

CLE GK3

Legionella Temperature Monitoring Kit – Includes MM2008 Digital Thermometer and K Type High Speed Dual Surface/Immersion Probe

MM2008 Thermometer



Features

A single input thermocouple thermometer with an integral timer with a separate 1 minute and 2 minute count. This thermometer is primarily developed for use in Legionella risk management and offers reassurance that the correct reading is taken when monitoring hot and cold water temperatures.

- Single input thermocouple thermometer
- °C/ °F switchable
- Counter ensures that the correct temperature is met
- 1 minute counter for hot water temperatures
- 2 minute counter for cold water temperature
- Resolution of 0.1° to 1000° autoranging
- Switchable thermocouple K & T only
- Full retention of thermocouple type and temperature scale
- 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

Using the Timer



1. Press either  for 1 minute count or  for 2 minute count.
2. Press the same button again to switch off.

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
THERMOCOUPLE TYPES	:	K & T	
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 gm
DIMENSIONS : 130 X 70 X 33 mm

Probe

Description

This probe is designed for monitoring both immersion and surface temperatures. It features a 'crossed' ribbon sensing tip for superior strength and speed when compared to a single band version.

Construction

'Crossed' ribbon band sensor with thermocouple attached and draught shield: Stainless Steel 316 (Food Grade). Sealed with Silicon Rubber compound to ensure the probe is fully waterproof. 2M curly polyurethane cable with moulded connector.

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.

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 '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 Secs
- **MEASUREMENT RANGE** : -50 TO 250 °C (higher for non-continuous measurement)

Cross-reference for compatible probes

Suitable probes for use with this instrument

TME PART No	DESCRIPTION	APPLICATION	T/C TYPE
KM08	LEGIONELLA SHOWER PROBE	SHOWER/WATER TEMPERATURE	K
KS20-S	HIGH SPEED REINFORCED DUAL SURFACE/IMMERSION PROBE	FOR SURFACE AND IMMERSION MEASUREMENT	K
KPS10	PIPE CLAMP PROBE	PROBE DESIGNED TO BE CLAMPED ONTO PIPES	K
KP05	NEEDLE PROBE	CORE TEMPERATURE OF SEMI-SOLID MATERIAL	K
TP05	NEEDLE PROBE	CORE TEMPERATURE OF SEMI-SOLID MATERIAL	T
KP07	NEEDLE PROBE HEAVY DUTY	CORE TEMPERATURE OF SEMI-SOLID MATERIAL	K
TP07	NEEDLE PROBE HEAVY DUTY	CORE TEMPERATURE OF SEMI-SOLID MATERIAL	T
KM01	LIGHT DUTY M.I. PROBE	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	K
TM01	LIGHT DUTY M.I. PROBE	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	T
KM03	M.I. PROBE	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	K
TM03	M.I. PROBE	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	T
KM04	M.I. PROBE EXTENDED LENGTH	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	K
TM04	M.I. PROBE EXTENDED LENGTH	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	T
KS01	SURFACE BAND PROBE	FAST RESPONSE SURFACE MEASUREMENT	K
TS01-S	DUAL PROBE	FOR SURFACE AND IMMERSION MEASUREMENT	T
KS07	SURFACE PROBE	GENERAL PURPOSE SURFACE MEASUREMENT	K
TS04	SURFACE PROBE	GENERAL PURPOSE SURFACE MEASUREMENT	T
KS08	HIGH TEMP SURFACE PROBE	HIGH TEMPERATURE SURFACE MEASUREMENT	K
KA04	AIR TEMPERATURE PROBE	FAST RESPONSE AIR TEMPERATURE PROBE	K
TA04	AIR TEMPERATURE PROBE	FAST RESPONSE AIR TEMPERATURE PROBE	T
TA12	SPATULA PROBE	BETWEEN PACK PROBE	T
KH01	SOCKET IN HANDLE	HANDLE FOR USE WITH PLUG MOUNTED PROBES	K
TH01	SOCKET IN HANDLE	HANDLE FOR USE WITH PLUG MOUNTED PROBES	T
KHA02	PLUG MOUNTED AIR PROBE	FAST RESPONSE AIR TEMPERATURE PROBE	K
THA2	PLUG MOUNTED AIR PROBE	FAST RESPONSE AIR TEMPERATURE PROBE	T
KHM01	PLUG MOUNTED M.I. PROBE	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	K
THM01	PLUG MOUNTED M.I. PROBE	GENERAL PURPOSE LIQUID/GAS MEASUREMENT	T
KHN01	PLUG MOUNTED NEEDLE PROBE	CORE TEMPERATURE OF SEMI-SOLID MATERIAL	K
THN01	PLUG MOUNTED NEEDLE PROBE	CORE TEMPERATURE OF SEMI-SOLID MATERIAL	T
THA12	PLUG MOUNTED SPATULA PROBE	BETWEEN PACK PROBE	T
KHS01	PLUG MOUNTED SURFACE BAND PROBE	FAST RESPONSE SURFACE MEASUREMENT	K
KHS02	PLUG MOUNTED SURFACE PROBE	GENERAL PURPOSE SURFACE MEASUREMENT	K
THS02	PLUG MOUNTED SURFACE PROBE	GENERAL PURPOSE SURFACE MEASUREMENT	T
PKHV1	HVAC KIT	PROBE KIT DESIGNED FOR THE HVAC INDUSTRY	K
PKGP1	GENERAL PURPOSE KIT	PROBE KIT CONTAINING MOST POPULAR PROBES	K