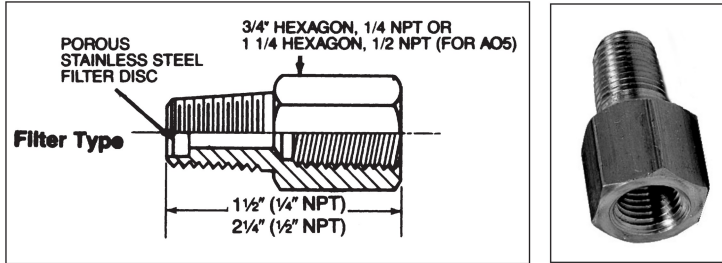


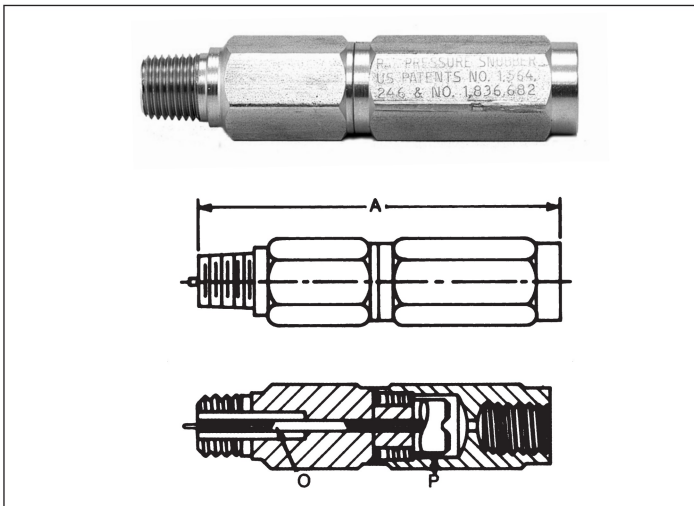
## FILTER TYPE



**Filter Type:** Snubbing element consists of a  $\frac{3}{8}$ " diameter x  $\frac{1}{8}$ " thick Micro Metallic stainless steel filter. When placed in the line just before the pressure gauge, the gauge pointer moves across the scale at a rate which is proportional to the pressure differential across the snubber element.

TYPE NUMBER	GAS OR LIQUID IN PIPE LINE	PRESSURE RANGE	CONNECTION	MATERIAL
BW 41	Air	1,500 psi	1/4 NPT	Brass
BW 42	Water-Light Oil			
BW 43	Heavy Oil			
SW 41	Air	5,000 psi	1/4 NPT	SS
SW 42	Water-Light Oil			
SW 43	Heavy Oil			
A05D	Heavy Oil	15,000 psi	1/2 NPT	SS
A05E	Water Light Oil			

## PISTON TYPE



**Piston Type:** Shocks and pulsations are absorbed in the doughnut-shaped orifice (O) formed by the piston (P) in the tube. As the piston moves up and down with the pulsation, it automatically clears away any sediment or pipe scale that would clog a simple orifice or needle valve.

Each snubber is furnished with three pistons. The snubbing may be changed to suit individual installations by changing pistons. By using the proper piston, any of the listed snubbers can be made to operate satisfactorily from vacuum to its maximum rated pressure on any fluid compatible with the body material. These snubbers may be installed vertically, horizontally, inverted, or at any angle.

TYPE NUMBER	GAS OR LINED IN PIPE LINE	PRESSURE RANGE LBS.	PIPE SIZE AND LENGTH	MATERIAL
RS1	Air, water, steam, etc.	0-3000	1/4 NPT	Brass
RS7	Thin corrosive liquid, gases	0-5,000	A = 3 1/2"	SS
RS8	Thick corrosive liquids		1/2 NPT	Brass
RS6	Oil, water, etc.	0-10,000	A = 3 3/8"	SS
RS9	Thin or thick corrosive			

## ADJUSTABLE SNUBBER



MODEL	MAX. WORKING PRESS.	BODY MATERIAL	LENGTH O.A.	THREAD LENGTH	THREAD SIZE
MSB4	3,000	Brass	1.60	.50	1/4 NPT
MSB2	3,000	Brass	2.28	.80	1/2 NPT
MSS4	5,000	316SS	1.60	.50	1/4 NPT

**NOTE:** The adjusting screw, ball and ball retainer are Stainless Steel, Buna N Seals are standard. Teflon, Viton and Butyl Seals are available.

## Adjustable Snubber

The Universal Adjustable Snubber has a ball check cut-off to block line surges, shock waves and fluid hammer; and an adjustable fine thread choke valve to tune out line pulsations. The combination of the ball cut-off and a tunable choke valve makes it an all-purpose, universal Snubber that is used on low displacement instruments such as bourdon tube gauges which require heavy dampening; and with high displacement instruments such as diaphragm, piston and bellows operated gauges, recorders and controllers, which require moderate to heavy dampening.

The adjustable choke valve is also used as a positive shut-off valve, to isolate the gauge or instrument, for servicing or replacement.

The operation of the Adjustable Snubber cut-off ball and the choke valve is shown in the chart. The cut-off ball blocks and clamps off shock and hammer transients in the line, which are above the normal pressure level in the system. The choke valve throttles and dampens out pulsations and cyclic pressure waves, and may be adjusted to dampen out to any level desired to prevent pointer oscillation on gauges, chart painting on recorders, instability in controllers or, damage to instruments, generally.