

Bench Top Controller

Pressure Controller

The **Microfluidic Pressure Controller - Bench Top** (MPC-BT) combines the closed loop performance features of OEM-grade electronic pressure controllers into a form factor suitable for laboratory and prototype development work. Used in microfluidic and life science research, this unit replaces manual regulators, sensors, gauges, and tubing assemblies while providing considerably better pressure accuracy and eliminating pressure drift and fluctuation.

Typical applications include:

- Liquid Piloting
- Cytometry Research
- Microfluidics
- Oocyte Chambers

Features

- Simple adjustment of closed-loop pressure set points via front panel knob
- Electrical inputs for high resolution set points
- Set and display pressure in your choice of units
- Optional I/O hook-ups allow high resolution and/or remote operation
- Quick disconnect fittings for easy pneumatic connection



Characteristics

Performance Characteristics

Pneumatic	Includes 2 pcs of Parker Presto-Loc quick disconnect fittings for 1/4" urethane tubing
Recommended Pressure Source	120% rated pressure
Accessories (not included)	Burst proof air-over-liquid piloting chamber

LED Display

3 digit visual (0.375" height) with choice of pressure units (see Model chart)

Refresh rate	0.1 sec
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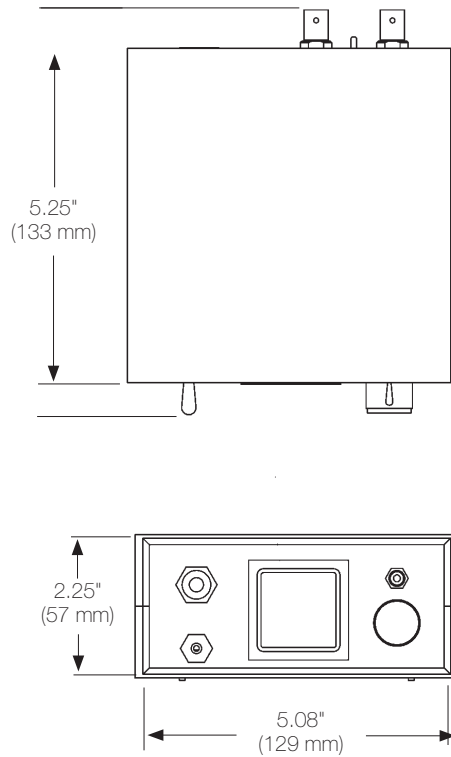
Physical Properties

Media	Air and non-corrosive gasses
Operating Environment	0 to 55°C (32 to 131°F)
Storage Temperature	-40 to 55°C (-40 to 131°F)
Dimensions (W x L x H)	5.08 x 5.25 x 2.25 in (129 x 133 x 57 mm)
Weight	2 lbs (907 grams)

Electrical

Input Power	100 - 240 VAC* (50-60 Hz) *power supply and 6ft. cord included
I / O	0-5 VDC analog input for high resolution (0.001 psi) pressure set points 0-5 VDC monitor output signal allows high resolution (0.001 psi)

Dimensions



Electrical Connections



FRONT



BACK

Model	MPC-BT-015	MPC-BT-050	MPC-BT-100
Pressure Range (psig)	0-14.7	0-50	0-100
Actual Resolution from monitor signal (psi)	0.001	0.001	0.001
Display Resolution (psi)	0.1	0.1	1
Display Resolution (bar)	0.001	0.01	0.01
Display Resolution (kPa)	0.1	1	1
Display Resolution (Kgf/cm3)	0.001	0.01	0.01
Repeatability of Pressure Control	0.2% FS	0.2% FS	0.2% FS



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