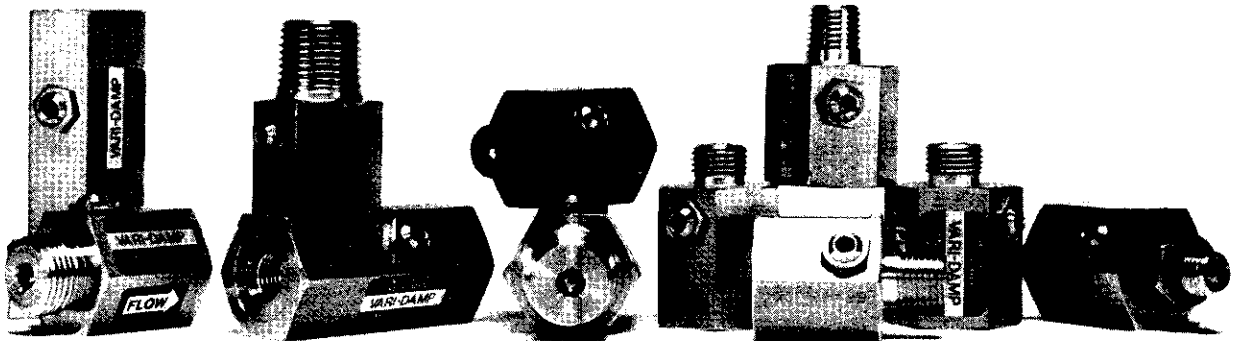


MODEL 150 "VARI-DAMP"[®] PULSATION DAMPENER



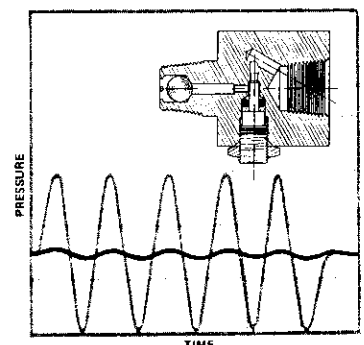
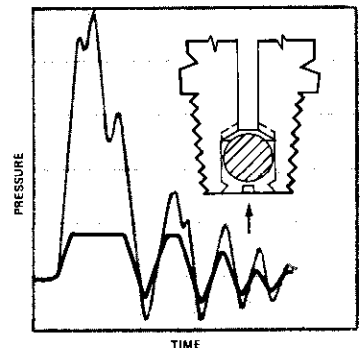
- Provides Infinitely adjustable dampening
- Protects against surges and pressure shocks
- Use with all types of instruments and pressure gauges including differential pressure and compound.
- Optional swivel design eliminates gauge orientation problems

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.

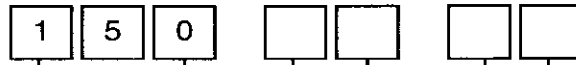
The Model 150 needle valve provides adjustable dampening characteristics by simply loosening the lock-nut on the adjusting screw and making a slight readjustment to the needle valve setting. Use of the Model 150 is preferred over other commercially available designs that feature several piston diameters or porous metal discs requiring removal and/or disassembly to readjust. 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-torquing could damage the valve seat.

The Model 150 ball check offers protection against surge and/or pressure spikes as indicated by the black lines in the graphs. 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.

The Model 150 is available in aluminum, brass, or 316 stainless steel. It is offered with a variety of end configurations to handle virtually any application.



PART NUMBERING SYSTEM



① **BASIC MODEL NUMBER**

② **MATERIAL (BODY)**

- A. ALUMINUM
- B. BRASS
- S. 316 STAINLESS STEEL
- Z. SPECIAL

③ **SIZE**

- O. 1/4" FNPT X 1/4" MNPT
- H. 1/2" FNPT X 1/2" MNPT
- Z. SPECIAL

④ **SEALS**

Temp. Range (Deg. F)

- 0. Buna N & Teflon -30° to +250°
- 1. Viton & Teflon -15° to +400°
- 2. Neoprene & Teflon -45° to +300°
- 5. Ethylene Propylene & Teflon -70° to +250°
- 9. Special

⑤ **OPTIONS**

- 0. NONE
- 9. SPECIAL

STANDARD MODELS, SPECIFICATIONS

BASIC MODEL	DESCRIPTION	THREAD SIZE	BODY MATERIAL	L, IN.	L ₂ IN.	MAX. W.P. P.S.I.G. (bar)	WEIGHT OZ.	FIG. NO.
150-BH	MALE X FEMALE PIPE	1/2" NPT	BRASS	2.31	.75	5,000 (340)	8	1
150-SH	MALE X FEMALE PIPE	1/2" NPT	316 S.S.	2.31	.75	10,000 (680)	8	1
150-AO	MALE X FEMALE PIPE	1/4" NPT	ALUM.	1.73	.56	3,000 (204)	2	1
150-BO	MALE X FEMALE PIPE	1/4" NPT	BRASS	1.73	.56	3,000 (204)	6	1
150-SO	MALE X FEMALE PIPE	1/4" NPT	316 S.S.	1.73	.56	5,000 (340)	6	1

Please Consult Factory For Other End Configurations

INSTALLATION: The 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 OCCUR.

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.

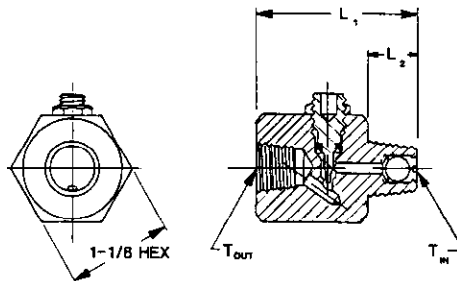


FIG. 1

Mid-West[®]

Instrument

6500 Dobry Dr. □ Sterling Heights, MI 48314
 (586) 254-6500 □ FAX (586) 254-6509
 E-mail: sales@midwestinstrument.com
 Website: www.midwestinstrument.com



REPRESENTED BY: