

# Model 100

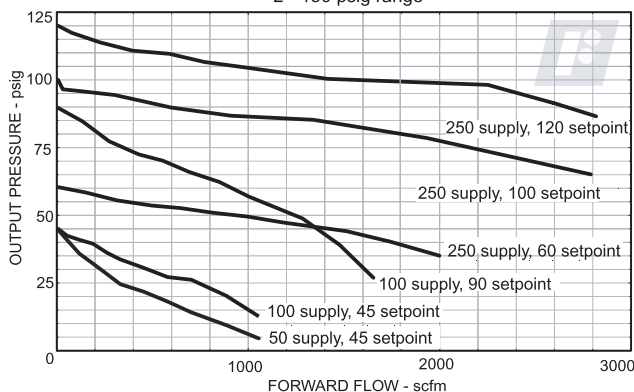


precision pneumatic & motion control

## High Flow Pressure Regulator



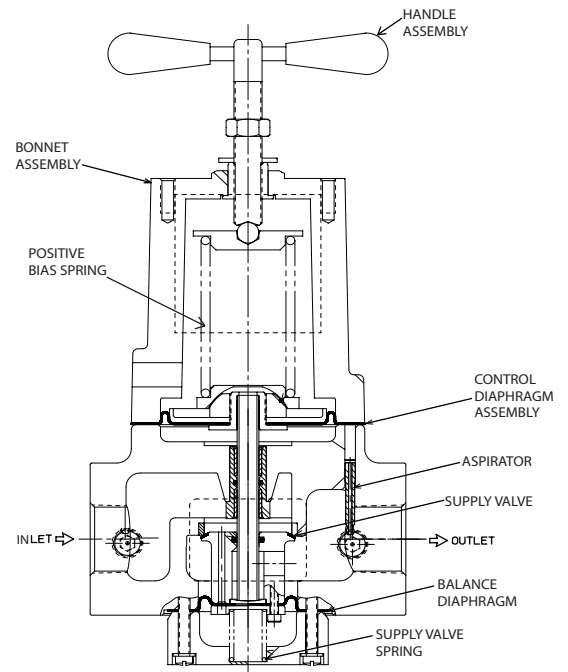
Fairchild Industrial Product Company  
2 - 150 psig range



### Operating Principles

The Model 100 High Flow Pressure Regulator is designed for use in control systems requiring unusually high flow capacities. Like many of the Fairchild regulators, the compensating action of the inner valve assembly of the Model 100 allows complete stabilization of downstream pressure.

This high quality unit, which operates as efficiently on shop air as on dry instrument air, offers unusual versatility and economy. The Model 100 is capable of providing precise control of set point and good sensitivity under high flow conditions, and is the ideal choice for many demanding applications, including main header regulator control, large nip roll loading, and clutch brake operation.

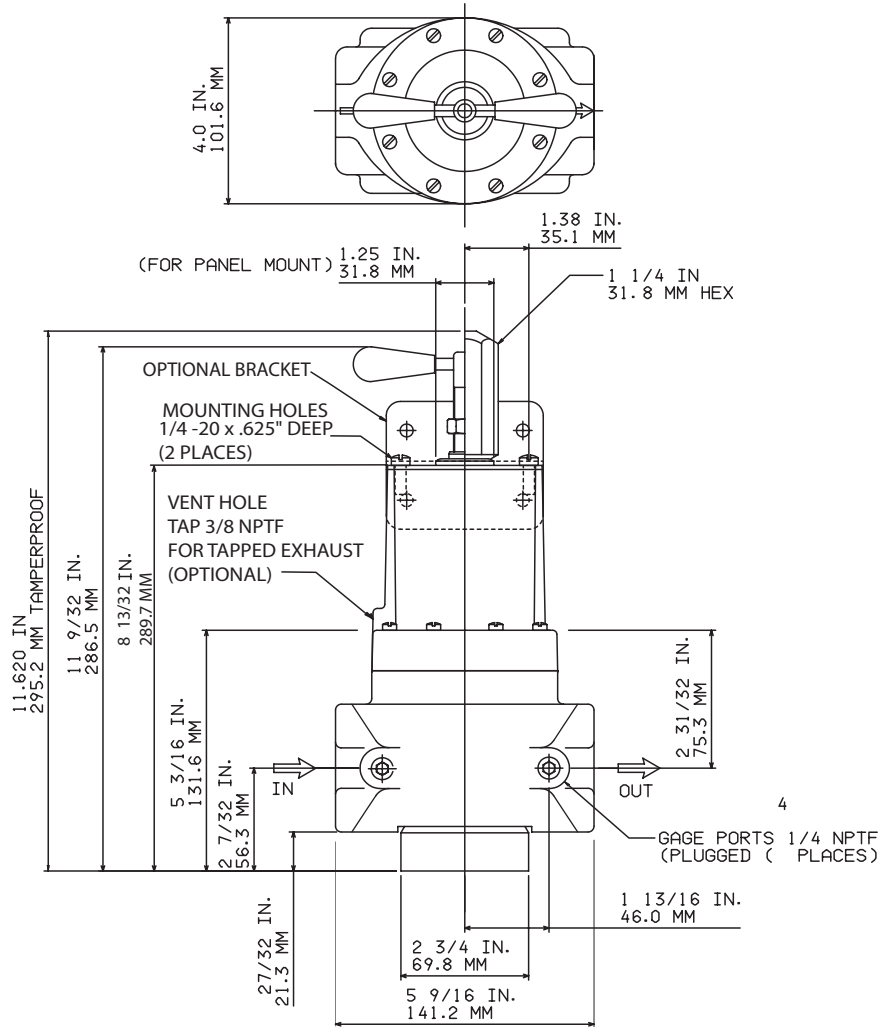


### Cross Section Model 100 Regulator Detail Drawing

### General Information

- Can be set within 1/2" (1.27 cm) of water. Responds to equally minute changes in downstream pressure.
- Venturi-type aspirator tube to aid stability to minimize downstream pressure droop under flowing conditions.
- Balanced supply valve to minimize effect of supply pressure variation.
- Control Chamber isolates the control diaphragm.
- Operates equally well on shop air or clean, dry instrument air.
- May be serviced and maintained without removal from line.
- Mounting Bracket available

## Outline Dimensions



## Specifications

### Flow Capacity

In excess of 1500 SCFM (2550 m<sup>3</sup>/HR)  
(100 psig, [7.0 BAR], (700 kPa) supply, 1 1/2" NPT Conn.  
40 psig, [2.8 BAR], (280 kPa) setpoint

### Exhaust Capacity

44 SCFM (75 m<sup>3</sup>/HR) for downstream pressure  
5 psig, [.35 BAR], (35 kPa) above 20 psig set pressure

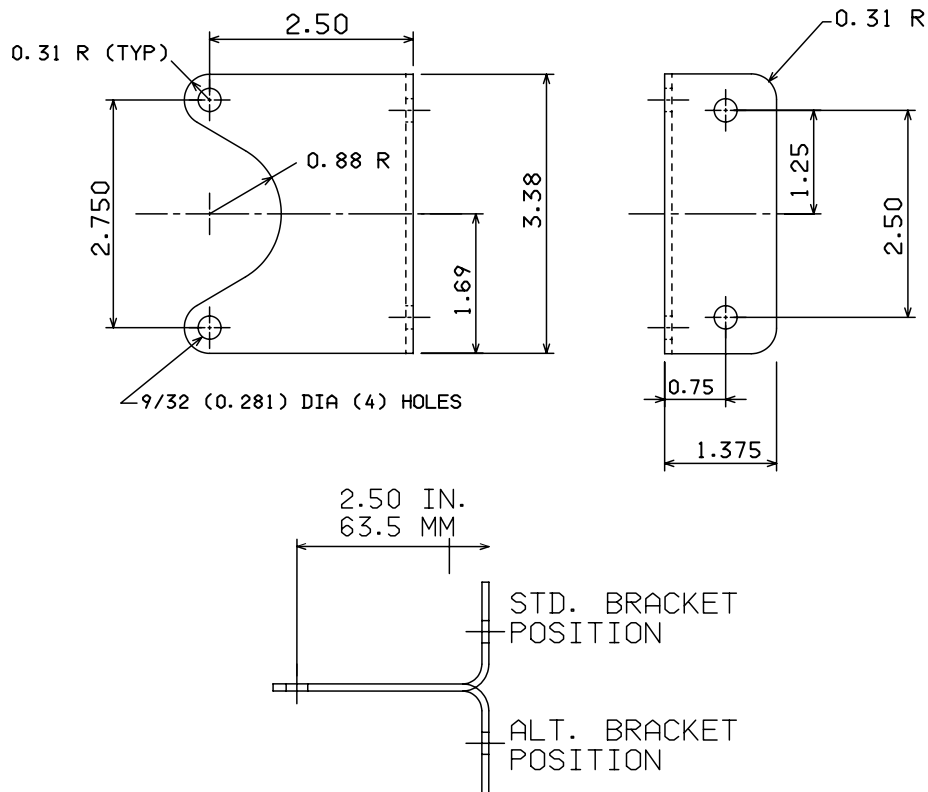
### Maximum Supply Pressure

250 psig, [17.0 BAR], (1700 kPa)

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## Mounting Bracket

Part Number: 10308 (sold separately)



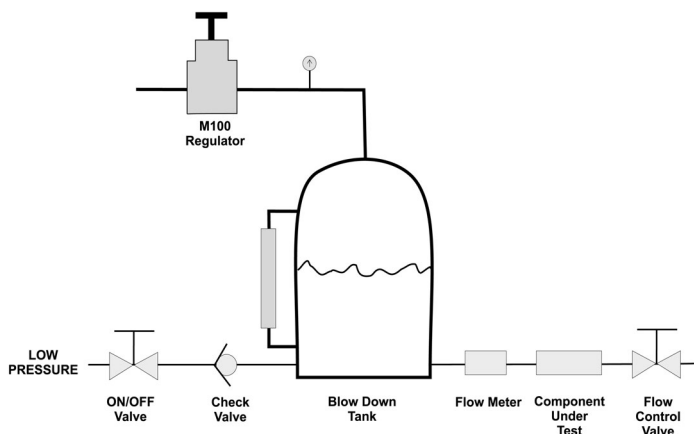
## Specifications

Sensitivity	0.5" (1.27 cm) Water Column
Supply Pressure Effect	Less than 0.1 psig, [.007 BAR], (.7 kPa) per 100 psig, [7.0 BAR], (700 kPa) change
Ambient Temperature Limit	-40°F to +200°F (-40°C to +93.3°C)

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## Typical Application

A Model 100 Regulator is used to pressurize a water storage tank which supplies water to a test stand run. Water supply pressure to test stand must be adjustable and, when set to the desired value, must remain stable and at a nearly constant value. When a pressure drop to a lower pressure level setting is required, the Model 100 must exhaust the air pressure in the tank as quickly as possible to avoid unnecessary delay awaiting tank pressure to assume the lower pressure setting.



## Service Information

A Service Kit is available for the Model 100. Please see the *Fairchild Model 100 High Flow Pressure Regulator Installation, Operation and Maintenance Instructions*, IS-10000100.

## Catalog Information

<b>Catalog Number</b>	<b>1 0 0</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Pressure Range</b>				
<b>psig</b>	<b>[BAR]</b>	<b>(kPa)</b>		
0-10	[0-0.7]	(0-70) . . . . .	2	
0.5-30	[0.035-2]	(3.5-200) . . . .	3	
1-60	[0.07-4]	(7-400) . . . . .	4	
2-100	[0.14-7]	(14-700) . . . .	5	
2-150	[0.14-10]	(14-1000) . . .	6	
<b>Pipe Size</b>				
1" NPT . . . . .			08	
1 1/2" NPT . . . . .			12	
<b>Options</b>				
Tapped Exhaust . . . . .				E
Non-Relieving . . . . .				N
Tamper Proof . . . . .				T

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