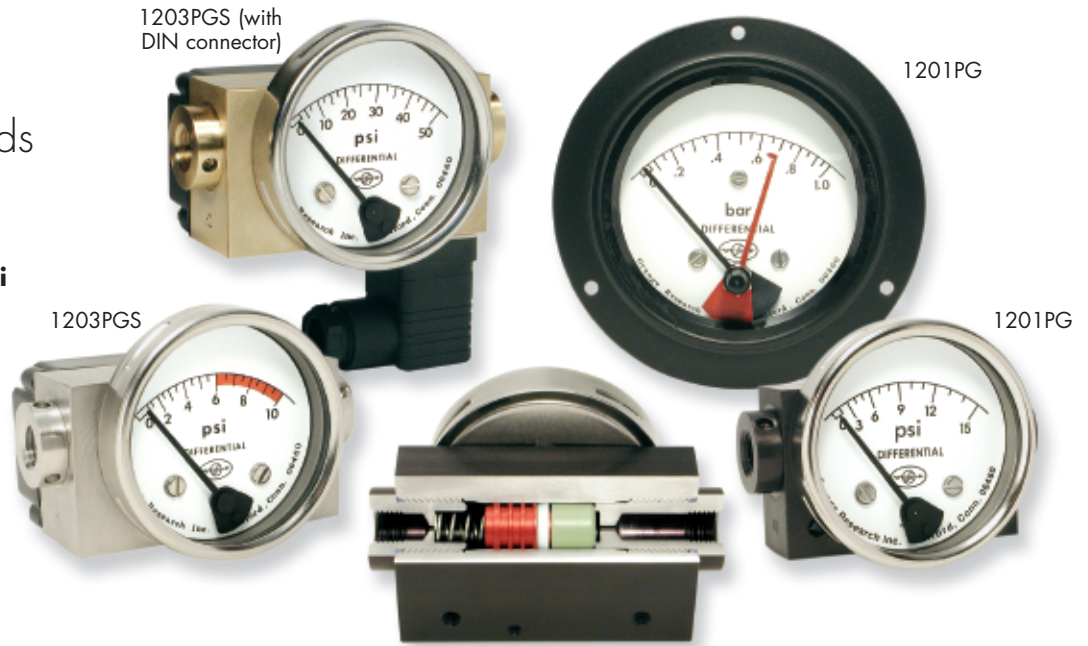


## 0-5 to 0-1000 psid Piston Sensor for Liquids

### Features

- Heavy duty — to 10,000 psi line pressure
- Weatherproof design and rugged construction
- Gauge, switch and transmitter versions
- Popular in filtration and flow measurements



Our piston sensor models are for liquid applications where durability and long life are required. Their simple design has fewer parts to wear out and also keeps the price low.

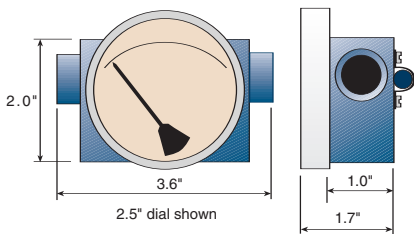
A magnet attached to the dial pointer shaft follows a spring-loaded sensor magnet that moves as differential pressure changes. In this way the DP displacement of the

sensor is translated to our easy-to-read 2.5 to 6-inch diameter dials.

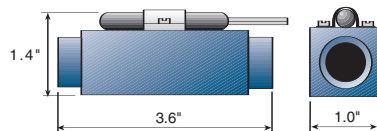
Select from a variety of options such as follower pointers, red arcs and mounting brackets along with switch, relay or transmitter outputs. See page 5 for a complete list of standard options.

### Dimensions

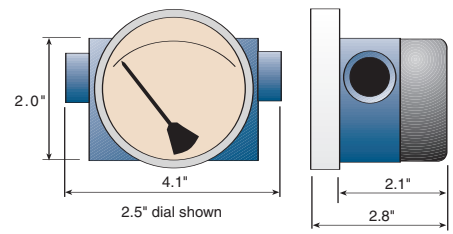
Detailed drawings on website.



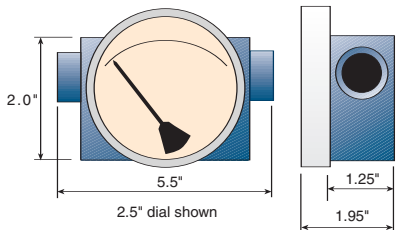
1201PGS



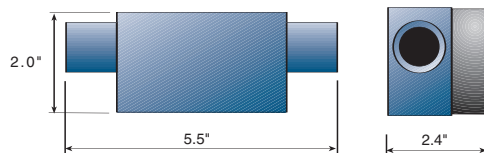
1201PS



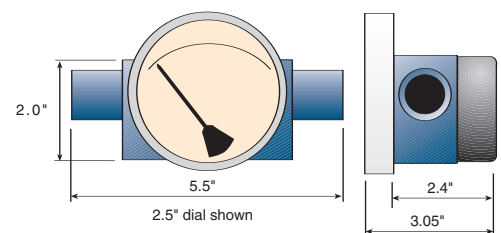
1203PGS



1301PG



1303PS



1303PGS

## Specifications (Detailed Specification Sheets on Website)

| Model                                                                                                                                    | Differential pressure range               | Maximum line pressure/temperature     | Accuracy (F.S.) (Ascending) | Porting (Many porting types available) | Electrical Available**                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------|-----------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>1201PG/PGS/PS</b><br>PG = Piston Gauge<br>PGS = Piston Gauge-Switch<br>PS = Piston Switch                                             | 0-5 to 0-150 psid<br>(0-0.33 to 0-10 bar) | 3000 psig (200 bar)<br>200°F (93°C)   | 2%                          | 1/4" NPT                               | 1 switch<br>no enclosure                                                                              |
| <b>1202PG</b><br>PG = Piston Gauge                                                                                                       | 0-5 to 0-150 psid<br>(0-0.33 to 0-10 bar) | 5000 psig (340 bar)<br>200°F (93°C)   | 2%                          | 1/4" NPT                               | Not available                                                                                         |
| <b>1203PGS/PS/PGT/PT</b><br>PGS = Piston Gauge-Switch<br>PS = Piston Switch<br>PGT = Piston Gauge-Transmitter<br>PT = Piston Transmitter | 0-5 to 0-150 psid<br>(0-0.33 to 0-10 bar) | 5000 psig (340 bar)<br>200°F (93°C)   | 2%                          | 1/4" NPT                               | 1 or 2 switches<br>1 relay<br>transmitter<br>Class 1 Div. 2/NEMA 4X<br>For Class 1 Div. 1, see pg. 26 |
| <b>1206PG*</b><br>PG = Piston Gauge                                                                                                      | 0-5 to 150 psid<br>(0-0.33 to 0-10 bar)   | 10,000 psig (680 bar)<br>200°F (93°C) | 2%                          | 1/4" NPT                               | 1 or 2 switches, 1 relay<br>NEMA 4X                                                                   |
| <b>1301PG</b><br>PG = Piston Gauge                                                                                                       | 0-100 to 0-1000 psid<br>(0-7 to 0-67 bar) | 5000 psig (340 bar)<br>200°F (93°C)   | 2%                          | 1/4" NPT                               | Not available                                                                                         |
| <b>1303PGS/PS/PGT/PT</b><br>PGS = Piston Gauge-Switch<br>PS = Piston Switch<br>PGT = Piston Gauge-Transmitter<br>PT = Piston Transmitter | 0-100 to 0-1000 psid<br>(0-7 to 0-67 bar) | 5,000 psig (340 bar)<br>200°F (93°C)  | 2%                          | 1/4" NPT                               | 1 or 2 switches<br>1 relay<br>transmitter<br>Class 1 Div. 2/NEMA 4X<br>For Class 1 Div. 1, see pg. 26 |
| <b>1306PG*</b><br>PG = Piston Gauge                                                                                                      | 0-100 to 0-1000 psid<br>(0-7 to 0-67 bar) | 10,000 psig (680 bar)<br>200°F (93°C) | 2%                          | 1/4" NPT                               | 1 or 2 switches, 1 relay<br>NEMA 4X                                                                   |

\*PS and PGS transmitter versions available

\*\*NEMA 4X switch models have a 1/2 inch NPT conduit port as standard. A DIN 43650A-PG11 with mating connector is optional, rated IP65 & NEMA 4X

## How to Order

Select from each of the applicable categories to construct a model number. Use the model number when ordering or obtaining additional information and pricing from Orange Research or your local distributor.

**Reordering? You must supply the Part Number from your instrument label.**

| Sample Model Number                              |                                 |                          |                  |                                        |                                  |
|--------------------------------------------------|---------------------------------|--------------------------|------------------|----------------------------------------|----------------------------------|
| <b>1201PGS – 1A – 2.5B – A 0-5 psid, 1, 3, E</b> |                                 |                          |                  |                                        |                                  |
| 1201PGS                                          | 1A                              | 2.5B                     | A                | 0-5 psid                               | 1, 3, E                          |
| Model                                            | Pressure Body                   | Dial Case                | Switch           | Range                                  | Options (more on pg. 5)          |
| 1201PG                                           | <i>In-line ports:</i>           | 2.5B = 2.5" basic        | A = SPST, N.O.   | 0-5, 0-8,                              | 1 = 1/2" NPT                     |
| 1201PGS                                          | 1A = aluminum                   | 3.5B = 3.5" basic        | B = SPST, N.C.   | 0-10, 0-15,                            | 2 = plastic lens                 |
| 1201PS                                           | 1C = 316 stainless steel        | 4.5B = 4.5" basic        | C = SPDT         | 0-20, 0-25,                            | 3 = liquid filled (glycerine)    |
| 1202PG                                           | 1E = brass                      | 6B = 6.0" basic          | A-A = 2 ea. - A  | 0-30, 0-35,                            | 4 = follower pointer             |
| 1203PS                                           |                                 |                          | B-B = 2 ea. - B  | 0-40, 0-50,                            | 5 = Teflon coated magnet/spring  |
| 1203PGS                                          |                                 |                          | C-C = 2 ea. - C  | 0-60, 0-80,                            | 6 = red arc (specify range)      |
| 1206PG                                           | <i>Change "1" above to</i>      | <i>Change "B" to "F"</i> | R2 = relay       | 0-100, 0-125, 0-150                    | 7 = dual scale (specify both)    |
| 1301PG                                           | <i>"4" for back ports; to</i>   | <i>above for flanged</i> | T1 = transmitter | psid                                   | 8 = high temperature             |
| 1303PS                                           | <i>"5" for bottom ports</i>     | <i>dial case</i>         |                  |                                        |                                  |
| 1303PGS                                          |                                 |                          |                  |                                        |                                  |
| 1306PG                                           | <i>Back/bottom ports N/A</i>    |                          |                  |                                        | Special Seals (Buna-N standard): |
|                                                  | <i>on 1203 or 1300 series;</i>  |                          |                  |                                        | E = EPDM V = Viton               |
|                                                  | <i>Brass N/A on 1300 series</i> |                          |                  |                                        | F = Fluorosilicone T = Teflon    |
| <i>More models above</i>                         |                                 |                          |                  | <i>1300 series ranges to 1000 psid</i> |                                  |