

## Electronic High Pressure Controller

FOR CONTROLLING GAS PRESSURE UP TO 500 PSI



A complete closed loop electronic pressure controller within an IP65 protective housing for pressures up to 500 psi

The EHP is an electronic high pressure regulator that controls the pressure at its outlet port based on an electrical command signal input. The EHP is available in a range of calibrated pressures up to 500 psig (35 bar(g)). It can be configured for 0 -10 VDC or 4-20 mA analog signal types or 3.3V serial digital.

The EHP is a complete closed loop controller consisting of two internal solenoid valves, a manifold, an electronic control circuit and a pressure transducer all contained in a protective IP65 rated housing. One solenoid valve functions as inlet control allowing supply media into the system which increases the controlled pressure. The other solenoid valve acts as the exhaust and will decrease the controlled pressure by venting to atmosphere.

The controlled output pressure is measured by the onboard pneumatic pressure sensor and compared to the desired (target) pressure by the EHP's internal electronics. When the circuit detects a difference between the targeted command pressure and the actual output pressure, the circuit will energize the appropriate solenoid valve to raise or lower the pressure back to the targeted value.

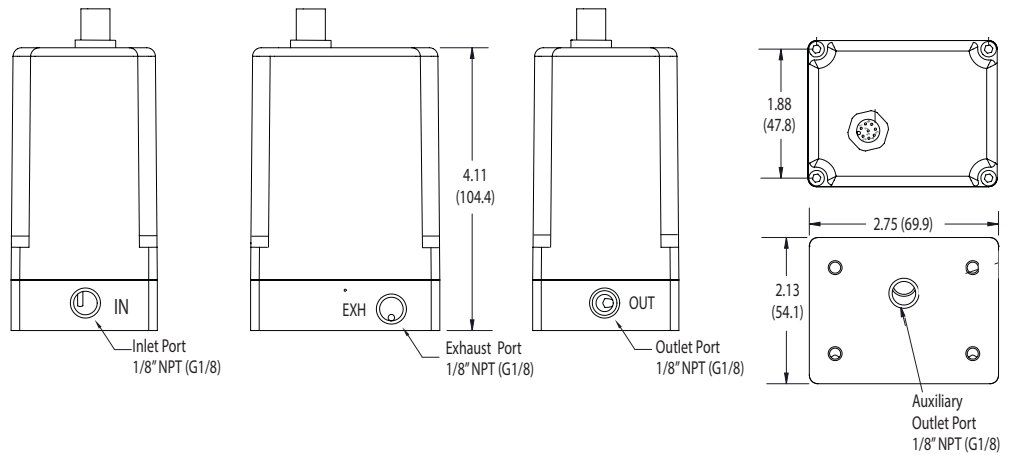
GENERAL SPECIFICATIONS	
Medium	Clean, dry, non-corrosive gases
Wetted Material	<b>Elastomers:</b> Viton <b>Manifold:</b> Anodized aluminum; <b>Valves:</b> Nickel plated brass; <b>Sensor:</b> Stainless Steel
IP65 Housing	Polycarbonate/ABS blend
Valve Type	Normally-Closed
Operating Pressure Range	0 to 500 psig
Max Inlet	550 psig
Accuracy	±0.5% of full scale
Resolution	≤ 50 mV
Max. Hysteresis	± 0.25% of full scale
Linearity	± 0.2% of full scale
Port Size	1/8" NPT
Temperature Range	32 to 180 °F (0 to 82°C)
Mounting Orientation	Any
Recommended Filtration	40 micron

ELECTRICAL SPECIFICATIONS	
Voltage	15 to 24 VDC
Current Draw	< 250 mA max
Protection Rating	IP65
Signal/Command Options	0 to 10 VDC 4 to 20 mA (differential) 3.3 V Serial Digital

- Smooth linear control
- Integrated internal or external sensor feedback
- Static applications
- Customizable pressure ranges and mounting options

Equipment used for test and calibration is NIST traceable

\*Not intended for hazardous/explosive environments. For use with air or inert gases only



## EHP Ordering Information

(Items listed in blue are often in stock for faster delivery)

	1	2	3	4	5	6
<b>EXAMPLE PART NUMBER</b>	<b>EHP</b>	<b>H</b>	<b>F</b>	<b>E</b>	<b>3G</b>	<b>H</b>
Your Part Number:	EHP	H				

### 1 MODEL

**EHP** Electronic High Pressure

### 2 TYPE

**H** IP65 Housing

### 3 PORT THREAD TYPE

**F** 1/8" NPT

**G** G1/8 (option available)

### 4 INPUT SIGNAL COMMAND

**E** 0 to 10 VDC

**I** 4 to 20 mA (differential)

**R** 3.3V Serial Digital

### 5 PRESSURE RANGE

**2G** 0 to 200 psig

**3G** 0 to 300 psig

**5G** 0 to 500 psig

### 6 MIN VOLUME / MAX FLOW RATE

**G**  $\geq 0.75$  in<sup>3</sup> / 3.0 lpm

**H**  $\geq 1.00$  in<sup>3</sup> / 6.5 lpm

**I**  $\geq 2.00$  in<sup>3</sup> / 12.5 lpm

## About Equilbar

Equilbar provides innovative and robust pressure and flow control technology for researchers and engineers worldwide. We are proud to design, manufacture, and test our patented back pressure regulators in our factory overlooking the Blue Ridge Mountains near Asheville, NC, and we are equally proud to work with clients around the world each and every day.

### APPLICATION ENGINEERING—WHAT SETS US APART

Unlike mass-market regulator distributors, we focus on working with you, the scientist or engineer with a complex pressure control scenario.

Our application engineers work collaboratively with clients to identify the optimal model, trim, and diaphragm for each application's unique challenges. No matter where you are on the globe, you can stay in close contact with your engineer by email, telephone, videoconferencing, or fax.



Made in the  
**USA**

Equilbar's quality system is  
**ISO 9001:2015** certified.

Equilbar, LLC  
320 Rutledge Rd.  
Fletcher, North Carolina 28732  
United States  
Tel: +1-828-650-6590  
[inquiry@equilbar.com](mailto:inquiry@equilbar.com)

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