



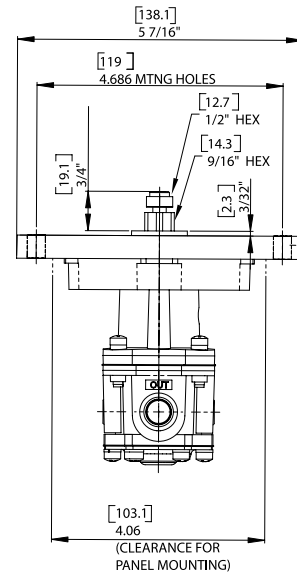
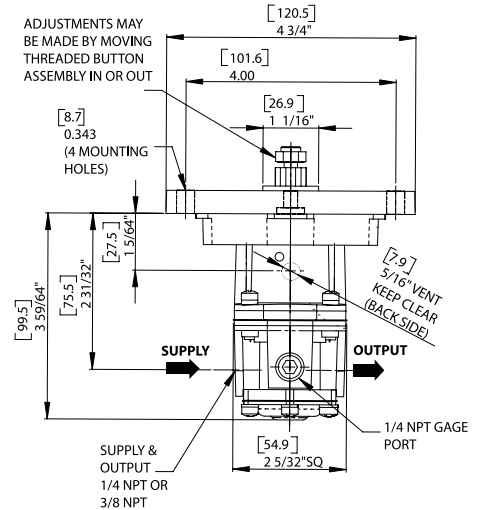
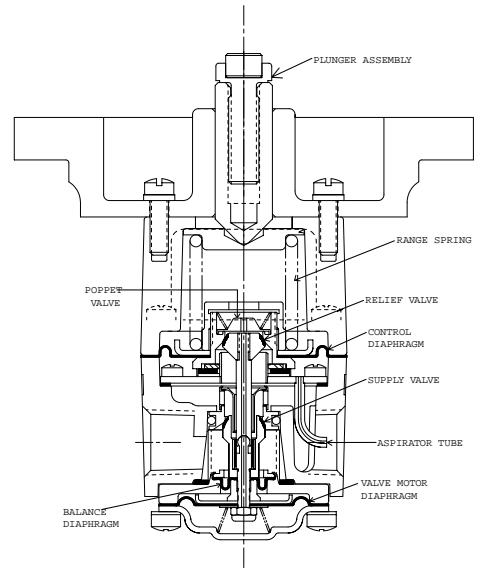
### Features

- 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.

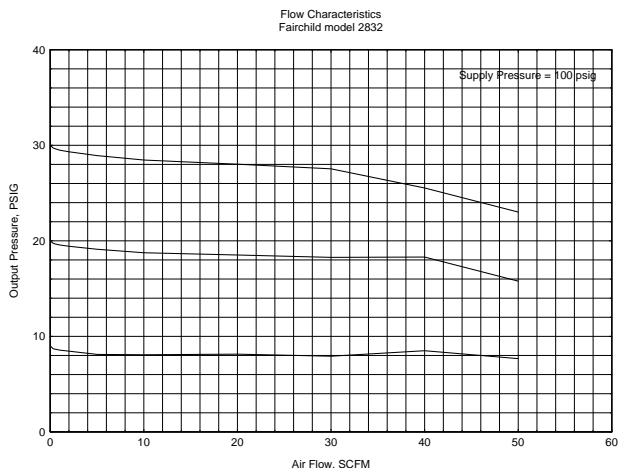
### Operating Principles

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.



**Technical Information**



**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) setpoint)

**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

**Supply Pressure Effect**

Less than 0.1 psig, [.007 BAR], (.7 kPa) per 100 psig, [7.0 BAR], (700 kPa) change

**Sensitivity**

1/2" (1.27 cm) Water Column

**Ambient Temperature**

-40°F to +200°F, (-40°C to +93.3°C)

**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%

**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

**Installation**

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