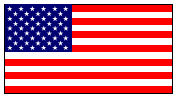


Mid-West[®] Instrument



Model 150 “VARI-DAMP” ADJUSTABLE PULSATION DAMPENER

Made in the USA and NON- ADJUSTABLE SNUBBERS



Adjustable Pulsation Dampeners

Non-Adjustable Snubbers

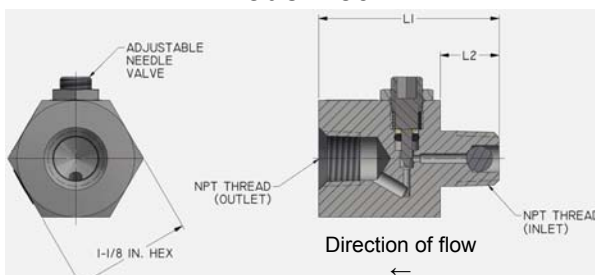
- Model 150 provides infinitely adjustable dampening
- Both models protect against surges and pressure shocks
- Use with all types of pressure gauges including differential pressure and compound gauges

The Model 150 “Vari-Damp” all purpose pulsation dampener features both a fine thread adjustable needle valve for dampening characteristics and a precision ball check to block line surges, shock waves or fluid hammer. The Model 150 provides outstanding protection for applications where low displacement devices such as bourdon tube gauges or electronic transmitters are used or in high displacement devices where diaphragm, piston or bellows operated gauges, recorders or controllers are required. Double-ported instruments should be installed with a Model 150 on each input pressure line.

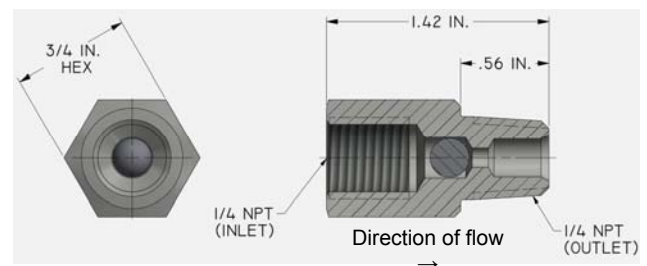
The Model 150 needle valve provides adjustable dampening characteristics by simply loosening the lock-nut on the adjusting screw and making a slight re-adjustment to the needle valve setting. Use of the Model 150 is preferred over other commercially available designs that feature several piston diameters or porous metal discs requiring removal and/or disassembly to re-adjust. The Model 150 adjustable needle valve can be used as a complete shutoff to facilitate changing out of a gauge or instrument. This method is not intended to replace instrument block valves as continual over-torqueing could damage the valve seat.

The *Model 150 Adjustable Pulsation Dampener* and the *Non-Adjustable Snubber* ball check offers protection surge and/or pressure spikes. The 316 stainless steel ball is driven on seat by the pressure surge and held on seat as long as the differential pressure exists across the ball, while metering pressure to the instrument through a calibrated, groove across the ball seating area.

Model 150



Non-Adjustable Snubbers

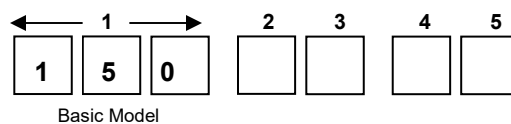


Model	Description	Thread Size	Body Material	L1 OAL Length (INCH)	L2 Thread Length (INCH)	MAX. W.P. PSIG (bar)	Weight OZ
150-BO	Male X Female NPT	1/4" NPT	Brass	1.73	0.56	3,000 (204)	6
150-BH	Male X Female NPT	1/2" NPT	Brass	2.31	0.75	5,000 (340)	8
150-SO	Male X Female NPT	1/4" NPT	316 S.S.	1.73	0.56	5,000 (340)	6
150-SH	Male X Female NPT	1/2" NPT	316 S.S.	2.31	0.75	10,000 (680)	8
110371	Non-Adjustable, Male X Female NPT	1/4" NPT	Brass	1.42	0.56	3,000 (204)	6
110370	Non-Adjustable, Male X Female NPT	1/4" NPT	316 S.S.	1.42	0.56	5,000 (340)	8

Adjustable snubber

Standard Model Specification: 150-BO-00
 3000 PSIG Working Pressure, Brass Body Material
 1/4" FNPT X 1/4" MNPT Connections, Buna-N & Teflon Seals

Mid-West Instrument
1-800-648-5778



Adjustable Pulsation Dampeners

Non-Adjustable Snubbers

2	Material (Body)	
B	Brass	
S	316 Stainless Steel	
Z	Special (<i>Un-coded Options</i>)	
3	Size	
O	1/4" FNPT X 1/4" MNPT	
H	1/2" FNPT X 1/2" MNPT	
Z	Special (<i>Un-coded Options</i>)	
4	Seal Materials / Temperature Range (Deg. F)	
0	Buna-N & Teflon	-30° to +250°
1	Viton & Teflon	-15° to +400°
2	Neoprene & Teflon	-45° to +300°
5	Ethylene & Teflon	-70° to +250°
9	Special (<i>Un-coded Options</i>)	
5	Options	
0	NONE	
9	Special (<i>Un-coded Options</i>)	
Brass & Stainless Steel Non-Adjustable Snubbers		
110371	1/4" FNPT x 1/4" MNPT BRASS Non-ADJUSTABLE SNUMBBER	
110370	1/4" FNPT x 1/4" MNPT STAINLESS STEEL Non-ADJUSTABLE SNUMBBER	

INSTALLATION: Model 150 pulsation dampener can be installed directly on the instrument to be protected. The Model 150 features a built-in shutoff to allow instrument protection or removal. A shutoff valve in the line is not required. Avoid excessive force when closing to prevent seat galling.

NOTE: CAUTION TO BE EXERCISED WHEN ADJUSTING NEEDLE VALVE. DO NOT ADJUST MORE THAN TWO TURNS FROM CLOSED POSITION, LEAKAGE CAN ACCUR.

MAINTENANCE: The Model 150 can be cleaned by removing the needle adjusting screw, "O" Ring and Teflon backup ring. Metal parts should be cleaned in a commercial solvent.