

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.

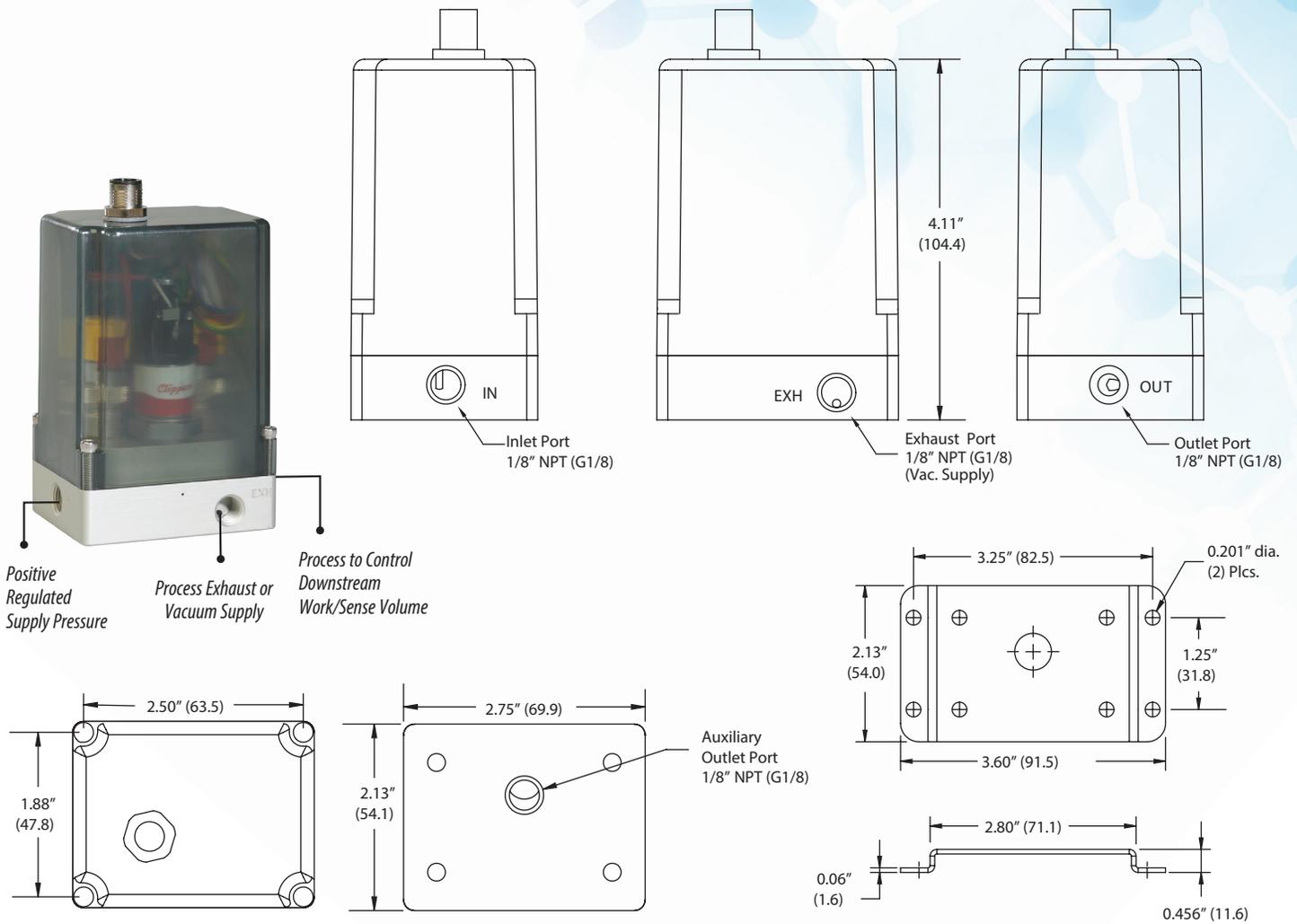
The CHP features a microcontroller, integrated pressure sensor, and two high pressure Clippard spider valves. The inlet valve is connected to the moderately regulated supply pressure and the exhaust valve is connected to a port that vents excess pressure to atmosphere. Once a command is increased, the 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

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

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 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

	C	H	P	-	□	□	□	-	□	□	←
Type											
H Housed Unit											
E CE Approved Housed Unit											
					Porting						
					F 1/8" NPT						
					G G1/8						
					Signal / Command						
					F 0 to 5 VDC						
					E 0 to 10 VDC						
					R 3.3 VDC Serial						
					I 4 to 20 mA						
					Calibrated Pressure Range						
					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						
					Min. Volume / Flow @ Max. Pressure*						
					G ≥0.75 in³ / 3.0 l/min						
					H ≥1.00 in³ / 6.5 l/min						
					I ≥2.00 in³ / 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

