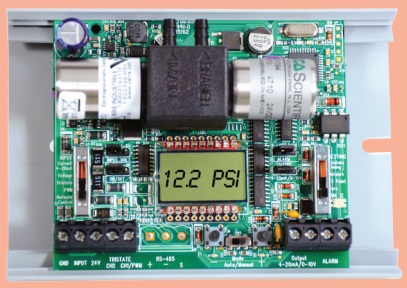
Electropneumatic Transducers

Micro-Controlled With High-Performance, Low-Power Coil Poppet Valve Technology



EP3

DESCRIPTION

The **EP3 Series** combines a microcontroller with high performance, low power coil poppet valve technology to create a system with unparalleled accuracy and proven reliability. The poppet valves used in the EP3 consume no air, eliminating unnecessary air losses in the system and allowing for efficient, long-term operation. The EP3 permits versatility, since all models feature manual override and a tri-state control option. The LCD provides easy visibility and the LED indicators provide visual status of valve operation in manual or automatic mode. All models come with SnapTrack housing and optional covers are available.

APPLICATIONS

- Hospitals
- Schools
- Pneumatic dampers/actuators

FEATURES

- Field-selectable 4-20mA/0-5V/0-10VDC input for application flexibility
- Poppet valve technology for quiet operation
- Manual override with set and hold feature...great for commissioning those leaky systems
- Multi-point calibration; 3-15 psi (5 point calibration) and 0-20 psi (6 point calibration)
- Pressure loss alarm provides a contact closure if the EP3 is unable to achieve the desired output within a fixed length of time
- Failsafe vent solenoids bleed branch pressure on power failure for added safety
- Optional transparent plastic dust cover (AA43) protects units from dust and tampering (required for CE)
- User programmable zero and full scale outputs
- Backlit LCD for local indication of readings...easy to view
- Dual-color LED...assists in trouble shooting
- Tristate and PWM inputs

PRESSURE

SPECIFICATIONS

5 Year Warranty

Input Power	22-30VDC/20-30VAC, 47-63 Hz,150mA max. average, 350mA peak
Control Input	4-20mA/0-5V/0-10VDC; switch-selectable, Tri-State, PWM
Input Impedance	4-20mA, 250 Ω; 0-5V/0-10VDC, 10 kΩ
Manual Override	Digital pushbutton adjust, switch-selectable mode
Alarm Contact	100mA@30VAC/DC (Pressure loss, manual mode, jumper selectable)
Accuracy	1% FS; combined linearity, hysteresis, repeatability @20°C (68°F) ambient
Temperature Coefficient	±0.1%/°C
Operating Environment	10-90% RH noncondensing -4°C to 60°C
SCIM	523 in^3/min @ 45 psi; (8570 cm^3/min @ 310.3 kPa); 333 in^3/min @ 20 psi (5457 cm^3/min @ 137.9 kPa)
Supply Pressure	Min (0.1 psi + user F.S. pressure); Max 45 psig
Control Range	User programmable Zero selectable from 0-25 psi: Full scale 0-25 psi
Pressure Differential	0.1 psig (supply to branch)
Pressure Indication	Electronic, 3-1/2 digit LCD (back-lit)
Minimum Tubing Length	15 feet*
Port Connection	1/8" i.d. poly tubing
Media Connection	Clean, dry air, or inert gas. Do not use with oxygen service

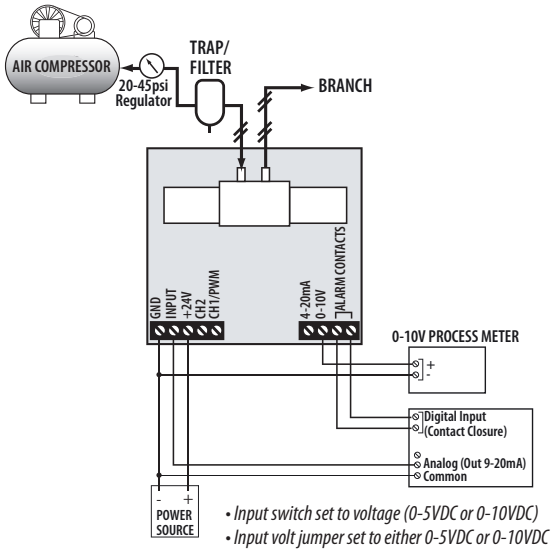
**For shorter tubing runs use AA45 Pneumatic Capacitor*
EMC Conformance: Low voltage directive 2006/95/EC; EMC directive 2004/108/EC.
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper SURGE PROTECTION (EN 61000-6-1:2007 specification requirements).

ATTENTION

EP Series transducers are sold as an open device. Observe handling precautions for static sensitive devices to avoid damage to the circuitry which would not be covered under the factory warranty.

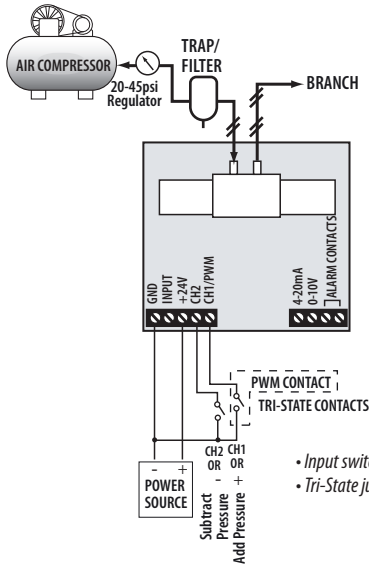
APPLICATION/WIRING DIAGRAMS

Current/Voltage Control



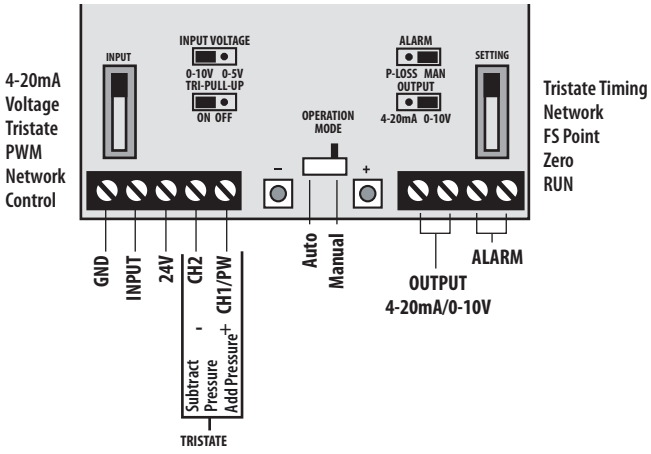
- *Input switch set to voltage (0-5VDC or 0-10VDC)*
- *Input volt jumper set to either 0-5VDC or 0-10VDC*
- *Input switch set to 4-20mA*
- *Output jumper set to 0-10VDC*

Tri-state Control

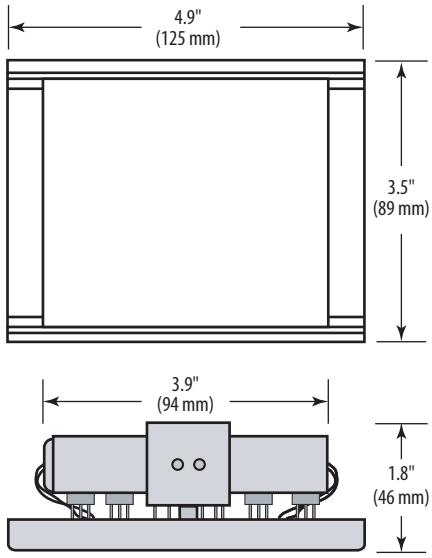


- *Input switch set to "TRI-STATE"*
- *Tri-State jumper set to "ON"*

CONFIGURATION

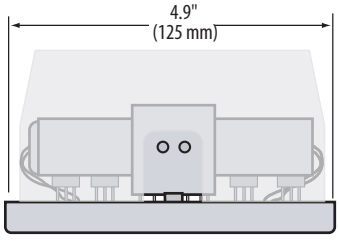


DIMENSIONAL DRAWINGS

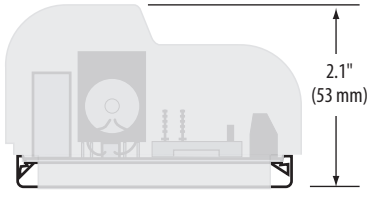


Dust Cover

FRONT VIEW



SIDE VIEW



ORDERING INFORMATION

CE *Available*

Output	Feedback	Failsafe	US or EU	Option
EP3 ☐	3	☐	☐	☐
0 = None **3** = Analog output: 0-10VDC, or 4-20mA, selectable	= Pressure Loss Alarm, or Manual Mode Alarm	**0** = None **1** = Vent on Power Fail	**S** = Standard **C** = CE, includes cover plate	**Blank** = None **2** = EP Cover Plate

Example:

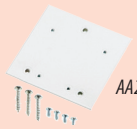
EP | 3 | 3 | 3 | 1 | S | 2 | Option = Cover Plate

ACCESSORIES

Steel Bracket (AA23), Dust cover (AA43), Pneumatic Capacitor (AA45), Triac Adapter (AA49)


AA45


AA43


AA23


AA49

PRESSURE