

# CHP HIGH PRESSURE CONTROLLER



The Cordis CHP series utilizes Clippard's EHV and EHS lines of high pressure electronic valves to allow for steady, repeatable downstream pressure under static conditions. The result is precise, linear pressure control within a closed loop system.

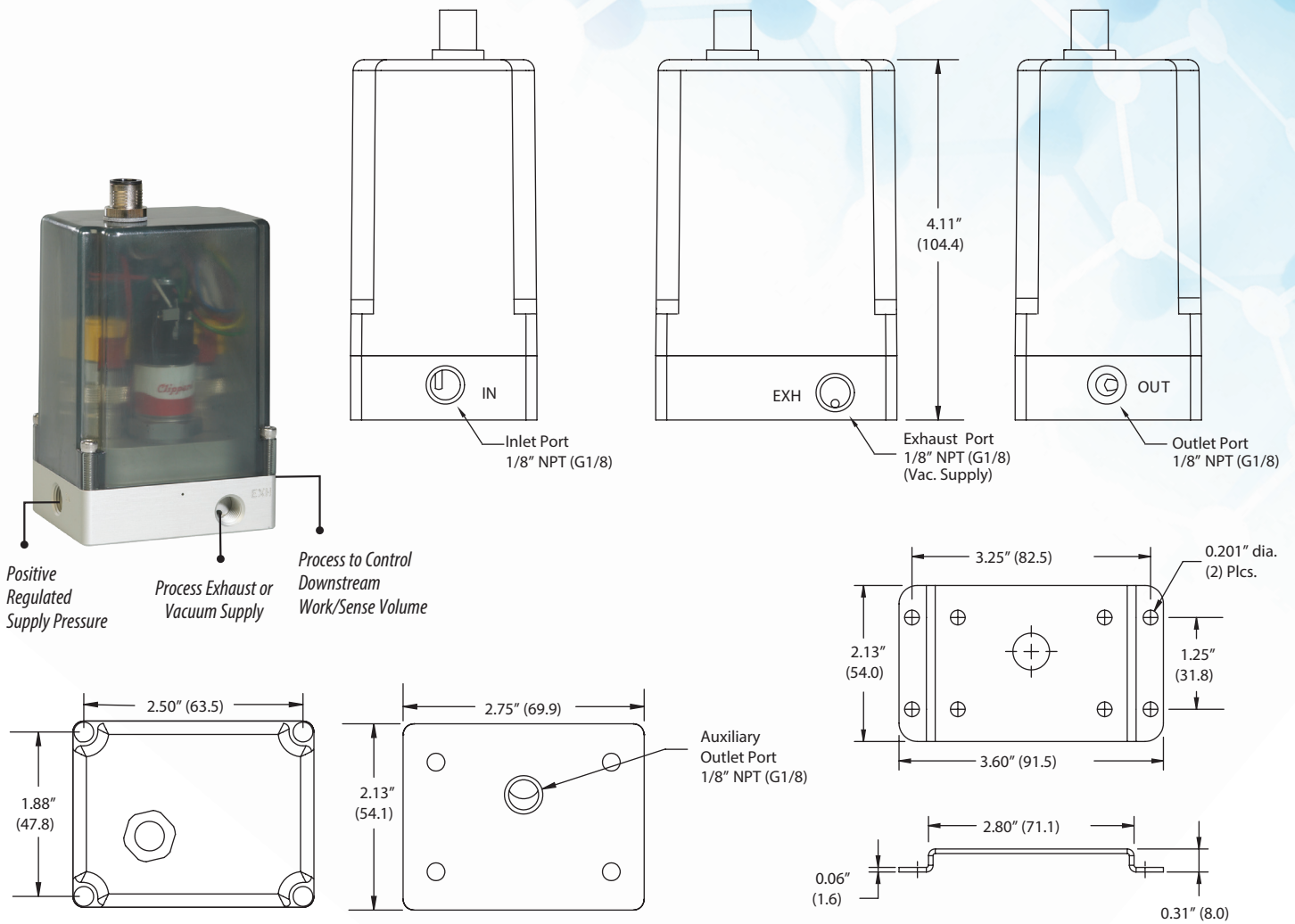
The CHP features a microcontroller, integrated pressure sensor, and two high pressure Clippard spider valves. The inlet valve is connected to the moderately regulated supply pressure and the exhaust valve is connected to a port that vents excess pressure to atmosphere. Once a command is increased, the inlet 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 exhaust valve will modulate open to vent off the excess pressure to maintain a stable and accurate control pressure in the process.

- Smooth, linear control
- Integrated internal or external sensor feedback
- Real-time adjustable PID control
- Customizable pressure ranges and mounting options
- Heavy duty stainless steel sensor
- Designed for static volume pressure control
- On-board microprocessor with access to proportional and integral settings
- Adaptable to a variety of sensors that can close the loop around pressure

<b>Accuracy</b>	±0.5% of full scale
<b>Calibrated Range</b>	0 to 1,000 psig (69 bar)
<b>Current Draw</b>	<250 mA max.
<b>Filtration</b>	40 micron filter ( <i>recommended</i> )
<b>Function</b>	Normally-closed
<b>LED Indicators</b>	Power (red) and command mode (blue—solid indicates analog, flashing indicates serial)
<b>Linearity</b>	≤0.2%
<b>Material, Wetted</b>	<b>Sensor:</b> Stainless steel <b>Manifold:</b> Anodized aluminum <b>Valves:</b> Nickel-plated brass body, viton core
<b>Max. Hysteresis</b>	≤0.25% of full scale
<b>Max. Inlet</b>	550 psig (37.9 bar) ≤ 500 psig (34.5 bar) 1,100 psig (75.8 bar) ≥ 501 psig
<b>Medium</b>	Clean, dry, non-corrosive gases
<b>Mounting Attitude</b>	Any
<b>Operating Pressure Range</b>	Vac. to 1,000 psig (69 bar)
<b>Porting</b>	1/8" NPT, G1/8
<b>Protection Rating</b>	IP65
<b>Resolution</b>	≤50 mV
<b>Response Time</b>	<20 ms typical (application dependent)
<b>Signal / Command</b>	0-5 or 0-10 VDC, 4-20 mA, or 3.3 VDC serial
<b>Supply Voltage</b>	15 to 24 VDC
<b>Temperature Range</b>	32 to 180°F (0 to 82°C), <i>valves</i>
<b>More Details</b>	<a href="http://clippard.com/link/cordis-chp">clippard.com/link/cordis-chp</a>

## Applications

- Leak testing
- Burst testing of catheters
- Maintaining internal pressure of tubing during extrusion
- Piloting one-to-one
- Piloting ratio valves
- Monitoring onboard sensor for data acquisition
- Tubing extrusion piloting



Dimensions shown are in inches (millimeters listed in parentheses). Visit [clippard.com](http://clippard.com) for more detailed 2D and 3D drawings.

## ORDERING INFORMATION

All flow ranges are factory tested at 100 psig on the process side. Positive pressure supply to "IN" port. Vacuum pressure supply to "EXH" port. Consult Clippard for availability of non-standard commands and other options.

**Example Part Number:**  
**CHP-HFE-2GG**

	<b>C</b>	<b>H</b>	<b>P</b>	-	□	□	□	-	□	□	←
<b>Type</b>											
H	Housed Unit										
E	CE Approved Housed Unit										
<b>Porting</b>											
F	1/8" NPT										
G	G1/8										
<b>Signal / Command</b>											
F	0 to 5 VDC										
E	0 to 10 VDC										
R	3.3 VDC Serial										
I	4 to 20 mA										
<b>Calibrated Pressure Range</b>											
2G	0 to 200 psig										
3G	0 to 300 psig										
5G	0 to 500 psig										
1K	0 to 1,000 psig										
2M	0 to 13 bar										
3M	0 to 20 bar										
5M	0 to 34 bar										
6M	0 to 69 bar										
<b>Min. Volume / Flow @ Max. Pressure*</b>											
G	≥0.75 in <sup>3</sup> / 3.0 l/min										
H	≥1.00 in <sup>3</sup> / 6.5 l/min										
I	≥2.00 in <sup>3</sup> / 12.5 l/min										

## ACCESSORIES

- CPCH-C1     Actuation Cable, 8-Pin, 6' (1.8 meters)
- CPCH-C2     3.3 VDC Serial Cable, 3' (0.8 meters)
- CPCH-B2     Mounting Bracket

For more info, scan the QR code or visit [clippard.com/link/cordis-chp](http://clippard.com/link/cordis-chp)

