

FEATURES

- Terminals and air connections oriented for convenient panel installation
- Manual/Auto toggle switch reports override status to controller, and Adjustable Pressure Output Pot active in Manual Mode
- Four Field Selectable Rates of Change
- Three Field Selectable Pressure Output Ranges
- Field Adjustable Offset and Span
- EFP bleeds at the rate of 41 scim, EFP2 has valve controlled branch exhaust which holds pressure on power loss, EFP2FS is valve controlled branch exhaust which fails safe to 0 psig branch pressure
- Analog Feedback on branch pressure
- Closed loop control, 1% accuracy at room temperature
- Plug-in Terminal Block
- Not Position Sensitive
- 50/60 Hz Compatible
- Anodized aluminum manifold
- Supplied with Filter-in-Barb



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
- Pneumatic Valve and Damper Actuator Control
- Fan Vane Control
- Compressor Staging

PRODUCT DESCRIPTION

The EFP* converts a floating point signal into a proportional pneumatic signal ranging from 0-20 psig. The pneumatic output is proportional to the signal input. The EFP* has a manual override switch with terminal strip contacts to indicate its status and a potentiometer to vary the pneumatic output. Two LEDs indicate UP or DOWN excursions, with an additional one for power indication.

The EFP* offers four jumper selectable rates of change in the output pressure.

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.

EFP* 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.

Three basic configurations are available:

The **EFP** is a constant bleed interface with branch exhaust response time determined by the bleed orifice size and pressure differentials. If power fails to the EPW, it will continue to bleed through the bleed orifice until branch pressure is zero psig.

The **EFP2** incorporates two valves (one controls exhaust) and does not bleed air at set point. Its 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 EFP2, branch line pressure remains constant if the branch line does not leak air.

FAIL SAFE: The **EFP2FS** is a two valve fail safe model. Its 3-way branch exhaust valve allows exhaust of branch line air on a power failure.

ORDERING INFORMATION

Specify: **EFP**

		G - with 0-30 psi (206.85 kPa) gauge
2	- 1 valve - 0.007" bleed orifice	750 scim supply valve, 41 scim (.6719 liters) constant bleed
	- 2 valve - maintains branch pressure	750 scim supply valve, 750 scim (12.29 liters) exhaust
	2FS - 2 valve - exhausts on power failure	750 scim supply valve, 750 scim (12.29 liters) exhaust

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

SPECIFICATIONS

ELECTRICAL REQUIREMENTS

Power Supply:

Supply Voltage	24 VAC (+/-10%), 50 or 60 Hz, 24 VDC (+10%/- 5%)
Supply Current	50 mA, 150 mA (3.6 VA) on pressure excursions (standard model), 180 mA (4.3 VA) on pressure excursions (fail-safe model).

Digital Input:

Relay contact closure, transistor or TRIAC 9-24 VAC/VDC signal trigger level, impedance 750 ohms nominal

Rates of Change:

Version # 1 Version # 2

45 seconds	30 seconds
1 minute	3 minutes
90 seconds	6 minutes
2 minutes	8 minutes

Other rates of change can be ordered.

Override Switch:

24 VDC/VAC @ 1A maximum, N.O. in AUTO operation
(Optional: N.O. in MAN operation)

Feedback Output:

Feedback Signal Range: 0-5 VDC = Output Span

MECHANICAL REQUIREMENTS

Air Supply:

Supply Pressure	Maximum 28 psig (193.06 kPa), minimum 22 psig (151.69 kPa).
Air Consumption	See <i>Ordering Information</i> .
Output Pressure Range	0-10 psig (0-69 kPa), 0-15 psig (0-103 kPa) or 0-20 psig (138 kPa).
Output Pressure Accuracy	1% full scale at room temperature (above 1 psig or 6.895 kPa). 2% full scale across operating temperature range (above 1 psig or 6.895 kPa).
Air Flow	Supply valves @ 20 psig (138 kPa) main/15 psig (103 kPa) out, 750 scim. Branch Line requires 2 in ³ or 33.78 cm ³ (minimum).
Filtering	Furnished with integral-in-barb 80-100 micron filter (Part # PN004) Optional standard barb (PN002) with external 5 micron in-line filter (PN021).

Connections:

Wire Size	Up to one 14 AWG wire.
Terminal Type	90° plug-in terminal blocks with 5mm pin spacing (optional fixed 45°, captive screw with moving clamp design).
Pneumatic Fitting	Removable brass barbed fittings for Main and Branch in machined aluminum manifold with black anodized finish (blue for FS model). Plugged 1/8-27-FNPT gauge port. Gauge installed at additional cost.
Pneumatic Tubing Size/Type	1/4" O.D. nominal polyethylene.

Dimensions

With gauge 3.125" H (7.938cm) .

Shipping Weight

7.1oz.(187g)-EPW, 9.0oz.(237.15g)-EPW2 8.9oz.(234.5g) EPW2FS.

Mounting

Snap track pre-punched for optional DRC DIN rail mounting kit.

ENVIRONMENTAL REQUIREMENTS

Operating Temperature Range

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