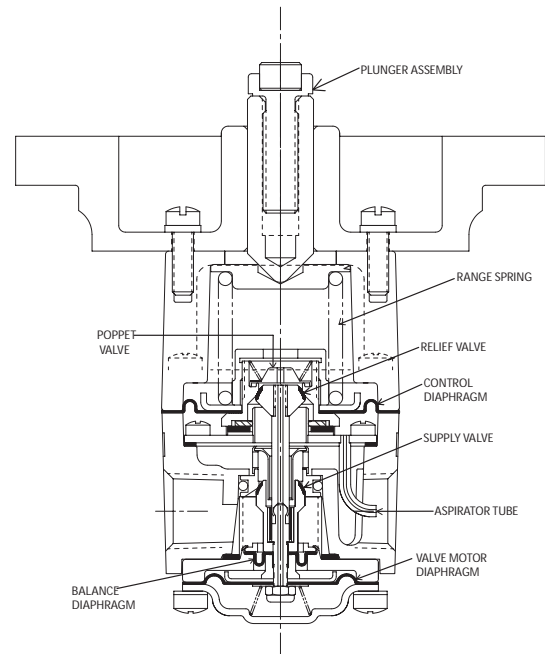
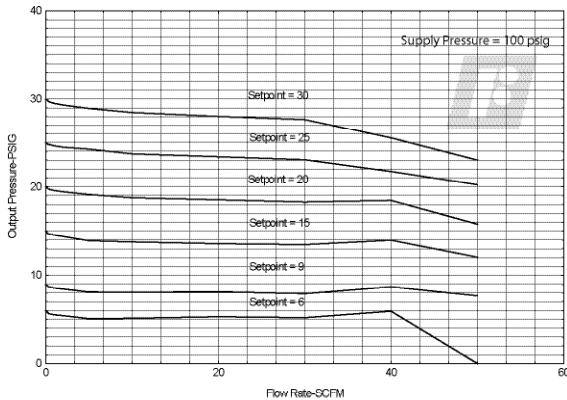


# Model 2800 Plunger Regulator



Flow Characteristics  
Fairchild Model 2832



## Operating Principles

The Model 2800 Plunger Regulator is designed for applications requiring rapid changes in set pressure. This precision device provides excellent sensitivity with high forward and reverse flows. The plunger design allows more rapid set point adjustment over the pressure range of the unit than conventional control knob models.

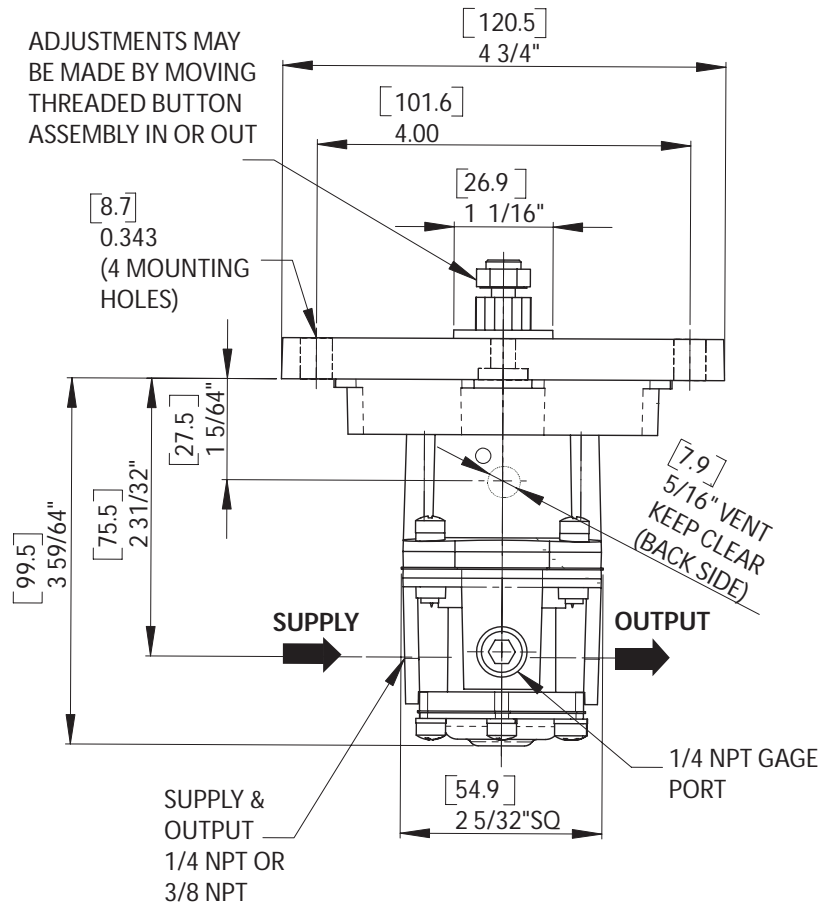
The Model 2800 is recommended for use in a variety of applications where rapid pressure changes are required, including control stations and test panels, and in construction machinery and industrial or oil rig control equipment.

## Cross Section Model 2800 Detail Drawing

## General Information

- Regulator is sensitive to 1/2" Water Column which permits use in precision applications.
- Balanced Supply Valve minimizes the effect of supply pressure variation.
- Aspirator Tube minimizes downstream pressure droop under flow conditions.
- Soft Supply and Exhaust Seats minimize air consumption.
- Flow of up to 50 SCFM with 100 psig Supply allows use in applications with high flow requirements.
- Separate Control Chamber isolates the diaphragm from the main flow, eliminating hunting and buzzing.
- Unit construction permits servicing without removing from line.
- Short Plunger Stroke Over full pressure range allows rapid change in pressure for small mechanical movement.

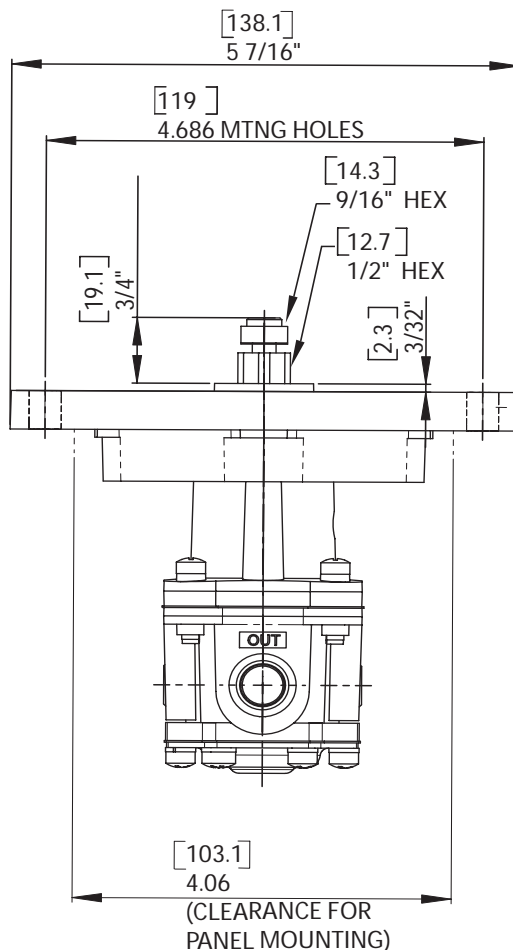
## Outline Dimensions



## Specifications

Flow Capacity	50 SCFM (85 m <sup>3</sup> /HR) (100 psig, [7.0 BAR], (700 kPa) supply, 20 psig [1.5 BAR], (150 kPa) set)
Exhaust Capacity	8 SCFM (13.6 m <sup>3</sup> /HR) (Downstream pressure 5 psig, [0.35 BAR], (35 kPa) above set pressure)
Supply Pressure	250 psig, [17.0 BAR], (1700 kPa) Maximum
Sensitivity	1/2" (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	-40°F to +200°F (-40°C to +93.3°C)

## Outline Dimensions



## Specifications

### Materials of Construction

#### Regulator

Body ..... Zinc  
 Trim ..... Zinc Plated Steel, Aluminum, Brass  
 Diaphragms ..... Buna N and Dacron

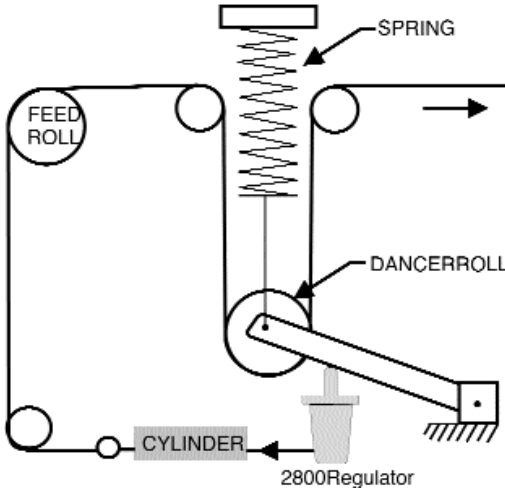
#### Mounting Plate Assembly

Base ..... Aluminum Alloy  
 Plunger ..... Steel

psig	Range [BAR]	(kPa)	Plunger Travel	Thrust at Max. Range
1/2-10	[0.03-0.7]	(3-70)	.431 ± 10%	20# ± 10%
1/2-30	[0.03-2.0]	(3-200)	.470 ± 10%	62# ± 10%
1-60	[0.1-4.0]	(10-400)	.418 ± 10%	124# ± 10%
2-150	[0.15-10.0]	(15-1000)	.346 ± 10%	311# ± 10%

## Typical Application

In this application, the Model 2800 is actuated by the dancer roll to control web tension.



## Installation

A service kit is available for the Model 2800 Regulator. Please refer to the *Fairchild Model 2800 Regulator Installation, Operation and Maintenance Instructions*, IS-10002800.

## Catalog Information

**Catalog Number**

**2 8**

**Pressure Range**

psig	[BAR]	(kPa)
0.5-10	[0.03-0.7]	(3 -70)
0.5-30	[0.03-2.0]	(3 -200)
1-60	[0.07-4.0]	(7-400)
2-150	[0.15-10]	(15-1000)

2  
3  
4  
6

**Pipe Size**

1/4" NPT .....	2
3/8" NPT .....	3



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