

Pressure Snubbers

NPT CONNECTIONS

Description

A simple in-line element called a pressure snubber is used to reduce the rate of flow of fluids into pressure instruments and controls. A small orifice in an adapter fitting dampens shock and fluctuating pressure effects by limiting the rate at which flow enters. The smaller the orifice, the greater is the dampening effect.

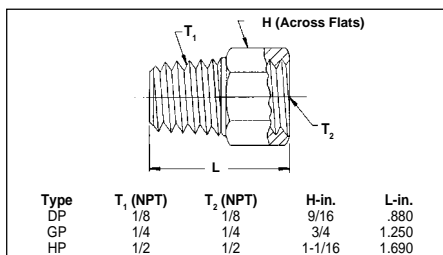
The proper orifice size for any application depends upon the size of the pressurized chamber, the viscosity of the fluid and the required response time of the system.

Orifice sizes from .004" diameter to .020" diameter are available. In general, large instrument chambers require large flow orifices. Viscous fluids require larger flow orifices than low viscosity fluids. Gases generally require small orifices.

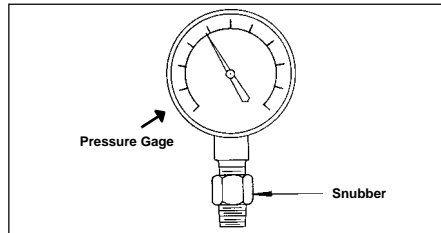
Specifications

- Maximum Operating Pressure**
 Brass – 2000 psig
 303SS – 4000 psig
 - Flow Direction** – Suitable for flow in either direction
 - Orifice Diameter** – Standard .004", .008", .015", .020". See chart at right. Special orifice sizes available; consult factory.
 - Flow Rate** –
- | Orifice Diameter (in.) | C _v | Air Flow to Atmos. @ 25 psig inlet |
|------------------------|----------------|------------------------------------|
| .004 | .00035 | .46 scfh |
| .008 | .0015 | 2.0 scfh |
| .015 | .0050 | 6.9 scfh |
| .020 | .0088 | 13.0 scfh |
- Fluid Media** – Air, Water Gases and Liquids compatible with materials of construction.

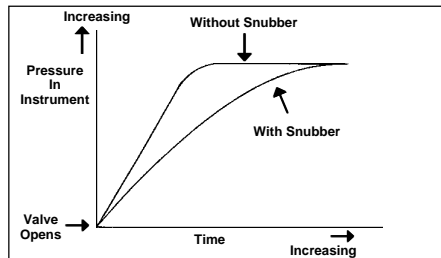
Dimensions



Operation



Pressure snubber adapts to pressure gage, instrument or control element with 1/8", 1/4" or 1/2" NPT connection.

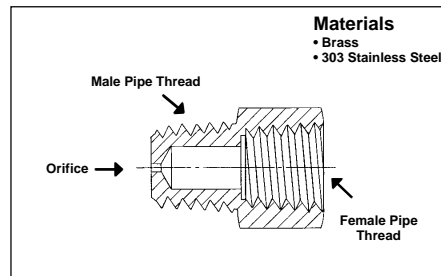


After a valve opens, the pressure in an instrument or control device builds more slowly when equipped with a pressure snubber.

Construction



Pressure snubbers are in-line components which reduce the rate of fluid flow to a gage, instrument or control element and thus dampen shock and fluctuating pressure effects.



Part Numbers

TYPE	Orifice Diameter-in.	Pipe Size (NPT)	Stainless Steel Part Number	Brass Part Number
DP	.004	1/8	DP-4-SS	DP-4-BR
DP	.008	1/8	DP-8-SS	DP-8-BR
DP	.015	1/8	DP-15-SS	DP-15-BR
GP	.004	1/4	GP-4-SS	GP-4-BR
GP	.008	1/4	GP-8-SS	GP-8-BR
GP	.015	1/4	GP-15-SS	GP-15-BR
HP	.004	1/2	HP-4-SS	HP-4-BR
HP	.008	1/2	HP-8-SS	HP-8-BR
HP	.015	1/2	HP-15-SS	HP-15-BR
HP	.020	1/2	HP-20-SS	HP-20-BR

Applications

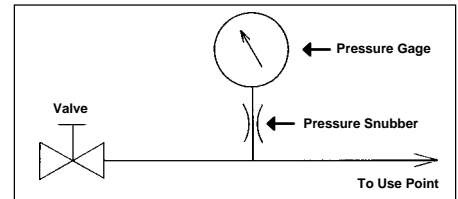
Pressure snubbers are used as in-line elements to reduce rapid pressure fluctuations in the following types of components:

- Pressure Gages
- Pressure Measuring Instruments
- Air Piloted Valves
- Hydraulic Piloted Valves

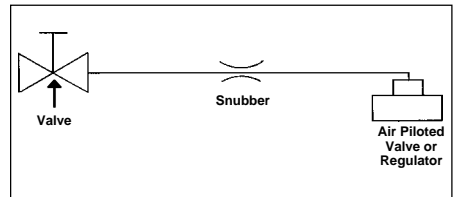
They can also be used to control the flow rate of fluid delivered to:

- Air Cylinders
- Hydraulic Cylinders
- Fluid Actuators

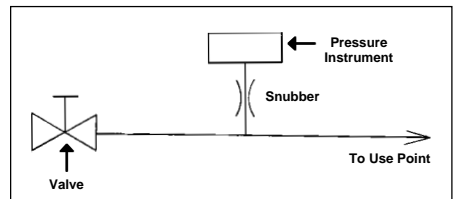
See illustrations for typical applications.



A pressure gage equipped with a snubber will respond more slowly to pressure changes than a gage without a snubber. This slowed response dampens pressure spikes caused by valves and pumps.



When valve opens the pressure in the pilot port increases slowly. In the case of an air loaded pressure regulator with a snubber, the output also increases gradually rather than suddenly.



Pressure measuring instruments are protected from surges when equipped with a snubber. High frequency pressure spikes are dampened by the small orifice in the pressure snubber.

Ordering Information

To order pressure snubbers, indicate quantity and obtain part number from the chart.