

細胞・切片用温度制御

本装置は細胞・切片をもちいた生理学実験での培養チャンパー、還流液、薬物などの温度コントロールを行います。豊富なアクセサリは、様々なアプリケーションに対応いたします。



◆ 本体

最大3箇所までの温度モニターを行い、ヒーターで設定温度に自動制御いたします。

TC2PKG - for no/low flow situations

TC2PKGP - for flowing solutions

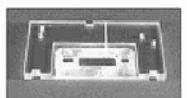
TC2PKG3P - for flow with 3rd channel
for objective heater

温度制御のためのアクセサリ

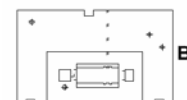
BT-1-xx Tissue chambers

Application: tissue chambers-for isolated cells, tissue or brain slices.

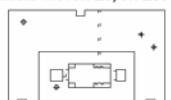
- size platform 8.3 x 5.1 x 0.55cm
- size central chamber:
 - BT-1: 22.4x8x1.3mm=0.25ml vol
 - BT-1-12: 22.4x12x3.5mm=0.45ml vol
 - BT-1-13: 22.4x13x3.5mm=0.5ml vol
 - BT-1-18: 22.4x18x3.5mm=1.4ml vol
- inflow/outflow chamber, thermistor groove
- constructed of polycarbonate
- compatible with HI-25, HI-25T



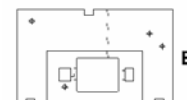
BT-1



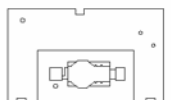
BT-1-12



BT-1-13



BT-1-18



BT-1-13

目的に応じて選択できます。

チャンパーの底面に貼付する石英ガラスヒーターです。

HI-25/25T/24T Heater-ITO transparent

Application: heating BT-1-xx Tissue chamber or similar small tissue chambers. Use with inverted or conventional microscope. HI-2xT are thinner for fluorescence or work with immersion lenses.

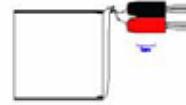
- transparent indium tin oxide coated heater
- sizes:
 - HI-25: 50x22x~0.25mm thick
 - HI-25T: 50x22x~0.12mm thick
 - Heated area=45x18mm
 - HI-24T: 40x22x~0.12mm thick
 - Heated area=35x18mm
- resistance nominally 6-13Ω
- max. operating temp. 70°C
- plugs into Heater Main of TC²_{HP}, TC-1



HI-55D Heater-ITO transparent

Application: heating 30mm culture dishes, Nunc Lab-Tek chambers. Heater forms a platform for dishes/chambers.

- transparent indium tin oxide coated heater
- size: 50x50x~0.6mm thick
- resistance nominally 9Ω
- max. operating temp. 70°C
- plugs into Heater Main of TC²_{HP}, TC-1



TH-1 Thermistor probe

Application: miniature thermistor probe (~0.35mm diam.)

- suitable for shallow baths, point temperature measurement, submersible
- rugged alternative to the YSI-511
- R₂₅ @ 25°C: 2kΩ±5%; b=3000
- τ = 20ms, plunge water
- Max oper. temp: 100°C; 2m lead; 6mm plug
- compatible with Main Probe input of TC²_{HP}



TH-10Km Interchangeable therm. probe

Application: miniature thermistor probe (~0.45mm diam.)

- general purpose mini probe, submersible
- R₂₅ @ 25°C: 10kΩ
- τ < 100ms, plunge water
- max oper. temp: 100°C; 1m lead; 6mm plug
- compatible with Aux Probe input of TC²_{HP}



TH-2Km Interchangeable thermistor probe

Application: mini 400 series compatible probe (~0.45mm diam.)

- suitable for shallow baths etc.
- rugged alternative to YSI-511
- R₂₅ @ 25°C: 225Ω
- τ < 100ms, plunge water
- max operating temp: 100°C; 1.2m lead; 6mm plug
- compatible with Main Probe input of TC²_{HP}



FL-1 Miniature positioner

Application: adjust bath solution levels, position ref. electrodes

- size: base 13mm dia., height 24mm
- adjuster height range ~3mm; ~0.5mm/turn
- miniature block for clamping tube, electrode
- spare spring wire for custom bending

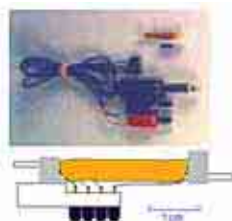


流路に途中にプレヒーターを用い、チャンパーの安定した温度を実現します。

HPRE2 Pre-heater

Application: 3 loop capillary heater for pre-heating solution

- HPRE2 dims. 45x14x7mm (LxWxH); heater resistance ~11Ω
- Thermistor sensor: 10kΩ NTC
- Plugs into Heater Aux of TC²_{HP}



MPRE8 Multitube Pre-heater

Application: superfusion of cells or small tissue pieces

- Dims. 10 x 0.4cm (LxDiam); heater resistance ~11Ω
- Thermistor sensor: 10kΩ NTC
- Plugs into Heater Aux or TC2-Ch3 of TC²_{HP}

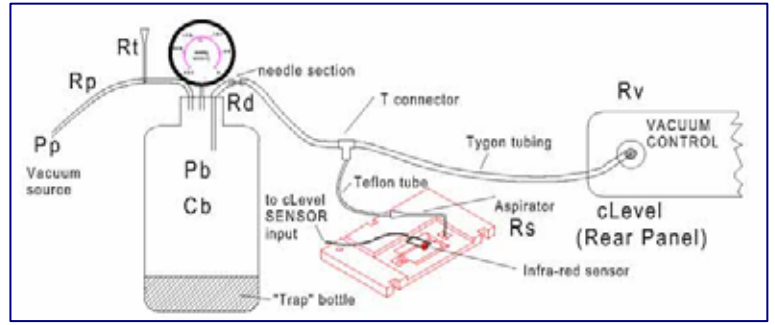


チャンバー液面制御

cLevel

Intelligent Fluid Level Controller

細胞・切片をもちいた生理学実験での培養チャンバーの液面制御は重要な問題です。赤外線センサーでチャンバーの液面レベルを検出し、液面レベルを長時間一定に保つことができます。

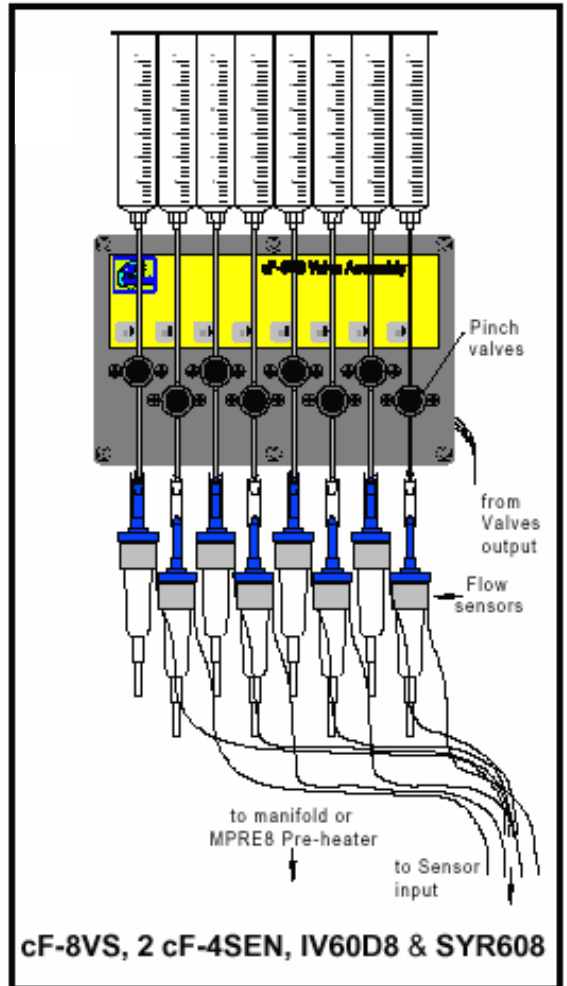


4・8ch 薬物刺激制御

cFlow V2.x 8-Channel Flow Control Systems



細胞・切片をもちいた生理学実験での培養チャンバーに還流液、薬物などをフロー制御するための装置です。4ch または 8ch のリザーバーが用意され、フローのタイミングと流量を設定することができます。また、他の商品と組合せ、大切な試料に安全な実験条件を構成することができます。



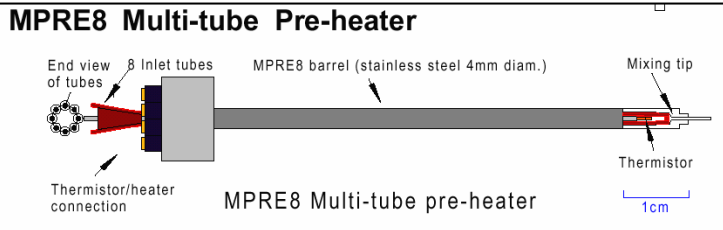
ピンチバルブユニット



滴数センサー



マルチチューブ プレヒーター



cF-8VS, 2 cF-4SEN, IV60D8 & SYR608