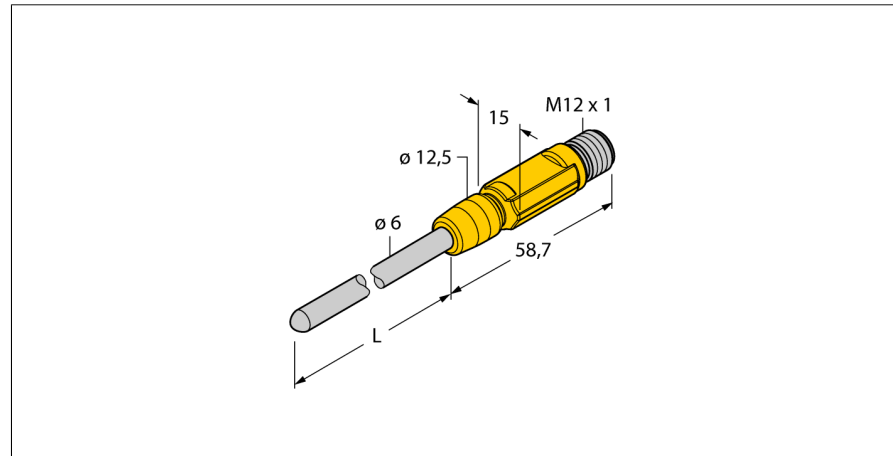
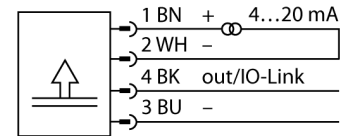


**Temperature measurement
with current output and PNP/NPN transistor switching output
TTM-206A-CF-LIUPN-H1140-L050**



- Miniature design
- Analog output 4...20 mA
- Factory setting: 0...150 °C

Wiring Diagram



General description

The TTM miniature transmitters are available with integrated probe.

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

Type designation	TTM-206A-CF-LIUPN-H1140-L050
Ident no.	9910809
Temperature range	-210...650 °C
Temperature operating range	-346...1202°F
Measuring element	Pt-100 probe, DIN EN 60751, class A
Accuracy	0.15 °C + 0.002 · t (-30 ...350 °C)
Response time	t 0.5 = 6 s / t 0.9 = 15 s in water at 0.2 m/s
Immersion depth (L)	50 mm
Power supply	
Operating voltage	15...30 VDC
Current consumption	≤ 20 mA
Voltage drop at I _e	≤ 2 V
Short-circuit/reverse polarity protection	yes/ yes
Protection type and class	IP67/ III
Outputs	
Output 1	Switching output or IO-Link mode
Output 2	analog output
Switching output	
Output function	NC/NO programmable, PNP/NPN
Switching point accuracy	± 0.3 K
Rated operational current	0.15 A
Switching cycles	≥ 100 mil.
Release points	-210...+640°C
Switching point	-200...+650°C
Analogue output	
Operating range	4...20/ 0...20 mA (2-wire)
Load	≤ 0.5 kΩ
Accuracy (Lin. + Hys. + Rep.)	± 0.3 K
Anmerkung	0.1% of full scale applies to temperatures > +200 °C
Repeatability	0.1 K
IO-Link	
IO-Link Specification	IO-Link
Programming	Specified acc. to version 1.1
Transmission physics	FDT / DTM
Transmission rate	corresponds to 3-wire physics (PHY2)
Process data width	COM 2 / 38.4 kbps
Measured value information	16 bit
Switchpoint information	15 bit
Frame type	1 bit
Genauigkeit	2.2
	± 0.2 K
Temperature behaviour	
Temperature coefficient zero point Tk0	± 0.1 % of full scale/10 K
Temperature coefficient span T _{is}	± 0.1 % of full scale / 10 K

**Temperature measurement
with current output and PNP/NPN transistor switching output
TTM-206A-CF-LIUPN-H1140-L050**

Ambient conditions

Ambient temperature	-40...+80 °C
Storage temperature	-40...+80°C

Housing

Housing material	Stainless-steel/Plastic, V4A (1.4404)
Sensor material	stainless steel, AISI 316L
Process connection	For cutting ring fittings, thermowell or direct mounting
Electrical connection	Connector, M12 (⌀) 1
Pressure resistance	100 bar

Reference conditions acc. to IEC 61298-1

Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC

**Temperature measurement
with current output and PNP/NPN transistor switching output
TTM-206A-CF-LIUPN-H1140-L050**

Wiring accessories

Type code	Ident no.	Description	
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
RKC4.4T-2/TXL	6625503	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
WKC4.4T-2/TXL	6625515	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com	
RKC4.4T-P7X2-10/TXL	6626184	Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com	