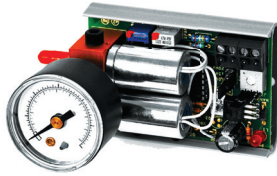




PXP

Analog to Pneumatic Output



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 which convert to a 0 to 15 psig modulating output (See EPC product for 0 to 20 psig outputs). 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 scfm. 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 ordering grid on the next page). 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 three-way solenoid valve assembly may be used with the bleed type PXP1.3, 5.3, or 7.3 to allow control to fall 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. 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. Custom calibration is available upon request for an additional charge. This will speed up installation time for the end user.

Applications: Three-Way Mixing Valve Control, Pilot Positioner Control, Pneumatic Valve & Damper Actuator Control, Fan Vane Control, DDC Control, Above Ceiling Applications (mixing and VAV boxes)

The PXP is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, workaci.com.

PRODUCT SPECIFICATIONS

Supply Voltage:	24 VAC (+/- 10%), 50 or 60Hz, 24 VDC (+10% /-5%)
Supply Current:	300 mAAC, 200mADC Maximum 400mAAC, 200mADC on fail safe models
Input Signal Source (@ Impedance):	0-5 VDC @ 10,000 Ω 0-10 VDC @ 10,000Ω 0-15 VDC @ 10,000Ω 0-20 mA @ 250Ω
Feedback Signal Output Range:	0-5 VDC = Output Span
Output Pressure Range:	Field Calibration Possible: 0 to 15 psig (0-103.421 kPa) maximum
Air Supply Pressure:	Maximum: 25 psig (172.369 kPa) Minimum: 18 psig (124.106 kPa)
Air Consumption:	See Ordering Grid
Output Pressure Accuracy:	1% full scale @ room temperature 2% full scale across operating temperature range
Manual / Auto Override:	MAN function = output can be varied AUTO function = output is controlled from input signal
Air Flow:	Supply valves @ 20 psig (138 kPa) main/15 psig (103 kPa) out, 2300 scfm Branch Line requires 2 in3 or 33.78 cm3 (min.). Branch line min. of 25 feet of 1/4" O.D. poly tubing
Filtering:	Furnished with integral-in-barb 80-100 micron filter (Part # PN004) except for PXP2LG which is furnished with external 5 micron in-line filter (PN021)
Connections:	90° Pluggable Screw Terminal Blocks
Wire Size:	16 (1.31 mm ²) to 26 AWG (0.129 mm ²)
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)
Connections Pneumatic Tubing Size-Type:	1/4" O.D. nominal (1/8" I.D.) polyethylene
Pneumatic Fitting:	Removeable brass barbed fittings for Main and Branch in machined aluminum manifold Plugged 1/8-27-FNPT gauge port Gauge installed at additional cost
Gauge Pressure Range (Gauge Models):	0-30 psig (0-200 kPa)
Gauge Pressure Accuracy (Gauge Models):	± 2.5% Midscale (± 3.5% Full Scale)
Operating Temperature Range:	35 to 120°F (1.7 to 48.9°C)
Operating Humidity Range:	10 to 95% non-condensing
Storage Temperature:	-20 to 150°F (-28.9 to 65.5°C)
Snaptrack Material:	Polyvinyl Chloride (PVC)
Snaptrack Flammability Rating:	UL94 V-0
Product Dimensions:	No Gauge: (L) 3.25" (W) 2.18" (H) 1.87" (82.55 x 55.37 x 47.49 mm) With Gauge: (L) 3.25" (W) 2.18" (H) 2.95" (82.55 x 55.37 x 74.9 mm)
Product Weight:	PXP1.3: 0.40 lbs. (0.1814 Kg) PXP2.3: 0.47 lbs. (0.2126 Kg) PXP1.3G: 0.49 lbs. (0.2211 Kg) PXP2.3G & PXP2.3GFS: 0.59 lbs. (0.2693 Kg)
Agency Approvals:	RoHS2, WEEE





DIMENSIONAL DRAWING

<p>PXP</p>		
<p>Board Only</p>	<p>Snap Track Side View</p>	<p>Snap Track Front View</p>
<p>PXP With Gauge</p>		
<p>Board with Snap Track</p>	<p>Board with Snap Track (Side)</p>	<p>Board with Snap Track (Top)</p>

STANDARD ORDERING

Model # Example: PXP2.3 -OR- 127209

Model #	Item #	Supply	Exhaust	Gauge	Additional Information
PXP0.3	127205	No Air Consumption	----		No Bleed Orifice, Requires Downstream Bleed
PXP0.3G	127206	No Air Consumption	----	•	No Bleed Orifice, Requires Downstream Bleed
PXP1.3	127207	2300 SCIM (37.69 Liters)	73 SCIM (1.196 Liters)		0.010" Bleed Orifice
PXP1.3G	127208	2300 SCIM (37.69 Liters)	73 SCIM (1.196 Liters)	•	0.010" Bleed Orifice
PXP2.3	127209	2300 SCIM (37.69 Liters)	2300 SCIM (37.69 Liters)		Maintains Branch Pressure
PXP2.3G	127213	2300 SCIM (37.69 Liters)	2300 SCIM (37.69 Liters)	•	Maintains Branch Pressure
PXP5.3	127215	2300 SCIM (37.69 Liters)	14 SCIM (0.229 Liters)		0.005" Bleed Orifice
PXP5.3G	127216	2300 SCIM (37.69 Liters)	14 SCIM (0.229 Liters)	•	0.005" Bleed Orifice
PXP7.3	127217	2300 SCIM (37.69 Liters)	41 SCIM (0.671 Liters)		0.007" Bleed Orifice
PXP7.3G	133044	2300 SCIM (37.69 Liters)	41 SCIM (0.671 Liters)	•	0.007" Bleed Orifice
PXP2.3FS	127210	2300 SCIM (37.69 Liters)	2300 SCIM (37.69 Liters)		Exhausts on Power Failure
PXP2.3GFS	127211	2300 SCIM (37.69 Liters)	2300 SCIM (37.69 Liters)	•	Exhausts on Power Failure
PXP2.3LG	127214	2300 SCIM (37.69 Liters)	2300 SCIM (37.69 Liters)	•	Maintains Branch Pressure, High Flow





ACCESSORIES ORDERING

Model # Example: **A/DO008** -OR- **142583**

Model #	Item #	Description
A/DO008	142583	Transient Voltage Suppressor, Bi-directional, 56 VAC/DC, 1500W
A/DRC 2.7 X 2.18	142626	DIN Rail Adapter
A/PN002	136499	10-32 X 1/8" ID, Barb Fitting
A/PN004	110831	80-100 Micron Filter Media in Barb Fitting
A/PN021	112219	In Line 10 Micron Filter, Installs in-between air supply and main barb conneciton
A/PN023	129675	0.005" Replacement Copper Orifice
A/PN024	128100	0.007" Replacement Brass Orifice
A/PN025	128102	0.010" Replacement Silver Orifice
A/PN028	128307	Replacement Gauge
ENC1	102472	20 Gauge Metal Enclosure, Designed to Hold Interfaces Products

