PPD, PRD PSD, PVD



### **Description & Features:**

- Versatile high static low differential pressure gauges
- Four types of sensing elements for a large variety of ranges
- Switches available for actuation
- 5 year warranty

### **Applications:**

- Filtration systems
- Low pressure gas systems
- Leak detection

| Specifications               |  |  |  |  |
|------------------------------|--|--|--|--|
|                              | Piston Gauge<br>(PPD)  | Rolling Diaphragm<br>Gauge<br>(PRD)  | Small Convoluted<br>Diaphragm Gauge<br>(PSD)                               | Convoluted<br>Diaphragm Gauge<br>(PVD)                     |
| Dial                         | 2" (50mm),<br>2.5" (63mm),<br>3.5" (90mm),<br>4" (100mm),<br>4.5" (115mm),<br>6" (150mm) | 2.5" (63mm),<br>3.5" (90mm),<br>4" (100mm),<br>4.5" (115mm),<br>6" (150mm) | 2.5" (63mm),<br>3.5" (90mm),<br>4" (100mm),<br>4.5" (115mm),<br>6" (150mm) | 3.5" (90mm),<br>4" (100mm),<br>4.5" (115mm),<br>6" (150mm) |
| Case                         | SS or flanged  | SS or flanged  | SS or flanged  | SS or flanged  |
| Lens                         | Glass  | Glass  | Glass  | Glass  |
| Line Connection<br>Locations | In-line standard, back & bottom (on request)   | & bottom (on request)  | ,  | In-line standard, back & bottom (on request)               |
| Connection                   | <sup>1</sup> /4", <sup>1</sup> /2", <sup>3</sup> /8" NPT, BSP,<br>BSPT                   | 1/4", 1/2", 3/8" NPT, BSP,<br>BSPT   | ¼", ½", ⅛" NPT, BSP,<br>BSPT   | 1/4", 1/2", 3/8" NPT, BSP,<br>BSPT                         |
| Wetted Parts Materials       | PTFE, SS, ceramic  | Diaphragm, SS, ceramic   | Diaphragm, SS,<br>ceramic  | Diaphragm, SS or aluminum, ceramic                         |
| Body Material                | 316 SS, aluminum,<br>brass, Monel®   | 316 SS, aluminum, brass  | 316 SS, aluminum,<br>brass, Monel®   | 316 SS, aluminum   |
| Internals/Movement           | Magnetic coupling using piston & spring  | Magnetic coupling<br>with rolling diaphragm<br>sensor                      | Magnetic coupling with<br>convoluted diaphragm<br>sensor                   | Magnetic coupling with<br>convoluted diaphragm<br>sensor   |
| Pointer                      | Magnetic   | Magnetic   | Magnetic   | Magnetic   |
| Migration of Media           | Marginal   | Zero   | Zero   | Zero   |
| Seal                         | Buna-N standard,<br>Viton®   | Buna-N standard,<br>Viton®   | Buna-N standard,<br>Viton®   | Buna-N standard, Viton®                                    |
| Standard Ranges              | 5-150 psi (0.25-10 bar)  | 5-100 psi (0.25-7 bar)   | 1-60 psi (0.075-4 bar)   | 1-25" wc (25-600mmwc)                                      |
| Maximum Pressure             | Aluminum: 3,000 psi<br>(200 bar)<br>316 SS: 6,000 psi<br>(400 bar)                       | 3,000 psi (200 bar)  | 1,500 psi (100 bar)  | 500 psi (35 bar)   |
| Maximum Temperature          | 175°F (80°C)   | 175°F (80°C)   | 175°F (80°C)   | 175°F (80°C)   |
| Accuracy                     | ±2% ANSI/ASME<br>Grade B   | ±2% ANSI/ASME<br>Grade B   | ±2% ANSI/ASME<br>Grade B   | ±2% ANSI/ASME<br>Grade B                                   |

Monel<sup>®</sup> is a registered trademark of Inco Alloys International Viton<sup>®</sup> is a registered trademark of DuPont Performance Elastomers

### Piston Type (PPD)

PPD, PRD

PSD, PVD

- Most suitable for general use/all purpose applications. Uses a piston with Teflon<sup>®</sup> cap as a sensor to separate high & low pressure in response to pressure differentiation. Not recommended for use on diaphragm seal
- Maximum Pressure: 6,000 psi (400 bar)
- Standard Range: 5-150 psi (0.25-10 bar)

### Rolling Diaphragm Gauge (PRD)

- Operates on rolling diaphragm as sensor, which separates high and low pressure ports. Recommended for air and gas applications or where zero migration of fluid between high and low ports is important. Used in high line pressure and differential pressure ranges up to 100 psid. Can be isolated from the media with a diaphram seal if required
- Maximum Pressure: 3,000 psi (200 bar)
- Standard Range: 5-100 psi (0.25-7 bar)

#### Small Convoluted Diaphragm Gauge (PSD)

- Operates on a convoluted diaphragm as a sensor which separates high and low pressure ports. Recommended for air and gas applications. Used for high line pressure and differential pressure ranges up to 60 psid
- Maximum Pressure: 1,500 psi (100 bar)
- Standard Range: 1-60 psi (0.075-4 bar)

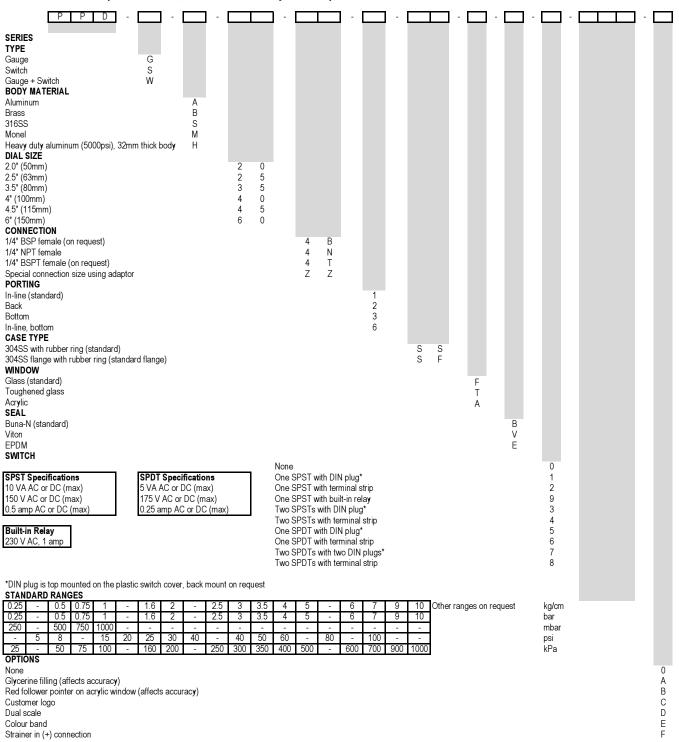
### **Convoluted Diaphragm Gauge (PVD)**

- Operates on convoluted diaphragm sensor with differential pressure ranges 2-200 inches of water. Used where comparatively low line pressures and sensitivity to small changes in differential pressure is important to 4", 4.5" and 6" dials
- Maximum Pressure: 35 bar
- Standard Range: 1-25" wc (25-600mmwc)

Note: Technical drawings are available upon request Teflon<sup>®</sup> is a registered trademark of Dupont Corporation

PP

### Series Number (for custom, non-standard product)

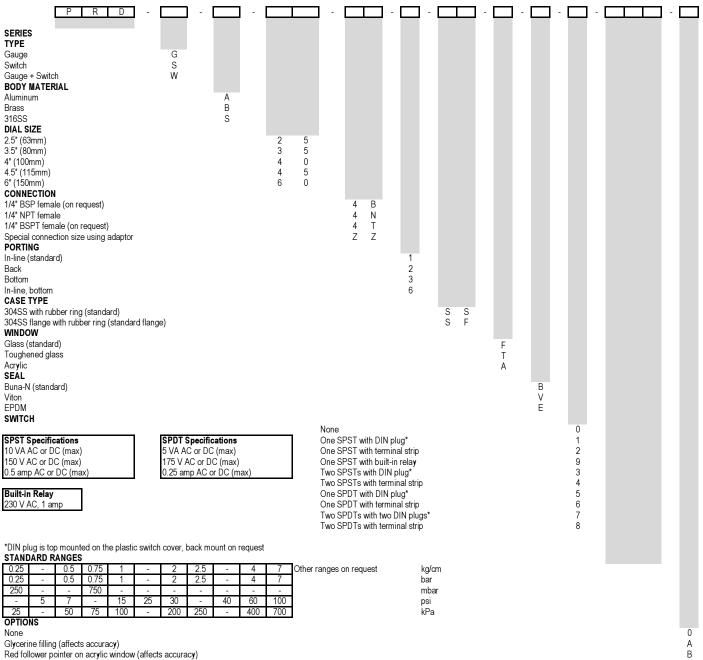


Note: Glycerine filling will not have follower pointer; No follower pointer available on 6" (150mm)

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# **PRD**Rolling Diaphragm Gauge<br/>(High Static Pressure Differential)

### Series Number (for custom, non-standard product)



Customer logo

Dual scale

Colour band

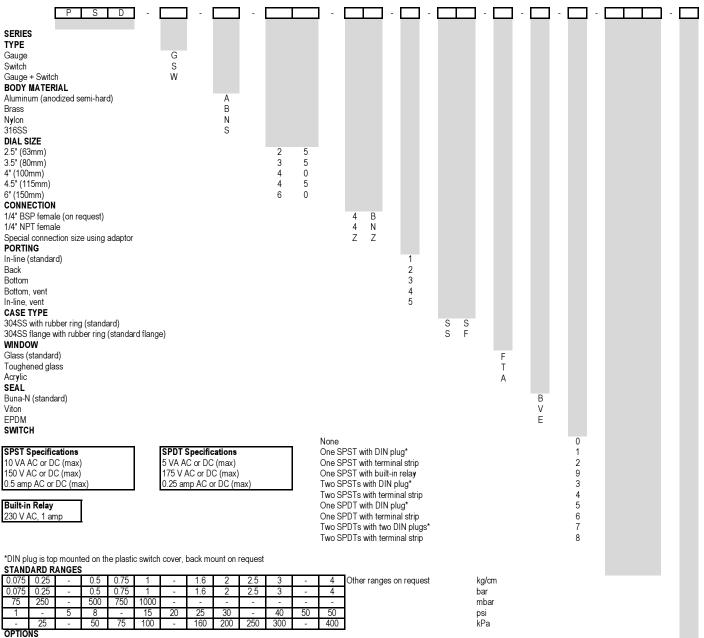
Strainer in (+) connection

Note: Glycerine filling will not have follower pointer; No follower pointer available on 6" (150mm)

0 A B C D E F

## Small Convoluted Diaphragm Gauge (High Static Pressure Differential)

### Series Number (for custom, non-standard product)



None

Glycerine filling (affects accuracy)

Red follower pointer on acrylic window (affects accuracy) Customer logo Dual scale

Colour band

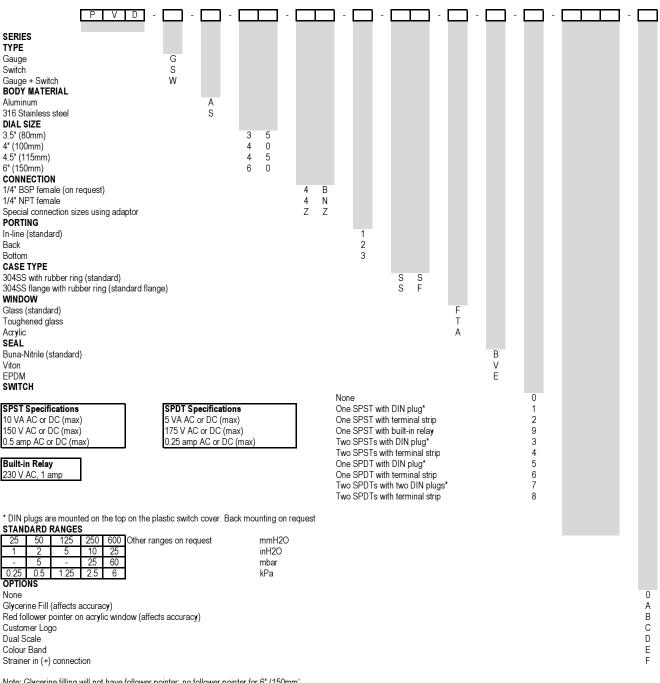
Strainer in (+) connection

Note: Glycerine filling will not have follower pointer; No follower pointer available on 6" (150mm)

PSD

### **Convoluted Diaphragm Gauge** PV (High Static Pressure Differential)

### Series Number (for custom, non-standard product)



Note: Glycerine filling will not have follower pointer; no follower pointer for 6" (150mm)