

MicroAir

AIR PRESSURE
REGULATORS
AND
CONTROLLERS
FOR USE
DURING
PLASTIC TUBING
EXTRUSION

Stable, precise, constant,
low pressure



ole On Line Controls Inc.

697 Hartford Tpke Ste E
Shrewsbury, MA 01545-4103 USA
Tel: 978-562-5353
Email: info@onlinecontrols.com

WEBSITE: www.onlinecontrols.com

The Importance of controlling Internal Air Pressure During Tubing Extrusion

Controlling the internal air pressure is an integral part of the tubing extrusion process. Used for two reasons, sizing and structure in some of the smallest, most complex tubes, and with the tightest tolerances tubing in the industry. To control the air pressure, a constant stream of air, injected via the die into the tubing is required to prevent the collapse of the partially molten tube, keep it round, and to control OD, ID, sizing, and shape. A stable diameter depends on maintaining a constant pressure even when varying flow rates of air through the tubing or when it is cut or spooled.




MicroAir I

MicroAir II

MicroAir IV

All MicroAir units feature:

- SIZING BY PRECISION INTERNAL AIR ADJUSTMENT – CONTROLS DIAMETER AND STRUCTURE OF TUBING
- REGULATES AIR PRESSURE TO A SET POINT
- PRECISION OUTPUT PRESSURE DISPLAY --LARGE EASY TO READ PRESSURE METER (4 ½ ")
- STAINLESS STEEL ENCLOSURE
- HYSTERESIS FREE REGULATING ACTION
- AIR CONNECTION – PLANT AIR REGULATED DOWN TO 50 PSI—LEFT SIDE IN – RIGHT SIDE OUT
- WITH FOUR 5/16" DIAMETER HOLES FOR ESSENTIAL VERTICAL MOUNTING
- NO RECALIBRATION REQUIRED- NO NEED TO RETURN FOR RECALIBRATION
- NEED TO BE LOCATED CLOSE TO THE DIE WITH 1/4" NPT MALE FITTINGS
-  CERTIFIED FOR SHIPMENT TO EUROPE
- WARRANTY: 3 YEARS
- MADE IN THE U.S.A.

FOR QUOTATION:

EMAIL: olc@onlinecontrols.com CALL: 978-562-5353

MicroAir I

Ultra Low Air Pressure Regulator Manual Model (MAI)



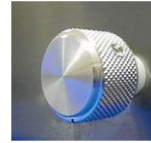
MultiAir 3-channel MicroAir I



Dual MicroAir I

FEATURES:

- 30 TURN MANUAL PRECISE ADJUSTMENT KNOB



- REGULATES AIR PRESSURE TO A SET POINT
- CONTROLS OUTSIDE DIAMETER
- SIZING BY PRECISION INTERNAL AIR ADJUSTMENT
- MODELS AVAILABLE IN
SINGLE (MAI) (12" X 10" X 6"),
DUAL (DMAI) (16" X 10" X 6") AND
3-CHANNEL (MU3MAI) (20" X 10" X 6")
FOR MULTILUMEN TUBING
- SPECIFY RANGE WHEN ORDERING
- OPTIONAL STAND WITH LOCKING CASTERS AVAILABLE (USA ONLY)

MicroAir units are by far the most common unit used for medical tubing processing with great industry acceptance. The new low range units the regulation is extremely precise with great resolution capabilities." Bob Bessemer of NOVATEC

FOR QUOTATION:

EMAIL: olc@onlinecontrols.com CALL: 978-562-5353

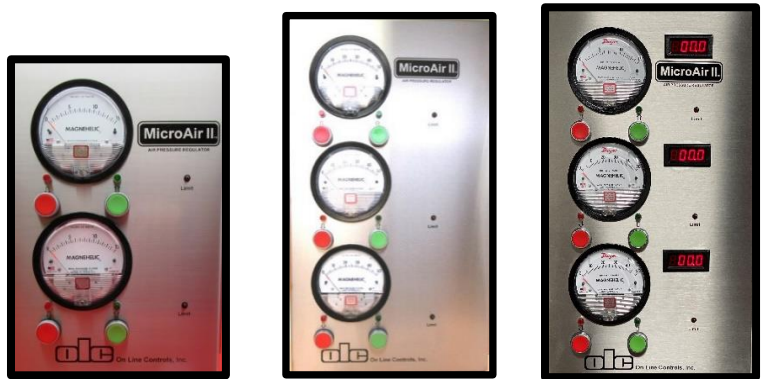
FEATURES:

- ACCEPTS CONTACT CLOSURE INPUTS—
MOTORIZED UP/DOWN REMOTE
CONTROL READY FOR SOLID STATE OR
MECHANICAL RELAYS BY INTERNAL
SCREW TERMINALS (UP/DOWN/GND)
- UP/DOWN MANUAL CONTROL DUAL
SPEED PUSH BUTTONS
- MOTORIZED UP/DOWN REMOTE
CONTROL READY FOR SOLID STATE
PRECISION
- POWER INPUTS –
110/220 VAC 50/60 HZ
- MODELS AVAILABLE IN
SINGLE (MAII) (12" X 10" X 6"),
DUAL (DMAII) (15" X 10" X 6") AND
3-CHANNEL (MU3MAII) (21" X 12" X 6")
- SPECIFY RANGE WHEN ORDERING

OPTIONS AVAILABLE:

- DIGITAL (LED) DISPLAY PRESSURE
READOUT IN
"INCHES OF WATER"
- PRESSURE OUTPUT OPTIONS
CURRENT 0-10 VOLT OR
VOLTAGE 4-20 MA
- REMOTE CONTROL UNIT WITH 100'
CABLE - DIGITAL READOUT
- STAND WITH CASTERS (USA ONLY)

MicroAir II Ultra Low Air Pressure Controller Model: MAII



Dual MicroAir II MultiAir 3-channel MicroAir II w/digital



MicroAir II with Remote

FOR QUOTATION:

EMAIL: olc@onlinecontrols.com CALL: 978-562-5353

MicroAir IV
High Speed Programmable switching for
bump and taper tubing; and
0-10 volt input Control
MODEL: MAIV



Dual MicroAir IV

3-channel MicroAir IV with Digital



4-channel MicroAir IV

MultiAir 4-channel MicroAir IV w/digital

FEATURES:

- A THREE-IN-ONE UNIT
- INSTANTANEOUS SWITCHING BETWEEN TWO PRESSURES FOR BUMP OR TAPER TUBING
- INTERNAL SWITCH DISABLES FRONT CONTROLS FOR 0-10 VOLT REMOTE CONTROL VIA PLC OR OTHER DEVICE
- 10-turn potentiometer knob for full manual control
- POWER INPUTS –110/220 VAC 50/60 HZ -- SELECTABLE 3 CONDUCTOR GROUNDED IDC POWER CORD
- MODELS AVAILABLE IN SINGLE (MAIV) (12" X 10" X 6"), DUAL (DMAIV) (15" X 10" X 6") AND 3-CHANNEL (MU3MAIV) (22" X 10" X 6") 4-CHANNEL (MU4MAIV) (28" X 10" X 6")
- SPECIFY RANGE WHEN ORDERING.

OPTIONS AVAILABLE:

- DIGITAL (LED) DISPLAY PRESSURE READOUT IN "INCHES OF WATER"
- PRESSURE OUTPUT OPTIONS: CURRENT 0-10 VOLT OR VOLTAGE 4-20 MA
- STAND WITH CASTERS (USA ONLY)

FOR QUOTATION:

EMAIL: olc@onlinecontrols.com CALL: 978-562-5353

ULTRA LOW RANGES

Ranges Available for MicroAir units

It is recommended the pressure required on the tubing extrusion line be in the middle of the range/meter on your MicroAir unit.

Magnehelic meter ranges available on MicroAir units:

PSI	Inches of water
	0 – 2" *
	0 – 3" *
	0 – 5" *
	0 – 10" *
	0 – 15"
0 – 1 psi	0 – 30"
	0 – 50"
	0 – 80"
0 – 3 psi	0 – 100"
0 – 5 psi	0 – 150"



Also available in “kilopascal”, “millibar”, “mm of water column” and “ounces per square inch”.

Info:

1 PSI = 27.68” of water = 6.894 kilopascal = 68.947 millibar
 5 PSI = 138.399” of water = 34.473 kilopascal = 344.737 millibar

Digital displays can only read in “Inches of water” and some kPa and mbar ranges.

* Digital displays can have two decimal places in the low ranges below 10” of water.



***A range needs to be specified on your purchase order for your MicroAir unit.
 All Dual and Multi-channel units FOR MULTI-LUMEN TUBING
 can have a different range on each channel.***

Our MicroAirs are reliable, stable, precise and can hold pressures down below 1” of water (0.036 psi) using our 0-2” of water or 0-3” of water range. All regulators will lose some precision below 10% of full scale; therefore; it is recommended that your required range be in the middle of the meter for better stability.



New Air Pump for MicroAir



Product Specifications

- External Air Pump for single channel MicroAir units for ranges up to 0-60" of water
- Quiet operation
- Low power consumption, and starting current
- Vibration Free
- Oil-less contamination free design
- Long life
- Automatic pressure limitation
- Easy to service
- Thermal protection
- Over pressurization protection
- C.E. compliant and U.L. listed
- 4.2 CFM Max Air Flow
- 80 Liters per minute
- 3.6 psi Max Continuous Operating Pressure
- 12VAC, 60Hz, 1.6A, 71 Watts
- 36 dBA @ 1 meter
- Dimensions: 9.3" x 7.1"W x 7.8"H
- 2-year warranty

FOR QUOTATION:

EMAIL: olc@onlinecontrols.com CALL: 978-562-5353

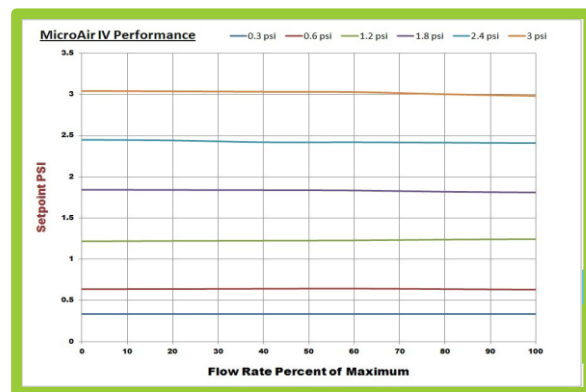
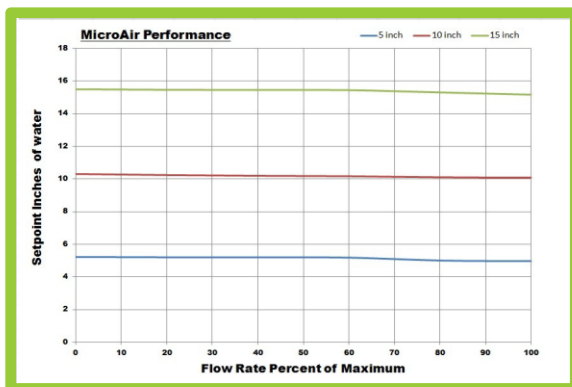
STAND FOR MICROAIR UNITS

SPECIFICATIONS

MicroAir units are the industry standard, known for their precision, repeatability and stability. Units with full scale less than 1 psi (0-30" of water) have the best precision.

- * 60" H (5') Stand with handle
- * Base is 23" wide and 8"H
- * 4 locking casters (125mm)
- * Color Traffic White
- * Can hold 2 single units or any of the Dual, 3- channel or 4-channel models.
- * Ships in USA only

Flow Output	The maximum volume of air, which can be produced, varies according to the units output pressure. Selected pressures are listed below, for all others please consult the factory. SCFH=Standard Cubic Feet per hour <table border="1"> <thead> <tr> <th>Range Output</th> <th>Maximum Output</th> </tr> </thead> <tbody> <tr> <td>5" of water</td> <td>10 SCFH</td> </tr> <tr> <td>15" of water</td> <td>25 SCFH</td> </tr> <tr> <td>30" of water</td> <td>40 SCFH</td> </tr> <tr> <td>3 psi</td> <td>70 SCFH</td> </tr> <tr> <td>5 psi</td> <td>90 SCFH</td> </tr> </tbody> </table>	Range Output	Maximum Output	5" of water	10 SCFH	15" of water	25 SCFH	30" of water	40 SCFH	3 psi	70 SCFH	5 psi	90 SCFH
Range Output	Maximum Output												
5" of water	10 SCFH												
15" of water	25 SCFH												
30" of water	40 SCFH												
3 psi	70 SCFH												
5 psi	90 SCFH												
Accuracy	Flow changes of 50% effect the pressure of by less than +/-0.2% of full scale for low ranges and +/- 0.5% of full scale for higher psi units												
Stability of regulator:	<+/- 0.1% for 30 inches of water and below <+/- 0.2% for psi												
Regulator Pressure Repeatability:	+/-0.2% of full scale for low ranges +/- 0.3% for 3 and 5 psi												
Pressure Display Resolution:	Magnehelic meter +/- 2% of full scale Digital Display LED: +/- 0.1% of full scale below 60" of water (.01" of water) +/- 0.3% of full scale above 3 psi (.03 psi)												
Damping Oil	All units come with a bottle of silicone oil for damping with clear ventilated oil cup. Oil does not come in contact with your plant air at any time and does not evaporate.												



FOR QUOTATION:

EMAIL: olc@onlinecontrols.com CALL: 978-562-5353