



Type 7250BP

Precision, Signal Operated, Back Pressure Regulator

For applications that require high relief capacity

The Type 7250BP Back Pressure Regulator is a 1:1 signal to output regulator that is high flow. It is a normally closed valve that will remain closed until the pressure at the inlet exceeds the regulator's set point. When pressure does exceed the regulator's setpoint, the valve will open and vent air until the pressure decreases to below the setpoint. A typical application is to provide protection against over pressurization in the downstream portion of a pneumatic system. In an over pressurization scenario, the air flowing through the 7250BP can be vented to atmosphere or could be captured and directed to trigger an emergency shut-off valve. It can also be used as a flow controller. Varying the signal pressure, usually with an I/P transducer, will increase or decrease the amount of air allowed to flow from upstream to downstream.

Features

- **1/4", 1/2", or 3/4" NPT Porting**
- **Two 1/4" NPT Gauge Ports**
- **Large Relief Valve**
Allows flows up to 375 scfm.
- **Sensitive**
Reacts to pressure deviations to within 1" water column pressure.
- **Stable Performance**
Isolated control chamber prevents hunting and vibration during flow conditions.

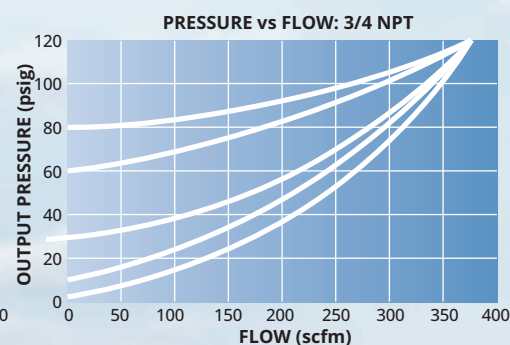
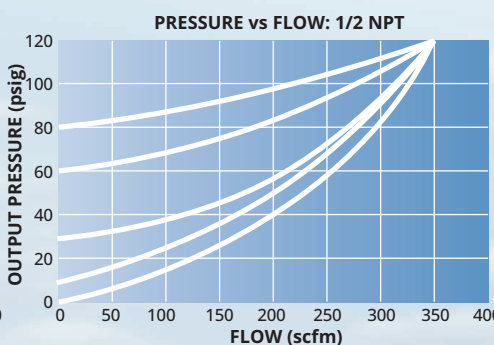
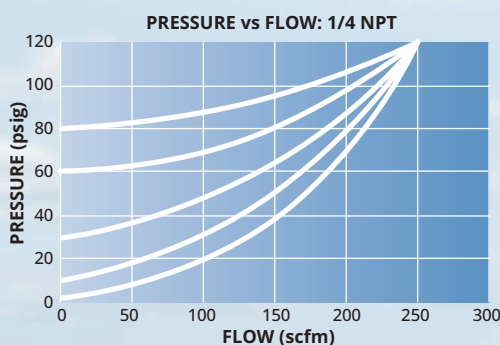
Specifications

Signal/Output Ratio	1:1
System Pressure	250 psig (17.0 bar) Maximum
Signal Pressure	150 psig (10.0 bar) Maximum
Operation Temperature	-40 to 200°F (-40 to 93°C)
Low Temperature Option	-62 to 194°F (-52 to 90°C)
Expanded Temperature Option	-65 to 284°F (-54 to 140°C)
Flow Coefficients (Cv)	3/4 NPT: 7.5, 1/2 NPT: 6.2, 1/4 NPT: 4.6
Flow Capacity	See flow curves
Ratio Accuracy	1.0%
Sensitivity	1" H ₂ O (2.54 cm)
Signal Port & Gauge Port (2)	1/4" NPT
Supply/Output Port	1/4", 1/2" or 3/4" NPT
Weight	2.65 lbs (1.20 kg)
Mounting	Pipe, panel, or bracket



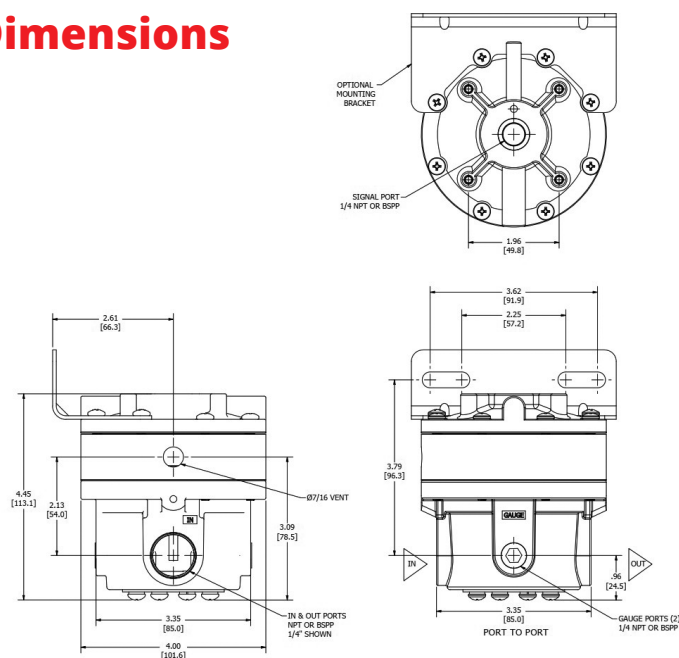
Materials of Construction

Body and Housing	Aluminum
Bolting	Zinc plated steel
Internal Components	Plated steel, brass, aluminum
Elastomers	Nitrile, Silicone or EPDM

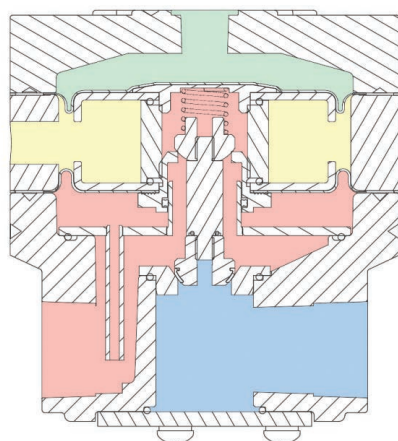


Type 7250BP Precision, Signal Operated, Back Pressure Regulator

Dimensions



Principles of Operation



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Ordering Use this coding system to order

Model

7250

Port Size (NPT)

B 1/4"

D 1/2"

E 3/4"

Ratio

A 1:1

Options

L Low Temperature

P EPDM Expanded Temp.

S Stainless Steel Trim

X ATEX 2014/34/EU

Accessories

Mounting Bracket (zinc plated steel):

P/N 449-542-045

Gauges: 1/4" NPT back mount, 2" face, dual scale

Range psi (bar)

0-15 (0-1.0)

0-30 (0-2.0)

0-60 (0-4.0)

0-160 (0-11)

Part Number

446-725-003

446-725-004

446-725-001

446-725-002

Exhaust Screen/Muffler Fitting (plated steel):

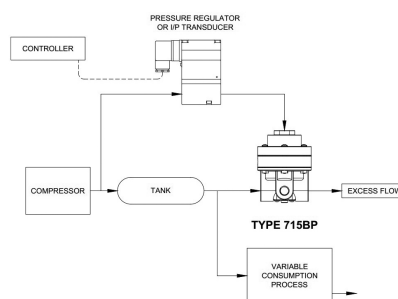
1/4" NPT: P/N 445-761-008

1/2" NPT: P/N 445-761-013

3/4" NPT: P/N 445-761-006

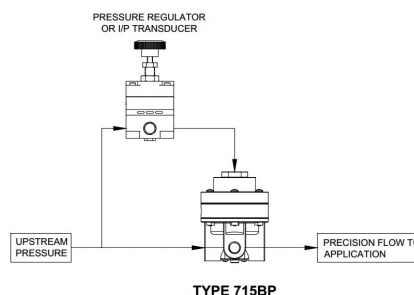
Application Examples

Over Pressurization Protection



The Type 7250BP relay can be controlled by a manual pressure regulator or I/P transducer to provide precision flow to a downstream application.

Flow Controller



The Type 7250BP relay can be controlled by a manual pressure regulator or I/P transducer to provide protection against over pressurization in the downstream portion of a pneumatic system.



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