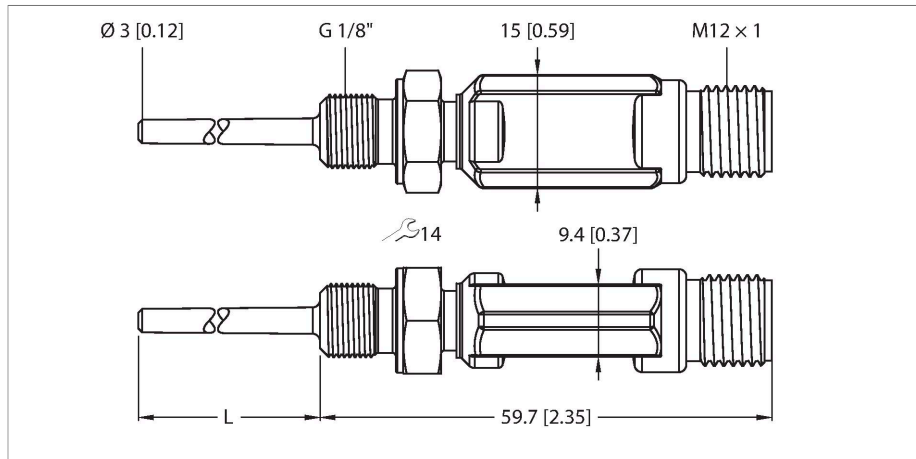


# TTM100C-103A-G1/8-LI6-H1140-L024

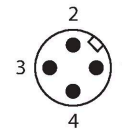
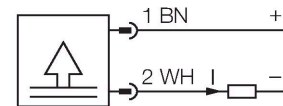
## Temperature Detection – With Current Output



### 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

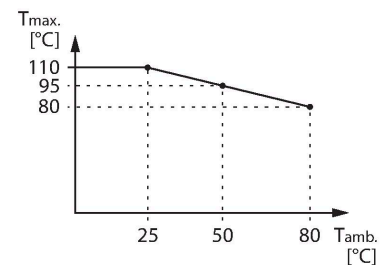


### Technical data

Type	TTM100C-103A-G1/8-LI6-H1140-L024
ID	9910551
<b>Temperature range</b>	
Measuring range	0...100 °C
Measuring range	32...212 °F
Measuring element	Pt-1000 probe, DIN EN 60751, class A
Response time	$t_{0.95} = 1.5 \text{ s}$ / $t_{0.99} = 6.0 \text{ s}$ in water @ 0.2 m/s
Immersion depth (L)	24 mm
Process Pressure	100 bar
<b>Power supply</b>	
Operating voltage	5.5...32 VDC
Current consumption	≤ 20 mA
Short-circuit/reverse polarity protection	yes / yes
Insulation class	III
<b>Analog output</b>	
Current output	4...20 mA
Load	≤ 0.84 kΩ @24 VDC $[R_{Load} = (V_{Supply} - 5.5 \text{ V}) / 22 \text{ mA}] \text{ kΩ}$
Accuracy (Lin. + Hys. + Rep.)	± 0.2 K
<b>Mechanical data</b>	
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)
Process connection	G 1/8" male thread
Electrical connection	Connector, M12 × 1
Protection class	IP67

### 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

Environmental conditions	
Ambient temperature	-40...+80 °C
Storage temperature	-40...+80 °C
Tests/approvals	
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 range TK <sub>s</sub>	± 0.1 % of full scale/10 K
Temperature coefficient zero point TK <sub>0</sub>	± 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-L024
ID	9910551
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 <sub>05</sub> = 1.5 s / t <sub>09</sub> = 6.0 s in water @ 0.2 m/s
Immersion depth (L)	24 mm
Outer diameter	3 mm
Power supply	
Operating voltage	5.5...32 VDC
Current consumption	≤ 20 mA
Short-circuit/reverse polarity protection	yes / yes
Protection type and class	IP67 / III
Analog output	
Current output	4...20 mA
Load	≤ 0.84 kΩ @24 0.84 kΩ @24 VDC [R <sub>Load</sub> =(V <sub>Supply</sub> - 5.5 V) / 22 mA] kΩ
Accuracy (Lin. + Hys. + Rep.)	± 0.2 K
Temperature behaviour	
Temperature coefficient zero point TK <sub>0</sub>	± 0.1 % of full scale/10 K

## Technical data

Temperature coefficient range TK <sub>s</sub>	± 0.1 % of full scale/10 K
<b>Environmental conditions</b>	
Ambient temperature	-40...+80 °C
Storage temperature	-40...+80 °C
<b>Mechanical data</b>	
Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L)
Process connection	G 1/8" male thread
Process Pressure	100 bar
Electrical connection	Connector, M12 × 1
<b>Reference conditions acc. to IEC 61298-1</b>	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC
<b>Tests/approvals</b>	
MTTF	162 years acc. to SN 29500 (Ed. 99) 40 °C