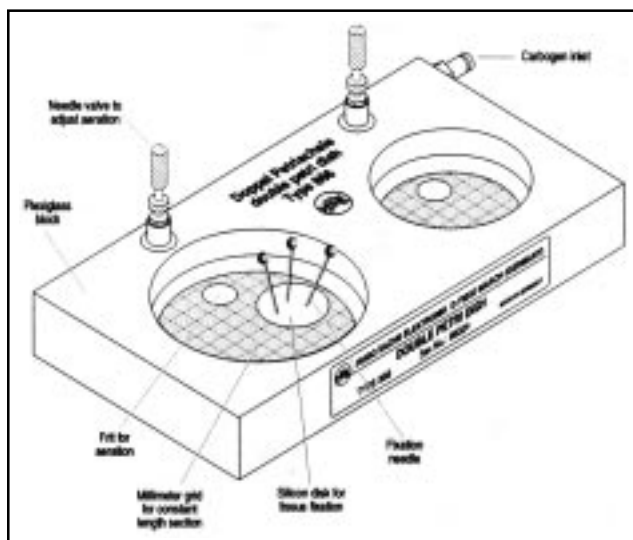


HSE-Harvard Steiert Organ Bath with Temperature DC-Controller



Electrode is installed using ball joints. The electrode can therefore precisely and easily be placed. The stimulation electrode is connected to the stimulator by means of an isolation unit.

The microelectrode for recording intracellular action potentials (AP) is connected to the PLUGSYS Microelectrode Amplifier MEA. The AP-signal can be differentiated using the module DIF-S. The Isometric Force Transducer F30 or F10 is connected to a PLUGSYS Transducer Amplifier TAM-A. The organ bath together with the manipulators and preamplifier headstage are mounted on a vibration free table mainly but not necessarily equipped with a Faraday Cage. A stereomicroscope and a cold light lamp are also requested.

For easier preparation a special petri dish is available. This dish has a silicone disk for fixing the heart with the open left ventricle using needles. This allows to locate the muscle and to cut it easily out. The dish is also equipped with aeration capabilities, to keep the pO_2 and the pH of the solution in the dish at the requested level.

Specifications

Technical Data Temperature Controller DC:

Construction	Plastic case in ABS
Function	Electronic temperature control of perfusate supply to Steiert Organ Bath
Input	From organ bath temperature probe via 4-pin binder socket for control and safety switch-off
Output	Heating controlled DC via 2-pin Hirschmann plug STAS20 24 V, 6 A max.
Supply for PPM1	Output (9-pin sub-D socket) on back, 18 V AC (3 A max), fused internally 4 A slow
Earth Connection	4 mm banana socket on front panel for instrument screen and connection to central earth point
Indication	3-digit LED temperature indication with 0.1°C resolution
Temp. Setting	Adjustment by multi-turn trimmer in the range 26 to 42°C
Ambient Comp	Adjustment by multi-turn trimmer in the range 0 to 4°C
Supply	230 (115) VAC, 50-60 Hz, 200 W max
Dimensions, H x W x D	120 x 290 x 280 mm (4.7 x 11.4 x 11.0 in)
Weight	Approx. 5 kg (11 lb)

Technical Data Peristaltic Pump PPM1:

Construction	Plastic Case in ABS
Drive	DC motor with electronic commutation, speed controlled in range 10 to 100%
Speed	Continuously adjustable 12 to 120 RPM by potentiometer
Direction	Clockwise/anticlockwise by switch
Pump Head	Interchangeable pumphead with bayonet quick-connect fitting, 8 rollers, 3 channels with removable microcassettes for tubing from 0,13 to 2.79 mm bore (flow rate from 0,012 to 57,6 ml/min).
Indication	3-digit LED display (option) to indicate pump output in ml/min. Calibration to output of pump tubing through multi-turn trimmer
Supply	18 V AC, 3 A max., from Temperature Controller DC
Dimensions, H x W x D	165 x 105 x 190 mm (6.5 x 4.1 x 7.5 in)
Weight	Approx. 1.5 kg (3.3 lb)

Catalog No.	Product
CGS 8763.73	Basic Unit, Organ Bath According to Steiert Type 813, (including either 230 V AC, 50 Hz or 115 V AC, 60 Hz Temperature DC Controller)
CGS 8764.73	Double Preparation Dish
CGS 8765.73	PLUGSYS Basic System Case 603
Additional Equipment Required for Action Potential Measurements	
CGS 8766.73	MEA Microelectrode Amplifier
CGS 8767.73	DIF/S Differentiator Module
Additional Equipment Required for Force Contraction Measurements	
CGS 8768.73	Isometric Force Transducer F30
CGS 8769.73	TAM-A Transducer Amplifier Module