



# liquid temperature calibration baths

## Liquid Calibration Baths

The Techne liquid calibration bath (LCB) series offer compact, accurate and reliable liquid baths which can be used for external circulation or temperature calibration of thermal sensors.

- -35°C to 250°C
- Three different capacities available; 5, 7 or 12 litres
- Temperature stability;  $\pm 0.005^\circ\text{C}$  depending on choice of control unit
- Fully insulated bath for excellent heat retention
- Analogue or digital temperature selection, depending on choice of control unit
- Includes cover, lid and bridging plate

When temperature calibration is required the compact liquid baths offers excellent stability over the entire temperature range. The LCBs can be also be used for external circulation to maintain temperatures of samples in viscometers, photometers, refractometers, fermenters and other reaction vessels.

All models of LCB offer exceptional thermal stability from  $-35^\circ\text{C}$  to  $250^\circ\text{C}$ . The baths are fully insulated on all sides and base and are fitted with a cooling coil for connection to a cold water supply for use at temperatures around ambient. The minimum temperature achievable is  $-35^\circ\text{C}$  when a Dip or Flow Cooler is added to the system.\* For the full specifications of the thermoregulators see pages 24 and 25.

Each bath is supplied complete with lid, drain tap, carry handles, a cooling coil and hole with bung to position a certified sensor.

The TechneWorks software package is available for the TU-20 thermoregulators free of charge from [www.techne.com](http://www.techne.com) (see page 11 for details).

### Technical Specification

	5 litre	7 litre	12 litre
Working depth L x W x H (mm)	125	175	300
Dimensions L x W x H (mm)	351 x 260 x 183	351 x 260 x 233	351 x 260 x 358
Thermoregulator L x W x H (mm)	237 x 124 x 260	237 x 124 x 260	237 x 124 x 260
Bath opening (mm)	140 x 140	140 x 140	140 x 140

### Ordering Information

Product Code	Description
FBCAL05D	LCB insulated liquid calibration bath with cooling coil, 5 litre capacity
FBCAL07D	LCB insulated liquid calibration bath with cooling coil, 7 litre capacity
FBCAL12D	LCB insulated liquid calibration bath with cooling coil, 12 litre capacity

\*LCB baths fitted with a TU-20HT thermoregulator are not suitable for use with a Flow Cooler.

Liquid Calibration Bath	LCB-5/7/12	LCB-5/7/12
Thermoregulator	/TU-20D	/TU-20HT
Bath Capacity	5 / 7 / 12 litres	5 / 7 / 12 litres
Operating temperature range <sup>1</sup>	-35 to $200^\circ\text{C}$	ambient $+10$ to $250^\circ\text{C}$
Working temperature range <sup>2</sup>	25 to $200^\circ\text{C}$	30 to $250^\circ\text{C}$
Stability at $-35^\circ\text{C}$ (short term*)	$\pm 0.015$	N/A
Stability at $0^\circ\text{C}$ (short term*)	$\pm 0.020$	N/A
Stability at $50^\circ\text{C}$ (short term*)	$\pm 0.005$	$\pm 0.005$
Stability at $100^\circ\text{C}$ (short term*)	$\pm 0.015$	$\pm 0.015$
Stability at $200^\circ\text{C}$ (short term*)	$\pm 0.024$	$\pm 0.024$
Stability at $250^\circ\text{C}$ (short term*)	N/A	$\pm 0.040$
Uniformity $^\circ\text{C}$ (full range)**	0.008	0.008
Accuracy $^\circ\text{C}$ (full range)	$\pm 0.5$	$\pm 0.5$

1) With an FC-500 flow cooler;

2) ambient of  $20^\circ\text{C}$

\*Short term stability is over a 15 minute period, for 1 hour double the values shown

\*\*Two SPRT's 3" apart in the working area of bath