

#### **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

**High Static Pressure Differential Gauges** 

#### **Applications:**

- Filtration systems
- Low pressure gas systems
- Leak detection

Specifications										
	Piston Gauge (PPD)	Rolling Diaphragm Gauge (PRD)	Small Convoluted Diaphragm Gauge (PSD)	Convoluted Diaphragm Gauge (PVD)						
Dial	2" (50mm), 2.5" (63mm), 3.5" (90mm), 4" (100mm), 4.5" (115mm), 6" (150mm)	2.5" (63mm), 3.5" (90mm), 4" (100mm), 4.5" (115mm), 6" (150mm)	2.5" (63mm), 3.5" (90mm), 4" (100mm), 4.5" (115mm), 6" (150mm)	3.5" (90mm), 4" (100mm), 4.5" (115mm), 6" (150mm)						
Case	SS or flanged	SS or flanged	SS or flanged	SS or flanged						
Lens	Glass	Glass	Glass	Glass						
Line Connection Locations	In-line standard, back & bottom (on request)	,	In-line standard, back & bottom (on request)	In-line standard, back & bottom (on request)						
Connection	1/4", 1/2", 3/8" NPT, BSP, BSPT	1/4", 1/2", 3/8" NPT, BSP, BSPT	1/4", 1/2", 3/8" NPT, BSP, BSPT	¹¼", ¹½", ³⅓" NPT, BSP, BSPT						
Wetted Parts Materials	PTFE, SS, ceramic magnet	Diaphragm, SS, ceramic magnet	Diaphragm, SS, ceramic magnet	Diaphragm, SS or aluminum, ceramic magnet						
Body Material	316 SS, aluminum, brass, Monel®	316 SS, aluminum, brass	316 SS, aluminum, brass, Monel®	316 SS, aluminum						
Internals/Movement	Magnetic coupling using piston & spring	Magnetic coupling with rolling diaphragm sensor	Magnetic coupling with convoluted diaphragm sensor	Magnetic coupling with convoluted diaphragm sensor						
Pointer	Magnetic	Magnetic	Magnetic	Magnetic						
Migration of Media	Marginal	Zero	Zero	Zero						
Seal	Buna-N standard, Viton®	Buna-N standard, Viton®	Buna-N standard, 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 (200 bar) 316 SS: 6,000 psi (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% of full scale value	±2% of full scale value	±2% of full scale value	±2% of full scale value						

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## PPD, PRD PSD, PVD

### **High Static Pressure Differential Gauges**

#### Piston Type (PPD)

- Most suitable for general use/all purpose applications.
   Uses a piston with Teflon® 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® is a registered trademark of Dupont Corporation

## PRD

# Rolling Diaphragm Gauge (High Static Pressure Differential)

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

P R D				<del></del> -		· 🗆 · 🗀	<u> </u>
SERIES TYPE Gauge Switch Gauge + Switch BODY MATERIAL Aluminum Brass	G S W						
316SS DIAL SIZE 2.5" (63mm) 3.5" (80mm) 4" (100mm) 4.5" (115mm) 6" (150mm) CONNECTION 1/4" BSP female (on request)	\$	2 5 3 5 4 0 4 5 6 0	4 B 4 N				
1/4" NPT female 1/4" BSPT female (on request) Special connection size using adaptor PORTING In-line (standard) Back Bottom In-line, bottom CASE TYPE 304SS with rubber ring (standard)			4 T Z Z	1 2 3 6			
3045S flange with rubber ring (standar) WINDOW Glass (standard) Toughened glass Acrylic SEAL Buna-N (standard) Viton EPDDM	d flange)			S F	F T A B V E		
SWITCH  SPST Specifications 10 VA AC or DC (max) 150 V AC or DC (max) 0.5 amp AC or DC (max)  Built-in Relay 230 V AC, 1 amp	SPDT Specifications 5 VA AC or DC (max) 175 V AC or DC (max) 0.25 amp AC or DC (max)	One One Two Two One One Two	ne e SPST with DIN plug* e SPST with terminal s e SPSTs with built-in rel e SPSTs with DIN plug e SPSTs with terminal e SPDT with DIN plug* e SPDT with terminal s e SPDTs with two DIN e SPDTs with two DIN e SPDTs with treminal	trip ay * strip strip plugs*	E	0 1 2 9 3 4 5 6 7 8	
*DIN plug is top mounted on the plastic STANDARD RANGES  0.25 - 0.5 0.75 1  0.25 - 0.5 0.75 1  250 - 750 -  5 7 - 15  25 - 50 75 100  OPTIONS	switch cover, back mount on request 2 2.5 - 4 2 2.5 - 4 2 2.5 - 4 2 2.5 - 4 2 2.5 30 - 40 60 - 200 250 - 400	7 Other range 7 - 100	es on request	kg/cm bar mbar psi kPa			
None Glycerine filling (affects accuracy) Red follower pointer on acrylic window Customer logo Dual scale Colour band Strainer in (+) connection	(affects accuracy)						O A B C D E F

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