

## **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 scim. The PXP1.3, 5.3, and

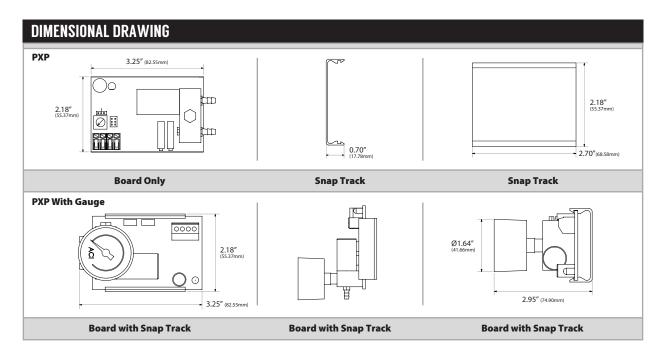
7.3 are constant bleed controllers with branch exhaust response time determined by the bleed orifice size and pressure differentials (see ordering grid on the next page). If power fails, the PXP1.3, 5.3, or 7.3 will continue to bleed through the bleed orifice until branch pressure is zero psig. A three-way 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. 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. 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 website, www.workaci.com.

	21/45/ (420) 52 (21/ 21/05/ 420/ 52)				
Supply Voltage:	24 VAC (+/-10%), 50 or 60Hz, 24 VDC (+10%/- 5%)				
Supply Current:	160 mA maximum, 200 mA 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:	<b>Maximum:</b> 25 psig (172.369 kPa)   <b>Minimum:</b> 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, 750 scim (1400 on LG model)				
	Branch Line requires 2 in $^3$ or 33.78 cm $^3$ (min.). Branch line min. of 25 feet of $1/4^{\prime\prime}$ O.D. poly tubin				
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 mm²) to 26 AWG (0.129 mm²)				
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 Rage:	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:	<b>No Gauge:</b> (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:	<b>PXP1.3:</b> 0.40 lbs. (0.1814 Kg)   <b>PXP2.3</b> : 0.47 lbs. (0.2126 Kg)   <b>PXP1.3G:</b> 0.49 lbs. (0.2211 Kg)				
•	<b>PXP2.3G &amp; PXP2.3GFS:</b> 0.59 lbs. (0.2693 Kg)				
Agency Approvals:	RoHS2, WEEE				





STANDARD ORDERING  Model # Example: PXP0.3 -OR- 12720						
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	750 SCIM (12.29 Liters)	73 SCIM (1.196 Liters)		0.010" Bleed Orifice	
PXP1.3G	127208	750 SCIM (12.29 Liters)	73 SCIM (1.196 Liters)	•	0.010" Bleed Orifice	
PXP2.3	127209	750 SCIM (12.29 Liters)	750 SCIM (12.29 Liters)		Maintains Branch Pressure	
PXP2.3G	127213	750 SCIM (12.29 Liters)	750 SCIM (12.29 Liters)	•	Maintains Branch Pressure	
PXP5.3	127215	750 SCIM (12.29 Liters)	14 SCIM (0.229 Liters)		0.005" Bleed Orifice	
PXP5.3G	127216	750 SCIM (12.29 Liters)	14 SCIM (0.229 Liters)	•	0.005" Bleed Orifice	
PXP7.3	127217	750 SCIM (12.29 Liters)	41 SCIM (0.671 Liters)		0.007" Bleed Orifice	
PXP7.3G	133044	750 SCIM (12.29 Liters)	41 SCIM (0.671 Liters)	•	0.007" Bleed Orifice	
PXP2.3FS	127210	750 SCIM (12.29 Liters)	750 SCIM (12.29 Liters)	[	Exhausts on Power Failure	
PXP2.3GFS	127211	750 SCIM (12.29 Liters)	750 SCIM(12.29 Liters)	•	Exhausts on Power Failure	
PXP2.3LG	127214	1400 SCIM (22.94 Liters)	1400 SCIM (22.94 Liters)	•	Maintains Branch Pressure, High Flow	

ACCESSORIES Model # Example: A/D0008 -OR 142		
Model #	Item #	Description
A/D0008	142583	Transient Voltage Suppressor, Bi-directional, 56 VAC/DC, 1500W
A/DRC 2.7 X 2.18	142626	DIN Rail Adapter Kit
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 connection
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



