

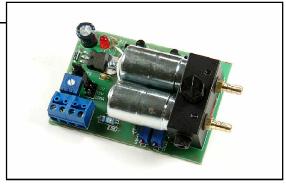
PXP*3



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

FEATURES: See also newer EPC*

- New circuitry for **QUIET** operation for dual valve models
- · Field selectable analog input ranges
- · Analog feedback on branch pressure
- On power outage, PXP2.3 maintains branch line pressure, 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. It's branch exhaust flow and response time are not limited by an internal restrictor and are similar to its load rate.

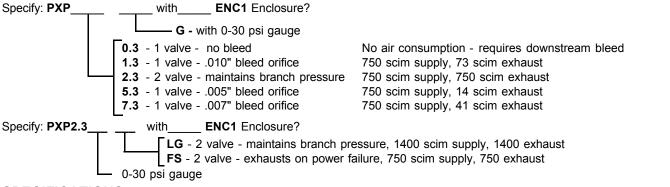
If power fails to the PXP2.3, branch line pressure remains constant if the branch line does not leak air. **FAIL SAFE:** The **PXP2.3FS** is equipped with a N.O. branch exhaust valve which allows exhaust of branch air on power failure.

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 EPC which offers all versions and has other special features that job specifications may require.

ORDERING INFORMATION



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.

Mechanical Requirements

Feedback: Output Signal Range

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.

Manual Override Engage with jumper setting.

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

Weight

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

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

port. Gauge installed at additional cost. 1/4" O.D. nominal (1/8" I.D.) polyethylene.

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

 $\mbox{PXP1/5/7}$ - 6.4 oz., $\mbox{PXP2.3}$ and $\mbox{PXP2.3FS}$ - 8.5 oz. Add an additional

2.3 oz. for a gauge for each model.

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

Environmental Requirements

Pneumatic Tubing Size/Type

Overall Dimensions mounted in Snap Track

Operating Temperature32 to 120 deg. FStorage Temperature Range-20 to 150 deg FOperating Humidity Range5 to 95% non-condensing

EU Commission Directive 2002/95/EC (RoHS) Compliant

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