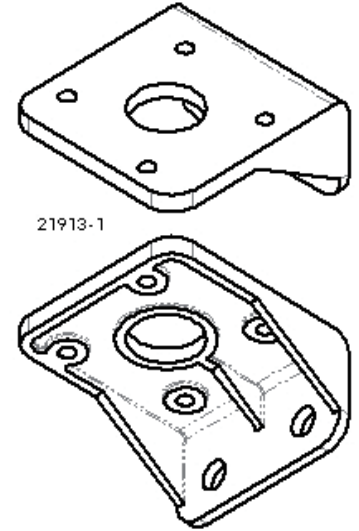


# Model 55 Miniature Precision Regulator

## Features

- Compact size
- Lightweight unit
- Handles high supply pressure
- High accuracy for precision control
- Polymer construction for corrosive resistance
- Venturi design compensates downstream pressure droop under flowing conditions
- Non-rising adjustment knob
- Manifold mount capability
- Separate control chamber isolates the Diaphragm from the main flow to eliminate hunting and buzzing



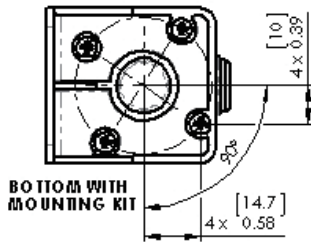
21913-1



Model  
55

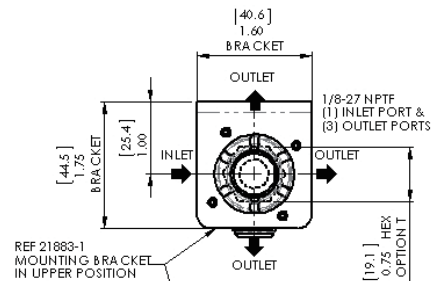
## Operating Principles

When the setpoint is reached, the upward force of the output pressure that acts on the bottom of the Diaphragm balances with the downward force that acts on the top of the Diaphragm. If the output pressure rises above the setpoint, the force that acts on the bottom of the Diaphragm moves the Diaphragm Assembly upward to close the Supply Valve and open the Relief Valve. Excess output pressure exhausts through the Vent in the unit until it reaches the setpoint.

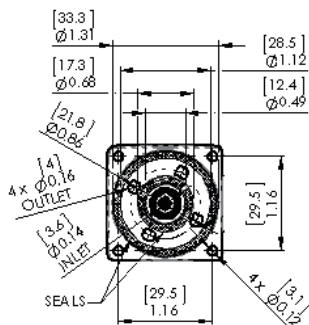


BOTTOM WITH MOUNTING KIT

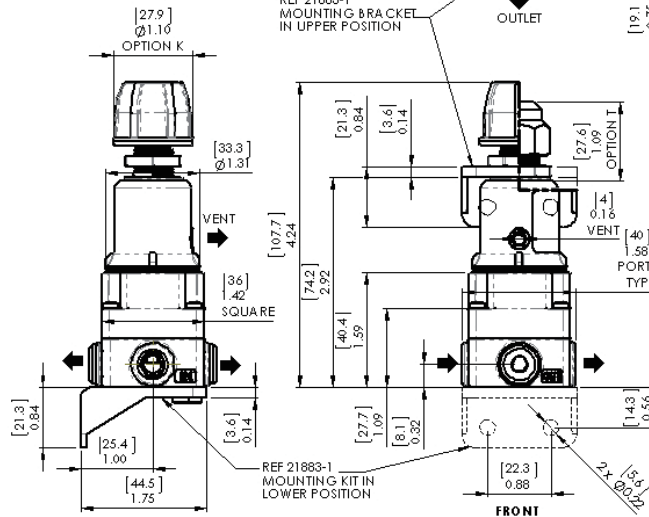
1/8" PORTS  
OPTION 1  
NPTF OR BSPT THREAD



REF 21883-1 MOUNTING BRACKET IN UPPER POSITION



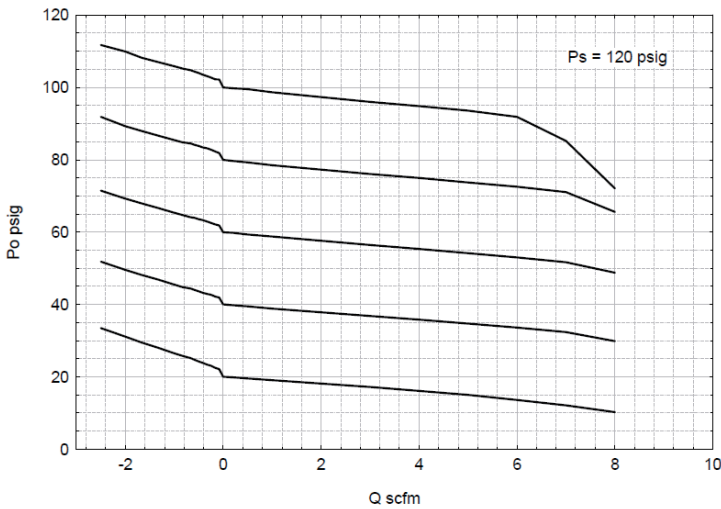
SEALS



REF 21883-1 MOUNTING KIT IN LOWER POSITION

# Model 55 Miniature Precision Regulator

Model 55151 NNKRNN



Model 55

## Specifications

### Flow Capacity

9 SCFM (17.0 m<sup>3</sup>/HR) @ 120 psig, [8 BAR], (800 kPa) supply

### Exhaust Capacity

2 SCFM (3.4 m<sup>3</sup>/HR) where downstream pressure is 15 psig, [1.0 BAR], (100 kPa) above set point

### Maximum Supply Pressure

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

### Supply Pressure Effect

0.1 psig for 10 psig change in supply

### Ambient Temperature

-40°F to +150°F, (-40°C to 65.5°C)

### Materials of Construction

Body and Housing.....Valox 508  
 Valve.....Stainless Steel  
 Diaphragm.....Polymer Reinforced Nitrile  
 Mounting Bracket.....Valox 508

## Ordering Information

### Catalog Number 551

#### Pressure Ranges:

0-10 psi ..... 2  
 0.5-30 psi ..... 3  
 1-60 psi..... 4  
 2-100 psi..... 5

#### Inlet/Outlet Port Size:

Manifold Mount..... 0  
 1/8" ..... 1

#### Port Thread:

NPTF ..... N

#### Elastomer

Nitrile ..... N

#### Actuator

Knob ..... K  
 Tamper Proof ..... T

#### Relief

Relieving, Normal Bleed ..... R  
 Non Relieving ..... N  
 Relieving, Low Bleed ..... B

#### Gauge

Gauge ..... G  
 Without Gauge ..... N

#### Mounting Bracket

Mounting Bracket ..... B  
 Without Mounting Bracket ..... N

## Installation

For installations instructions, refer to the Fairchild Model 55 Miniature Precision Regulator Instruction, Operation and Maintenance Instructions, IS-10000055.