

FEATURES

- Painted steel housing with mounting flange
- Terminals and air connections oriented for 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.
- Closed loop control, 1% accuracy at room temperature
- Pluggable Terminal Block
- Not Position Sensitive, mount at any angle
- 50/60 Hz Compatible
- Integral-in-barb filter.
- Gauge installed on anodized aluminum manifold



APPLICATIONS

- 3 Way Mixing Valve Control
- Chiller Loading
- Pilot Positioner Control
- Pneumatic Valve and Damper Actuator Control
- Fan Vane Control
- DDC Control

PRODUCT DESCRIPTION

The I-EPC2GB is an electric to pneumatic transducer which converts an analog input signal to a proportional pneumatic output. The I-EPC2GB will automatically modulate its control valves to regulate the branch line pressure to the selected set point as determined by the input signal.

The I-EPC2GB 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. Branch line pressure gauge is standard.

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

I-EPC2GB's steel enclosure 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 I-EPC2GB 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.

If power fails to the I-EPC2GB, branch line pressure remains constant if the branch line does not leak air.

FAIL SAFE: The I-EPC2GFSB shares the same specifications except on a power failure. Its 3-way branch exhaust valve allows exhaust of branch line air on power failure.

ORDERING INFORMATION

Specify: I-EPC2G _____

B

- 2 valve - maintains branch pressure, 750 scim supply valve, 750 scim exhaust

FSB

- 2 valve - exhausts on power failure, 750 scim supply valve, 750 scim exhaust

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

SPECIFICATIONS

Electrical Requirements

Power Supply: Voltage	24 VDC (+10%/-5%). 24 VAC (+/-10%), 50 or 60 Hz.
Power Supply: Current	180 mA maximum, 200 mA maximum on FS (fail-safe) model.
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).
Accuracy	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

Air Flow:	Supply valves @ 25 psig (172.38 kPa) main/20 psig (137.9 kPa) out, 750 scim. Branch line requires 2 cubic inches minimum.
Filtering:	Furnished with 80-100 integral-in-barb micron filter (Part # PN004)

Connections

Wire Size	Up to one 14 gauge wire per terminal.
Terminal Type	Plug-in Blocks with 5mm pin spacing
Pneumatic Fitting Type	Brass barbed fittings for Main and Branch tubing mounted in black anodized machined aluminum manifold (blue manifold on FS model). Supplied with 1-1/2" (3.81 cm), 0-30 psig pressure gauge. 1/4" O.D. nominal (1/8" I.D.) polyethylene.
Pneumatic Tubing Size/Type	4.4" (8.255 cm) L x 4.25" (10.8 cm) W x 3.35" (8.509 cm) H.

Dimensions

Mounting

Weight

Painted steel housing with mounting flange with four (4) holes for sheet metal screws.
I-EPC2GB, I-EPC2GFSB - 14.5 oz. (411.09 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