

# Mid-West<sup>®</sup> Instrument

## O.E.M “Diaphragm Type” Differential Pressure Gauge & Switch Model 146

### Common Applications



- Filter monitor for initiating backwash cycles
- Strainer Monitoring
- Water Systems applications
- Hydro applications
- Pump performance monitoring
- Refrigerant filtration systems
- Replacement indicating switch for competitor switches that do not offer local indication

### Specifications:

- Differential Pressure 0-50" H<sub>2</sub>O (0-125 mbar) to 0-30 PSID (0-2.0 bar)
- Accuracy ±5% Full Scale Ascending
- Dial Size
  - Single 1-1/4" x 2-1/4" Oval (Std.)
  - Dual 1-1/4" x 2-1/4" Oval (Opt.)
- Working Pressure 1,000 PSIG
- Operating Temp. -40° F To +200° F (-40°C to 93°C)
- Body Material – Aluminum, Brass & 316L Stainless Steel
- Internal Materials - 316 Stainless Steel
- Elastomers - Buna-N (Std), Viton<sup>®</sup>\*, Silicone, Neoprene (25 PSID & Below), Ethylene Propylene
- Switch Option
  - SPDT 3W, 125 VAC/VDC, 0.25 Amp
  - SPST 60W, 240 VAC/VDC, 3 Amp
- Process Connections 1/8" FNPT Bottom
- Dimensions 1.7H" x 2.5W" x 2.9L"
- Weight 2.5#

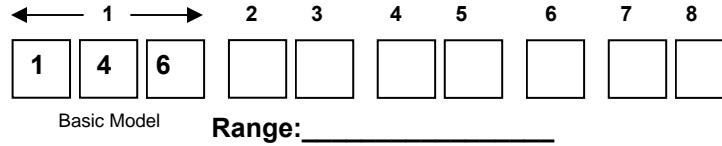


\* Viton<sup>®</sup> is a Registered Trademark of DuPont Dow Elastomers

**Operation:** Differential pressure is sensed by flexible elastomer diaphragm and a calibrated spring. A magnetic coupling transmits the sensing element motion to an indicating pointer. This prohibits the possibility of fluid leaking into the gauge case, while assuring total isolation of the process fluid within the pressure capsule. The diaphragm assures total separation between high and low pressure signals. It is totally supported at full travel in either direction.

**Temperature Limits:** -40 °F (-40° C) to 200°F (93°C). These limits are based on the entire instrument being saturated to these temperatures. System (process) temperatures may exceed these limitations with proper installation. Contact our customer service representative for details.

**Model "146"** 1000 PSIG Working Pressure, Buna-N Diaphragm,  
 Aluminum, Brass or 316 Stainless Steel Body, 316 S.S. Internal Metal Parts  
 Accuracy  $\pm 5\%$  F.S. (Ascending), 1/8" FNPT Bottom Mount  
 Range: **0-50" H<sub>2</sub>O** thru **0-30 PSID**



2	Material
A	Aluminum Body
B	Brass Body
S	316 Stainless Steel Body
Z	Special ( <i>Un-coded Options</i> )
3	Dial Size & Type
W	One
X	Two
Z	Special ( <i>Un-coded Options</i> )
4	Seal Materials
0	Buna-N
1	Viton®-A Registered Trademark of Dupont
2	Silicone
4	Neoprene ( <i>25 PSID &amp; below</i> )
5	Ethylene Propylene
9	Special ( <i>Un-coded Options</i> )
5	Process Connections
0	1/8" FNPT Bottom Connections ( <b>STD</b> )
2	1/8" FNPT Back Connections
6	Options
O	None
Z	Special ( <i>Un-coded Options</i> )
7	Electrical Configuration
A	(1) Switch (non-adjustable)
B	(2) Switches (non-adjustable)
C	(1) Switch (non-adjustable) DIN Plug-In Connector
D	(1) Switch (Flat Pack) Non-Adjustable
E	(2) Switches (Flat Pack) Non-Adjustable
F	(1) Switch (Flat Pack) Switch adjustability $\pm 15\%$
G	(2) Switches (Flat Pack) Switch adjustability $\pm 15\%$
Z	Special ( <i>Un-coded Options</i> )
8	Electrical Specifications
A	SPDT 3W .025 Amp 125 VAC/VDC (Flat-Pack)
C	SPST 60W 3.0 Amp 240 VAC/VDC (Clamp-On & Flat-Pack)
Z	Special ( <i>Un-coded Options</i> )

\*\*Product of switching voltage and current shall not exceed the power rating. Ratings are resistive loads.

**\* Special "OEM" Box car number will be assign upon order.**

**\*Gauges must be purchased in quantities of 25 units.**