MicroAir



Ultra Low Air Pressure Regulator and Controllers for Plastic Tubing Extrusion

Precise stable air pressure is a critical component in the extrusion of small plastic tubes. A precision internal air adjustment is needed for sizing and structure in the free extrusion of tubing. The outside diameter can be maintained for a wide range of varying flow rates such as when a cut is made or the tubing coiled. MicroAirs provide air support through the pin inside the die to maintain the tubing's shape and prevent a collapse during the extrusion process. Used to make single-lumen, multi-lumen, balloon, taper, catheters, automotive and medical tubing.

IMPROVEMENTS have recently been made for even more precision and accuracy in the internal components of each model.

Features:

- Regulates air pressure to a set point
- Controls outside diameter
- Precision output pressure display
- Ultra Low ranges:

0 - 3" of water

0 - 5" of water

0 - 15" of water

0 - 30" of water

0 - 50" of water

0 - 3 psi

0 - 5 psi maximum Others available upon request. Also in mbar, kpa

- Stainless steel enclosure
- Hysteresis free regulating action
- Manual control and auto control models
- High speed model that accepts a 0-10 volt input for control
- Multiple channels for multi-lumen tubing.
- STAND now available

Models Available:

MicroAir I

Manual model controlled by a single knob (30 turn adjustment) Single, Dual and 3-channel units



Accepts contact closure inputs. Up/Down manual control dual speed push buttons on the front or motorized Up/Down remote control ready for solid state or mechanical relays by internal screw terminals.

Dual selectable voltage input 110 or 220 volt. Zero to Full Scale in approximately 2 minutes. Options: Digital display, output, and remote Single, Dual and 3-channel units

MicroAir IV

Dual-state using a logic signal or linear mode using a 0-10 volt input to control pressure by extrusion line equipment. Instantaneous switching between pressures

for use in manufacturing bump and tapered tubing. A precision voice-coil linear motor with viscostic damping ensures optimum speed and stability. Control knobs for Hi and Low set points. Responds to a step of 50% of full scale in less the 0.1 second.

Options: Digital display and outputs. Single, Dual, 3-channel and 4-channel











"Supplying over 35 years of quality and reliability to the extrusion industry"

Ultra Low Air Pressure Regulators and Controllers for Manufacturers of Extruded Tubing

Model	Case Dimensions	Functionality	Power Inputs	Control Inputs	Options
MicroAir I MAI	12" x 10"x 6"	30-turn manual knob	N/A	N/A	∙Stand
Dual MicroAir I DMAI	16" x 10" x 6"				
3-Channel MicroAir I MU3MAI	20" x 10" x 6"				
MicroAir II MAII	12" x 10" x 6"	*Up/Down Manual control dual speed- push buttons * Motorized Up/ Down remote con- trol ready for solid state or mechani- cal relays	110/220 VAC 50/60 Hz Selectable 3 conductor grounded IDC pow- er cord (supplied)	3 Internal screw Terminals Up/ Down / Gnd Up/Down Inputs Open: Inactive Close to Gnd: Active	•Additional (LED) Digital pressure readout Voltage pressure output — 0-10 VDC •Current pressure output— 4-20 ma •Stand •* Remote control unit
Dual MicroAir II DMAII	15" x 10" x 6"				
MultiAir 3-channel MicroAir II MU3MAII	21" x 12" x 6"				
MicroAir IV MAIV	12" x 10" x 6"	*High speed motorized Up/Down remote control ready for 0-10 VDC signal. *10 turn Manual Control potentiometer. * Hi speed motorized dual pressure remote switching.	110/220 VAC 50/60 Hz Selectable 3 conductor grounded IDC power cord (supplied)	2 Internal screw terminals +/- +Input Analog control 0-10 VDC Dual State Control Close to—or 0 to +1 VDC: High Open or +4 to +24 VDC: Low	•Additional (LED) Digital pressure readout.
Dual MicroAir IV DMAIV	15" x 10" x 6"				
MultiAir 3-channel MicroAir IV MU3MAIV	22" x 10" x 6"				Voltage pressure output— 0-10 VDC Current pressure output— 4-20 ma
MultiAir 4-channel MicroAir IV MU4MAIV	28" x 10" x 6"				•Stand

RANGES for Air Output (Inch we = inch of water column	Max Output Flow Rate SCFH = Standard Cubic Feet per hour			
2 inch wc	5 SCFH			
5 inch wc	11 SCFH			
15 inch wc	25 SCFH			
30 inch wc	40 SCFH			
3 psi	70 SCFH			
5 psi	90 SCFH			
Other pressure readouts/ranges available				

All MicroAir units:

- Have a 4 1/2" magnehelic meter for pressure readout.
- Need to be located close to the Die with 1/4" NPT male fittings.
- Connect Leftside in / Rightside out on single units or bottom connections on Dual and MultiAirs.
- Use four 5/16" diameter holes for essential vertical mounting.
- Air connections—plant air regulated down to 50 psi for single units and 55 psi for MultiAirs.
- WARRANTY: 3 years
- MADE IN The U.S.A.





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