



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

Features

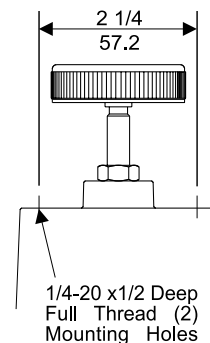
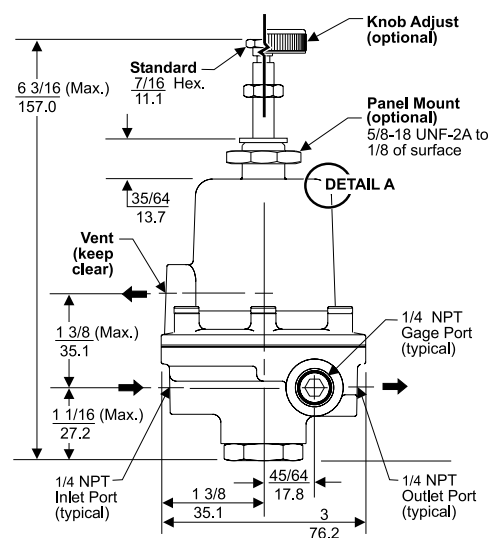
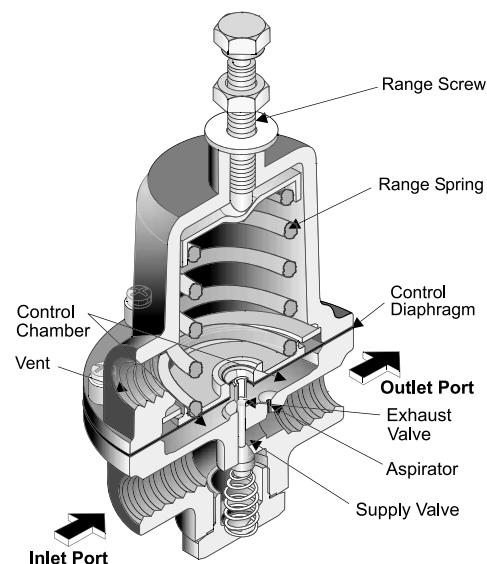
- Large Control Diaphragm area for increased sensitivity.
- Aspirator design compensates downstream pressure drop under flow conditions.
- Viton Elastomers are compatible with corrosive materials and environments.
- A separate Control Chamber isolates the diaphragm from the main flow to eliminate hunting 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.

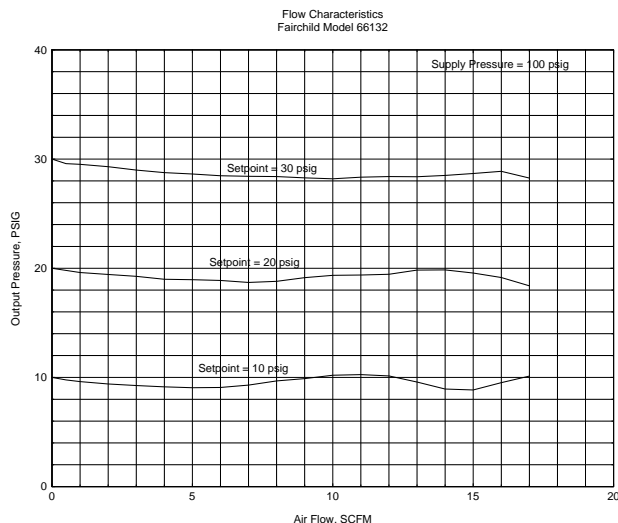


Detail A

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

Non-Relieving (optional)

Technical Information



Specifications

Supply Pressure

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

Flow Capacity

17 SCFM (28.9 m³/HR) @ 100 psig, [7.0 BAR], (700 kPa) supply and 20 psig, [1.5 BAR], (150 kPa) setpoint

Exhaust Capacity

1 SCFM (1.7 m³/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 1

Pressure Range

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

2
3
4
5
6

Pipe Size

1/4" NPT

2

Options

Tapped Exhaust	E
Knob Adjust	K
(Knob is Stainless Steel on all except NA option which is Zinc Plated and Plastic)	
Non-Relieving	N
Non-Relieving - Aluminum Bonnet	NA
Panel Mounting ¹	P

¹ Not available with Non-Relieving (NA) Option

Installation

For installations instructions, see the *Fairchild Model 66 Stainless Steel Regulator Instruction, Operation and Maintenance Instructions, IS-10000063*.

Model
66BP

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

Features

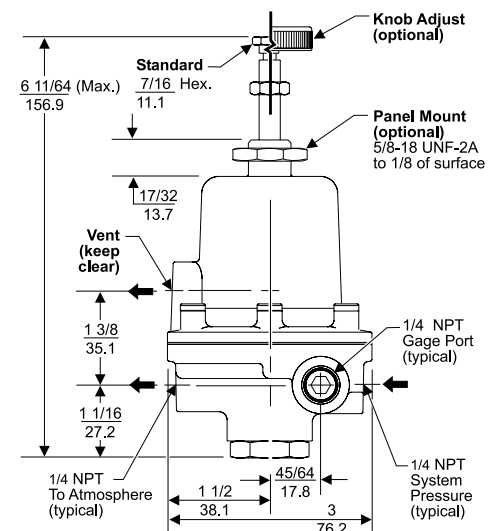
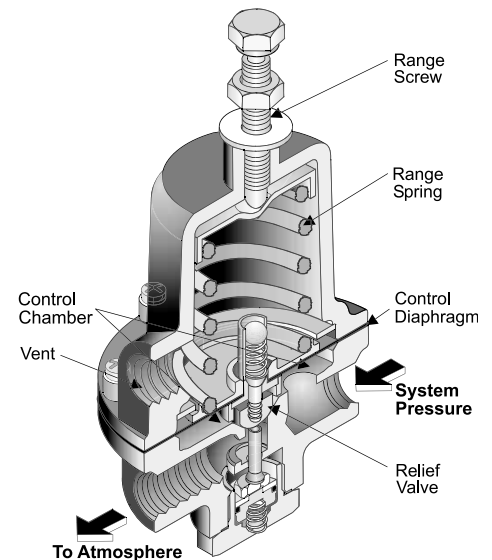
- Control sensitivity to 1" water column allows use in precision applications.
- Large Control Diaphragm area for increased sensitivity.
- Fluorocarbon Elastomers are compatible with corrosive materials and environments.
- Valve Damper eliminates hunting and buzzing.
- Line or Panel Mounting provides flexibility for installation.

Operating Principles

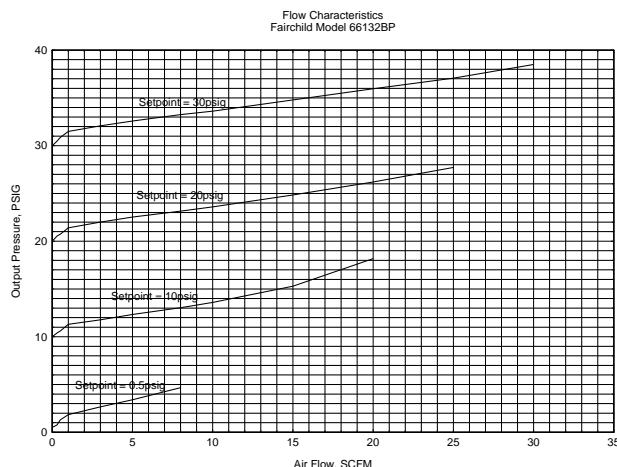
When you adjust the Range Screw to a specific setpoint, the Range Spring exerts a downward force against the top of the Control Diaphragm. This downward force closes the Relief Valve. When the force from the system pressure that acts on the bottom of the Control diaphragm is less than the force that acts on the top of the Control Diaphragm, the Relief Valve remains closed.

When the system pressure increases, the force that acts on the bottom of the Control Diaphragm increases until it reaches the setpoint.

When the system pressure rises above the setpoint, the Diaphragm Assembly moves upward lifting the Relief Valve from its seat and vents the excess pressure from the system. The relief valve closes as set point is reached.



Technical Information



Specifications

Supply Pressure

150 psig, [10 BAR], (1000 kPa) Maximum

Flow Capacity

22 SCFM (37.4 m³/HR) @ 100 psig, [7.0 BAR], (700 kPa) system pressure

Sensitivity

1" (2.54 cm) Water Column

Ambient Temperature

-85°F to +300°F, (-65°C to 149°C)

Materials of Construction

Body and Housing 316 Stainless Steel
Diaphragms Fluorocarbon on Nomex
..... with Teflon Shield
Trim 316 Stainless Steel and Teflon

Catalog Information

Catalog Number

6 6 B P

Pressure Range

psig	[BAR]	(kPa)	
0-10	[0-0.7]	(0-70)	12
0.5-30	[0.03-2]	(3-200)	13
1-60	[0.1-4]	(10-400) ...	14
2-100	[0.15-8]	(15-800) ...	15
2-150	[0.15-10]	(15-1000) ...	16

Pipe Size

1/4" NPT 2

Options

Knob Adjust K
(Knob is Stainless Steel on all except NA option which is Zinc Plated and Plastic)
Aluminum Bonnet NA
Panel Mounting ¹ P

¹ Not available with NA option

Installation

For installations instructions, refer to the *Fairchild Model 66 Stainless Steel Back Pressure Regulator Instruction, Operation and Maintenance Instructions, IS-100066BP*.