

Model  
66



The Model 66 Stainless Steel Regulator is designed for corrosive environments and extreme temperatures.

## Features

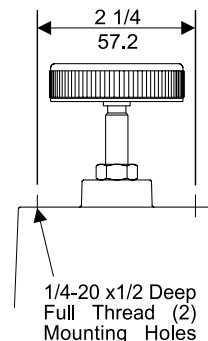
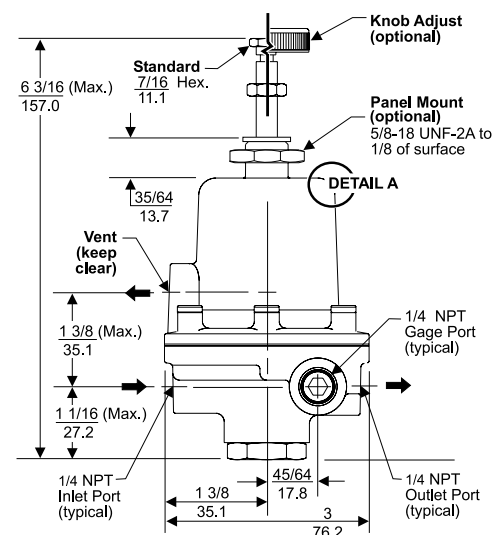
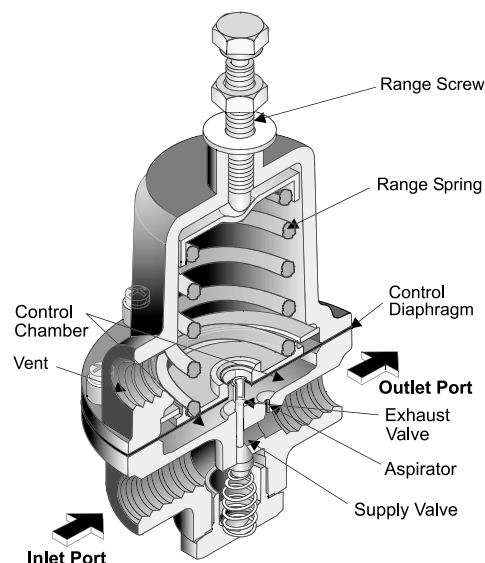
- Large Control Diaphragm area for increased sensitivity.
- Aspirator design compensates downstream pressure droop under flow conditions.
- Viton Elastomers are compatible with corrosive materials and environments.
- A separate Control Chamber isolates the diaphragm from the main flow to eliminate hunting and buzzing.
- Line or Panel Mounting provides flexibility for installation.

## Operating Principles

When you adjust the Range Screw to a specific setpoint, the Range Spring exerts a downward force against the top of the Control Diaphragm. This downward force opens the Supply Valve. Output pressure flows through the Outlet Port and the Aspirator Tube to the Control Chamber where it creates an upward force on the bottom of the Control Diaphragm.

When the setpoint is reached, the force of the Range Spring that acts on the top of the Control Diaphragm balances with the force of output pressure that acts on the bottom of the Control Diaphragm and closes the Supply Valve.

When the output pressure increases above the setpoint, the Diaphragm Assembly moves upward to close the Supply Valve and open the Exhaust Valve. Output pressure exhausts through the Vent on the side of the unit until it reaches the setpoint.



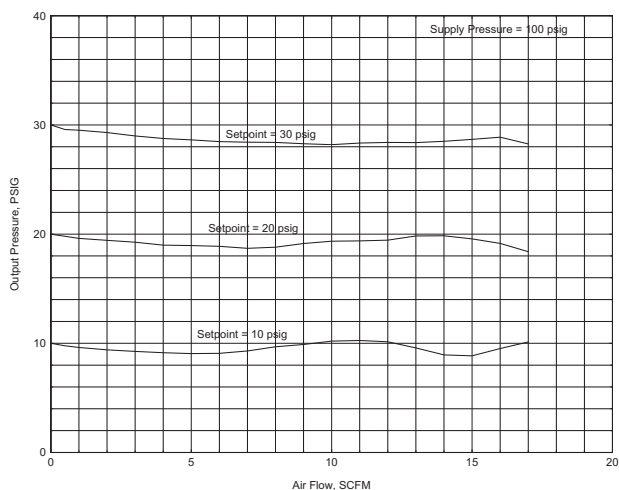
### Detail A

NOTE: Mounting Holes used for Non-Relieving Option with Aluminum Bonnet Only

Non-Relieving (optional)

**Technical Information**

Flow Characteristics  
Fairchild Model 66232



**Specifications**

**Supply Pressure**

500 psig, [35 BAR], (3500 kPa) Maximum

**Flow Capacity**

17 SCFM (28.9 m<sup>3</sup>/HR) @ 100 psig, [7.0 BAR], (700 kPa) supply and 20 psig, [1.5 BAR], (150 kPa) setpoint

**Exhaust Capacity**

1 SCFM (1.7 m<sup>3</sup>/HR) where downstream pressure is 5 psig, [.35 BAR], (35 kPa) above 20 psig, [1.5 BAR], (150 kPa) setpoint

**Supply Pressure Effect**

Less than 0.1 psig, [.007 BAR], (0.7 kPa) for 25 psig, [1.7 BAR], (170 kPa) change in supply pressure

**Sensitivity**

1" (2.54 cm) Water Column

**Ambient Temperature**

-20°F to +300°F, (-28°C to 149°C)

**Materials of Construction**

Body and Housing ..... Stainless Steel  
Diaphragms ..... Viton (Fluorocarbon) with  
..... Teflon on control side  
Trim ..... Stainless Steel and Teflon

**Catalog Information**

**Catalog Number** 6 6 2

**Pressure Range**

psig	[BAR]	(kPa)	
0-10	[0-0.70]	(0-70)	2
0.5-30	[0.03-2]	(3-200)	3
1-60	[0.10-4]	(10-400)	4
2-100	[0.15-7]	(15-700)	5
2-150	[0.15-10]	(15-1000)	6

**Pipe Size**

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

**Port Thread**

NPTF	N
BSPT (Tapered)	U
BSPF (Parallel)	H

**Elastomers**

Fluorocarbon	J
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**Actuator**

Knob Adjust	K
Screw	S

**Relief**

Relieving	R
Non-Relieving	N
Non-Relieving - Aluminum Bonnet	A

**Vent**

Straight	S
Tapped Exhaust	E

**Mounting**

None	N
Panel Mounting	P

**Installation**

For installations instructions, see the *Fairchild Model 66 Stainless Steel Regulator Instruction, Operation and Maintenance Instructions, IS-10000066*.