

## DATA SHEET

### P08 TYPE K OR T EXTENDED ROBUST NEEDLE PROBE

**Needle Probes - 6.0 mm 300mm LONG Type K or T**

#### Description

This probe has been designed for long penetration into semi-solid materials. It is ideal for applications such as measurement within a **grain store** or **construction** materials such as **Tarmac** also used in the **paper industry**. The probe uses the bulbous handle to enable the sensor tip to be pushed into a semi-solid product with maximum ease of use.

#### Construction

Needle Probe 6.0mm Diameter by 300mm Long : Stainless Steel 316 (Food Grade)  
2M curly polyurethane cable with moulded connector. Complete waterproof assembly.

#### **Sensor Features**

➤ **TOTAL ENCAPSULATION TECHNIQUE FOR MAXIMUM STRENGTH AND DURABILITY.**

This results in a solid handle as opposed to a hollow handle. This is particularly important as there is often damage to the handles caused by excess heat. With a hollow handle it is possible to puncture the outer plastic and damage the sensor irreparably.

➤ **WATERPROOF HANDLE**

Due to the total encapsulation method used, all TME probe handles are completely waterproof.

➤ **TOUGH POLYURETHANE CABLE**

- Polyurethane cables are used in place of the standard polyurethane for the following reasons :-
- Greater retractability
- Enhanced memory of it's curl
- Non-Toxic
- Greater mechanical strength for durability
- 12 X 0.2mm wires used internally for greater strength.
- PTFE inner insulation for strength and retractability.

➤ **HIGH ACCURACY THERMOCOUPLE MATERIAL THROUGHOUT**

Type 'T' Thermocouple : ½ Class I (±0.25°C ±0.25%)  
Type 'K' Thermocouple : Class I (±1.5°C ±0.5%)

➤ **POLYPROPYLENE HANDLES**

Polypropylene is an extremely tough and durable material, commonly used for milk crates, it has good low temperature performance and a relatively high melt temperature. It performs exceptionally well under chemical attack.

- **WIDE AMBIENT TEMPERATURE SPECIFICATION** : -30 TO 50 °C
- **TIME RESPONSE (96%of value in water)** : 3 Secs
- **MEASUREMENT RANGE** : -100 TO 250 °C

#### Cross-reference for compatible instruments

Suitable instruments for use with this probe

TME PART No	DESCRIPTION	APPLICATION
MM2000	SINGLE INPUT INSTRUMENT	HIGH ACCURACY TEMPERATURE MEASUREMENT
MM2010	MAX / MIN HOLD INSTRUMENT	HIGH ACCURACY INSTRUMENT WITH MAX, MIN AND HOLD FEATURES
MM2020	DIFFERENTIAL INSTRUMENT	DUAL INPUT INSTRUMENT FOR DIFFERENTIAL MEASUREMENTS
MM2030	THERMOCOUPLE SIMULATOR	HIGH ACCURACY SIMULATOR WITH MEASUREMENT FACILITY