

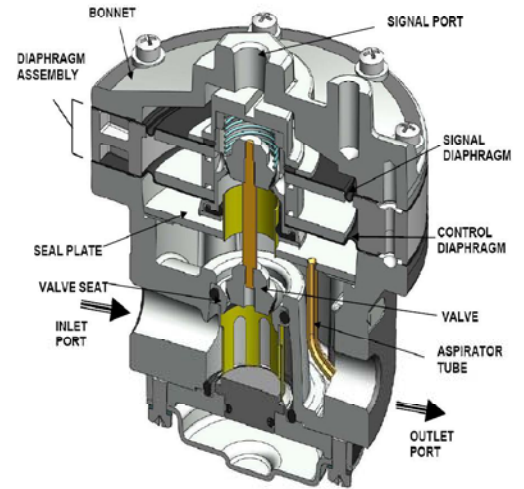
Model 4500ABP Pneumatic Back Pressure Booster

Features

- Control sensitivity of 1" water column allows use in precision applications.
- Large Exhaust Valve provides high exhaust flows.
- An Aspirator Tube compensates pressure droop under flow conditions.
- A separate Control Chamber isolates the diaphragm from the main flow to eliminate hunting and buzzing.
- Unit construction lets you service the Model 4500ABP without removing it from the line.



C
Model
4500ABP



Operating Principles

The Model 4500ABP Booster is a pneumatic device capable of high flow capacity. This device uses a force balance system to open the relief valve and vent system pressure when set point is exceeded. When system pressure increases, the force on the bottom of the Diaphragm Assembly increases beyond the set point, the assembly moves upward, lifting the Relief Valve from its seat and vents the system air.

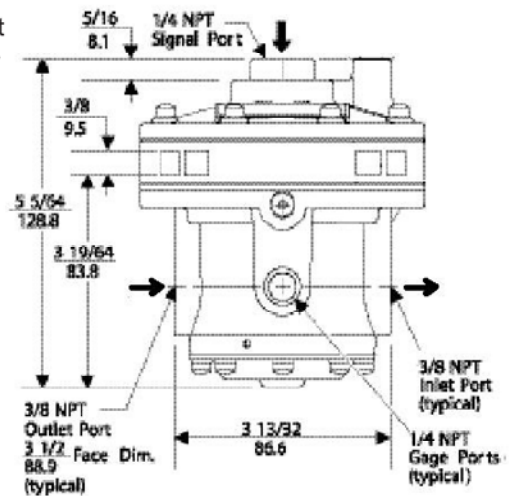
If system pressure decreases below the set point, the assembly moves downward closing the Relief Valve.

INSTRUMENTS • CONTROLS • VALVES

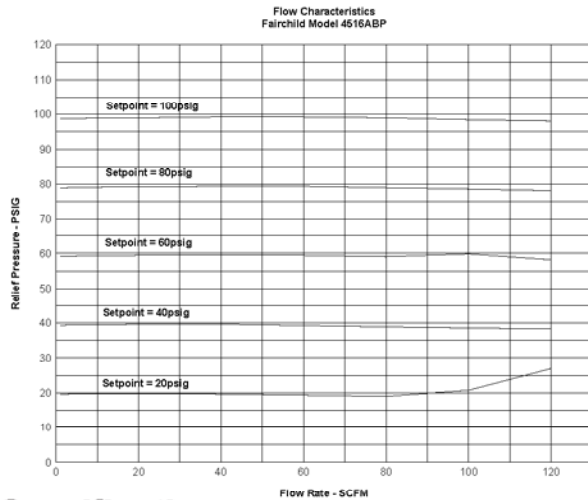
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Technical Information



Specifications

| | RATIO | 1:1 |
|---|----------------------------|-------------------|
| Maximum Signal Pressure | psig [BAR] (kPa) | 150 [10.0] (1000) |
| Maximum System Pressure | psig [BAR] (kPa) | 250 [17.0] (1700) |
| Flow Capacity AT 100 psig, [7.0 BAR], 700 kPa) System Pressure, | SCFM m ³ /HR | 150 (255) |
| Setpoint Water Column | (cm) | 1" (2.54) |
| Ratio Accuracy % of 100 psig, [7.0 BAR], (700 kPa) input span. | | 3.0 |

Ambient Temperature

-40°F to 200°F, (-40°C to 93.3°C)

Hazardous Locations

Acceptable for use in Zones 1 and 2 for gas atmosphere; Groups IIA and IIB and Zones 21 and 22 for dust atmospheres

Materials of Construction

Body and Housing Aluminum
Trim Zinc Plated Steel, Brass
Diaphragm Nitrile on Dacron

Catalog Information

Catalog Number

45 ABP

Ratio

1:1

Pipe Size

3/8" NPT.

1/2" NPT.

3/4" NPT.

Options

BSPT (Tapered)

BSPP (Parallel) ¹

Viton Elastomers

U
H
J

Actuator

Knob

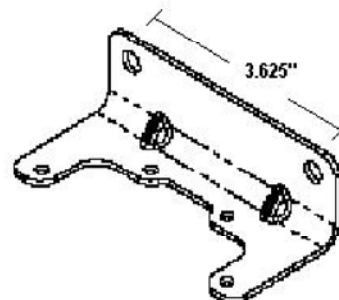
Tamperproof

K
T

¹ BSPP Threads in Inlet, Outlet, Exhaust & Bonnet Ports Only. Others BSPT

Installation

For installations instructions, refer to the corresponding *Fairchild Model 4500ABP Pneumatic Volume Booster Instruction, Operation and Maintenance Instructions.*



Model 4500ABP Mounting Bracket
Kit P/N 20555-1 zinc plated (sold separately)

