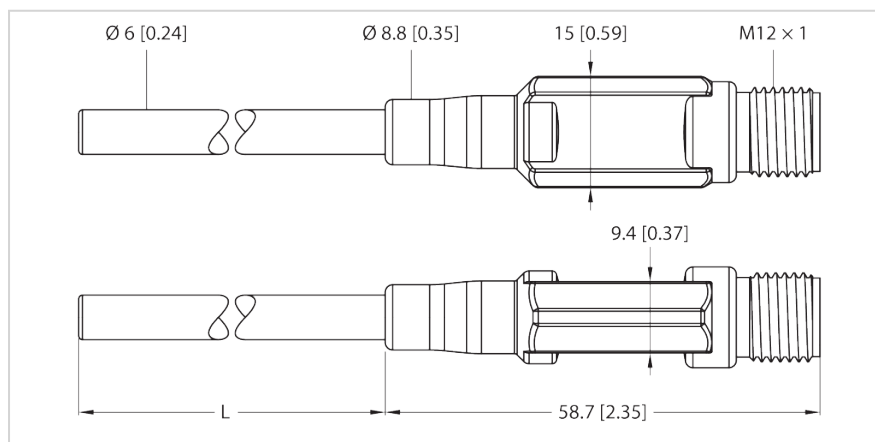


TTM650C-206A-CF-LI6-H1140-L200-10/650°C

Temperature detection with current output



Type designation	TTM650C-206A-CF-LI6-H1140-L200-10/650°C
Ident-No.	100046879

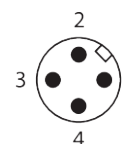
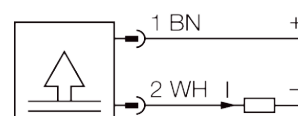
Technical data

General data	
Detection type	medium contact
Measuring principle	Media-contacting
Application area	
Immersion depth (L)	200 mm
Measuring element	Pt1000, DIN EN 60751, class A
Pressure resistance	100 bar
Detection area/measuring range	
Factory setting	10...650 °C
Factory setting	50...1202 °F
Measuring range	-50...500 °C
Measuring range	-58...932 °F
Temperature	
Temperature measuring range	-50...500 °C
Power supply	
Operating voltage U_B	5.5...32 VDC
Power supply	
Electrical data	

Features

- Miniature design
- Analog output 4...20 mA
- Factory setting 10...650 °C
- Compression fitting process connection
- 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

Short-circuit protection	yes
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 [$R_{\text{Load}} = (V_{\text{Supply}} - 5.5 \text{ V}) / 22 \text{ mA}$]

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
Process connection	For compression fittings, thermowell or direct mounting
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) 40 °C
MTBF	162 Jahre

Reference conditions

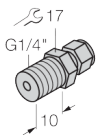
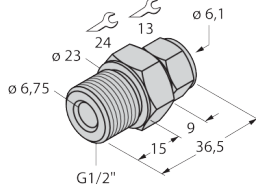
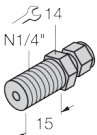
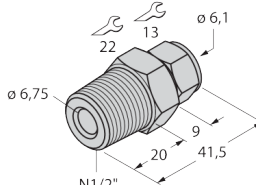
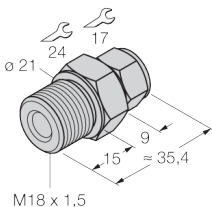
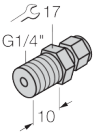
Auxiliary power	24 VDC
Atmospheric pressure	860...1060 hPa abs.

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

Technical data

Humidity	45...75 % rel.
Temperature	15...+25 °C
Comments	
Note	Max. temperature of electronics: 80 °C/ 176 °F

Mounting accessories

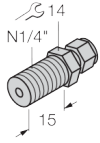
CF-M-6-G1/4-A4	9910483		Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection G1/4" male thread	CF-M-6-G1/2-A4	9910530		Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection G1/2" male thread
CF-M-6-N1/4-A4	9910484		Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection 1/4" NPT male thread	CF-M-6-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-M18-A4	9910525		Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection M18 x 1.5 male thread	CF-P-6-G1/4-A4	9910485		Compression fitting for direct mounting of temperature probes; probe diameter 6 mm; process connection G1/4" male thread

Mounting accessories

CF-P-6-N1/4-A4

9910486

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

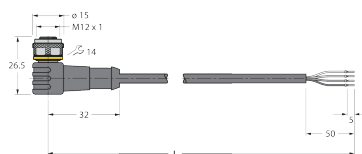


Connection accessories

WKC4.4T-2/TEL

6625025

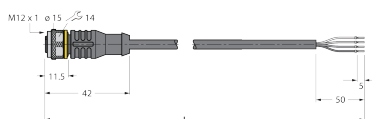
Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval



RKC4.4T-2/TEL

6625013

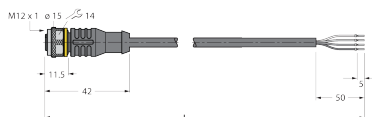
Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval



RKC4.4T-2/TXL

6625503

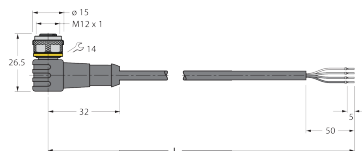
Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval



WKC4.4T-2/TXL

6625515

Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval



RKC4.4T-P7X2-10/TXL

6626184

Connection cable, M12 female connector, straight, 4-pin, LED, cable length: 10 m, jacket material: PUR, black; cULus approval

