

Clippard

CORDIS HIGH RESOLUTION ELECTRONIC PROPORTIONAL PRESSURE CONTROLS



Precise, linear pressure control within a closed-loop system with ultra high resolution and repeatability

Medium	Clean, dry, non-corrosive gases
Material, Wetted	Sensor: Polyamide, Manifold: Anodized Aluminum, Valves: please refer to the DVP or EVP specifications
Valve Type	Normally-Closed Proportional
Calibrated Range	Vacuum to 150 psig
Typical Flow	2.7 to 65 l/min ($\pm 10\%$ @ 100 psig)
Response Time	<20 ms (application dependent)
Accuracy	$\pm 0.25\%$ of Full Scale
Resolution	≤ 5 mV
Max. Hysteresis	$\pm 0.05\%$ of Full Scale
Linearity	$\pm 0.05\%$ BFSL
Port Size	1/8" NPT, G1/8, Manifold
Operating Temperature	Proportional Valve: 32° to 120°F
Mounting Attitude	Any
Filtration	40 micron (recommended)
More Details	clippard.com/link/cordis

Equipment used for test and calibration is NIST Traceable



Clippard's proven DVP and EVP proportional valves provide fast, stable control of pressure

Known for reliability, innovation and focus on miniature pneumatics, Clippard's Cordis Pressure controllers utilize the proven EVP and DVP proportional valve series allowing for steady, accurate and repeatable downstream pressure control as demand or processes change. The result, a very precise linear pressure control within a closed-loop system providing ultra-high resolution and repeatability.

The Cordis uses a microcontroller, an internal or external pressure sensor, and two Clippard proportional 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. Based on the command input, the comparative circuit compares the command versus the sensor feedback signal. The difference determines whether the inlet valve starts filling or the exhaust valve starts bleeding. This feedback signal or monitor signal generates from either an internal or external pressure sensor. The comparative circuit continually strives to maintain an accurate and repeatable balance between the command and feedback signals.

The Cordis is adaptable to a variety of sensors that can be utilized to close the loop around not only pressure, but vacuum, flow, force and torque.

Consult Clippard for application assistance and product specifications.

- Smooth linear control
- Integrated internal or external sensor feedback
- Multiple flow configurations
- Static or dynamic applications with the same smooth proportional control
- Non-pulsing proportional fill and bleed
- Customizable pressure ranges, mounting options and electrical connections.
- No integral bleed required to maintain 5 mV resolution
- Multiple inert gas compatible
- Both Cordis housing and external sensors are IP 65 rated



ORDERING INFORMATION WITH INTERNAL SENSOR

Model	Type	Porting	Signal/Command	Calibrated Pressure Range		Min. Volume/Flow @ Max. Pressure*
CPC- Pressure Control	C Card Unit H Housed Unit E CE Approved Housed Unit (4 to 20 mA only)	F 1/8" NPT G G1/8 M Manifold	F 0 to 5 VDC E 0 to 10 VDC R 3.3 VDC Serial I 4 to 20 mA	-A 0 to 1 psig	-M 0 to 7 bar	A ≥0.25 in ³ / 2.7 l/min B ≥0.50 in ³ / 6.7 l/min C ≥1.00 in ³ / 25.0 l/min D ≥2.00 in ³ / 65.0 l/min F ≥1.00 in ³ / 32.0 l/min
				-B 0 to 5 psig	-N 0 to 10 bar	
				-C 0 to 15 psig	-O 0 to 15 psia	
				-D 0 to 30 psig	-P 0 to 30 psia	
				-E 0 to 60 psig	-Q 0 to 100 psia	
				-F 0 to 100 psig	-R -5 to +5 psid	
				-G 0 to 150 psig	-S -15 to +15 psid	
				-I 0 to 0,5 bar	-T 0 to 10" H2O	
				-J 0 to 1 bar	-U -10" to +10" H2O	
				-K 0 to 2 bar	-V 0 to 4" H2O	
-L 0 to 4 bar	-W -1 to +1 psid					
Consult Clippard for availability of non-standard commands and other options.		Example Part No. CPC-CFE-GA				

ORDERING INFORMATION WITH EXTERNAL DOWNSTREAM SENSOR

Model	Porting	Signal/Command	Sensor Mounting	Calibrated Pressure Range	Min. Volume/Flow @ Max. Pressure*
CPC-Z Pressure Control (Housed Unit)	F 1/8" NPT G G1/8	F 0 to 5 VDC	-F Male 1/8" NPT	SEE CALIBRATED RANGES ABOVE	A ≥0.25 in ³ / 2.7 l/min B ≥0.50 in ³ / 6.7 l/min C ≥1.00 in ³ / 25.0 l/min D ≥2.00 in ³ / 65.0 l/min F ≥1.00 in ³ / 32.0 l/min
		E 0 to 10 VDC	-I 7/16-20 UNF		
		R 3.3 VDC Serial	-M Manifold		
		I 4 to 20 mA	-R Male 1/8" BSPT		

Accessories

CPCH-C1 Actuation Cable, 8-Pin, 6'

CPCH-C2 3.3 VDC Serial Cable, 3'

CPCH-B1 Mounting Bracket

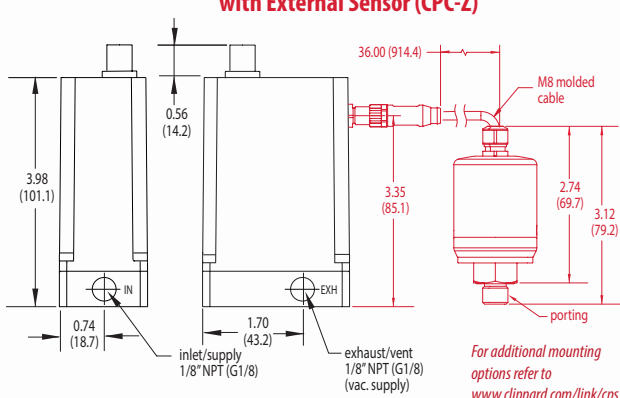
CPCH-CA6 Power Cord, 6' (card unit only)

Example Part No. CPC-ZFE-FAC

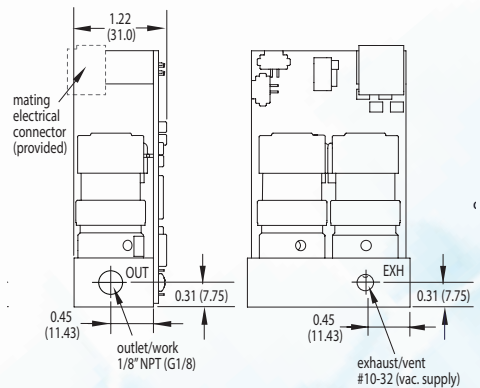
* All flow ranges are factory tested at 100 psig on the process side.

Positive Pressure Supply to "IN" Port. Vacuum Pressure Supply to "EXH" Port.

CPC-H Housed Unit with External Sensor (CPC-Z)



CPC-C Card Unit



For Manifold Mount dimensions, visit www.clippard.com/link/cordis

877-245-6247 | clippard.com

CLIPPARD INSTRUMENT LABORATORY, INC. • ISO 9001 • TDS 1.19 v.2
For warranty and disclaimer information, visit clippard.com/warranty

