CP1 PRESSURE CONTROLLER

Clippard's Cordis CP1 Pressure Controller utilizes Clippard's proven EVP and DVP proportional valves to allow for steady, accurate, repeatable downstream pressure control as demand or process changes. The result is incredibly precise, linear pressure control within a closed-loop system that provides ultra-high resolution and repeatability.

The CP1 Series consists of a microcontroller, an internal pressure sensor, and a Clippard proportional valve. The inlet valve is connected to the moderately regulated supply pressure. Once a command is increased, the proportional valve opens up to allow supply pressure to pass over the sensor element which provides an active feedback for the microcontroller to satisfy the set point in the process. If at any point the sensor detects a value higher than the set point, the proportional valve closes and allows the process to consume the higher downstream pressure.

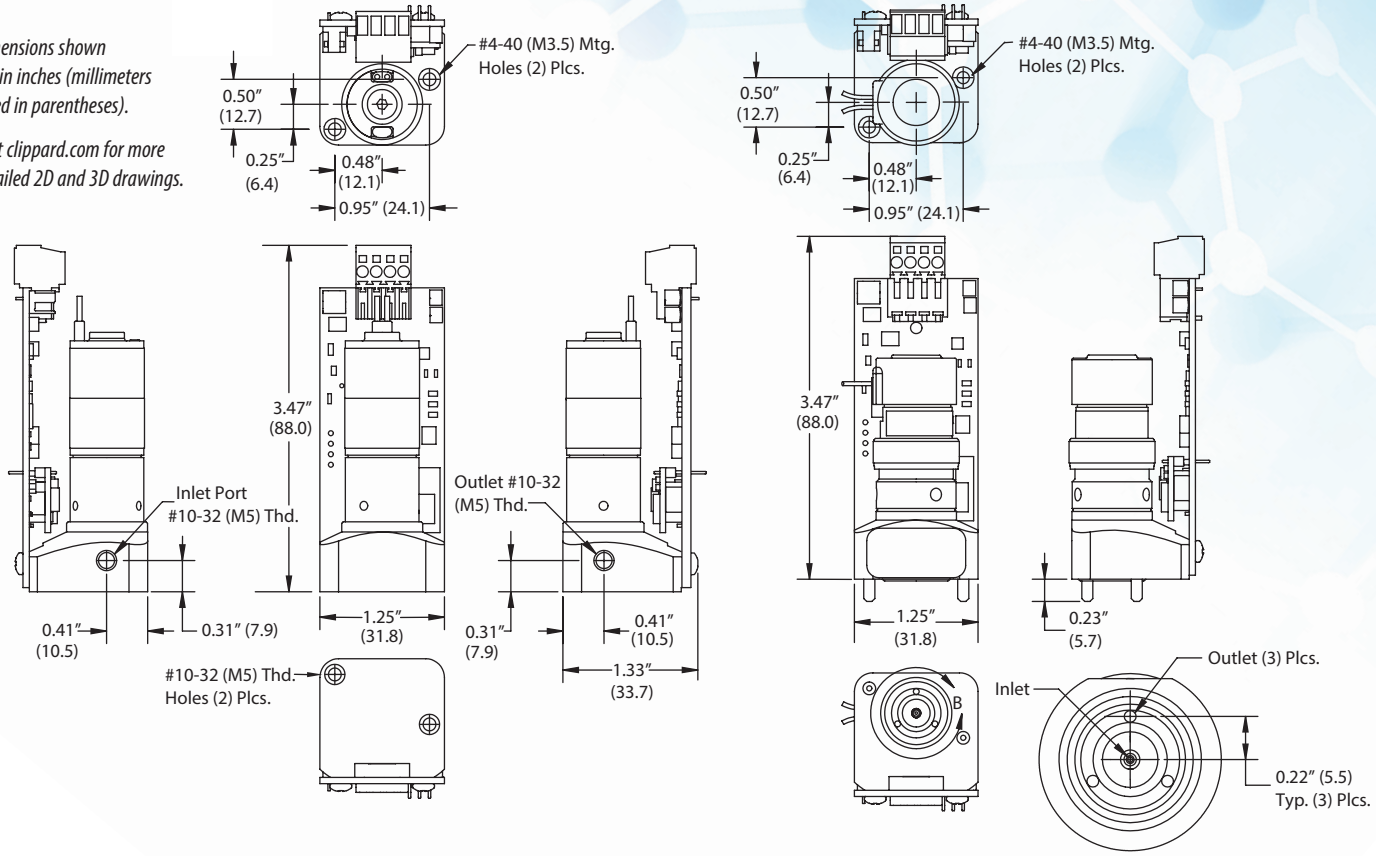
Accuracy	±0.25% of full scale
Calibrated Range	0 to 0.5 psig (0.03 bar) min. 0 to 150 psig (10.3 bar) max.
Current Draw	<250 mA max.
Filtration	40 micron filter *(recommended)*
Flow	2.7 to 65 l/min typical, ±10% @ 100 psig (7 bar)
LED Indicators	Power (red)
Linearity	± 0.5% BFSL
Material, Wetted	**Elastomers:** FKM **Manifold:** Anodized aluminum **Sensor:** Polyamide **Valves:** Nickel plated brass
Max. Hysteresis	± 0.5% of full scale
Medium	Clean, dry, non-corrosive gases
Mounting Attitude	Any
Operating Pressure Range	0 to 150 psig (10.3 bar)
Operating Temperature	32 to 120˚F (0 to 49˚C), *proportional valves*
Porting	#10-32 thd, 1/8" NPT, G1/8, or manifold
Resolution	≤5 mV
Response Time	<20 ms typical (application dependent)
Signal / Command	0 to 5 V, 0 to 10 VDC
Supply Voltage	15 to 24 VDC
Type	Card unit
Valve Function	Normally-closed proportional
More Details	**clippard.com/link/cordis-cp1**

Equipment used for test and calibration is NIST traceable.

- **Smooth, linear control**
- **Integrated internal feedback**
- **Multiple flow configurations**
- **Dynamic proportional pressure control**
- **Non-pulsing proportional fill**
- **Customizable pressure ranges and mounting options**
- **Compatible with multiple inert gases**
- **Customizable calibrated ranges**

Dimensions shown are in inches (millimeters listed in parentheses).

Visit clippard.com for more detailed 2D and 3D drawings.



ORDERING INFORMATION

CP1-C ❑ ❑ ❑ - ❑ ❑ - ❑ ❑ _._ _ ❑ _._ _

Porting

I	Imperial
M	Metric

Mounting

I	In-line
M	Manifold

Signal / Command

F	0 to 5 VDC
E	0 to 10 VDC

Calibrated Pressure Range

A	0 to 1 psig	I	0 to 0.5 bar
B	0 to 5 psig	J	0 to 1 bar
C	0 to 15 psig	K	0 to 2 bar
D	0 to 30 psig	M	0 to 7 bar
F	0 to 100 psig	N	0 to 10 bar
G	0 to 150 psig		

Min. Volume / Flow@ Max. Pressure*

A	≥0.25 in^3 / 2.7 l/min	D	≥2.00 in^3 / 65.0 l/min
B	≥0.50 in^3 / 6.7 l/min	F	≥1.00 in^3 / 32.0 l/min
C	≥1.00 in^3 / 25.0 l/min		

**All flow ranges are factory tested at 100 psig on the process side.*

CUSTOM CALIBRATED RANGE

Unit of Measure

A	psig
B	bar
C	psia
D	mBar
E	inHg
F	mmHg
G	Torr
H	H_2O
I	kPA

±Pressure

P	Positive

Offset - Low

0.00 Low End *(manual entry)*

±Pressure

P	Positive

Calibrated High

0.00 High End *(manual entry)*

Example Part Number:

CP1-CIIF-CD *or* CP1-CIIF-CD-AP0.00P0.75

ACCESSORIES

CPCH-CA4	Power Cord, 6' *(card unit only)*

For more info, scan the QR code or visit
clippard.com/link/cordis-cp1