FLUID 200 T
PORTABLE TEMPERATURE CALIBRATOR T.Amb./+250°C

APPLICATIONS:
- Control and calibration of temperature sensors, in the laboratory and in the field, in accordance with ISO 9000 standards
- Control of thermostatas
- Control of glass thermometers
- Automatic computer-controlled calibrations

MAIN CHARACTERISTICS:
- Operating range T.Amb /250°C T.Amb/+482°F
- 2 different models
- Hight stability and precision
- Screen Touch Display
- Display resolution up to 0.001
- Light weight and compactness
- Holder for sensors under test
- Multi-hole inserts available
- Automatic ramp function
- USB connection

The new **FLUID200T** are portable thermostatic liquid calibrators used for checking thermocouples, platinum resistance and glass thermometers in the laboratory as well as in the field.

It consists of an aluminium liquid bath whose capacity is about 400 cc and it is constantly kept homogeneous by a magnetic mixer whose speed is adjustable according to the viscosity of the fluid used.

Low-temperature models with subzero field do not employ external cooling fluids; the equalization block is heated and cooled by a static Peltier cell system.

They are equipped with a new 32-bit PID microprocessor-based controller with resolution up to 0.001 °C, unit setting in °C °F and K, programming of ascendent/ descendent ramps and storage of the thermostats operative temperature.

The new **FLUID200T** series of calibrators is equipped with an innovative touch-sensitive display, where the various icons are graphically displayed, making it easier to select different instrument settings.

The new **FLUID200T** are also available in the **3I version**, in which the instruments are

equipped with an acquisition card having three configurable inputs to be able to connect all types of sensors:
- EXT and REF to be able to connect thermocouples type B, E, J, K, N, R, S, T and RTDs type PT100, PT1000
- ANALOG for probes with 0-10V or 4-20 mA output

The REF input is provided for the reference sample probe, thus obtaining a complete calibration system which can be certified by Accredia centres, in compliance with ISO 9000 regulations. The EXT input is provided for probes that are being tested; hence, the instrument can display the temperature of the well, the temperature of the sensor to be checked and the temperature of the reference sample probe, at the same time.

The calibrators are equipped with B type USB serial interface to operate in automatic mode connected to the PC by means of the Aq2Sp2 software which is capable to automate control procedure and allow to print reports, so they are easily traceable in compliance with ISO 9000 standards.

GIUSSANI

TESTING EXPERTISE

Standard Equipment:
- Bottle 500cc of silicon oil 47V50 (200+T) – 47V20 (200T)
- Closure cap for trasport
- Fluid emptying system
- Holder for glass thermometers
- Power supply cable
- Fuses kit
- Thermostat connection cables
- Instruction manual
- Kit of clamp connection (only 3I version)
- Cordura® Soft Bag

Accesories on demand:
- Aluminium insert 2D2846.
- Blind aluminium insert 2d2678
- Insert with customizable holes
- Extension Tube
- Aq2Sp2 software
- USB cable
- ACCREDIA certificate (only 3I version)
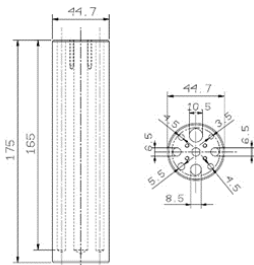- water-cooling coil - 0FLUIDCOOLING

Touch Display

Touch-sensitive display with graphic visualization of the various functions allowing the various functions to be activated intuitively without having to consult the user manual.
The new 32-bit microprocessor-based PID controller allows a resolution down to 0.001 °C

Inserts

The Fluids can be equipped with Anticorodal inserts with holes on demand to be used as dry calibrators.

Perforated insert
Code: 2D2846

Supports

Fluids are equipped with adjustable holders to support the probes under test or thermometers

Extension tube

The extension tube is suitable for increasing the depth of the liquid tank Total depth: 230 mm

COMPARATIVE TABLE

Specifications	FLUID200T	FLUID200+T
Temperature range*	Temp. Amb. ÷ +200℃	Temp. Amb. ÷ +250℃
Display	SCREEN TOUCH	
Accuracy**	±0.2℃	±0.2℃
Units of measure	℃ - ℉ - K	
Display resolution	0. 1°/ 0.0 1°/ 0.00 1℃	
Mean heating time (stabilization included)	from T$_{amb}$ to 200℃ approx 30 min.	
Mean cooling time (stabilization included)	from 200℃ to 50℃ approx 75 min.	
Stability full temperature range***	±0.03℃	
Axial uniformity	±0.0 1℃ +140℃	
Radial uniformity measured from the bottom up to 40 mm	±0.06℃ at 140℃	
Hole diameter	60 mm	
Hole depth	170 mm	
Insert material	Anticorodal	
Swich test, voltage	On/Off 4.5 V DC	
Adjustable ramp function	from 0.1℃ / 1℃	
PC interface	B type USB	
External probes	Pt100 at 3/4 wires Pt1000 - Thermocouples:J,K,N,R,S,E,T,B - Sensor with 0-10 V or 4-20 mA output	
Automatic calibration	on 5 points	
Operating voltage	230 or 115 VAC	
Electric power	500 VA	
Calibrator size	160x360x350 mm	
Calibrator weight with standard equipment	8.3 kg	

Diameter sensor_ 6 mm
The achievement of stabilization is confirmed by a symbol V and a *beep*
*   values measured at room temperature 20°C
** temperature deviation between the display and the reference probe
*** Maximum temperature difference at a stable temperature over 30 minute

Cordura® Soft Bag
Code: 2TRMBAG-FLUID
Dimensions:
410x220x380 mm
Weight: 1.45 kg
Packaging dimensions:
600x370x500 mm

Aluminium rigid case
Code: 2DC505-000
Dimensions:
450x280x380 mm
Weight: 4.8 kg
Packaging dimensions:
600x370x500 mm

Silicon Oil available

Bottle 500 cc of silicon oil 47V20 (-20°C/+200°C)
BOTTLE47V20
Bottle 500 cc of silicon oil 47V50 (30°/+230°C)
BOTTLE47V50
Bottle 500 cc of silicon oil 47V100 (50°C/ +250°C)
BOTTLE47V100

How to order:

FLUID200T
- Standard version
-00-1 115V 50/60 Hz
-00-2 230V 50/60 Hz

FLUID200+T
- Standard version
-00-1 115V 50/60 Hz
-00-2 230V 50/60 Hz

FLUID200T/FLUID200+T
- Version with 3 configurable input
-3I-1 115V 50/60 Hz
-3I-2 230V 50/60 Hz