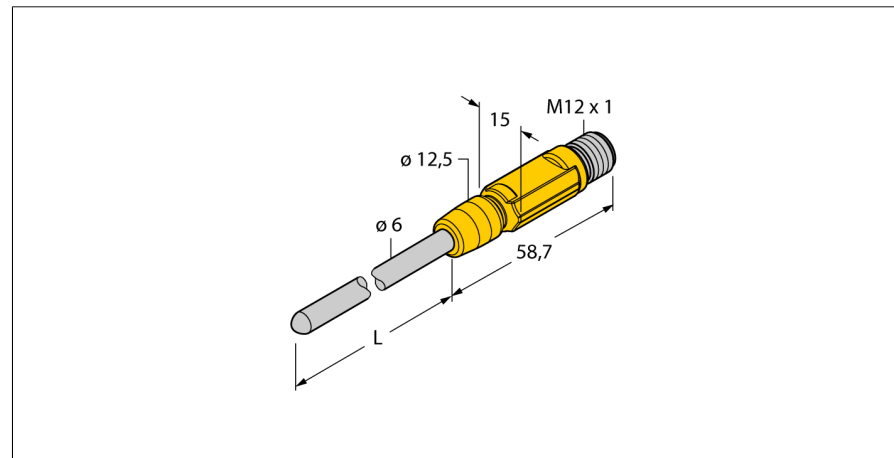
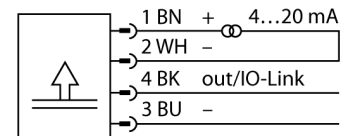


**Temperature measurement  
with current output and PNP/NPN transistor switching output  
TTM-206A-CF-LIUPN-H1140-L075**



- 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.

<b>Type designation</b>	TTM-206A-CF-LIUPN-H1140-L075
Ident no.	9910767
<b>Temperature range</b>	-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)	75 mm
<b>Power supply</b>	
Operating voltage	15...30 VDC
Current consumption	≤ 20 mA
Voltage drop at I <sub>e</sub>	≤ 2 V
Short-circuit/reverse polarity protection	yes/ yes
Protection type and class	IP67/ III
<b>Outputs</b>	
Output 1	Switching output or IO-Link mode
Output 2	analog output
<b>Switching output</b>	
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
<b>Analogue output</b>	
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
<b>IO-Link</b>	
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
<b>Temperature behaviour</b>	
Temperature coefficient zero point Tk0	± 0.1 % of full scale/10 K
Temperature coefficient span T <sub>is</sub>	± 0.1 % of full scale / 10 K

## Temperature measurement with current output and PNP/NPN transistor switching output TTM-206A-CF-LIUPN-H1140-L075

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**Ambient conditions**

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

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**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

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**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-L075**

**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 <a href="http://www.turck.com">www.turck.com</a>	
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 <a href="http://www.turck.com">www.turck.com</a>	
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 <a href="http://www.turck.com">www.turck.com</a>	
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 <a href="http://www.turck.com">www.turck.com</a>	