

# MicroAir

## Ultra Low Air Pressure Regulator and Controllers

For precise control of tubing outside diameter during extrusion, the MicroAir line of air pressure regulators and controllers regulates air pressure to an exact set point. Pressure is maintained for widely varying flow rates such as when a cut is made, etc. The “force balance regulator” provides instantaneous response to changes in flow rate and maintains a set pressure with flow rates from near zero up to the rated maximum.



### Types

MicroAir I  
MicroAir II  
MicroAir I  
Dual MicroAir I  
Dual MicroAir II  
Dual MicroAir IV  
MultiAir 3-channel  
MicroAir I  
MultiAir 3-channel  
MicroAir II  
MultiAir 3-channel  
MicroAir IV  
MultiAir 4-channel  
MicroAir IV

### Options available on MicroAir II & IV units:

Digital Display  
Voltage output  
4-20 ma output  
Contact closure (MAIV)

### Features:

- Regulates air pressure to a set point
- Controls outside diameter
- Precision output pressure display
- Ultra Low ranges:
  - 0 - 2" of water
  - 0 - 5" of water
  - 0 - 15" of water
  - 0 - 30" of water
  - 0 - 3 psi
  - 0 - 5 psiOthers available upon request.
- Stainless steel enclosure
- Hysteresis free regulating action
- Manual control and auto control models
- High speed model for bump tubing
- Multiple channels for multi-lumen tubing.

### Models Available:

#### MicroAir I

Manual model controlled by a single knob (30 turn adjustment)

#### MicroAir II

Accepts contact closure inputs. Up/Down manual control 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.

#### MicroAir IV

Designed for the use in manufacturing bump and tapered tubing where the pressure must be instantaneously switched or varied in a controlled way. 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 (typically 20-30 msec). Dual-state using a logic signal or Linear mode using a 0-10 volt input to control pressure.



**ole** On Line Controls Inc.

*"Supplying over 25 years of quality and reliability to the extrusion industry"*



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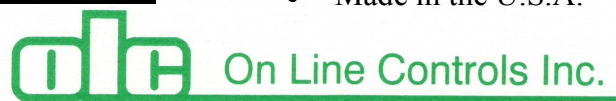
# Ultra Low Air Pressure Regulators and Controllers for Manufacturers of Extruded Tubing

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	N/A
Dual MicroAir I DMAI	16.5" x 10.5" x 6"				
3-Channel MicroAir I MU3MAI	23" x 12" x 6"				
MicroAir II MAII	12" x 10" x 6"	*Up/Down Manual control push buttons * Motorized Up/Down remote control ready for solid state or mechanical relays	110/220 VAC 50/60 Hz	3 Internal screw Terminals Up/ Down / Gnd	*Additional (LED) Digital pressure readout *Voltage pressure output 1-6, 0-5 or 0-10 VDC * 4-20 ma pressure output
Dual MicroAir II DMAII	16.5" x 10.5" x 6"		Selectable 3 conductor grounded IDC power cord (supplied)	Up/Down Inputs Open: Inactive Close to Gnd: Active	
MultiAir 3-channel MicroAir II MU3MAII	23" x 12" x 6"				
MicroAir IV MAIV	12" x 10" x 6"	*10 turn manual Control potentiometer *Hi speed motorized Up/Down remote control ready for 0-10 VDC signal * Hi speed motorized dual pressure remote switching	110/220 VAC 50/60 Hz	2 Internal screw terminals +/-	*Additional (LED) Digital pressure readout *Voltage pressure output 1-6, 0-5 or 0-10 VDC * 4-20 ma pressure output  ** NEW Up/Down Contact Closure (making it an all-in-one unit)
Dual MicroAir IV DMAIV	16" x 12" x 6"			+Input Analog control 0-10 VDC	
MultiAir 3-channel MicroAir IV MU3MAIV	22" x 13" x 6"			Dual State Control Close to—or 0 to +1 VDC: High Open or +4 to +24 VDC: Low	
MultiAir 4-channel MicroAir IV MU4MAIV	29" x 13" x 6"				

RANGES for Air Output (Inch wc = 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 ranges available, including metric	

### 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 some Dual and MultiAirs.
- Use four 5/16" diameter holes for essential vertical mounting.
- Air connections—plant air regulated down to 45 psi for single units and 55 psi for Dual and MultiAirs.
- WARRANTY: 3 years
- Made in the U.S.A.



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