

MicroAir IV

Ultra Low Pressure Air Controller with 0-10 volt input for controlling by PLC or other device and for high speed switching for bump/taper tubing for use on plastic tubing extrusion lines.

Application: Initially designed for bump and taper tubing, the MicroAir IV accepts a logic input to select one of two set points. A zero to 10 VDC analog input to provide any pressure from near zero to full scale *instantaneously*. For bump or taper tubing the MicroAir IV allows for a pressure to be switched quickly or varied in a controlled way. It can be connected to your PLC or any controller with the 0-10 volt input and with an added output option can have closed-loop control.



Operation: The MicroAir IV is connected to normal factory air. It regulates to the pressure set by a 0 to 10 volt input, or to one of the two manually set pressures by expelling surplus air. A precision voice-coil linear motor (no spring) with viscostatic damping ensures optimum speed and stability.

Operational Modes:

- Dual State mode – using logic signal to select which of two pressure set points is active. The Hi and Lo set points are adjusted with front panel knobs.
- Linear mode – A zero to 10 volt input controls pressure and the adjustable set points are ignored.
- Manual Setting: Set by turning the left side knob/potentiometer only.

Performance: The MicroAir IV responds to a step of 50% of full scale in less than 0.1 second (typically 20 msec) and maintains an accurate pressure at flow rates between zero and a maximum SCFH depending on the full scale range.

Power: 110/220 VAC 50/60Hz Dual selectable voltage input 110 or 220 volts



RANGES (check out Range page):

- Various ranges from 0 – 3 inches of water or maximum 0 – 5 psi
- Lowest ranges can regulate below 1" of water with highly accurate precision
- Normal ranges: 0-3" of water, 0-5" of water, 0-10" of water, 0-15" of water, 0-30" of water, 0 – 3 psi or 0 – 5 psi
- The range can be easily changed with a Range Change Kit if needed.

Options Available:

- Digital LED pressure readout for more precision and easier reading. It has better than a 0.1 inch of water resolution.
- OUTPUT Options for closed-loop control:
 - Voltage Pressure output – 0-10 VDC.
 - Current output – 4-20 ma output
- Stand available for shipping in the U.S.A.



Dual MicroAir IV



MultiAir 3-channel
MicroAir IV



MultiAir 3-channel
MicroAir IV with Digital



MultiAir 4-channel
MicroAir IV with Digital

Standard Features:

- Magnehelic pressure gauge (4 1/2") for output pressure display
- Dual speed Red and Green up/down buttons and limit light
- Leftside in / Rightside out
- Stainless steel enclosure
- Single channel unit – 12" x 10" x 6"; Dual channel -16" x 10" x 6"; 3-channel 22" x 10" x 6"; and 4-channel 28" x 10" x 6"
- Damping fluid is used to ensure stable, hysteresis free operation. Fluid does not come in contact with air pressure and does not evaporate.
- Unit must be kept vertical.
- Air connections – 1/4" NPT male fittings – locate close to the Die
- WARRANTY – 3 years
- MADE in the U.S.A.