-G1/8-LI6-H1140-L013

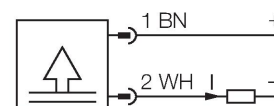
Temperature Detection – With Current Output



Features

- Miniature design
- Analog output 4...20 mA
- Factory setting 0...100 °C (other settings on request)
- Process connection G1/8" male thread

Wiring diagram

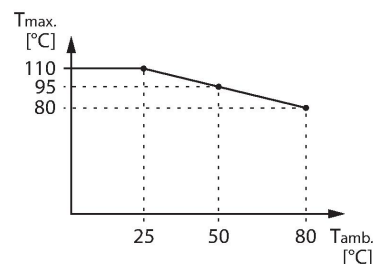


Technical data

Type	TTM100C-103A-G1/8-LI6-H1140-L013
ID no.	9910549
Temperature range	
Measuring range	0...100 °C
Temperature operating 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)	13 mm
Process Pressure	100 bar
Power supply	
Operating voltage	5...32 VDC
Current consumption	≤ 20 mA
Short-circuit/reverse polarity protection	yes / yes
Insulation class	III
Output 1	Analog output
Output function	Analog output
Analog output	
Current output	4...20 mA
Load	≤ 0.86 kΩ @24 VDC [R _{Load} =(V _{supply} - 5 V)/22 mA] kΩ
Accuracy (Lin. + Hys. + Rep.)	± 0.2 K
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)
Process connection	G1/8" male thread

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.



Technical data

Electrical connection	Connector, M12 × 1
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 T_{K0}	± 0.1 % of full scale/10 K
MTTF	162 years acc. to SN 29500 (Ed. 99) 40 °C

Technical data

Type	TTM100C-103A-G1/8-LI6-H1140-L013
ID no.	9910549
Temperature range	
Measuring range	0...100 °C
Temperature operating 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	$t_{0.5} = 1.5 \text{ s}$ / $t_{0.9} = 6.0 \text{ s}$ in water at 0.2 m/s
Immersion depth (L)	13 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 [R _{Load} =(V _{supply} - 5 V)/22 mA] kΩ

Technical data

Accuracy (Lin. + Hys. + Rep.)	± 0.2 K
Temperature behaviour	
Temperature coefficient zero point T_{k0}	± 0.1 % of full scale/10 K
Temperature coefficient span T_{ks}	± 0.1 % of full scale/10 K
Ambient conditions	
Ambient temperature	-40...+80 °C
Storage temperature	-40...+80 °C
Housing	
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L)
Process connection	G1/8" male thread
Process Pressure	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