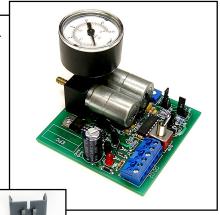




Analog Current or Voltage Input to Pneumatic Output Single Valve and Dual Valve (750 and 1400 scim)

FEATURES

- Terminals and air connections oriented for convenient panel installation.
- Manual/Auto toggle switch reports override status to controller, Adjustable Pressure Output Pot active in Manual Mode.
- Field selectable analog input ranges and pressure output ranges.
- Analog Feedback on branch pressure.
- · Field adjustable offset and span.
- EPC bleeds at the rate of 41 scim, EPC2/EPC2LG is controlled exhaust via valved branch.
- Closed loop control, 1% accuracy at room temperature.
- · Plug-in Terminal Block.
- · Not Position Sensitive.
- 50/60 Hz Compatible.
- Supplied with snap track and integral-in-barb filter, except for LG model which has external 5 micron in-line filter.
- Black anodized aluminum manifold with gauge port, gold on 1400 scim LG models.





Shown with optional gauge

Optional DRC Kit for DIN Rail Mounting-Clips mount either direction on snap track

APPLICATIONS

- 3 Way Mixing Valve Control
- · Chiller Loading
- Pilot Positioner Control
- Above ceiling applications (mixing and VAV boxes)
- Pneumatic Valve and Damper Actuator Control
- Fan Vane Control
- DDC Control

PRODUCT DESCRIPTION

The EPC* is an electric to pneumatic transducer which converts an analog input signal to a proportional pneumatic output. The EPC* will automatically modulate its control valve(s) to regulate the branch line pressure to the selected set point as determined by the input signal.

The EPC* offers four selectable input ranges of 0 to 5, 0 to 10, 0 to 15 VDC and 0 to 20 mA.

Output pressure ranges are jumper shunt selectable for 0 to 10, 0 to 15 and 0 to 20 psig, and adjustable in all ranges.

A 0-5 VDC feedback signal indicating the resultant branch line pressure, is also provided. This signal varies linearly with branch pressure range selected.

EPC's are 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 EPC is a constant bleed interface with branch exhaust response time determined by the bleed orifice size and pressure differentials.

If power fails to the EPC, it will continue to bleed through the bleed orifice until branch pressure is zero psig.

The EPC2 incorporates two valves (one controls exhaust) and does not bleed air at set point. It's branch exhaust flow and response time are not limited by an internal restrictor and are similar to its load rate. EPC2LG is same but uses an in-line 5 micron filter which increases scim rate to 1400 and mounts the optional 0-30 psi pressure gauge. If power fails to the EPC2, branch line pressure remains constant if the branch line does not leak air.

All factory calibrated products are NIST traceable. Certificates of Compliance must be ordered with product.

ORDERING INFORMATION

Specify: EPC - G - with 0-30 psi (206.85 kPa) gauge - 1 valve - .007" bleed orifice, 750 scim supply valve, 41 scim exhaust - 2 valve - maintains branch pressure, 750 scim supply valve, 750 scim exhaust 2L - 2 valve - maintains branch pressure, 1400 scim supply, 1400 exhaust (uses external filter)

SPECIFICATIONS

Electrical Requirements

Power Supply: Voltage 24 VDC (+10%/-5%).

24 VAC (+/-10%), 50 or 60 Hz. 180 mA maximum.

Power Supply: Current

Input: Range and Impedance Four jumper selectable ranges: 0 to 5 VDC / infinite ohms.

0 to 10 VDC / infinite ohms. 0 to 15 VDC / infinite ohms. 0 to 20 mA / 250 ohms.

Feedback: Output Signal Range 0 to 5 VDC = Output pressure range selected.

Mechanical Requirements

Air Supply

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 chart under "Ordering Information" above.

Output

Pressure Range - Field Calibration Possible 0 to 20 psig (0-138 kPa) maximum.

Output Pressure Range-Jumper Selectable 0 to 10 psig (0-68.95 kPa) 0 to 15 psig (0-103.43 kPa)

0 to 20 psig (0-137.9 kPa) 1% @ room temperature,

2% full scale @ 32 to 120 deg. F (0 to 48.8 deg. 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, 1 amp maximum). N.O. in AUTO

operation (optional: N.O. in MAN operation)

Pneumatic Capacity

Accuracy

Air Flow: Supply valves @ 25 psig (172.38 kPa) main/20 psig (137.9 kPa) out,

750 scim. Recommend branch line minimum of 25 feet of 1/4"

O.D. polyethylene tubing for optimum results .

Furnished with 80-100 integral-in-barb micron filter (Part # PN004) Filtering:

except for EPC2LG which is furnished with in-line 5 micron filter.

Connections

Dimensions

Mounting

Weight

Wire Size Up to one 14 gauge wire per terminal.

Plug-in Blocks with 5mm pin spacing (optional fixed terminal strip with **Terminal Type** 45° captive screw, moving clamp design in nickel plated copper alloy) Pneumatic Fitting Type

Brass barbed fittings for Main and Branch tubing mounted in black anodized machined aluminum manifold. Supplied with plugged 1/8"-

27 FNPT gauge port. Gauge installed at additional cost.

Pneumatic Tubing Size/Type 1/4" O.D. nominal (1/8" I.D.) polyethylene.

> 3.25" L x 3.25" W x 1.875" H (3.125" with gauge) or 8.255 cm L x 8.255 cm W x 4.763 cm H (7.938 cm with gauge mounted in snap track)

Furnished with snap track pre-punched for DRC kit to DIN rail mount EPC - 5 oz. (141.75 grams), EPC2 - 6.9 oz. (195.62 grams), EPC2LG

- 9.2 (260.82 grams).

Environmental Requirements

Operating Temperature 32 to 120 deg. F (0 to 48.8°C) Storage Temperature Range -20 to 150 deg F (-6.66 to 65.55°C)

Operating Humidity Range 5 to 95% non-condensing