

# Isolated Organ Baths

Cat. No. 4000 / 4050 / 4400

## General

The Isolated Organ Baths have been designed for accurate recording of isometric or isotonic tissue contraction/release.

Research involving effects of electrical stimuli or drugs on isolated organs, uterus, trachea, vessel strips, auricle, can be performed under optimum conditions.

Wash or test solution enters the chamber after passing through the temperature equilibrating coils and the syringe valve. The tissue in the chamber is washed by flushing the chamber through an overflow drain tube, to avoid exposing the tissue to the air.

Water stirring is accomplished by a water jet delivered by a centrifugal pump.

A 200W stainless steel heating element is mounted on the Perspex tank floor. A precise solid state "proportional" thermostat maintains the temperature within the excellent limits of  $\pm 0.1^{\circ}\text{C}$  on all models.

*Note : the Isometric and Isotonic Transducers featured in the picture are not included and can be ordered separately.*



**SAFETY**

**EFFICIENCY**

4000 One Muscle Chamber

4050 Two Muscle Chambers

4400 Four Muscle Chambers

## Main Features

- All components visible through the clear Perspex tank: great for teaching!
- Tissue washing without exposure to air
- Water-jet bath stirring provided by a noiseless vibration-free centrifugal pump
- Easy and quick mounting of tissue

## Bath 4000

The 4000 water bath consists of a clear Perspex tank, 19x19x17cm which contains one tissue chamber, one temperature equilibrating coil, one adjustable support rod on which transducers can be fastened to the tank via the holder provided.

## Bath 4050

This is similar to the one-chamber bath 4000 but the tank is dimensioned (34x19x17cm) to accommodate two muscle chambers and syringe valves, two coils, two adjustable support rods and holders for transducers.

## Bath 4400

The bath 4400 lodges up to 4 preparations; they maintain the features of the 4050 but heating power and dimensions are upgraded accordingly, the tank being 47x29x22cm.

## Tissue Chamber Configuration

The tissue chambers provided with porous frit, available in 5, 10, 20, 30 or 50 ml are standard. Unless otherwise specified, we supply our tissue baths with 10ml muscle chambers.

An accurately positioned glass hook is provided in the chamber to which the thread loop can be easily attached, ensuring the organ being well centered in the chamber.

Tissue chambers are also available provided with an aeration side arm in 20, 30 or 50 ml volume. Tissue chambers without hook are available on request.

## Control Box

The control section of the bath lodges the electronics; the temperature regulator, the temperature sensor & the circulation motor are connected to by connectors enabling quick disconnection for servicing purposes.

The upper panel consolidates all commands and the temperature regulator, with keys to preset water temperature in the range 25-45°C, enabling an accurate temperature setting in 0.1°C steps.



## Recording & Transducers

Ugo Basile offers a complete line of Transducers (Iso-metric 7003, 7004, 7005, 7010 or Isotonic 7006) and a versatile 4-channel digital recorder, DataCapsule-Evo. Ask for details!

## Ordering Information

**4000** **Isolated Organ Bath, One Muscle Chamber**, with circulation pump, heater, thermostat, temperature sensor, complete provided with following standard accessories:

**4005** Temperature Equilibrating Coil

**4100** Muscle Chamber, 10ml, provided with porous frit and hook

**14110** Lead-Screw Positioner for 10 & 13mm rods

**4004** Supporting Rod (10mm diam.)

**4000-302** Instruction Manual

**E-WP 008** Mains Cord

**4050** **Isolated Organ Bath, 2 Muscle Chambers**, as above but all standard accessories multiplied by two, i.e., 2x4005, 2x4100, etc.

**4400** **Isolated Organ Bath, 4 Muscle Chambers**, as above but all standard accessories multiplied by four, i.e., 4x4005, 4x4100, etc.

### Physical:

**4000** Dimensions : 32x20x22cm  
Weight : 4Kg  
Shipping Weight : 10.5Kg  
Packing : 67x42x53cm

**4050** Dimensions : 47x20x22cm  
Weight : 6.5Kg  
Shipping Weight : 11.5Kg  
Packing : 80x60x44cm

**4400** Dimensions : 47x29x22cm  
Weight : 9Kg  
Shipping Weight : 16.5Kg  
Packing : 680x60x44cm

### Power Requirement:

115 or 230V, 50-60Hz

250VA max. for 4000/4050, 400VA max. for 4400

## Bibliography

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