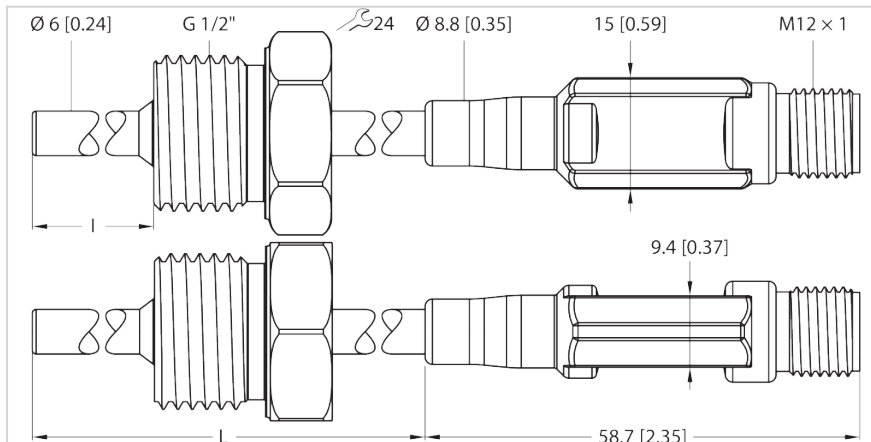


TTM150C-206A-G1/2-LI6-H1140-L250-50/150C

## Temperature detection with current output



|                  |                                          |
|------------------|------------------------------------------|
| Type designation | TTM150C-206A-G1/2-LI6-H1140-L250-50/150C |
| Ident-No.        | 9910736                                  |

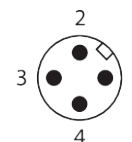
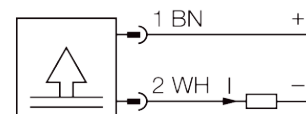
### Technical data

| General data                   |                               |
|--------------------------------|-------------------------------|
| Detection type                 | medium contact                |
| Measuring principle            | Media-contacting              |
| Application area               |                               |
| Immersion depth (L)            | 250 mm                        |
| Bar length (L)                 | 300 mm                        |
| Measuring element              | Pt1000, DIN EN 60751, class A |
| Pressure resistance            | 100 bar                       |
| Detection area/measuring range |                               |
| Measuring range                | -50...150 °C                  |
| Measuring range                | -58...302 °F                  |
| Temperature                    |                               |
| Temperature measuring range    | -50...150 °C                  |
| Power supply                   |                               |
| Operating voltage $U_B$        | 5.5...32 VDC                  |
| Power supply                   |                               |
| Electrical data                |                               |
| Short-circuit protection       | yes                           |

### Features

- Miniature design
- Analog output 4...20 mA
- Factory setting -50...150 °C (other settings on request)
- Process connection G1/2" male thread
- Bendable probe (min. bending radius: 3 × outer diameter; excluding 30-mm probe tip)

### Wiring Diagram



### Functional principle

The TTM miniature transmitters are available with integrated probe.

## Technical data

|                                        |                                                                      |
|----------------------------------------|----------------------------------------------------------------------|
| Wire break/reverse polarity protection | yes                                                                  |
| Current consumption                    | ≤ 20 mA                                                              |
| Insulation class                       | III                                                                  |
| Response time                          | $t_{05} = 1.5 \text{ s} / t_{09} = 6.0 \text{ s}$ in water @ 0.2 m/s |

### Outputs

|                               |                                                                                                    |
|-------------------------------|----------------------------------------------------------------------------------------------------|
| Accuracy (Lin. + Hys. + Rep.) | ±0,2 K                                                                                             |
| Current output                | 4...20 mA                                                                                          |
| Load                          | ≤ 0.84 kΩ at 24 VDC<br>[ $R_{\text{Load}} = (V_{\text{Supply}} - 5.5 \text{ V}) / 22 \text{ mA}$ ] |

### Accuracy/deviation

|                                           |                   |
|-------------------------------------------|-------------------|
| Temperature coefficient range $TK_s$      | ± 0,1 % v.E./10 K |
| Temperature coefficient zero point $TK_0$ | ±0,1 % v.E./10 K  |

### Mechanical data

|                               |                                             |
|-------------------------------|---------------------------------------------|
| Design                        | Without display (integrated probe)          |
| Construction type designation | TTM                                         |
| Housing material              | Stainless-steel/Plastic, 1.4404 (AISI 316L) |
| Electrical connection         | Connector, M12 x 1                          |
| Outer diameter                | 6 mm                                        |
| Immersion length (l)          | 250 mm                                      |
| Process connection            | G 1/2" male thread                          |
| Sensor material               | Stainless steel, 1.4404 (AISI 316L)         |
| Mounting conditions           | Immersion sensor                            |

### Ambient conditions

|                     |              |
|---------------------|--------------|
| Ambient temperature | -40...+80 °C |
| Storage temperature | -40...+80 °C |
| Protection class    | IP67         |

### Tests/approvals

|           |                                              |
|-----------|----------------------------------------------|
| Approvals | CE                                           |
| MTTF      | 162 Years acc. to SN 29500 (Ed. 99)<br>40 °C |
| MTBF      | 162 Jahre                                    |

### Reference conditions

|                      |                     |
|----------------------|---------------------|
| Auxiliary power      | 24 VDC              |
| Atmospheric pressure | 860...1060 hPa abs. |
| Humidity             | 45...75 % rel.      |

Due to the integrated electronics, the limited temperature range must be observed, especially in the area of the M12 connector.

## Technical data

|                 |                                                   |
|-----------------|---------------------------------------------------|
| Temperature     | 15...+25 °C                                       |
| <b>Comments</b> |                                                   |
| Note            | Max. temperature of electronics: 80 °C/<br>176 °F |