

# Pulsation Dampener PD8100 Series

The PD8100 Series eliminates pointer flutter on pressure indicating Swichgage® devices which are subject to pulsating pressure from reciprocating pumps or compressors. It also allows a close setting of high and low contact points providing for more accurate pressure indication and control of equipment.

The PD8100 Series decreases wear on geared movements and increases the life of pressure indicating instruments by eliminating excessive gage strain and unnecessary movement, a necessity which quickly pays for itself by protecting any pressure indicating and control instrument which is subject to pulsation.

**PD8100 SERIES IS NOT FOR USE ON OXYGEN OR LIQUID OXYGEN APPLICATIONS.**

The PD8100 is quality built with a large diameter valve stem wheel for ease of adjustment and features clearly printed operating instructions.

Machined from 1 3/8-inch (35 mm) hex bar stock, a two degree taper on the valve and stem assure positive dampening.

It's available in brass, carbon steel, 303 stainless steel or 316 stainless steel to meet pressure and environmental requirements with either 1/2 NPT or 1/4 NPT inlet connections.

## Specifications

See How to Order section for available inlet and outlet connections.

**PD8183:** All wetted parts are brass. Rated to 3000 psi (20.68 MPa) [206.80 bar]

**PD8184:** All wetted parts are carbon steel. Rated to 5000 psi (34.47 MPa) [344.70 bar]

**PD8185:** All wetted parts are 303 stainless steel. Rated to 10000 psi (68.95 MPa) [689.50 bar]

**PD8190:** All wetted parts are 316 stainless steel. Rated to 10000 psi (68.95 MPa) [689.50 bar]. Meets NACE standard MR-01-75 for direct exposure to H<sub>2</sub>S.

**Operating Temperature:** -15° to 400° F (-26° to 204° C)

**Shipping Weight (all models):** 2 lbs. (0.9 kg)

**Shipping Dimensions (all models):** 4 3/4 x 4 3/4 x 3 1/4 in. (121 x 121 x 83 mm)

## MurphyMatic® Compressor Panel

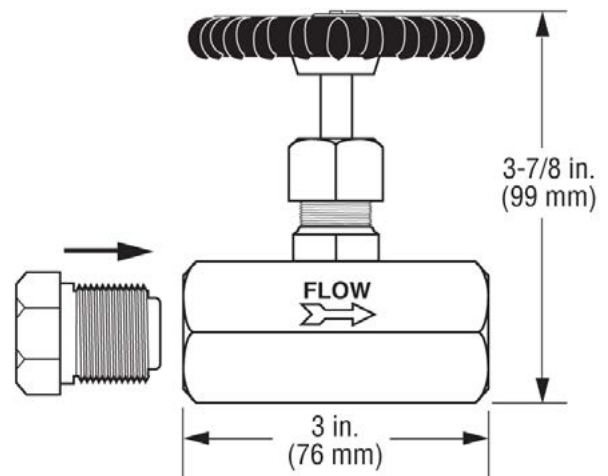
Shown at right is a typical MurphyMatic compressor panel featuring three Pulsation Dampeners and FW Murphy OPLFC gages.

The PDs are recommended for use on piston pumps and compressors to eliminate pointer contact flutter and gage wear.



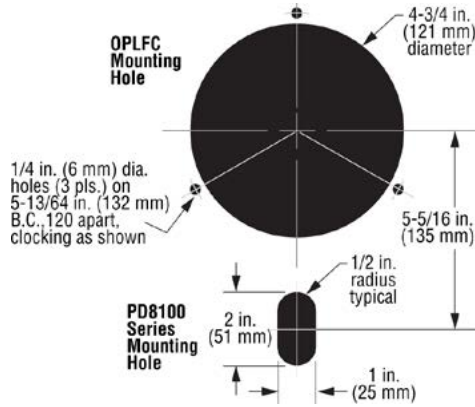
**NOT INTENDED FOR USE  
AS A SHUTOFF VALVE**

## Dimensions



# Mounting

The PD8100 Series Pulsation Dampener is mounted directly below the OPLFS Pressure Switchgauge.



Precautions: Dope or use Teflon tape on connection threads. Do not block the inlet orifice.

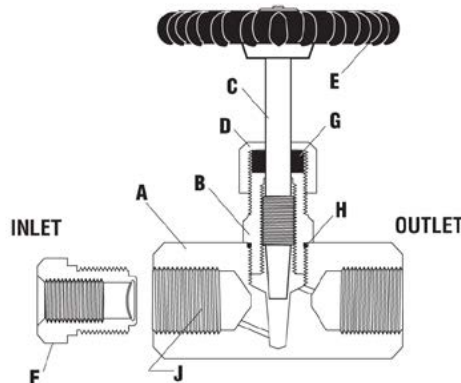
# How to Order

Options listed below. All configurations may not be available. Call your sales representative or FW Murphy for more information.

PD8185 - 1/4 x 1/4

Base Model		Connection Size	
PD8183	= Brass wetted parts, Rated to 3000 psi (20.68 MPa) [206.80 bar]	1/4 x 1/4	= 1/4 NPT Inlet x 1/4 NPT Outlet
PD8184	= Carbon Steel wetted parts, Rated to 5000 psi (34.47 MPa) [344.70 bar]	1/4 x 1/2	= 1/4 NPT Inlet x 1/2 NPT Outlet
PD8185	= 303 Stainless Steel wetted parts, Rated to 10000 psi (68.95 MPa) [689.50 bar]	1/2 x 1/2	= 1/2 NPT Inlet x 1/2 NPT Outlet
PD8190	= 316 Stainless Steel wetted parts, Rated to 10000 psi (68.95 MPa) [689.50 bar]. Meets NACE standard MR-01-75 for direct exposure to H <sub>2</sub> S.	1/2 x 1/4	= 1/2 NPT Inlet x 1/4 NPT Outlet

Part Number				Description	Notes
PD8183	PD8184	PD8185	PD8190		Service Parts See Drawing Below
65050104	65050210	65050204	65051136	A. 1/2 NPT inlet x 1/4 NPT outlet*	
65050105	65050212	65050206	65051135	A. 1/2 NPT x 1/2 NPT outlet*	
65050099	65050209	65050203	65051139	B. Bonnet Fitting	
65050175	65050208	65050202	65051140	C. Valve Stem	
65050098	65050211	65050205	65051137	D. Packing Nut	
55000179	55000179	55000179	55000179	E. Hand Wheel (with 10-32 nut)	
55000174	55000173	55000175	55000206	F. Strainer Bushing Assembly†	
00000936	00000936	00000936	00000936	G. Molded Packing Gland	
00000302	00000302	00000302	00000302	H. O Ring Bonnet Seal	
65050214	65050214	65050214	65050214	J. Stainless Mesh Filter**	



\*For 1/4 NPT inlet use with strainer bushing assembly

†Provided only for units with 1/4 NPT inlet

\*\*Provided in units with 1/2 NPT inlet.