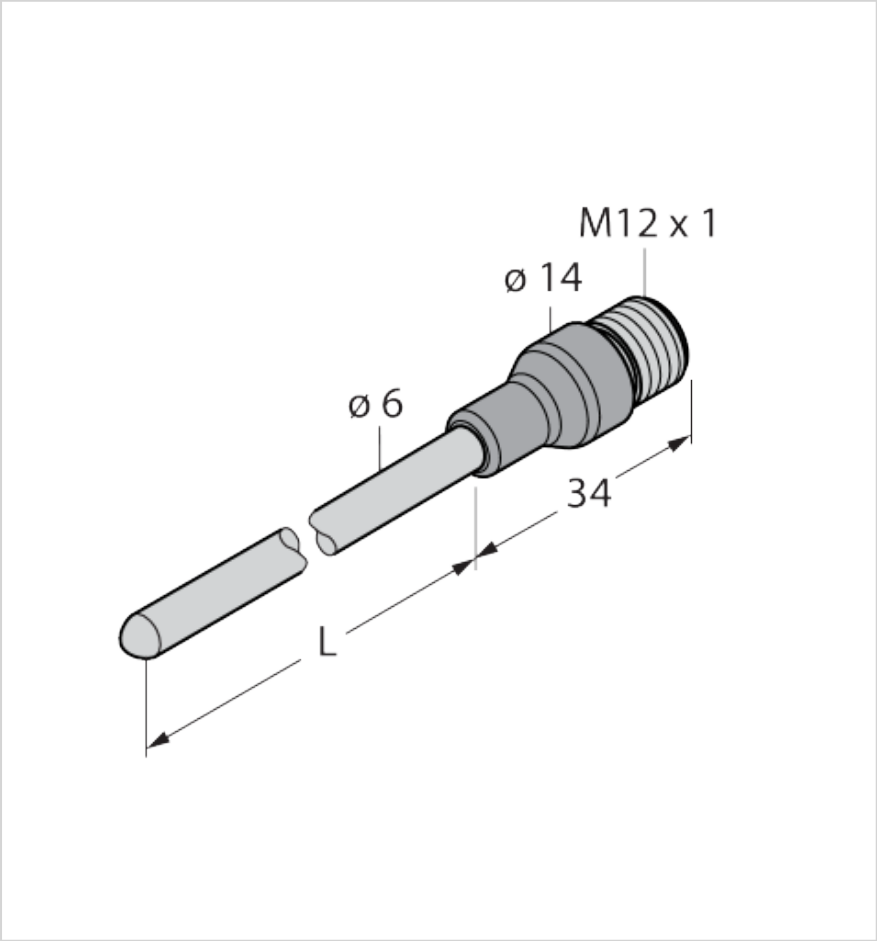


TP-206A-CF-H1141-L250

Temperature detection  
Probe



|                  |                       |
|------------------|-----------------------|
| Type designation | TP-206A-CF-H1141-L250 |
| Ident-No.        | 9910608               |

Technical data

|                     |                                                                     |
|---------------------|---------------------------------------------------------------------|
| General data        |                                                                     |
| Detection type      | medium contact                                                      |
| Measuring principle | Media-contacting                                                    |
| Application area    |                                                                     |
| Immersion depth (L) | 250 mm                                                              |
| Measuring element   | Pt100, DIN EN 60751, class A;<br>connection mode: 4-wire connection |
| Pressure resistance | 100 bar                                                             |

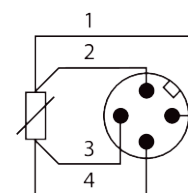
Features

- Pt100 probe according to DIN EN 60751
- Resistant to vibrations and shocks
- Connectable to TS, TTM, IM34, BL20, BL67
- Process connection via compression fitting or thermowell
- Connection mode: 4-wire connection

## Technical data

| Detection area/measuring range |                                                         |
|--------------------------------|---------------------------------------------------------|
| Measuring range                | -50...500 °C                                            |
| Measuring range                | -58...932 °F                                            |
| Temperature                    |                                                         |
| Temperature measuring range    | -50...500 °C                                            |
| Self-heating                   | 0.4 K/mW at 0 °C                                        |
| Electrical data                |                                                         |
| Response time                  | t 0.5 = 6 s / t 0.9 = 15 s in water at 0.2 m/s          |
| Outputs                        |                                                         |
| Electrical output              | Resistance                                              |
| Accuracy/deviation             |                                                         |
| Accuracy                       | ±0.15 K + 0.002 ·  t  (-30....300 °C)                   |
| Mechanical data                |                                                         |
| Design                         | Temperature probe                                       |
| Construction type designation  | TP                                                      |
| Housing material               | Stainless steel, 1.4404 (AISI 316L)                     |
| Electrical connection          | Connector, M12 x 1                                      |
| Outer diameter                 | 6 mm                                                    |
| Process connection             | For compression fittings, thermowell or direct mounting |
| Sensor material                | Stainless steel, 1.4404 (AISI 316L)                     |
| Mounting conditions            | Immersion sensor                                        |
| Cable                          |                                                         |
| Core cross-section             | 4                                                       |
| Ambient conditions             |                                                         |
| Ambient temperature            | -40...+120 °C                                           |
| Storage temperature            | -40...+85 °C                                            |
| Protection class               | IP67                                                    |
| Tests/approvals                |                                                         |
| UL registration number         | E345414                                                 |
| Approvals                      | cULus                                                   |
| Approvals                      | cULus                                                   |
| MTTF                           | 2283 Years acc. to SN 29500 (Ed. 99)<br>20 °C           |
| Reference conditions           |                                                         |
| Auxiliary power                | 24 VDC                                                  |
| Atmospheric pressure           | 860...1060 hPa abs.                                     |

## Wiring Diagram



## Functional principle

Resistance temperature detectors 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

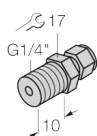
|             |                |
|-------------|----------------|
| Humidity    | 45...75 % rel. |
| Temperature | 15...+25 °C    |

## Mounting accessories

### CF-M-6-G1/4-A4

9910483

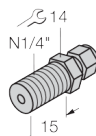
Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection G1/4" male thread



### CF-M-6-N1/4-A4

9910484

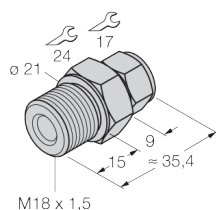
Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection 1/4" NPT male thread



### CF-M-6-M18-A4

9910525

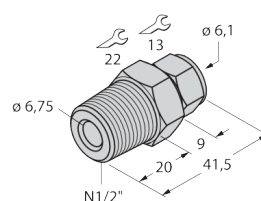
Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection M18 x 1.5 male thread



### CF-M-6-N1/2-A4

9910529

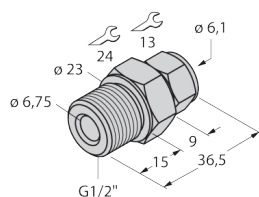
Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection 1/2" NPT male thread



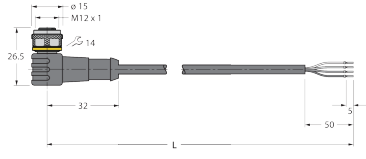
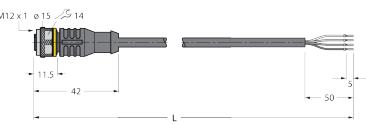
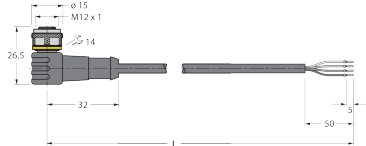
### CF-M-6-G1/2-A4

9910530

Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection G1/2" male thread



Connection accessories

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