

## DATA SHEET

### BSKA04 AIR TEMPERATURE PROBE TYPE 'K'

#### AIR TEMPERATURE PROBE - Type 'K'

##### Description

This probe uses the straight handle for fine control. This probe is used for the measurement of the temperature of gasses. Ideal for applications requiring air temperature measurement within small openings.

##### Construction

The probe features an exposed thermocouple junction protected by a stainless steel sheath :  
Stainless Steel 316 (Food Grade)  
1M straight 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 :-
- 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 II (±3°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 moving gas)** : 0.1 Secs
- **MEASUREMENT RANGE** : -50 TO 400 °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        |