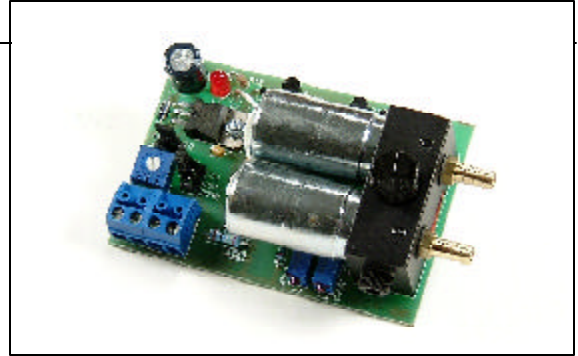




## Analog Current or Voltage Input to Pneumatic Output Dual and Single Valve, Standard and Fail Safe

### FEATURES: See also newer EPC\* and NXP2

- Field selectable analog input ranges
- Analog feedback on branch pressure
- PXP2.3 maintains branch line pressure on power outage, PXP2.3FS (Fail-Safe) exhausts branch to 0 psig
- Closed Loop Control, 1% accuracy at room temperature
- Manual Override
- Not Position Sensitive
- Uses solid state transducer
- 0 to 15 psig Output
- Black anodized machined aluminum manifold with gauge port (blue on Fail-Safe model, gold on 1400 scim model)
- Supplied with integral-in-barb filter



ENC1  
Enclosure

DRC  
DIN Rail  
Adapter



### APPLICATIONS

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

### PRODUCT DESCRIPTION:

The PXP\*.3 is an electric to pneumatic transducer which converts an analog electrical input signal to a proportional pneumatic output. The PXP\*.3 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 PXP\*.3 offers four selectable input ranges of 0 to 5, 0 to 10, 0 to 15 VDC and 0-20 mA that produce a 0 to 15 psig modulating output.

A 0-5 VDC feedback signal indicating the resultant branch line pressure, is also provided. This signal varies linearly with branch pressure (0 volts = 0 psig, 5 volts = 15 psig).

The PXP0.3 is a single valve version that does not bleed or exhaust air. Its operation depends on the pneumatic circuit where it is installed to consume between 14 and 73 standard cubic inches per minute (scim).

The PXP1.3, 5.3, and 7.3 are constant bleed controllers with branch exhaust response time determined by the bleed orifice size and pressure differentials (see page 2 ordering information).

If power fails, the PXP1.3, 5.3, or 7.3 will continue to bleed through the bleed orifice until branch pressure is zero psig.

A 3-way solenoid valve assembly may be used with the bleed type PXP1.3, 5.3, or 7.3 to allow control to fail back to the original local controller if power fails.

The PXP2.3 incorporates two valves and does not use 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 PXP2.3, branch line pressure remains constant if the branch line does not leak air. **FAIL SAFE:** The **PXP2.3FS** is equipped with a N.O. branch exhaust valve which allows exhaust of branch air on power failure.

A manual override (jumper selectable) which controls the output pressure is provided for setup and troubleshooting.

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

See also NXP2 which offers silent operation using a special Nitinol actuated valve, and EPC\* which offers all versions and has other special features that job specifications may require.

## ORDERING INFORMATION

Specify: **PXP** \_\_\_\_\_ with \_\_\_\_\_ **ENC1** Enclosure?

\_\_\_\_\_ **G** - with 0-30 psi gauge

\_\_\_\_\_ **0.3** - 1 valve - no bleed

\_\_\_\_\_ **1.3** - 1 valve - .010" bleed orifice

\_\_\_\_\_ **2.3** - 2 valve - maintains branch pressure

\_\_\_\_\_ **5.3** - 1 valve - .005" bleed orifice

\_\_\_\_\_ **7.3** - 1 valve - .007" bleed orifice

No air consumption - requires downstream bleed

750 scim supply, 73 scim exhaust

750 scim supply, 750 scim exhaust

750 scim supply, 14 scim exhaust

750 scim supply, 41 scim exhaust

Specify: **PXP2.3** \_\_\_\_\_ with \_\_\_\_\_ **ENC1** Enclosure?

\_\_\_\_\_ **LG** - 2 valve - maintains branch pressure, 1400 scim supply, 1400 exhaust

\_\_\_\_\_ **FS** - 2 valve - exhausts on power failure, 750 scim supply, 750 exhaust

\_\_\_\_\_ 0-30 psi gauge

## SPECIFICATIONS

### Electrical Requirements

Power Supply: Voltage

24 VDC (+ 10%/- 5%).

24 VAC (+/- 10%).

Power Supply: Current

160 mA maximum, 200 mA maximum on FS (fail-safe) model.

Input: Range and Impedance

Four selectable ranges:

0 to 5 VDC / 10,000 ohms.

0 to 10 VDC / 10,000 ohms.

0 to 15 VDC / 10,000 ohms.

0 to 20 mA / 250 ohms.

When MAN jumper is selected, varies output from potentiometer.

0 to 5 vdc = 0 to 15 psig.

Feedback: Output Signal Range

### Mechanical Requirements

#### Air Supply

Supply Pressure

Maximum 25 psig, minimum 18 psig.

Air Consumption

See chart under "Ordering Information" above.

#### Output

Pressure Range

0 to 15 psig.

Accuracy

1% full scale at room temperature.

2% full scale across operating temperature range.

Engage with jumper setting.

Manual Override

#### Pneumatic Capacity

Air Flow:

Supply valves @ 20 psig (138 kPa) main/15 (103 kPa) out, 750 scim standard, 1400 scim LG version. Branch line requires 2 cubic inches 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) provides 1400 scim rate (LG version).

#### Connections

Wire Size

Up to one 14 gauge wire per terminal.

Terminal Type

45° or 90° Captive screw, moving clamp design in nickel plated copper alloy, plug-in terminal strip optional.

Pneumatic Fitting Type

Brass barbed fittings for Main and Branch tubing mounted in machined aluminum manifold with black anodized finish (blue manifold for FS model, gold for LG model). 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.

Overall Dimensions mounted in Snap Track

3.75" L x 2.375" W x 1.875" H (3.125" H with gauge)

Weight

PXP1/5/7 - 6.4 oz., PXP2.3 and PXP2.3FS - 8.5 oz. Add an additional 2.3 oz. for a gauge for each model.

Furnished with 2.375" length of 2.25" wide snap track (ENC1 optional).

#### Mounting

### Environmental Requirements

Operating Temperature

32 to 120 deg. F

Storage Temperature Range

-20 to 150 deg F

Operating Humidity Range

5 to 95% non-condensing

**Specifications may change without notice to improve product performance or functionality.**