MMWALLKIT

TYPE T TEMPERATURE MONITORING KIT WITH THERMOMETER, NEEDLE, FLAT FOOD/PALLET PROBES AND WALLMOUNT HOLDER

MM2000 Thermometer

FEATURES

Easy to use low cost high accuracy microprocessor based thermocouple instrument with a measurement range of -200 to +1372 °C and an operating range of -30 to 50 °C.

*** °C / °F switchable
*** Resolution of 0.1° to 1000° autoranging
*** Switchable thermocouple types K / T / J / R / N / E / S
*** Infra-Red sensor compatibility
*** Full retention of thermocouple type and temperature scale
*** User configurable Auto Switch Off capability
*** Easy to use software calibration
*** Overrange / Open circuit sensor indication
*** Low battery indication
*** Supplied complete with shock resistant rubber boot
*** IP67 casing

SPECIFICATION

Environmental

AMBIENT OPERATING RANGE : -30 to 50 °C
STORAGE TEMPERATURE RANGE : -40 to 50 °C
HUMIDITY : 0 to 70% R.H.

ELECTRICAL

MEASUREMENT RANGES : K -200 to 1372 °C
              T -200 to 400 °C
              J -200 to 1200 °C
              R 0 to 1767 °C
              N -200 to 1200 °C
              E -200 to 1000 °C
              S 0 to 1767 °C

THERMOCOUPLE TYPES : K T J R N E S
INFRA-RED SENSOR (Exergen K80) : K80 -50 to 250 °C
TEMPERATURE SCALES : °C / °F
ACCURACY @23°C : +/- 0.1% OF READING +/- 0.2 °C
CHARACTERISING ACCURACY : LESS THAN 0.05 °C
TEMPERATURE COEFFICIENT : 0.01% OF READING /°C
COLD JUNCTION COMPENSATION : 0.0075 °C/°C
RESOLUTION : 0.1° to 1000, 1° ABOVE 1000

GENERAL

BATTERY : PP3 9V I.E.C. 6F22
BATTERY LIFE (INTERMITTENT USE) : GREATER THAN 200 HOURS (ALKALINE)
WEIGHT : 155 gms
DIMENSIONS : 130 X 70 X 33 mm
Probes

TP05 Needle Probe

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 115mm 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 its 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 ±0.15%)

- **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 280 °C

TA12 Flat Food/Pallet Probe

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

Stainless Steel Blade 110mm Long with 90mm x 5mm Flat: 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 PVC for the following reasons:
    - Greater retractability
    - Enhanced memory of its 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 ±0.15%)

- **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** : -50 TO 300 °C

ACCESSORIES

**MMWALLHOLD**

Thermometer and Probe Holder. Convenient wall storage that helps prevent damage to temperature monitoring equipment whilst not in use.

- Strong, hygienic stainless steel construction
- Measures: 93 x145 (incl clips) x 40mm
- Keyhole slots for ease of fitting

Requires: Wall screws.
Cross-reference for compatible probes

Suitable probes for use with this instrument

<table>
<thead>
<tr>
<th>TME PART No</th>
<th>DESCRIPTION</th>
<th>APPLICATION</th>
<th>T/C TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP05</td>
<td>NEEDLE PROBE</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>K</td>
</tr>
<tr>
<td>TP05</td>
<td>NEEDLE PROBE</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>T</td>
</tr>
<tr>
<td>KP07</td>
<td>NEEDLE PROBE HEAVY DUTY</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>K</td>
</tr>
<tr>
<td>TP07</td>
<td>NEEDLE PROBE HEAVY DUTY</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>T</td>
</tr>
<tr>
<td>TP10</td>
<td>SOUS VIDE NEEDLE PROBE</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>T</td>
</tr>
<tr>
<td>KM01</td>
<td>LIGHT DUTY M.I. PROBE</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>TM01</td>
<td>LIGHT DUTY M.I. PROBE</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>T</td>
</tr>
<tr>
<td>KM03</td>
<td>M.I. PROBE</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>TM03</td>
<td>M.I. PROBE</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>T</td>
</tr>
<tr>
<td>KM04</td>
<td>M.I. PROBE EXTENDED LENGTH</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>TM04</td>
<td>M.I. PROBE EXTENDED LENGTH</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>T</td>
</tr>
<tr>
<td>KS01</td>
<td>SURFACE BAND PROBE</td>
<td>FAST RESPONSE SURFACE MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>TS01-S</td>
<td>DUAL PROBE</td>
<td>FOR SURFACE AND IMMERSION MEASUREMENT</td>
<td></td>
</tr>
<tr>
<td>KS05</td>
<td>SURFACE PROBE</td>
<td>GENERAL PURPOSE SURFACE MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>KS06</td>
<td>HIGH TEMP SURFACE PROBE</td>
<td>HIGH TEMPERATURE SURFACE MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>KA04</td>
<td>AIR TEMPERATURE PROBE</td>
<td>FAST RESPONSE AIR TEMPERATURE PROBE</td>
<td>K</td>
</tr>
<tr>
<td>TA04</td>
<td>AIR TEMPERATURE PROBE</td>
<td>FAST RESPONSE AIR TEMPERATURE PROBE</td>
<td>T</td>
</tr>
<tr>
<td>TA12</td>
<td>SPATULA PROBE</td>
<td>BETWEEN PACK PROBE</td>
<td>T</td>
</tr>
<tr>
<td>KH01</td>
<td>SOCKET IN HANDLE</td>
<td>HANDLE FOR USE WITH PLUG MOUNTED PROBES</td>
<td>K</td>
</tr>
<tr>
<td>TH01</td>
<td>SOCKET IN HANDLE</td>
<td>HANDLE FOR USE WITH PLUG MOUNTED PROBES</td>
<td>T</td>
</tr>
<tr>
<td>KHA02</td>
<td>PLUG MOUNTED AIR PROBE</td>
<td>FAST RESPONSE AIR TEMPERATURE PROBE</td>
<td>K</td>
</tr>
<tr>
<td>THA2</td>
<td>PLUG MOUNTED AIR PROBE</td>
<td>FAST RESPONSE AIR TEMPERATURE PROBE</td>
<td>T</td>
</tr>
<tr>
<td>KHM01</td>
<td>PLUG MOUNTED M.I. PROBE</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>THM01</td>
<td>PLUG MOUNTED M.I. PROBE</td>
<td>GENERAL PURPOSE LIQUID/GAS MEASUREMENT</td>
<td>T</td>
</tr>
<tr>
<td>KHN01</td>
<td>PLUG MOUNTED NEEDLE PROBE</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>K</td>
</tr>
<tr>
<td>THN01</td>
<td>PLUG MOUNTED NEEDLE PROBE</td>
<td>CORE TEMPERATURE OF SEMI-SOLID MATERIAL</td>
<td>T</td>
</tr>
<tr>
<td>THA12</td>
<td>PLUG MOUNTED SPATULA PROBE</td>
<td>BETWEEN PACK PROBE</td>
<td>T</td>
</tr>
<tr>
<td>KHS01</td>
<td>PLUG MOUNTED SURFACE BAND PROBE</td>
<td>FAST RESPONSE SURFACE MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>KHS02</td>
<td>PLUG MOUNTED SURFACE PROBE</td>
<td>GENERAL PURPOSE SURFACE MEASUREMENT</td>
<td>K</td>
</tr>
<tr>
<td>THS02</td>
<td>PLUG MOUNTED SURFACE PROBE</td>
<td>GENERAL PURPOSE SURFACE MEASUREMENT</td>
<td>T</td>
</tr>
<tr>
<td>PKHV1</td>
<td>HVAC KIT</td>
<td>PROBE KIT DESIGNED FOR THE HVAC INDUTRY</td>
<td>K</td>
</tr>
<tr>
<td>PKF1</td>
<td>FOOD KIT</td>
<td>PROBE KIT DESIGNED FOR THE FOOD INDUTRY</td>
<td>T</td>
</tr>
<tr>
<td>PKGP1</td>
<td>GENERAL PURPOSE KIT</td>
<td>PROBE KIT CONTAINING MOST POPULAR PROBES</td>
<td>K</td>
</tr>
<tr>
<td>TP01</td>
<td>CORKSCREW PROBE</td>
<td>PROBE DESIGNED FOR CORE TEMPERATURE OF MEAT</td>
<td>T</td>
</tr>
<tr>
<td>KPS10</td>
<td>PIPE CLAMP PROBE</td>
<td>PROBE DESIGNED TO BE CLAMPED ONTO MEAT</td>
<td>K</td>
</tr>
<tr>
<td>TFS01</td>
<td>FOOD SIMULANT PROBE</td>
<td>SIMULATES THE CORE TEMPERATURE OF FOOD IN HOT OR COLD STORAGE</td>
<td></td>
</tr>
</tbody>
</table>