# MD3100 Analog Electronic Regulator

MARSH MEDICAL

Compact yet powerful, the **MD3100 Analog Electronic Regulators** are meticulously designed for medical applications. These small electropneumatic regulators control pressure with a remarkable accuracy of +/-0.5% FS. Convenient screw terminal wiring and front-facing jumper selection simplify command input configuration, while the output can be finetuned with a small screwdriver. Two electrical outputs enable direct monitoring of output pressure from the 0-10V AO terminal and unit operation from the TTL terminal. The MD3100 Series offers a small footprint, easy adjustments, and minimal air consumption, ensuring precision and reliability. With a wide variety of output pressure options and the ability to be O2 clean, it's an ideal choice for numerous medical device applications.

## **FEATURES**

- Second loop feedback
- On/Off operation
- Analog or logic output

#### FOCUS MARKETS/APPLICATIONS

- Low flow processes
- Vacuum control
- Neurodiagnostic Equipment
- Small Animal Anesthesia Systems

### **COMPETITIVE ADVANTAGES**

- Small footprint
- Economical
- 0.5% accuracy full scale
- Output pressure monitoring: 0-10V
- Unit status monitoring: ON/OFF
- Analog circuit (NO firmware)
- Easy output adjustments
- 0-10V or 4-20mA command signal
- Minimal air consumption at steady state





#### **TECHNICAL DATA**

Series	MD3100	
ELECTRICAL INPUTS		
Supply Voltage	15 - 24VDC (12VDC option)	
Standby Supply Current	80mA	
Maximum Supply Current	250mA	
E/P Control	0-10V, 10K OHMS	
I/P Control	4-20mA, 250 OHMS	
ELECTRICAL OUTPUTS		
Monitor Output	0-10V	
Logic Output	TTL	
PNEUMATIC INPUTS		
Supply Pressure	Max. Output PSIG (BAR)	Max. Supply PSIG (BAR)
	Up to 5 (0.35)	20 (1.4)
	>5 to 15 (0.35-1.03)	30 (2.1)
	>15 to 30 (1.03-2.1)	60 (4.1)
	>30 to 100 (2.1-6.9)	165 (11.4)
	>100 to 150 (6.9-10.3)	200 (13.8)
	>150 to 300 (10.3-20.7)	350 (24.1)
	>300 to 600 (20.7-41.4)	650 (44.8)
PNEUMATIC OUTPUTS		
Full-Scale Atomospheric Pressure Ranges	PSIG	BAR
	1, 5, 15, 30, 100, 150, 300, 500, 600	0.07, 0.35, 1.03, 2.07, 6.9, 10.34, 20.68, 34.47, 68.95
Vacuum Pressure Ranges	30″ Hg, 30 PSIA, 150 PSIA (2.1 BAR, 10.3 BAR)	
Forward Flow Capacity	1.25 SCFM (35.4 lpm)	
Exhaust Flow Capacity	1.25 SCFM (35.4 lpm)	
ENVIRONMENTAL		
Operating Temperature	32 to 141°F (0-60°C)	
Media-Wetted Materials	Aluminum, copper alloys, nickel, buna-n, silicon, 316SS	
Recommended Accessories	Manifold, Power Supply, Control Knob, Remote Pressure Sensor, External Volume Booster	

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