## **Type K** Thermocouple

Probe for Maturix<sup>®</sup> Temperature and Strength Monitoring



### **Overview**

The type K thermocouple sensor measures temperature at the tip of the cable and is intended for Maturix<sup>®</sup> Temperature and Strength Monitoring.

Install the thermocouple, connect it to the transmitter and the temperature data will be sent continuously.

The cable consists of two durable conductors. It is insulated with PTFE (Teflon), which has excellent abrasion, flame and humidity resistance. The cable is designed to be both strong and with high flexibility so that it is suitable for multiple purposes.

The connector is the standard male Type K miniature with flat pins that allows easy connection to the transmitter.

Type K thermocouples are simple to use, versatile, widely available, and cost-effective temperature sensors ideal for concrete monitoring.

#### **Features**

- Measure temperature at any position with
  type K thermocouples
- Industry-standard temperature sensor
- Multiple lengths available
- High resistance and durability

#### Benefits

- Ideal for concrete monitoring
- Flexible and versatile use
- Cost-efficient temperature & strength monitoring
- Flexible positioning

#### Maturix<sup>®</sup> Temperature and Strength Monitoring

Maturix combines durable hardware, smart wireless technology and user-friendly software to a powerful concrete monitoring tool. The system provides in-depth insights into the curing status and shows real-time temperature, maturity and strength data.

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Information in this datasheet is based on specifications believed correct at the time of publication. The right is reserved for making changes as design and general improvements are introduced.

## **Specifications**

#### **Temperature Measurements**

Range	-25 to 125 °C (-13 to 257 °F) 1
Tolerance	±1.5 °C (±2.7 °F)
Thermocouple Class	Class 1

#### **Use and Storage**

Temperature	-25 to 125 °C (-13 to 257 °F) <sup>1</sup>
Ideal Storage Conditions	Indoor, 20 to 30 °C (68 to 86 °F)

#### **Mechanical Specifications**

Cable Length	Ready-to-use cables: 1, 3, 5, 10 meters Self-assembly roll: 100 meter
Cable Shape	Flat pair
Cable Thickness	2.5 x 1.5 mm (0.1 x 0.06 in)
Connector Thickness	7/0.12, 0.2 mm <sup>2</sup>
Connector Dimensions (L x W x H)	32 x 17 x 8 mm (1.26 x 0.67 x 0.31 in)
Connector Type	Miniature, type K, male, flat pins
Materials	Cable, conductors: Ni-Cr / Ni-Al Cable, jacket: Teflon/PTFE (blue) Cable, tip protector: Polyolefin (black) Connector, ready-to-use: Nylon (yellow) Connector, self-assembly: Nylon (green)

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#### Models

Thermocouple wire with connector, type K, ready-to-use cable			
Part No.	Length	Amount	
31001-010	1 meter	10	
31001-100	1 meter	100	
31003-010	3 meters	10	
31003-050	3 meters	50	

31003-050	3 meters	50
31005-005	5 meters	5
31005-025	5 meters	25
31010-001	10 meters	1
31010-010	10 meters	10

#### Thermocouple wire, type K, for self-assembly

Part No.	Length	Amount
31100-001	100 meters	1

#### Thermocouple connector, type K, for self-assembly

Part No.	Amount
32005-010	10

HS Code

8517 6990 00

 $^{\rm a}{\rm Can}$  be extended to 250 °C without the tip protector. The tip must not be in contact with conducting materials like metals.



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