

Products Designed and Engineered for The BIOTECH Industry

Model 10 O₂ Regulator



Specifications

Flow Capacity: SCFM (m³/HR) Supply = 100 psig	40 (68)
Exhaust Capacity: SCFM (m³/HR) Downstream Pressure 5 psig above 20 psig setpoint	5.5 (9.4)
Sensitivity: Inch/WC (cm)	0.125 (0.32)
Supply Pressure Effect: psig, [BAR], (kPa) For Supply Change: 100 psig	<0.1, [<.007], (<0.7)
Supply Pressure Maximum: psig, [BAR], (kPa)	150, [10.0], (1000)
Ambient Temperature	-40°F to +150°F

Features

- Hard Epoxy Coated Exterior
- Stainless Trim
- Handles High Supply Pressure
- High Precision Pressure Control
- Accurately Holds Set Point
- **Biotech Unit available with Z20135 suffix**

Model 50 Polymer Regulator



Specifications

Flow Capacity: SCFM (m³/HR) Supply = 120 psig	10 (17.0)
Exhaust Capacity: SCFM (m³/HR) Downstream Pressure 15 psig	2 (3.4)
Sensitivity: Inch/WC (cm)	5 (12.7)
Supply Pressure Effect: psig, [BAR], (kPa) For Supply Change: 10 psig	<0.1, [<.007], (<0.7)
Supply Pressure Maximum: psig, [BAR], (kPa)	150, [10.0], (1000)
Ambient Temperature	0°F to +160°F

Features

- Compact Size
- Lightweight
- Handles High Supply Pressure
- High Precision Pressure Control
- Polymer Construction for Corrosive Resistance

Model 4500A High Flow No Bleed Design Booster



Specifications

Flow Capacity: SCFM (m³/HR) Supply = 100 psig	150 (255)
Exhaust Capacity: SCFM (m³/HR) Downstream Pressure 5 psig above 20 psig setpoint	40 (65.2)
Sensitivity: Inch/WC (cm)	1.0 to 3.0 (2.54 to 7.62) Varies with ratio
Supply Pressure Effect: psig, [BAR], (kPa)	<0.1 to 0.3 [.007 to .021] (0.7 to 2.1) Varies with ratio
Supply Pressure Maximum: psig, [BAR], (kPa)	250, [17], (1700)

Features

- High output flow for faster downstream pressure
- Can be serviced while mounted
- Separate control chamber eliminates hunting or buzzing

Model T7800 Transducers



Specifications

Flow Capacity: SCFM (m³/HR) Supply = 120 psig	9 (15.3)
Exhaust Capacity: SCFM (m³/HR) Downstream Pressure 5 psig above 20 psig setpoint	2 (3.4)
Output Pressure: 6 Ranges	psig 3-15, 0-120 [BAR] [0.2-1.0], [8.0] (kPa) (20-100), (0-800)
Supply Pressure: psig, [BAR], (kPa) Varies with unit	20-150, [1.5-10], (150-1000)

Features

- Compact Size
- Stability regardless of vibration or position
- Field Reversible and split range capable for versatile operation



FAIRCHILD
precision pneumatic & motion control



Instrumentation & Process Control Solutions for the
Biotech Industries

Fairchild leads the way in Instrumentation and Control products from research applications all the way through patient treatment products.

Our dedicated base of products meets and exceeds the need of even the toughest application with:

- Fast Response to Input Pressure Changes
- High Accuracy
- High Supply Pressure
- Precise Pressure Control
- High Sensitivity



LABORATORY

In laboratory applications, such as a Glove Box, maintaining the desired mixture of gases at specific pressures is critical, as is the rapid filling or evacuation of the chamber. Here, the Fairchild Model 10 Pressure or Vacuum Regulator is used to maintain the chamber environment and operating pressure or vacuum. When high flow and quick response or evacuation is needed, the Fairchild 4500A Volume Booster is incorporated into the system.



RESEARCH

State of the art test equipment, such as that employed to develop or test protein crystallization or nanotechnology structures rely upon Fairchild products. The T7800 Electro-Pneumatic Transducer is often used in this equipment because it is a highly accurate yet versatile transducer capable of maintaining the tight pressure control necessary to create uniform wall sections and structures for these operations.

ANALYSIS

Whether used in Genetic research or other analytical applications, Fairchild's Regulators and transducers play a vital role in research equipment. The Model 10 Pressure Regulator, in standard or Oxygen Service configuration, is often selected for precision pressure control. Where the envelope is tight yet high performance is demanded, the Model 50 Precision Polymer Regulator is used for accurate pressure control.



DIAGNOSTIC

Fairchild products are widely used in medical diagnostic equipment. For example, in applications for doppler, photo and pneumo-plethysmographs as well as other standard peripheral vascular tests, the Model 20 Volume Booster is called upon to increase flow through the equipment to provide quick response and enhanced ability to continuously monitor the patient.



MEDICAL DEVICES

In hospital and surgical settings, Fairchild products are hard at work behind the scenes. Our Model 50 Miniature Precision Regulator is used in heart pumps and other respiratory equipment for accurate pressure control. The polymer Model 50 is the best choice because it is immune to most fluids and gaseous materials, as well as its compact, lightweight and high performance characteristics.



PATIENT TREATMENT

In both in-patient and out-patient treatment areas, Fairchild Products are popular engineering selections. For example, hyperbaric chambers rely on the combination of a T7800 Transducer and a 4500A Volume Booster for accurate control with quick response, facilitated by the sophisticated yet simple T7800 electronics and the high flow capability of the 4500A Booster.

