

Model EPC

Electronic Proportional Control Valve

The Porter Instrument Model EPC Electronic Proportional Control Valve is an electromagnetically-actuated, proportional control valve designed for use in closed loopflow or pressure control systems. When coupled with a flow sensor or pressure transducer and a proportional electronic controller, Model EPC is capable of providing steady and precise control of gas flow rates or pressures. The Model EPC is a DC-driven, normally-closed valve which includes an elastomeric valve seat to provide bubble-tight shut-off. A broad range of flow coefficients (Cv's) is available for either flow or pressure control. The Model EPC is offered with either integral compression fittings for in-line mounting or as a manifold mount version. To allow design and user flexibility, custom configurations in OEM-scale quantities are also available.



CONTACT INFORMATION:

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PRODUCT FEATURES:

- Greater Than 50:1 Dynamic Range
- Many Electrical and Mechanical Configurations Available
- Low Cost
- Easily Customized
- Low Power Consumption
- Bubble-Tight Shut-Off
- Cleaned for Use in Analytical Instrumentation



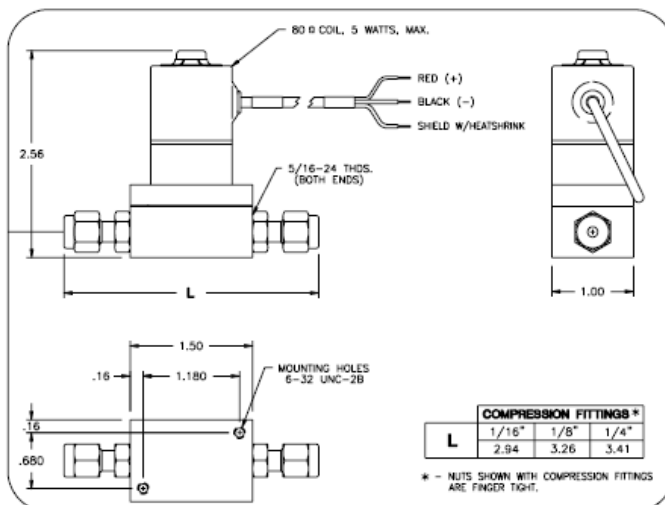
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Specifications

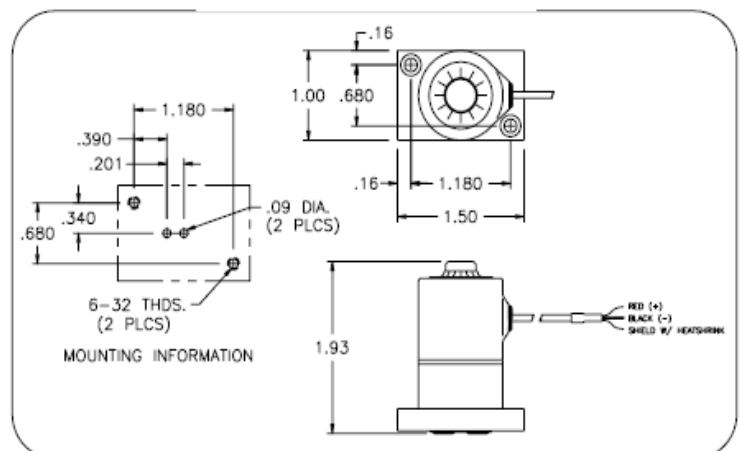
Mechanical Specifications	
Maximum Operating Pressure	200 PSIG
Maximum Operating Temperature	85° C (185°F)
Available C _v 's	1.6 x 10 ⁻⁴ to 4.0 x 10 ⁻²
Flow Capacity	40 SCCM up to 10,000 SCCM Full Scale (nitrogen at 70°F & 5 PSID)
Rangeability	50:1 minimum
Fitting Sizes and Type	1/16", 1/8" or 1/4" compression
Electrical Specifications	
Coil and Connection Resistance	75-85 ohms
Coil Inductance	25 mH
Opening Voltage	2.5-4.5 Vdc
Control Range Span	4-8 Vdc
Minimum Operating Voltage	+15 Vdc (±10)
Power Dissipation	0.8 watts typical
Materials of Construction	
Valve Base (Body)	Aluminum (black-anodized) or Stainless Steel
Orifice	Brass or Stainless Steel
Valve Trim	Stainless Steel
O-Rings and Valve Seat	Buna N, EPDM, Kalrez®, Neoprene or Viton®
Fittings	Brass or Stainless Steel

DIMENSIONAL DATA

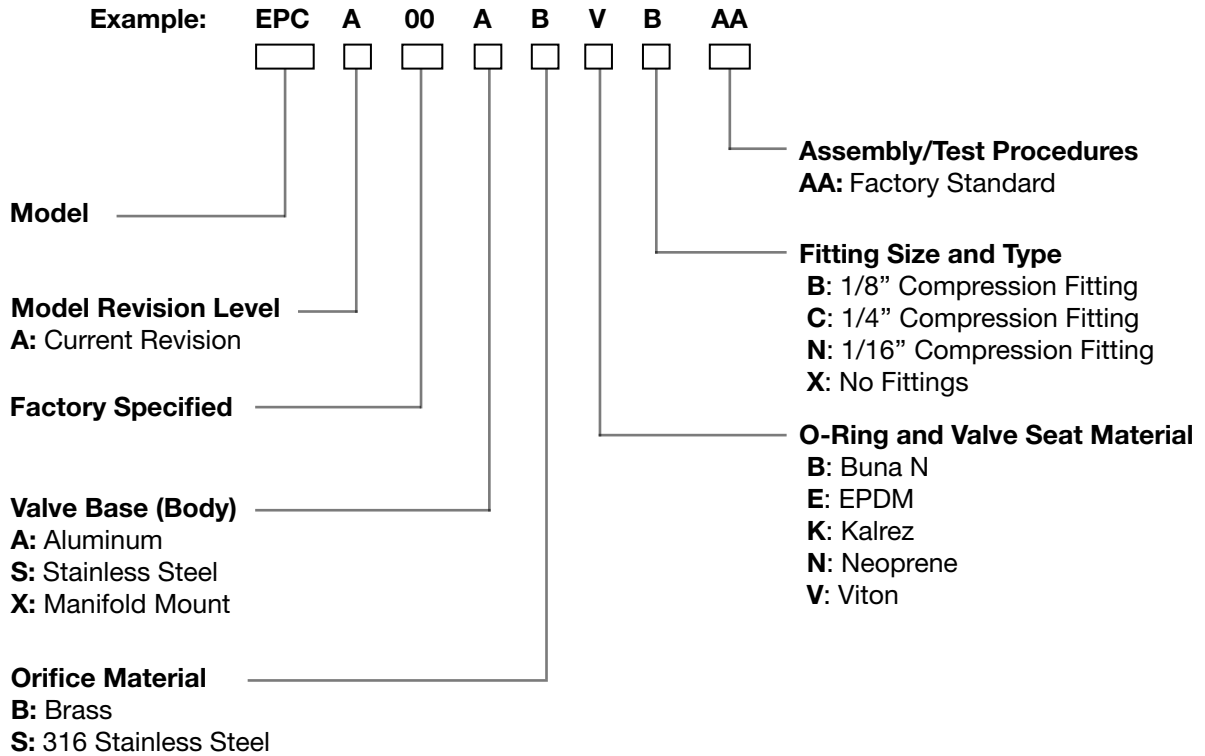
Model EPC with Valve Base



Manifold-Mount Model EPC



MODEL NUMBER AND DESCRIPTION



ORDERING INFORMATION

To order, please specify:

- Model number
- Valve Base (Body) Material
- O-Ring Material
- Valve Seat Material
- Fitting Size and Type
- Gas Type
- System Flows (Minimum, Nominal and Maximum)
- Operating Temperature
- Upstream (inlet) Pressure
- Downstream (outlet) Pressure

⚠ WARNING – USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

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