**EPC** 



Automation Components, Inc.



## Analog Current, Voltage Input to Pneumatic Output

The EPC Series are electric to pneumatic transducers which convert an analog input signal to a proportional pneumatic output, modulating its control valve(s) to regulate the branch line pressure to the set point determined by the input signal. The EPC series offers four selectable input ranges. Output pressure ranges are jumper shunt selectable and adjustable in all ranges. A feedback signal indicating the resultant branch line pressure is also provided. EPC Series is designed with electrical terminals on one end and pneumatic connections on the other, allowing for maximum convenience in wiring and tubing installation when panel mounted. The EPC2 incorporates two valves (one controls exhaust), does not bleed air at set point and has a 750 scim supply and exhaust. Its branch exhaust flow and response time are not limited by an internal restrictor and are similar to its load rate. EPC2LG operates as the EPC2, but has a higher air flow rate (1400 scim) using an external 5 micron filter, and includes a 0-30 psi gauge. If power fails to the EPC2 or EPC2LG, branch line pressure remains constant if the branch line does not leak air. FAIL SAFE: The EPC2FS shares the same specifications as the EPC2 except its 3-way branch valve will exhaust branch line air upon power failure. Custom calibration is available upon request for an additional charge.

The EPC Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.

INTERFACE

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## SPECIFICATIONS

| Supply Voltage                          | 24 VDC (+10%/-5%)/24 VAC (+/-10%), 50/60Hz   |
|---|--|
| Supply Current                          | 180 mA maximum, 200 mA on fail safe models   |
| Input                                   | 0-5 VDC/infinite $\Omega$ , 0-10 VDC/infinite $\Omega$ , 0-15 VDC/infinite $\Omega$ , 0-20 mA/250 $\Omega$ |
| Feedback Signal Output Range            | 0-5 VDC = output pressure range selected   |
| Supply Pressure                         | Maximum 25 psig (172.38 kPa), minimum 18 psig (124.11 kPa) Main air pressure must                          |
|   | be minimum of 2 psig (13.79 kPa) above maximum output pressure desired                                     |
| Air Consumption                         | See data under "Ordering Information" below  |
| Output Pressure Range                   | Field Calibration Possible: 0 to 20 psig (0-138 kPa) maximum   |
| Output Pressure Range-Jumper Selectable | 0-10 psig (0-68.95 kPa), 0-15 psig (0-103.43 kPa), 0-20 psig (0-137.9 kPa)                                 |
| Accuracy                                | +/-1% @ room temp or 2% full scale @ 32-120°F (0-48.8°C)   |
| Manual/Auto Override                    | When switched to MAN, output can be varied.  |
|   | When switched to AUTO, output is controlled from input signal  |
| Manual/Auto Override Feedback           | Dry Contacts (24 VAC or 24 VDC, 1A maximum). N.O. in AUTO  |
|   | operation (optional: N.O. in MAN operation)  |
| Air Flow                                | Supply valves @ 25 psig (172.38 kPa) main/20 psig (137.9 kPa) out, 750 scim (1400 on LG model)             |
|   | Branch line requires 2 cubic inches minimum. Branch line minimum of 25 feet of 1/4" O.D.                   |
|   | Polyethylene tubing for optimum result on FS model.  |
| Filtering                               | Furnished with 80-100 integral-in-barb micron filter (Part #PN004) except                                  |
|   | for EPC2LG which is furnished with in-line 5 micron filter   |
| Operating Temperature                   | 32 to 120°F (0 to 48.9°C)  |
| Storage Temperature Range               | -20 to 150°F (-6.66 to 65.55°C)  |
| Operating Humidity Range                | 5 to 95% non-condensing  |
| Product Dimensions                      | (L) 4.37" (W) 4.25" (H) 1.87"  |
|   |  |

## ORDERING

Please select one Valve (A). If "EPC" was selected as a Valve (A) proceed to Gauge (B) only. If "EPC2" was selected, proceed to (B), (C) & (D). Choose an Optional Accessory (1) if desired.

| A Valve  |   | B Gauge                           | (              | C EPC2 Options   | D EPC2   | Enclosure            |
|--|---|-----------------------------------|----------------|--|--|----------------------|
| <b>EPC</b> (.007 Bleed Orifice<br><b>EPC2</b> (Valved Exhaust) | e) (Complete (B) only)<br>(Complete (B), (C) & (D)) | ○ (None)<br>○ <b>G</b> (Gauge) (0 | -30 psi)       | <ul> <li> (None)</li> <li>FS (Fail Safe)</li> <li>LG (Higher Flow R</li> </ul> | <ul> <li> (Not</li> <li>B (EPC2</li> <li>ate)</li> </ul> |                      |
| 1 Optional Accesso   | ries  |                                   |                |  |  |                      |
| ○ (None) ○ DRC (I  | Din Rail Mounting)                                  |                                   |                |  |  |                      |
| BUILD PART NUMBER  |   |                                   |                |  |  |                      |
| After completing (A), (B), (<br>number is offered.             | (C) & (D) from the above t                          | able, fill in the Part            | Number Table I | below. (1) is an Option  | nal Accessory. An e                                      | example part         |
|  |   |                                   |                |  |  |                      |
|  |   | -                                 | _              | -  |  |                      |
| A<br>EXAMPLE: EPC2 - FS - B                                    |   | 8                                 |                | C  |  | D                    |
| LAMMFLL, LFC2 - F3 - D   |   |                                   |                |  |  |                      |
|  |   |                                   |                |  |  |                      |
|  | 0   |                                   | l              |  |  |                      |
| EXAMPLE: ENC1  |   |                                   |                |  |  |                      |
|  |   |                                   |                |  |  |                      |
|  |   |                                   |                |  |  |                      |
|  |   |                                   |                |  |  | RoH                  |
|  |   |                                   |                |  |  | COMPLIA<br>2002/95/8 |

INTERFACE