Electropneumatic Transducers

MICRO-CONTROLLED WITH HIGH-PERFORMANCE, LOW-POWER COIL POPPET VALVE TECHNOLOGY

5 Year Warranty

EP3

Features PWM, tristate, and analog inputs with slide-switch selection and user programmable zero and full scale outputs

EP2

Equipped with jumper selectable control ranges (0-20 psig or 3-15 psig)

The **EP 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 EP Series consume no air, eliminating unnecessary air losses in the system and allowing for efficient, long-term operation. The EP Series permits versatility, since all models feature manual override. 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

EP2 – Versatile and Easy to Use

- 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; 3-15psi (5 point calibration) and 0-20psi (6 point calibration)
- Pressure loss alarm provides a contact closure if the EP 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

EP3 Same Features as EP2 Plus...

- 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

SPECIFICATIONS

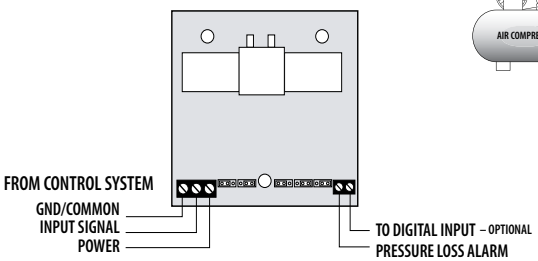
Input Power	**EP2:** 24VAC/DC nominal,30VAC max.; 150mA max. **EP3:** 22-30VDC 20-30VAC, 47-63 Hz.,150mA max. average, 350mA peak
Control Input	**EP2:** 4-20mA/0-5V/0-10VDC; jumper-selectable **EP3:** 4-20mA/0-5V/0-10VDC; switch-selectable, Tri-State, PWM
Input Impedance	4-20mA, 250 ohm; 0-5V/0-10VDC, 10k ohm
Manual Override	**EP2:** Jumper-selectable mode, digital pushbutton adjust **EP3:** Digital pushbutton adjust, switch-selectable mode
Accuracy	**EP2:** 1% FS; combined linearity, hysteresis, repeatability **EP3:** 1% FS; combined linearity, hysteresis, repeatability @20°C (68°F) ambient
Compensated Temperature Range	**EP2:** -4° to 65°C (25° to 140°F)
Temperature Coefficient	**EP2:** ±0.05%/°C **EP3:** ±0.1%/°C
Operating Environment	**EP2:** 10-90% RH, non-condensing **EP3:** 10-90% RH, non-condensing -4°C to 60°C
SCIM	**EP3:** 523 in^3/min @45psi; (8570 cm^3/min @ 310.3kPa); 333 in^3/min @ 20psi (5457 cm^3/min @ 137.9 KPa)
Air Capacity	**EP2:** 523 in^3/min@45 psi (8570cm^3/min@310.3 kPa); 333 in^3/min@20 psi (5456cm^3/min@137.9 kPa)
Supply Pressure	**EP2:** 45 psig max. **EP3:** Min (0.1psi + user F.S. pressure); Max 45psig
Control Range	**EP2:** 0-20 psig or 3-15 psig, jumper-selectable **EP3:** User programable Zero selectable from 0-25psi: Full scale 0-25psi
Pressure Differential	0.1psig (supply to branch)
Pressure Indication	Electronic, 3-1/2 digit LCD (back-lit on EP3 models)
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: EN 61000-6-3:2001 Class B, EN 55022 Class B, EN 61000-6-1:2001
EMC Test Methods: CISPR 22:2005, Class B, IEC 61000-4-2:2001, IEC 61000-4-3:1998; IEC 61000-4-4:1995, IEC 61000-4-5:1995, IEC 61000-4-6:1997, IEC 61000-4-8:2001
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper SURGE PROTECTION (EN 61000-6-1:2001 specification requirements).

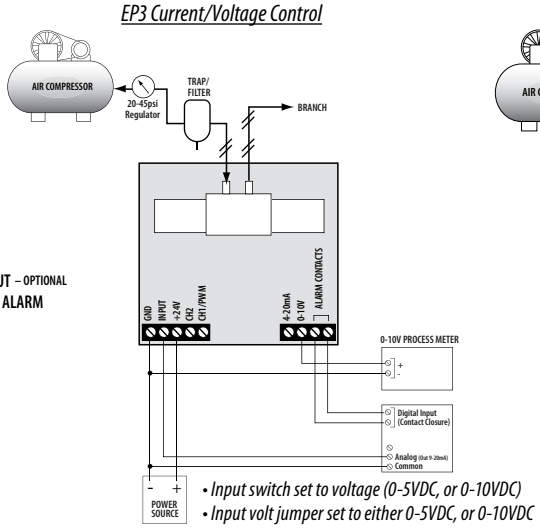
EP Series transducers are sold as an open device. Observe handling precautions for static sensitive devices to avoid damage to the circuitry which would not be covered under the factory warranty.

APPLICATION/WIRING DIAGRAMS

EP2

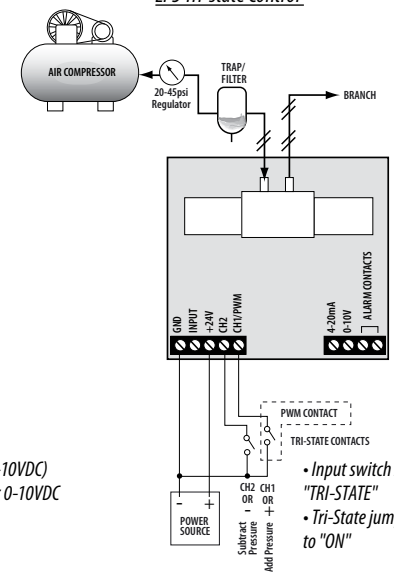


EP3 Current/Voltage Control



- *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*

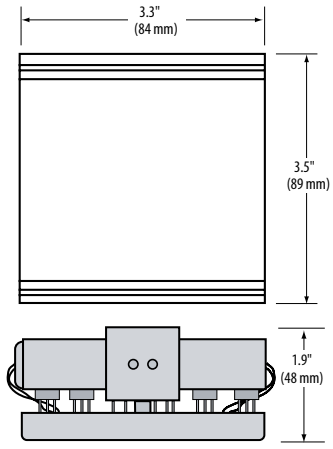
EP3 Tri-state Control



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

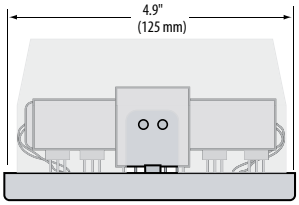
DIMENSIONAL DRAWINGS

EP2/EP3

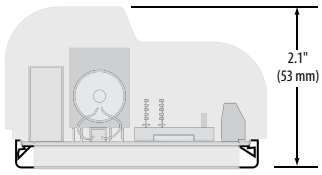


Dust Cover

FRONT VIEW

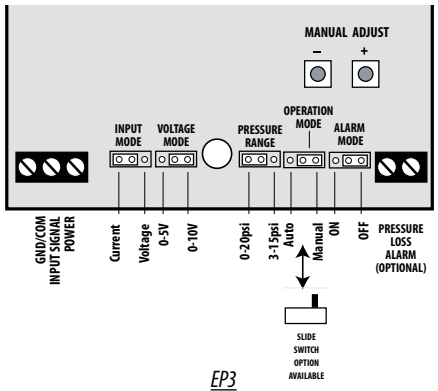


SIDE VIEW

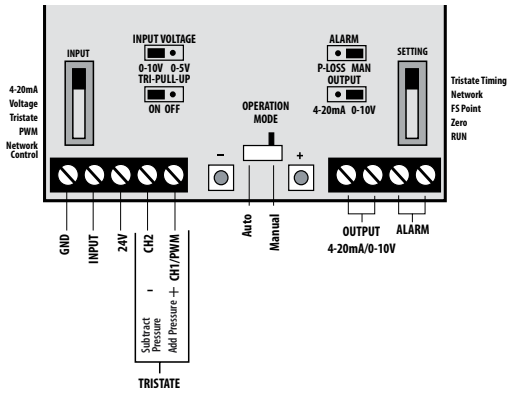


CONFIGURATION

EP2



EP3



ORDERING INFORMATION

CE available

EP2

Output	Feedback	Failsafe	US or EU	Option
1 = Selectable 3-15/0-20 psi	**0** = None **1** = Pressure Loss Alarm **2** = Manual Mode Alarm	**0** = None **1** = Vent on Power Fail	**S** = Standard **C** = CE, includes cover plate	**Blank** = none **1** = Slide Switch/ Auto/Manual **2** = EP Cover Plate **3** = Slide Switch/ Auto Manual plus EP cover plate

Example: EP 2 1 0 0 S 1 Option = Slide Switch Auto Manual Mode

EP3

Output	Feedback	Failsafe	US or EU	Option
0 = None **3** = Analog output: 0-10VDC, or 4-20mA, selectable	**3** = 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, Dust cover, Pneumatic Capacitor...see page 218.