PTS4.1

Floating Point to Pneumatic Output

The PTS4.1 converts two digital (increase or decrease) signals from relay contact closures, transistors, or triac inputs into a proportional pneumatic signal of 0-10, 5-15 or 0-15 psig (jumper selectable). The pneumatic output increases when the UP input is on, or decreases when the DOWN input is on. The pneumatic output changes full scale (from minimum to maximum) in 90 seconds with 255 steps of resolution. The PTS4.1's closed loop electronic design will maintain the last commanded pneumatic pressure. An on-board microprocessor measures the signal input and a solid-state pressure transducer measures branch line pressure. The PTS4.1 uses these two values to automatically increase or decrease branch line air pressure. In the event of a power failure, both PTS4.1 valves close, shutting off main air and branch line bleed. If a power brown-out occurs, the PTS4.1 automatically reboots its on-board processor. During a power brown-out, power to the processor on the PTS4.1 is shut down, while the pressure output remains the same. When proper power level is restored, processor automatically powers up and branch pressure output defaults to 0 psig.

Applications: Pneumatic Damper Motor Control, Pneumatic Valve Actuator Control, Compressor Staging, Electric Control of any Pneumatic Actuator

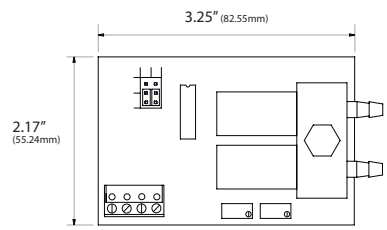
The PTS4.1 is covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI's Sensors & Transmitters catalog or can be found on ACI's website, which is: www.workaci.com.

PRODUCT SPECIFICATIONS

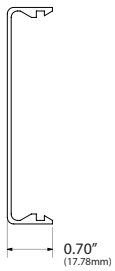
Supply Voltage:	24 VAC +/-10% at terminals | 50 or 60 Hz
Power Consumption:	150 mA (3.6 VA)
Digital Input Signal Source:	Two (2) Relay Contact Closures, Transistors or TRIACs (no accessories required)
Digital Input Signal Trigger Level (@ Impedance):	9-24 VAC @ 750Ω
Rate of Change:	90 Seconds
Air Supply Pressure:	25 psig (172 kPa) maximum, 20 psig (138 kPa) minimum
Output Pressure Range:	0-10 psig (0-68.95 kPa), 5-15 psig (34.47-103.43 kPa), or 0-15 psig (0-103.43 kPa)
Accuracy:	2% @ room temperature, 3% @ full range of operating temperature
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 (min) | Unit requires min. of 25 ft of 1/4" O.D. poly tubing
Filtering:	Furnished with integral-in-barb 80-100 micron filter (Part # PN004)
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:	-10 to 150°F (-23.3 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 55.24 x 47.49 mm) **With Gauge:** (L) 3.69" (W) 2.30" (H) 2.95" (93.60 x 58.42 x 74.9 mm)
Product Weight:	0.61 lbs. (0.276 Kg)
Agency Approvals:	RoHS2, WEEE

DIMENSIONAL DRAWING

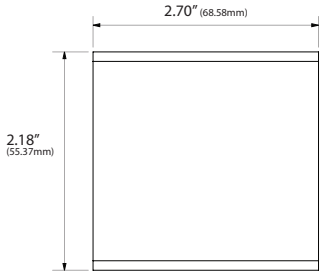
PTS4.1



Board Only

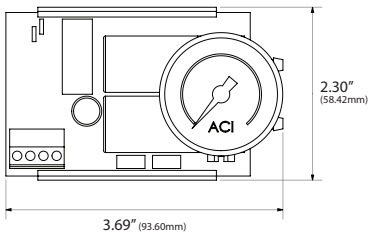


Snap Track

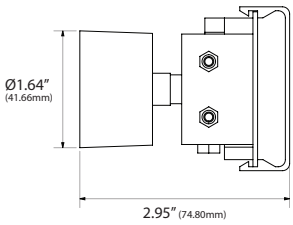


Snap Track

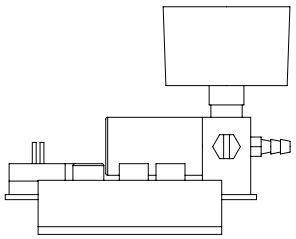
PTS4.1 With Gauge



Board with Snap Track



Board with Snap Track



Board with Snap Track

STANDARD ORDERING

Model # Example: PTS4.1 -OR- 127749

Model #	Item #	Description	Gauge	
PTS4.1	127749	Floating Point to Pneumatic Output		
PTS4.1G	127750	Floating Point to Pneumatic Output, with Gauge	•	

ACCESSORIES

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 Kit
A/PN004	110831	80-100 Micron Filter Media in Barb Fitting
ENC1	102472	20 Gauge Metal Enclosure, Designed to Hold Interfaces Products