

## MAXICAL TEMP BASIC Mk2

## Basic Dry Block Calibrators



### Benefits

- Interchangeable inserts
- Multi-hole insertion tubes
- New forced air ventilation system reduce heating and cooling time
- Automatic switch test /ramp programming
- Easy Re-calibration from keyboard
- Compact and light weight
- Rugged and robust
- Very fast heating/cooling time
- 110/220 Vac Universal operation

NEW !!! RS232 Digital interface standard

### Basic Compact Temperature Calibrators

The Eigroup basic series are innovative dry block calibrators especially designed for field application, robust and able to maintain high accuracy and stability in severe conditions such as offshore rigs and on board of vessels. These self-contained units are very compact, portable and are probably the lighter unit available in the market. The innovative forced air ventilation greatly reduces the cooling time and prevents the sensors under test from being exposed to excessive heating.

The basic series consist of 3 models to cover a temperature range from -24 (@20 Deg° C) to 650 °C

Eigroup control technology ensures extremely fast setting time and offers an excellent absolute temperature stability and well-to-well uniformity. The ramp function allows for calibrating the temperature loops by monitoring the

temperature in the control rooms while the calibrator automatically generates temperature.

These units offer an electrical switch test input along with a fully programmable ramp, to perform testing of temperature switches so that no other auxiliary unit is needed.

TEMP basic MT and MTL only weights 6 KGs, with dimensions of only 130x280x260 mm but they still offer a large block capacity of 26x150 mm depth immersion. Multi-hole inserts are available to suit the variety of probe size, and the large test well (26 mm) ensures the testing of multiple sensors at the same time.

TEMP basic LOT only weight 4.9 Kg and features a 2 wells with replaceable inserts - The high efficiency peltier elements and block design ensure very fast heating and cooling time

Selection guide TEMP Basic series	LOT	MTL	MT
Temperature range @ ambient 20°C	-24 to 125°C	Tamb to 375°C	Tamb to 650°C
Heating time	15 min to max	18/°C min	18/°C min
Immersion depth	110 mm	150 mm	150 mm
Well diameter	2 x 13 mm	26 mm	26 mm
Accuracy	±0.25°C + 1 lsd		±0.9°C
Stability	±0.05°C	±0.15°C	±0.3°C
Resolution	0.1°C	0.1°C	0.1°C
Read-out	°C/F	°C/F	°C/F
Power Supply( switching)	110/220 Vac	110/220 Vac	110/220 vac

### Fast Heating/cooling

The TEMP Basic MT and MTL feature an innovative heating block design called . The new design allows for very fast heating and cooling time yet maintaining a block dimension of 26 x 150 mm to allow for calibration of bigger diameter temperature sensors or bi-metallic thermometers. This new forced air ventilation system keeps the balance between temperature stability / homogeneity and rapid heating / cooling.

### Easy to transport

#### TBSER-TC

Water proof hard transit case  
Robust IP 65 rated water proof transit case with customised foam and inserts for space to take TM dry block, 4s inserts, accessories, manual etc.  
Particularly suitable for transport in the marine industry or in the exposed conditions and tough environment.



#### TBSER-VC

Rosbut Vinal case with pockets for inserts



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The removable inserts add greater flexibility and extend the use of the TEMP series- Different size temperature sensors can then be calibrated- We offer a comprehensive range of inserts, but if you have any particular requirement, we can offer specific/customised hole size

(in accordance with the maximum available diameter)  
Insert for LOT and MTL are made in aluminium- Insert for MT are made out of brass- The nominal diameter is the actual diameter of the holes size.

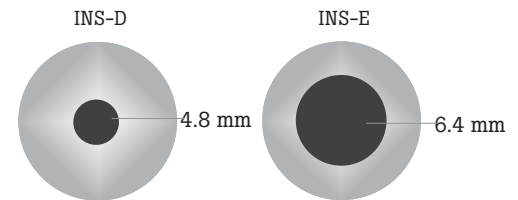
### Removable Inserts



Part number	Basic LOT inserts
BLOT-INS-B	Basic LOT Insert 110x13, blank
BLOT-INS-A	Basic LOT Insert 110x13 mm, 1 hole 3.2 mm (1/8")
BLOT-INS-C	Basic LOT Insert 110x13 mm, 1 hole 4 mm (5/32")
BLOT-INS-D	Basic LOT Insert 110x13 mm, 1 hole 4.8 mm (3/16")
BLOT-INS-E	Basic LOT Insert 110x13 mm, 1 hole 6.4 mm (1/4")
BLOT-INS-F	Basic LOT Insert 110x13 mm, 1 hole 7.9 mm (5/16")
BLOT-INS-G	Basic LOT Insert 110x13 mm, 1 hole 9.5 mm (3/8")
BLOT-INS-H	Basic LOT Insert 110x13 mm, 1 hole 11.1 mm (7/16")
Part number	Basic MTL Inserts
BMTL-INS-A	Basic MTL Insert 4 holes, Ø 3.2, 4.8, 6.4, 11.1 mm
BMTL-INS-B	Basic MTL Insert 2 holes, Ø 6.4, 12.7 mm
BMTL-INS-C	Basic MTL Insert Blank
Part number	Basic MT inserts
BMT-INS-A	Basic MT Insert 4 holes, Ø 3.2, 5, 7, 10.5 mm
BMT-INS-B	Basic MT Insert 2 holes, Ø 7, 12.7 mm
BMT-INS-C	Basic MT Insert Blank
BMT-INS-D	Basic MT Insert 1 hole, Ø 15.7 mm
BMT-INS-E	Basic MT Insert 1 hole, Ø 17.5 mm
BMT-INS-G	Basic MT Insert 3 holes, Ø 4.5, 6.4, 10.5 mm
BMT-INS-S	Basic MT insert customised size

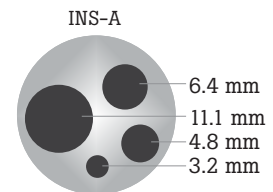
### BLOT-INS-D / BLOT-INS-E

Two standard insert supplied



### BMTL-INS-A

multi-hole standard insert supplied with MTL and MT

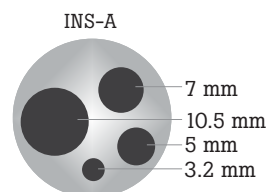


### Ordering

Part number	Description
TEMP Basic are supplied as standard with instruction manual, calibration certificate traceable to international standard, power cord, standard insert, tweezers for inserts removal and switchtest cable-	
LOT is supplied with INS-D and INS-E as standard	
MTL/MT are supplied with INS-A as standard	
BLOT-EU	T140-M Temperature Calibrator -24 to 125°C-110/220V, EU
BLOT-UK	T140-M Temperature Calibrator -24 to 125°C,-110/220V, UK
BLOT-US	T140-M Temperature Calibrator -24 to 125°C, 110/220V, US
BMTL-EU	T375-M Temperature Calibrator Tamb/375 °C-110/220V, EU
BMTL-UK	T375-M Temperature Calibrator Tamb/375 °C-110/220V, EK
BMTL-US	T375-M Temperature Calibrator Tamb/375 °C-110/220V, US
BMT-EU	T650-M Temperature Calibrator Tamb/650 °C-110/220V, EU
BMT-UK	T650-M Temperature Calibrator Tamb/650 °C-110/220V, EK
BMT-US	T650-M Temperature Calibrator Tamb/650 °C-110/220V, US
Accessories	
TBSER-TC	Robust Transit case, IP65
TBSER-VC	Vinyl Transit case with pockets

### BMT-INS-A

multi-hole standard insert supplied with MTL and MT



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Specifications	TEMP Basic LOT	TEMP Basic MTL	TEMP Basic MT
Temperature range @ ambient 20°C	-24°C to 140°C	Amb+10°C to 375°C	Amb +15°C to 650°C
Heating time(included stability)	Ambient to 120°C:20 minutes	30°C to 375°C: 20 minutes	50°C to 650°C: 35 minutes
Cooling time(included stability)	Ambient to -20°C:17 minutes	375°C to 100°C: 40 minutes	650°C to 100°C: 60 minutes
Axial Uniformity at 40mm			
	±0,05°C at -20°C	±0,02 °C at 50°C	±0,13 °C at 250°C
	±0,04°C at 0°C	±0,05°C at 150°C	±0,15°C at 450°C
	±0,1°C at 100°C	±0,15°C at 375°C	±0,35°C at 650°C
Axial Uniformity at 60mm			
	±0,15°C at -20°C	±0,03 °C at 50°C	±0,17 °C at 250°C
	±0,08°C at 0°C	±0,08°C at 150°C	±0,45°C at 450°C
	±0,2°C at 100°C	±0,25°C at 375°C	±0,55°C at 650°C
Well- to- well uniformity at 40mm			
	±0,02°C at -20°C	±0,1 °C at 50°C	± 0.22°C
	±0,02°C at 0°C	±0,15°C at 150°C	
	±0,05°C at 100°C	±0,2°C at 375°C	
Immersion depth	104 mm	150 mm	
Well diameter	19 mm	26 mm	
Standard Insert Supplied	4x holes, 4.8 mm(3/16") , 2x 6.4 mm, 1x 3.3mm	4 holes, Ø 3,2-4.8-6.4-11.1mm	4 holes, Ø 3,2-5-7-10,5mm
Accuracy	±0.25°C + 1 lsd	±0.35°C at 150°C	±0.5°C+ 1 lsd
		±0.5°C at 375°C	
Stability	±0.05°C full range	±0.1°C full range	±0,3°C full range
Resolution	0.1°C		
Read-out	°C /°F		
Switch test	12 VDC	5 VDC	
Dimension	130x260x280 mm		
Weight	4.9 Kg	5,4 Kg	6 Kg
Power Supply	100-230V±10%,	115/230 ±10%,	
Power	50/60Hz, 80 W	50/60Hz, 600W	

Diameter of the reference sensor used to test the uniformity:

LOT: sensor Pt100 diameter 3 mm

MTL: sensor Pt100 diameter 3 mm

MT: sensor tcN diameter 4,5 mm