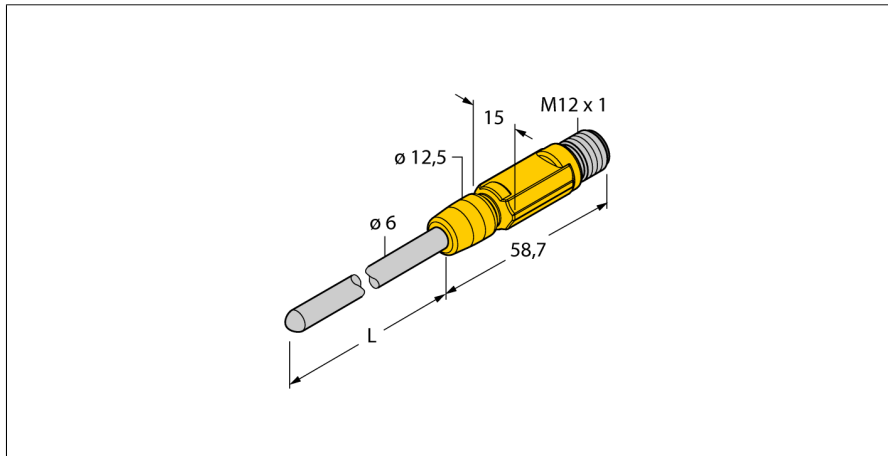
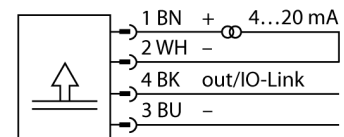


Temperature measurement with current output and PNP/NPN transistor switching output TTM-206A-CF-LIUPN-H1140-L150



- Miniature design
- Parametrizable via IO-Link
- Analog output 4...20 mA (2-wire)
- Switching output
- Factory setting 0...150°C (other settings on request)

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-L150
Ident-No.	9910626
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)	150 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
Analog 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
IO-Link Specification	Specified acc. to version 1.1
Programming	FDT / DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Transmission rate	COM 2 / 38.4 kbps
Process data width	16 bit
Measured value information	15 bit
Switchpoint information	1 bit
Frame type	2.2
Genauigkeit	± 0.2 K
Temperature behaviour	
Temperature coefficient zero point Tk0	± 0.1 % of full scale/10 K
Temperature coefficient span T _{KS}	± 0.1 % of full scale/10 K

Temperature measurement with current output and PNP/NPN transistor switching output TTM-206A-CF-LIUPN-H1140-L150

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-L150**



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	