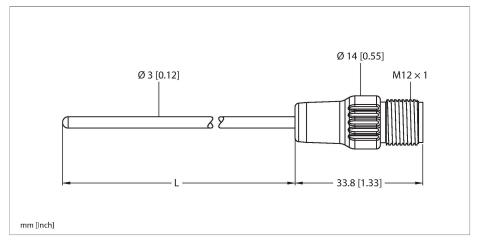


# TP-203KK1-CF-H1141-L150 Temperature Detection – Probe



## Technical data

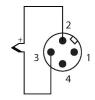
Measuring range

Туре	TP-203KK1-CF-H1141-L150
ID	100045292
Temperature range	
Measuring range	-401100 °C
Measuring range	-402012 °F
Accuracy	Class 1
Measuring element	Thermocouple type K, DIN EN 60584
Immersion depth (L)	150 mm
Output function	2-wire
Housing material	Metal/plastic, Inconel 600/Nylon
Process connection	For compression fittings, thermowell or direct mounting
Electrical connection	Connector, M12 × 1
Protection class	IP67
Ambient temperature	-40+120 °C
Storage temperature	-40+85 °C
Reference conditions acc. to IEC 61298-1	
Temperature	15+25 °C
Atmospheric pressure	8601060 hPa abs.
Humidity	4575 % rel.
Auxiliary power	24 VDC
Technical data	
Туре	TP-203KK1-CF-H1141-L150
ID	100045292
Temperature range	

# **Features**

- ■Thermocouple acc. to DIN EN 60584
- Resistant to vibrations and shocks
- Can be connected to TS720, IM34 or IME-
- ■Max. temperature connector: 120 °C
- ■2-wire technology
- ■Process connection: Compression fitting
- Bendable probe (min. bending radius:
  - 3 × outside diameter)

## Wiring diagram



# Functional principle

Thermocouples 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 pair of metallic conductors that are made of different materials and connected at one end. Due to the thermoelectric effect, the thermocouple provides a temperature-dependent voltage.

-40...1100 °C



# Technical data

Measuring range	-402012 °F
Accuracy	Class 1
Measuring element	Thermocouple type K, DIN EN 60584
Immersion depth (L)	150 mm
Protection type and class	IP67
Output function	2-wire
Ambient conditions	
Ambient temperature	-40+120 °C
Storage temperature	-40+85 °C
Mechanical data	
Housing material	Metal/plastic, Inconel 600/Nylon
Sensor material	Metal, Inconel 600
Process connection	For compression fittings, thermowell or direct mounting
Electrical connection	Connector, M12 × 1
Reference conditions acc. to IEC 61298-1	
Temperature	15+25 °C
Atmospheric pressure	8601060 hPa abs.
Humidity	4575 % rel.
Auxiliary power	24 VDC

# Accessories



9910405
Compression fitting for direct mounting of temperature sensors; sensor diameter 3 mm; process connection G1/8" male thread

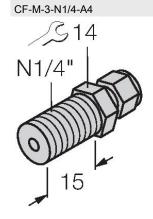


9910406 Compression fitting for direct mounting of temperature sensors; sensor diameter 6 mm; process connection 1/8" NPT male thread

# CF-M-3-G1/4-A4

#### 9910407

Compression fitting for direct mounting of temperature sensors; sensor diameter 3 mm; process connection G1/4" male thread



#### 9910408

Compression fitting for direct mounting of temperature sensors; sensor diameter 3 mm; process connection 1/4" NPT male thread

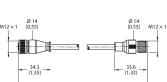
## Accessories

Dimension drawing

Ø 14 M12×1 [0.55]	Ø 14 [0.55] M12×1
<u> </u>	
- 34.3 [1.35]	33.6
-	L

100033104 RK4.217T-2-RS4.217T/TS7198

Thermocouple cable, type K — Extension cable, M12 female connector, straight, 2-pin to M12 male connector, straight, 2-pin; cable length: 2 m, jacket material: TPE, green



RK4.217T-5-RS4.217T/TS7198 100033105 Thermocouple cable, type K — Extension cable, M12 female connector, straight, 2-pin to M12 male connector, straight, 2-pin; cable length: 5 m, jacket material: TPE, green

RK4.217T-7-RS4.217T/TS7198 100033107

Thermocouple cable, type K — Extension cable, M12 female connector, straight, 2-pin to M12 male connector, straight, 2-pin; cable length: 7 m, jacket material: TPE, green

