

Humphrey[®]

ProCONTROL[™]

Electronic Pressure Regulators PCRL and PCRH Series



www.humphrey-products.com

A privately owned US company since 1901.

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PROCONTROL Regulator Series

Humphrey **PROCONTROL** Electronic Pressure Regulators provide exceptional closed-loop proportional pressure control by incorporating a unique, dual proportional valve design.

SUPERIOR PRESSURE REGULATION CONTROL IS ACHIEVED:

GREATER RESPONSIVENESS

Stable at dynamic inlet and outlet pressure applications.

LONG SERVICE LIFE

As compared to competitive models using ON/OFF valves for supply or venting control.

VERY QUIET OPERATION

Ideal for any work environment, particularly medical and laboratory applications.



PCRL
Low Flow Type



PCRH
High Flow Type

FEATURES

- Proportional valves control both fill and venting functions
- Two sizes: Low flow type
High flow type
- Quiet operation, even at low pressure settings
- Frictionless design results in multi-million cycles
- Made in the USA
- RoHS and REACH compliant

TYPICAL APPLICATIONS

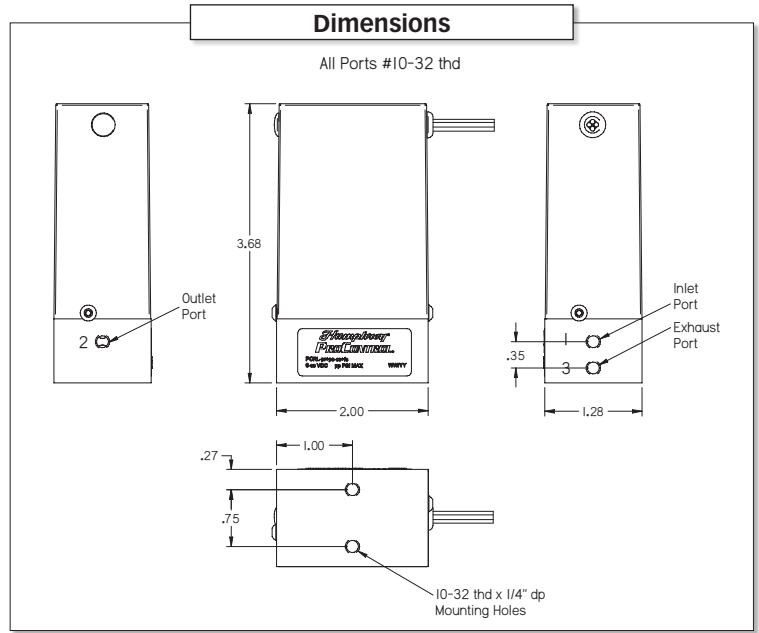
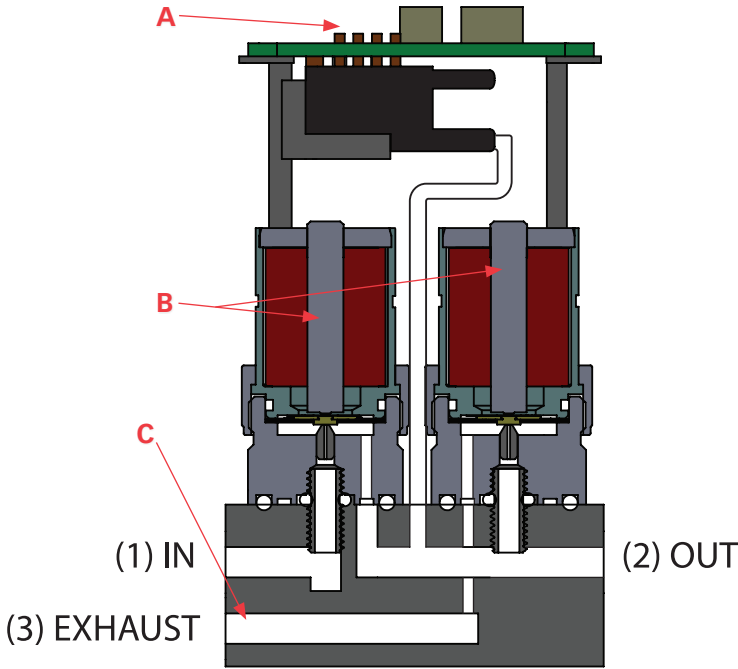
- Direct control of pressurized air and inert gases
- Operation of small bore cylinders
- Medical/Analytical Devices
- Leak testing
- Packaging

Specifications	PCRL-Low Flow	PCRH-High Flow
Media:	Air or inert gases (Consult factory for O ₂ , other gas and liquid media.)	
Pressure Ranges:	0~50 PSIG (3.4 bar); 0~100 PSIG (6.8 bar)	
Ambient Temp. Range:	32° to 158°F (0° to 70°C)	
Flow:	See Graphs	
Cv:	0.02	0.30
Response Time (full span):	1 second	
Pressure Accuracy (Typical):	+/- 0.5% or less (Full Span)	
Linearity (Typical):	+/- 0.5% or less (Full Span)	
Connections:	10-32 UNF	Supply & Outlet: 1/4" PIPE Relief: 10-32 UNF
Filtration:	40 Micron Recommended	
Weight (lbs):	0.6	0.8
Internal Valve Wetted Materials:	Cold-rolled stainless steel w/electroless nickel plating, brass, 304 and 403 stainless steel, FKM seals, Nylon, 6000 Series Aluminum.	

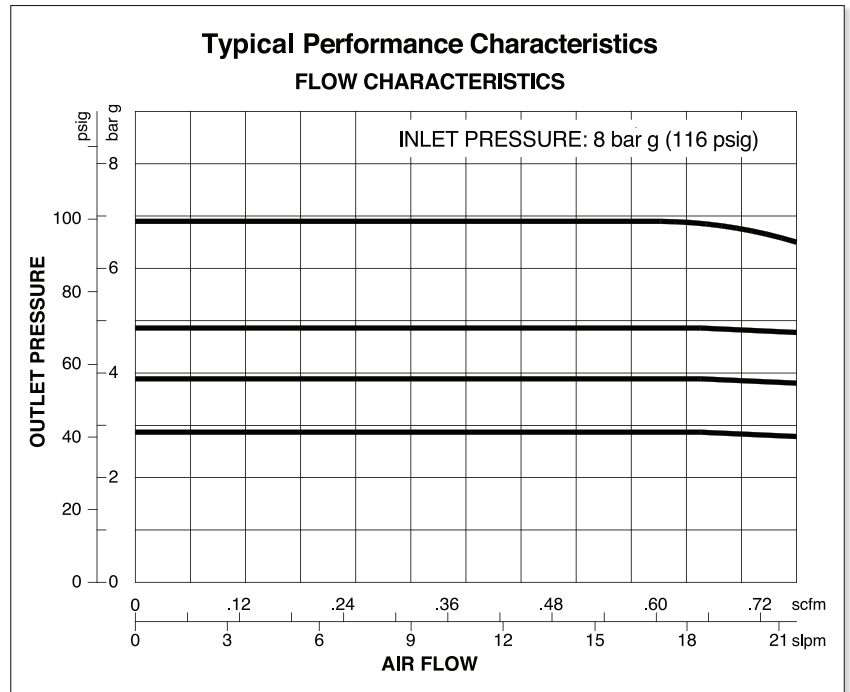
Electrical Specifications

Control Signals:	0~5V, 0~10V
Output Signal:	0~5V
Power Supply:	12VDC or 24VDC
Power Consumption (mA):	200 (maximum)

PCRL - Low Flow Regulator



- A** Analog control circuitry compensates for dynamic changes in output pressure, offering fast, accurate, closed-loop pressure control characteristics.
- B** The incorporation of two proportional control valves offers fast and smooth pressure control, excellent resolution, as well as optimized response times when pressure venting, and reduced overall air (media) consumption.
- C** Relief port can be plugged (with Humphrey PF fitting), allowing for non-relieving type function.



How to Order

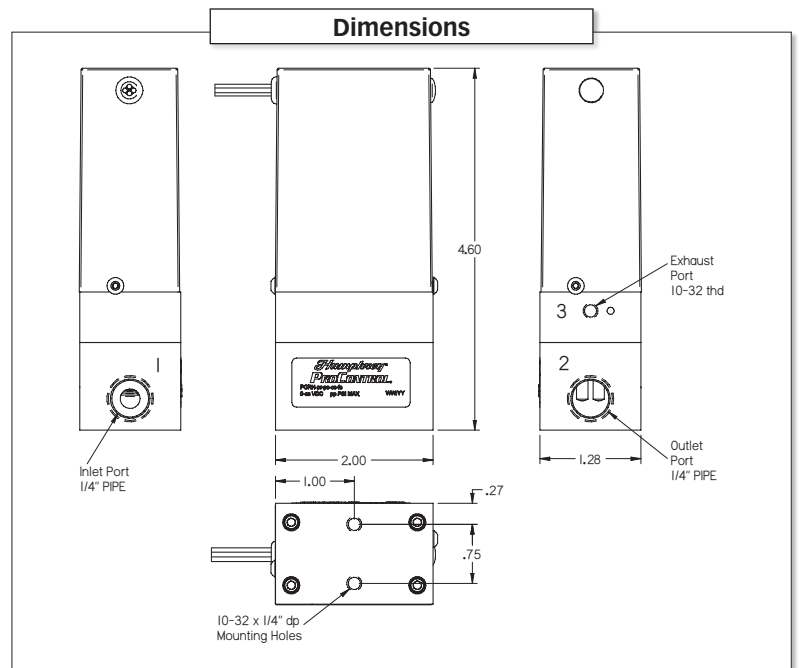
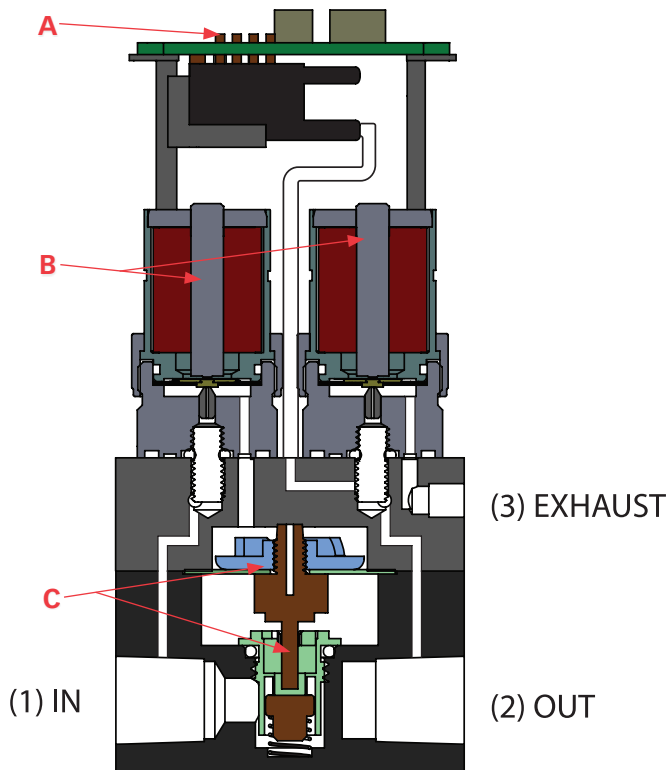
ProCONTROL™

Low Flow Pressure Regulators

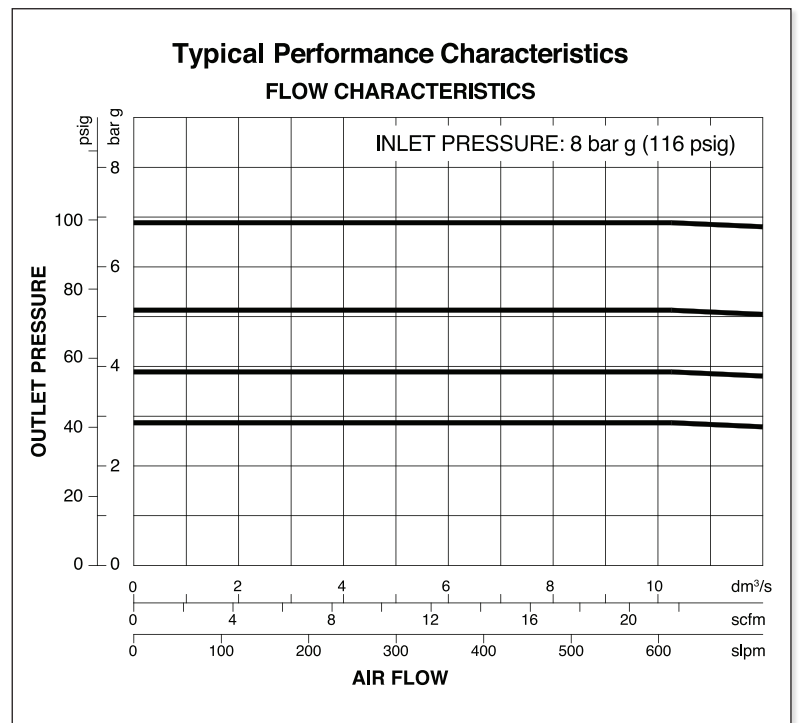
PCRL	-50	12	-05	05
PRESSURE RANGE	POWER SUPPLY		CONTROL SIGNAL	
-100 - 0-100 PSIG -50 - 0-50 PSIG	12 - Wire Leads, 12VDC 24 - Wire Leads, 24VDC		-05 - 0-5V -10 - 0-10V	
			FEEDBACK SIGNAL	
			05 - 0-5V	

Order Example:
PCRL-5012-0505

PCRH - High Flow Regulator



- A** Analog control circuitry compensates for dynamic changes in output pressure, offering fast, accurate, closed-loop pressure control characteristics.
- B** The incorporation of two proportional control valves offers fast and smooth pressure control, excellent resolution, as well as optimized response times when pressure venting, and reduced overall air (media) consumption.
- C** Utilizes a pilot operated configuration with an Internal Valve and Diaphragm. This offers high volume flow rates relative to size, while accurately controlling output pressure.



How to Order

ProControl™

High Flow
Pressure
Regulators

PCRH	-100	24	-10	05	
PRESSURE RANGE	POWER SUPPLY		CONTROL SIGNAL		FEEDBACK SIGNAL
-100 - 0-100 PSIG -50 - 0-50 PSIG	12 - Wire Leads, 12VDC 24 - Wire Leads, 24VDC		-05 - 0-5V -10 - 0-10V		05 - 0-5V

Order Example:
PCRH-10024-1005