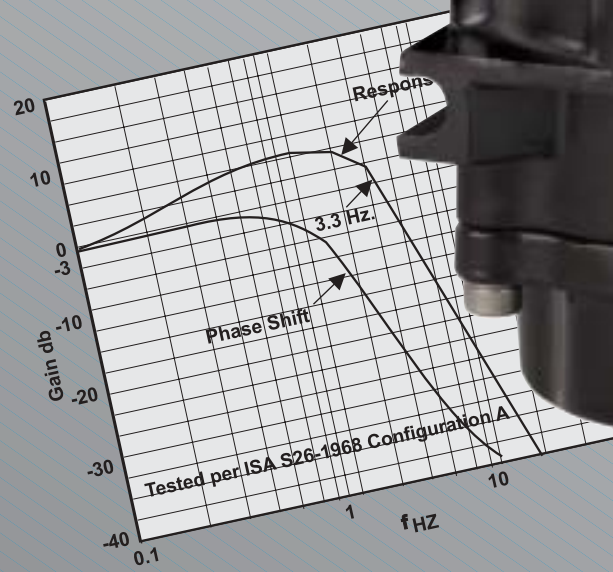
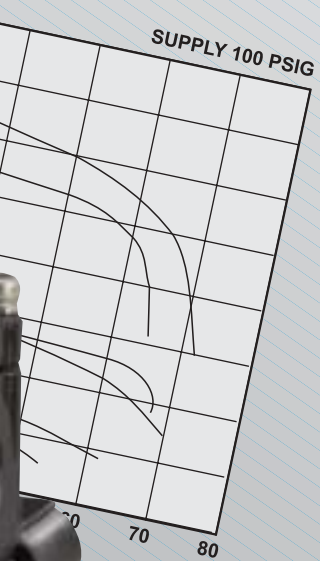
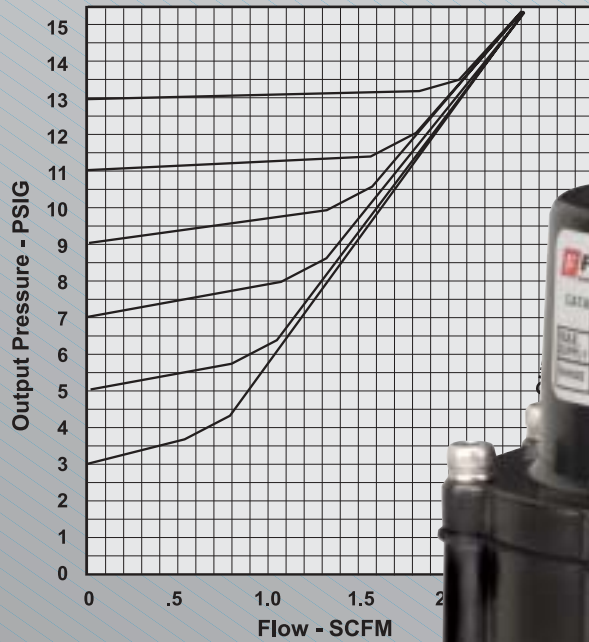


# FAIRCHILD

## PNEUMATIC FILTER REGULATOR

Model 63



**FAIRCHILD**  
INDUSTRIAL PRODUCTS COMPANY

## CROSS SECTION

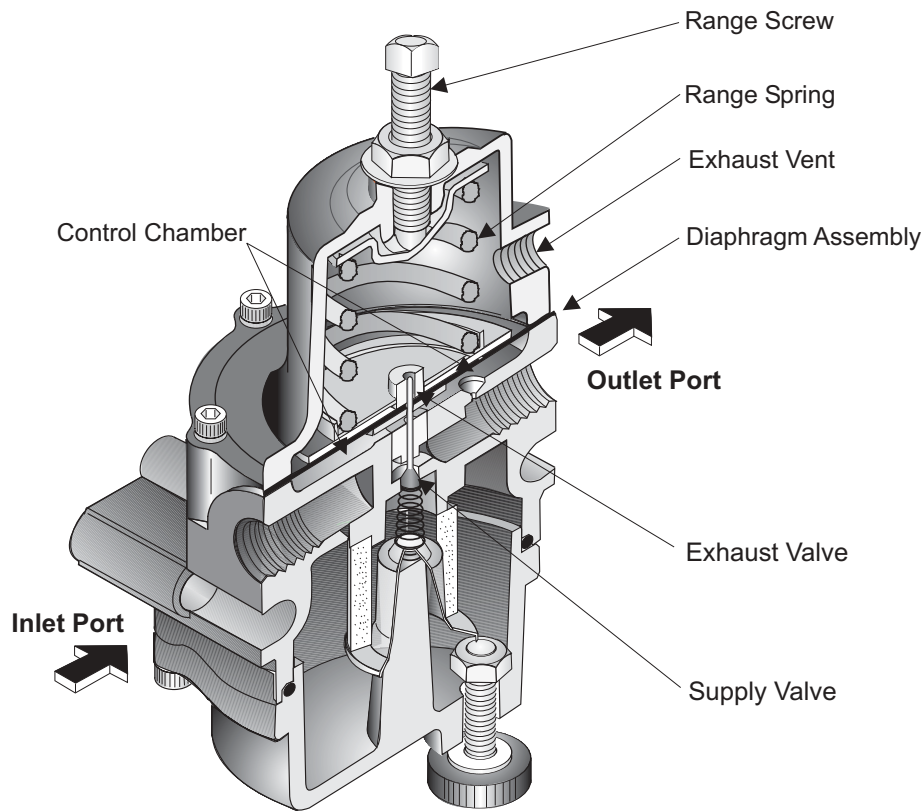


Figure 1. Model 63 Detail Drawing

## GENERAL INFORMATION

The Model 63 Pneumatic Filter Regulator is a general purpose service regulator for use in harsh environments.

The Model 63 has the following features:

- The no-brass construction is well suited to harsh environments.
- Internal and external epoxy finish
- Integral Relief Valve
- A Gage Port provides convenient pressure gage mounting.
- The standard 5-Micron Filter minimizes internal contamination.
- The Filter Dripwell contains a Drain Plug to easily drain trapped liquids.
- Standard Tapped Exhaust
- Soft Relief Seat minimizes air loss

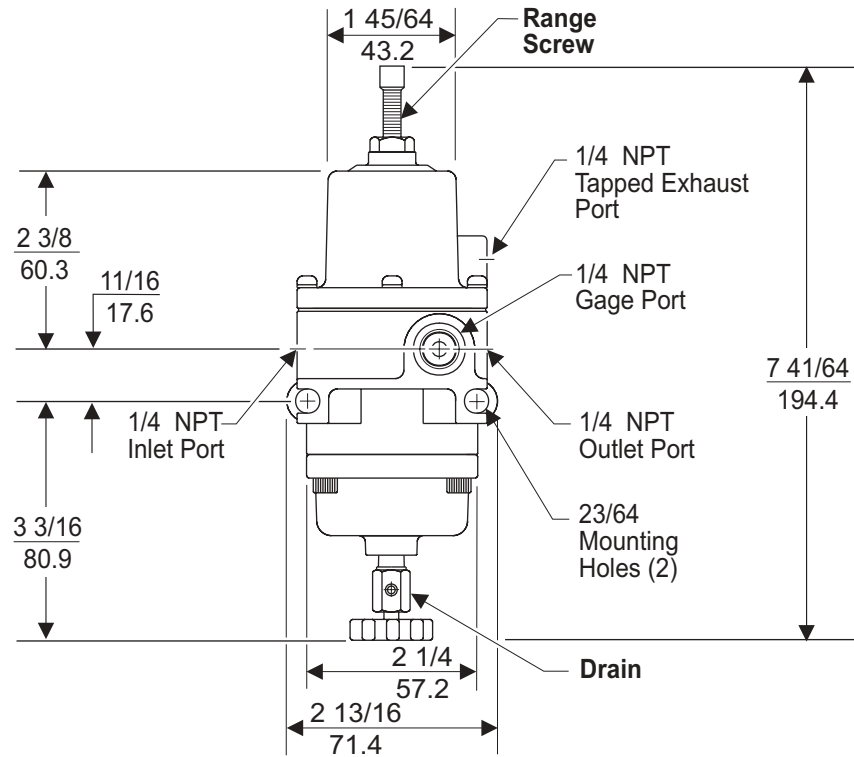
## OPERATING PRINCIPLES

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

When the setpoint is reached, the force of the Spring that acts on the top of the Diaphragm Assembly balances with the force of output pressure that acts on the bottom of the Diaphragm Assembly 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 flows through the Exhaust Valve and out of the Exhaust Vent on the side of the unit until it reaches the setpoint. For more information, see Figure 1.

## OUTLINE DIMENSIONS



**NOTE:**  
Pipe plug  
is included.

**Figure 2. Model 63 Outline Dimensions**

## SPECIFICATIONS

### FUNCTIONAL SPECIFICATIONS

<b>Supply Pressure</b>	200 psig, [14.0 BAR] (1400 kPa) Maximum.
<b>Flow Capacity (SCFM)</b>	25 (42.5 m <sup>3</sup> /HR) @ 100 psig, [7.0 BAR], (700 kPa) supply & 20 psig, [1.5 BAR], (150 kPa) setpoint.
<b>Exhaust Capacity (SCFM)</b>	0.4 (0.68 m <sup>3</sup> /HR) where downstream pressure is 5 psig, [.35 BAR], (35 kPa) above 20 psig, [1.5BAR], (150 kPa) setpoint.
<b>Ambient Temperature</b>	-40° F to +160° F (-40° C to + 71° C)

### PERFORMANCE SPECIFICATIONS

<b>Supply Pressure Effect</b>	Less than 1.25 psig, [.09 BAR], (9.0 kPa) change for 100 psig, [7.0 BAR], (700 kPa) change in supply pressure.
<b>Materials of Construction</b>	<p>Body and Housing . . . . . Epoxy Coated Aluminum</p> <p>Trim . . . . . Stainless Steel, Nickel Plated Steel</p> <p>Elastomers . . . . . Nitrile</p>

## TYPICAL APPLICATION

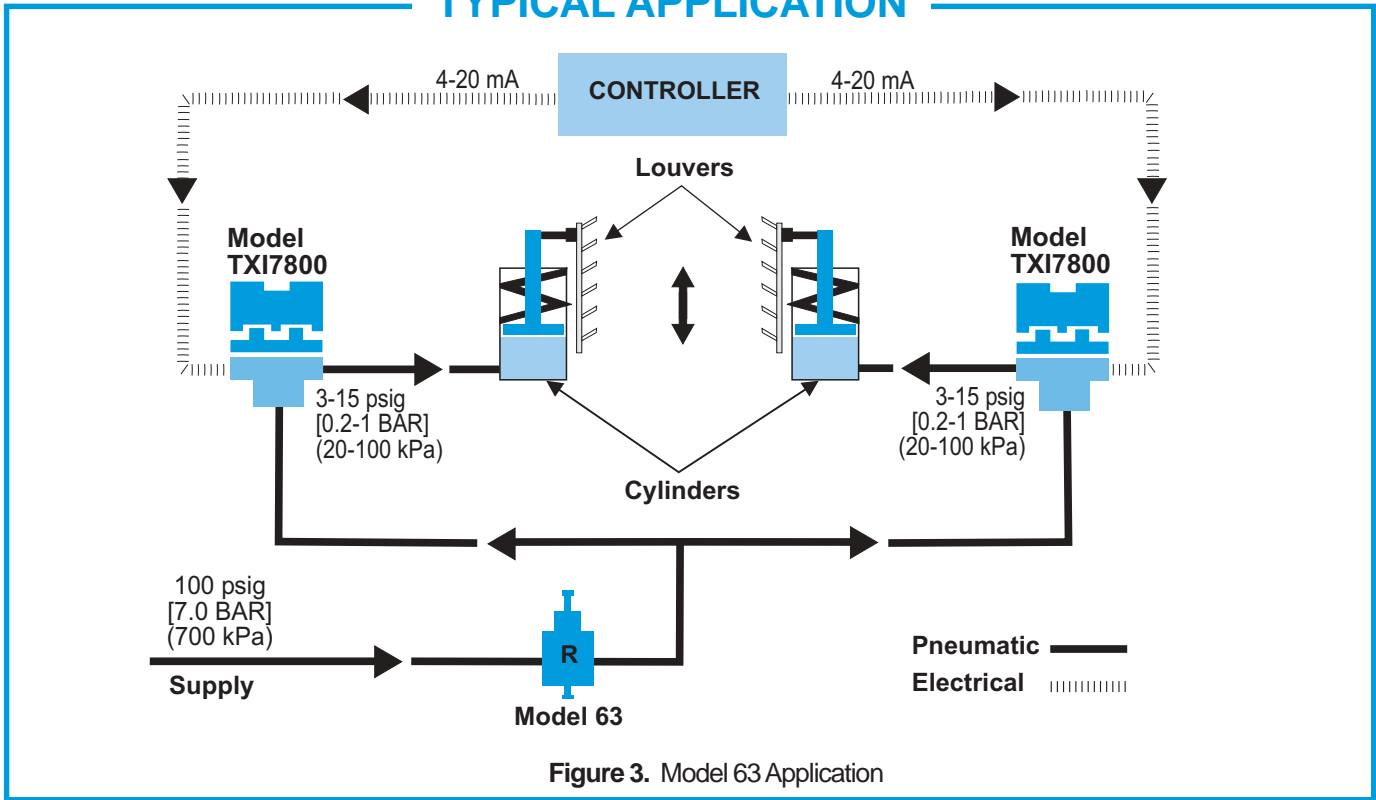


Figure 3. Model 63 Application

### TYPICAL APPLICATION

This application uses the Model 63 regulator with a 5-micron filter to supply clean media to instrumentation on a gas compressor skid.

The Model 63 **does not contain yellow metals** and is suited for the harsh environment and supply media on the skid. The regulator's soft relief seat minimizes media loss.

Supply media at 20 psig is routed to two Model TXI7800 explosion-proof transducers that control inlet and outlet air louvers on a compressor station. A temperature controller in the station supplies a 4-20mA signal to the TXI7800 transducers. The transducers provide a 3-15 psig signal to spring-return cylinders that open and close the louvers for proper cooling in the station.

### ORDERING INFORMATION

<b>Catalog Number</b>	63	1		
<b>Model</b>	_____			
<b>Pressure Range</b>	_____			
<b>psig</b>	<b>[BAR]</b>	<b>(kPa)</b>		
0.5-30	[0.03-2]	(3-200)		<b>(3)</b>
1-60	[0.07-4]	(7-400)		<b>(4)</b>
2-120	[0.14-8]	(14-800)		<b>(5)</b>
<b>Pipe Size</b>	_____			
1/4" NPT				<b>(2)</b>

### INSTALLATION

For installation instructions, see the *Model 63 Pneumatic Filter Regulator IOM, IS-10000063*.



ISO 9001:2000  
FM NO. 25571

[www.fairchildproducts.com](http://www.fairchildproducts.com)

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