

## DATA SHEET

### PKHVK TYPE 'K' PLUG MOUNTED HEAT, VENT & REFRIGERATION PROBE KIT

#### Description

This kit combines a range of temperature probes which are ideal for use in the heat, vent and refrigeration industry. Each temperature probe is plug mounted for connection into the handle.

#### **KH01 HANDLE FOR PLUG MOUNTED PROBES - Type 'K'**

#### Construction

Handle which includes miniature thermocouple socket into which any one of the TME plug mounted probes may be inserted. Complete with 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 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 : -50 TO 50 °C**

## DATA SHEET

### KHA02 PLUG MOUNTED AIR PROBE TYPE 'K'

#### PLUG MOUNTED AIR PROBE - Type 'K'

##### Description

Air probe plug mounted using a moulded connector.

##### Construction

Air probe with exposed thermocouple sensor protected by a perforated stainless steel sheath. Insulated in ceramic sheaths. Sensor stem is 4mm diameter and 110mm long, the sensor is approx 5mm from the stem end.

##### **Sensor Features**

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

This probe is manufactured using a two stage moulding technique. Firstly the probes are encased in tough nylon, then a thermoplastic over moulding is applied. This gives an extremely robust and durable construction with the added benefit that the assembly is waterproof.

- **HIGH ACCURACY THERMOCOUPLE MATERIAL THROUGHOUT**

Type 'K' Thermocouple : Class I ( $\pm 1.5^{\circ}\text{C} \pm 0.25\%$ )

- **WIDE AMBIENT TEMPERATURE SPECIFICATION** : -30 TO 50 °C
- **TIME RESPONSE (96% of value in moving gas)** : 0.1 Secs
- **MEASUREMENT RANGE** : -100 TO 750 °C

## DATA SHEET

### KVEL01 VELCRO PROBE TYPE 'K'

#### PIPE CLAMP PROBE - Type 'K' (KVEL01)

##### Description

This probe uses a VELCRO strip to hold a temperature sensor against a pipe to measure the temperature of the pipe.

##### Construction

The Velcro probe is fitted with a fine wire thermocouple mounted on a Velcro strip. The probe is fitted with 1M of straight PTFE cable, complete with moulded miniature plug.

##### **Sensor Features**

- TOUGH PTFE CABLE
- HIGH ACCURACY THERMOCOUPLE MATERIAL THROUGHOUT

Type 'K' Thermocouple : Class I ( $\pm 1.5^{\circ}\text{C} \pm 0.25\%$ )

- WIDE AMBIENT TEMPERATURE SPECIFICATION : -30 TO 70 °C
- TIME RESPONSE (*96% of value in water*) : 1.0 Secs
- MEASUREMENT RANGE : -50 TO 150 °C

## DATA SHEET

**KHS01 PLUG MOUNTED SURFACE PROBE TYPE 'K'****PLUG MOUNTED SURFACE BAND PROBE - Type 'K'****Description**

The probe is designed for the measurement of surface temperatures giving a fast response time.

**NOTE:** This probe only requires light pressure to give a true reading and is suitable for smooth, clean surfaces.

If used on an uneven surface, there is a risk that the band will be weakened and deformed.

**Construction**

Ribbon band sensor with thermocouple sensor attached and draught shield : Stainless Steel 316 (Food Grade) 4mm diameter stem 100mm long.

**Sensor Features**

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

This probe is manufactured using a two stage moulding technique. Firstly the probes are encased in tough nylon, then a thermoplastic over moulding is applied. This gives an extremely robust and durable construction with the added benefit that the assembly is waterproof.

- **HIGH ACCURACY THERMOCOUPLE MATERIAL THROUGHOUT**

Type 'K' Thermocouple : Class I ( $\pm 1.5^{\circ}\text{C} \pm 0.25\%$ )

- **WIDE AMBIENT TEMPERATURE SPECIFICATION** : -30 TO 50 °C
- **TIME RESPONSE (96% of value on clean metal)** : 0.1 Secs
- **MEASUREMENT RANGE** : -100 TO 250 °C

## DATA SHEET

### KHM01 PLUG MOUNTED GENERAL PURPOSE PROBE TYPE 'K'

#### PLUG MOUNTED GENERAL PURPOSE PROBE - Type 'K'

##### Description

Minerally Insulated probe plug mounted using a moulded connector.

##### Construction

3.0mm diameter by 100mm long minerally insulated plug mounted probe using moulded plug.

##### **Sensor Features**

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

This probe is manufactured using a two stage moulding technique. Firstly the probes are encased in tough nylon, then a thermoplastic over moulding is applied. This gives an extremely robust and durable construction with the added benefit that the assembly is waterproof.

- **HIGH ACCURACY THERMOCOUPLE MATERIAL THROUGHOUT**

Type 'K' Thermocouple : Class I (±1.5°C ±0.25%)

- **WIDE AMBIENT TEMPERATURE SPECIFICATION** : -30 TO 50 °C
- **TIME RESPONSE (96% of value in water)** : 2.0 Secs
- **MEASUREMENT RANGE** : -100 TO 750 °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
SOLO-K	COMPACT SINGLE INPUT INSTRUMENT	HIGH ACCURACY TEMPERATURE MEASUREMENT