

DATA SHEET

KP05 TYPE 'K' NEEDLE PROBE

Needle Probes - 3.3 mm Type 'K'

Description

This 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 3.3mm Diameter by 100mm 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 'K' Thermocouple : Class I ($\pm 1.5^{\circ}\text{C} \pm 0.5\%$)

➤ 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*) : 1.6 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

DATA SHEET

TP05 TYPE 'T' NEEDLE PROBE

Needle Probes - 3.3 mm Type 'T'

Description

This 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 3.3mm Diameter by 100mm 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%)

➤ **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)** : 1.6 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

DATA SHEET

KP07 HEAVY DUTY TYPE 'K' NEEDLE PROBE

Needle Probes - 6.0 mm Type 'K'

Description

This 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 100mm 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 '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)** : 3.6 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

DATA SHEET

TP07 HEAVY DUTY TYPE 'T' NEEDLE PROBE

Needle Probes - 6.0 mm Type 'T'

Description

This 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 100mm 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%)

➤ **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)** : 3.6 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

DATA SHEET

KM01 LIGHT DUTY TYPE 'K' GENERAL PURPOSE PROBE

GENERAL PURPOSE PROBE - 1.5 mm Type 'K'

Description

This probe uses the straight handle for fine control. The probe is truly general purpose and may be used for gas, liquid or applications with difficult access.

Construction

Minerally Insulated Probe 1.5mm Diameter by 100mm 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 'K' Thermocouple : Class I (±0.5°C ±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 in water)** : 1.0 Secs
- **MEASUREMENT RANGE** : -200 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

DATA SHEET

TM01 LIGHT DUTY TYPE 'T' GENERAL PURPOSE PROBE

GENERAL PURPOSE PROBE - 1.5 mm Type 'T'

Description

This probe uses the straight handle for fine control. The probe is truly general purpose and may be used for gas, liquid or applications with difficult access.

Construction

Minerally Insulated Probe 1.5mm Diameter by 100mm 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%)

➤ **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)** : 1.0 Secs
- **MEASUREMENT RANGE** : -200 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

DATA SHEET

KM03 TYPE 'K' GENERAL PURPOSE PROBE

GENERAL PURPOSE PROBE - 3.0 mm Type 'K'

Description

This probe uses the straight handle for fine control. The probe is truly general purpose and may be used for gas, liquid or applications with difficult access.

Construction

Minerally Insulated Probe 3.0 mm Diameter by 100mm 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 'K' Thermocouple : Class I (±0.5°C ±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 in water)** : 2.0 Secs
- **MEASUREMENT RANGE** : -200 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

DATA SHEET

TM03 TYPE 'T' GENERAL PURPOSE PROBE

GENERAL PURPOSE PROBE - 3.0 mm Type 'T'

Description

This probe uses the straight handle for fine control. The probe is truly general purpose and may be used for gas, liquid or applications with difficult access.

Construction

Minerally Insulated Probe 3.0 mm Diameter by 100mm 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%)

➤ **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)** : 2.0 Secs
- **MEASUREMENT RANGE** : -200 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

DATA SHEET

KM04 EXTENDED TYPE 'K' GENERAL PURPOSE PROBE

GENERAL PURPOSE PROBE - 3.0 mm Type 'K'

Description

This probe uses the straight handle for fine control. The probe is truly general purpose and may be used for gas, liquid or applications with difficult access.

Construction

Minerally Insulated Probe 3.0 mm 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 'K' Thermocouple : Class I (±01.5°C ±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 in water)** : 2.0 Secs
- **MEASUREMENT RANGE** : -200 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

DATA SHEET

TM04 EXTENDED TYPE 'T' GENERAL PURPOSE PROBE

GENERAL PURPOSE PROBE - 3.0 mm Type 'T'

Description

This probe uses the straight handle for fine control. The probe is truly general purpose and may be used for gas, liquid or applications with difficult access.

Construction

Minerally Insulated Probe 3.0 mm 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%)

➤ **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)** : 2.0 Secs
- **MEASUREMENT RANGE** : -200 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

DATA SHEET

KS01 SURFACE (BAND) PROBE TYPE 'K'

RIBBON SURFACE PROBE - Type 'K'

Description

This probe uses the straight handle for fine control. The probe is designed for the measurement of surface temperatures giving a fast response time.

Construction

Ribbon band sensor with thermocouple sensor attached and 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 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 'K' Thermocouple : Class I ($\pm 0.5^\circ\text{C} \pm 0.25\%$)

➤ **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)** : 0.1 Secs
- **MEASUREMENT RANGE** : -200 TO 1000 °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

DATA SHEET

TS04 SPRUNG SHIELD SURFACE PROBE TYPE 'T'

SPRUNG SHIELD SURFACE PROBE - Type 'T'

Description

This probe uses the straight handle for fine control. The probe is designed for the measurement of surface temperatures with wide temperature range.

Construction

Surface probe with sprung tip with thermocouple sensor attached with Nylatron 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 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%)

➤ **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** : -200 TO 180 °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

DATA SHEET

KS08 HIGH TEMPERATURE SURFACE PROBE TYPE 'K'

HIGH TEMPERATURE SURFACE PROBE - Type 'K'

Description

This probe uses the straight handle for fine control The probe is designed for the measurement of surface temperatures with a very high temperature range.

Construction

Surface probe with copper sensing tip protected by a sprung stainless steel 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 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 'K' Thermocouple : Class I (±01.5°C ±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

DATA SHEET

KA04 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)
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 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 'K' Thermocouple : Class I ($\pm 0.5^\circ\text{C} \pm 0.25\%$)

➤ **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 in moving gas) : 0.1 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

DATA SHEET

TA04 AIR TEMPERATURE PROBE TYPE 'T'

AIR TEMPERATURE PROBE - Type 'T'

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)
 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 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%)

➤ **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** : -100 TO 450 °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

DATA SHEET

TA12 SPATULA TEMPERATURE PROBE TYPE 'T'

BETWEEN PACK TEMPERATURE PROBE - Type 'T'

Description

This probe uses the straight handle for fine control. The probe is designed for the measurement of temperature between products. Most commonly used as part of a goods inward inspection procedure. May also be used for liquid temperature measurement.

Construction

Flattened Stainless Steel blade 5mm wide blade by 125mm Long : Stainless Steel 316 (Food Grade) 2M curly polyurethane cable with moulded connector. Complete waterproof assembly. This provides the user with a far more robust product than the foil type of between pack probe.

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%)

➤ **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)** : 3.0 Secs
 ➤ **MEASUREMENT RANGE** : -100 TO 450 °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

DATA SHEET

TH01 SOCKET IN THE HANDLE PROBE TYPE 'T'

SOCKET IN THE HANDLE - Type 'T'

Description

This probe is used in conjunction with the range of plug mounted probes offered by TME. The socket in the end of the handle allows for the plug mounted probes to be inserted into the handle. This means that a variety of temperature measurements may be performed using the socket in the handle and different plug mounted probes.

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 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%)

➤ **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**

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

DATA SHEET**KH01 SOCKET IN THE HANDLE PROBE TYPE 'K'****SOCKET IN THE HANDLE - Type 'K'****Description**

This probe is used in conjunction with the range of plug mounted probes offered by TME. The socket in the end of the handle allows for the plug mounted probes to be inserted into the handle. This means that a variety of temperature measurements may be performed using the socket in the handle and different plug mounted probes.

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 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 'K' Thermocouple : Class I ($\pm 0.1.5^{\circ}\text{C} \pm 0.25\%$)

➤ **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****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

