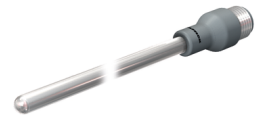
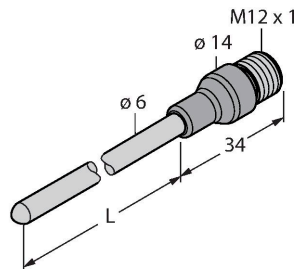


# TP-206A-CF-H1141-L050

## Temperature Detection – Probe



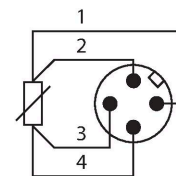
### Technical data

|   |  |
|---|--|
| Type  | TP-206A-CF-H1141-L050  |
| ID  | 9910646  |
| <b>Temperature range</b>                        |  |
| Measuring range                                 | -50...120 °C   |
|   | -58...248 °F   |
| Accuracy  | $\pm 0.15 \text{ K} + 0.002 \cdot  t $ (-30...300 °C)                |
| Self-heating                                    | 0.4 K/mW at 0 °C   |
| Measuring element                               | Pt100, DIN EN 60751, class A; connection mode: 4-wire connection     |
| Response time                                   | $t_{0.5} = 6 \text{ s} / t_{0.9} = 15 \text{ s}$ in water at 0.2 m/s |
| Immersion depth L                               | 50 mm  |
| Outer diameter                                  | 6 mm   |
| Protection class                                | IP67   |
| <b>Environmental conditions</b>                 |  |
| Ambient temperature                             | -40...+120 °C  |
| Storage temperature                             | -40...+85 °C   |
| <b>Mechanical data</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              |
| Pressure resistance                             | 100 bar  |
| Electrical connection                           | Connector, M12 x 1   |
| Core cross-section                              | 4 mm <sup>2</sup>  |
| <b>Reference conditions acc. to IEC 61298-1</b> |  |
| Temperature                                     | 15...+25 °C  |

### Features

- Process connection via compression fitting or thermowell
- Connection mode: 4-wire connection

### Wiring diagram



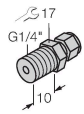
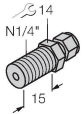
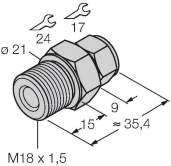
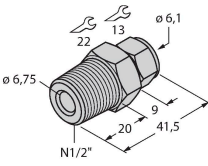
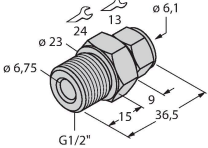
### Functional principle

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

|                        |  |
|------------------------|--|
| Atmospheric pressure   | 860...1060 hPa abs.                        |
| Humidity               | 45...75 % rel.                             |
| Auxiliary power        | 24 VDC                                     |
| Tests/approvals        |  |
| Approvals              | cULus                                      |
| UL registration number | E345414                                    |
| MTTF                   | 2283 years acc. to SN 29500 (Ed. 99) 20 °C |

Accessories

|  |  |  |   |
|--|--|--|---|
| CF-M-6-G1/4-A4   | 9910483  | CF-M-6-N1/4-A4   | 9910484   |
|    | Compression fitting for direct mounting of temperature sensors; sensor diameter 6 mm; process connection G1/4" male thread   |   | Compression fitting for direct mounting of temperature sensors; sensor diameter 6 mm; process connection 1/4" NPT male thread |
| CF-M-6-M18-A4  | 9910525  | CF-M-6-N1/2-A4   | 9910529   |
|   | Compression fitting for direct mounting of temperature sensors; sensor diameter 6 mm; process connection M18 x 1 male thread |  | Compression fitting for direct mounting of temperature sensors; sensor diameter 6 mm; process connection 1/2" NPT male thread |
| CF-M-6-G1/2-A4   | 9910530  |  |   |
|  | Compression fitting for direct mounting of temperature sensors; sensor diameter 6 mm; process connection G1/2" male thread   |  |   |

Accessories

| Dimension drawing | Type          | ID      |   |
|-------------------|---------------|---------|---|
|                   | WKC4.4T-2/TEL | 6625025 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval   |
|                   | RKC4.4T-2/TEL | 6625013 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |
|                   | RKC4.4T-2/TXL | 6625503 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval |
|                   | WKC4.4T-2/TXL | 6625515 | Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval   |