

## DATA SHEET

### KS19 EXTRA HIGH TEMPERATURE FAST RESPONSE SURFACE PROBE TYPE 'K'

#### **SURFACE PROBE - Type 'K'**

##### Description

This probe uses a ribbon sensor housed in ceramic and an extended length for high temperature surface applications. The ribbon sensor allows for a quicker response time when compared with our standard extra high temperature surface probe.

##### Construction

Surface probe with stainless steel ribbon wire sensing tip protected by a stainless steel and ceramic draught shield.: Stainless Steel 316 (Food Grade)  
2M curly polyurethane cable with moulded connector.

#### **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 PVC 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 'K' Thermocouple : Class I ( $\pm 1.5^{\circ}\text{C} \pm 0.25\%$ )
- **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 on clean metal*) : 3.0 Secs
- **MEASUREMENT RANGE** : 0 TO 1100 °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