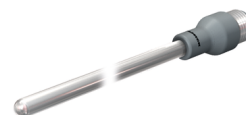
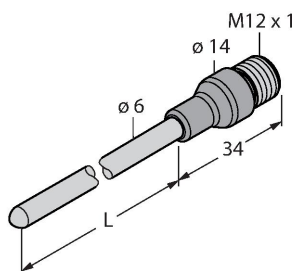


# TP-206A-CF-H1141-L450

## Temperature Detection – Probe



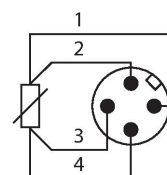
### Technical data

|                                                 |                                                                      |
|-------------------------------------------------|----------------------------------------------------------------------|
| Type                                            | TP-206A-CF-H1141-L450                                                |
| ID no.                                          | 9910610                                                              |
| <b>Temperature range</b>                        |                                                                      |
| Measuring range                                 | -50...500 °C                                                         |
| Temperature operating range                     | -58...932 °F                                                         |
| Accuracy                                        | $\pm 0.15\text{ °C} + 0.002 \cdot  t $ (-30...350 °C)                |
| Measuring element                               | Pt-100 probe, DIN EN 60751, class A                                  |
| Self-heating                                    | 0.4 K/mW at 0 °C                                                     |
| Response time                                   | $t_{0.5} = 6\text{ s}$ / $t_{0.9} = 15\text{ s}$ in water at 0.2 m/s |
| Immersion depth (L)                             | 450 mm                                                               |
| Process Pressure                                | 100 bar                                                              |
| Output function                                 | 4-wire                                                               |
| Housing material                                | Stainless steel, 1.4404 (AISI 316L)                                  |
| Process connection                              | For compression fittings, thermowell or direct mounting              |
| Electrical connection                           | Connector, M12 x 1                                                   |
| Protection class                                | IP67                                                                 |
| Ambient temperature                             | -40...+120 °C                                                        |
| Storage temperature                             | -40...+85 °C                                                         |
| <b>Reference conditions acc. to IEC 61298-1</b> |                                                                      |
| Temperature                                     | 15...+25 °C                                                          |
| Atmospheric pressure                            | 860...1060 hPa abs.                                                  |
| Humidity                                        | 45...75 % rel.                                                       |

### Features

- Pt-100 probe acc. to DIN EN 60751
- Vibration and shock-resistant
- Connectable to TS, TTM, IM34, BL20, BL67
- Max. temperature connector: 120°C
- 4-wire connection technology

### 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.

## Technical data

|                 |                                            |
|-----------------|--------------------------------------------|
| Auxiliary power | 24 VDC                                     |
| MTTF            | 2283 years acc. to SN 29500 (Ed. 99) 20 °C |

## Technical data

|                                                 |                                                         |
|-------------------------------------------------|---------------------------------------------------------|
| Type                                            | TP-206A-CF-H1141-L450                                   |
| ID no.                                          | 9910610                                                 |
| <b>Temperature range</b>                        |                                                         |
| Measuring range                                 | -50...500 °C                                            |
| Temperature operating range                     | -58...932 °F                                            |
| Accuracy                                        | 0.15 °C + 0.002 • t  (-30...350 °C)                     |
| Self-heating                                    | 0.4 K/mW at 0 °C                                        |
| Measuring element                               | Pt-100 probe, DIN EN 60751, class A                     |
| Response time                                   | t 0.5 = 6 s / t 0.9 = 15 s in water at 0.2 m/s          |
| Immersion depth (L)                             | 450 mm                                                  |
| Protection type and class                       | IP67                                                    |
| Output function                                 | 4-wire                                                  |
| <b>Ambient conditions</b>                       |                                                         |
| Ambient temperature                             | -40...+120 °C                                           |
| Storage temperature                             | -40...+85 °C                                            |
| <b>Housing</b>                                  |                                                         |
| Housing material                                | Stainless steel, 1.4404 (AISI 316L)                     |
| Sensor material                                 | Stainless steel, 1.4404 (AISI 316L)                     |
| Process connection                              | For compression fittings, thermowell or direct mounting |
| 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                                                  |
| MTTF                                            | 2283 years acc. to SN 29500 (Ed. 99) 20 °C              |