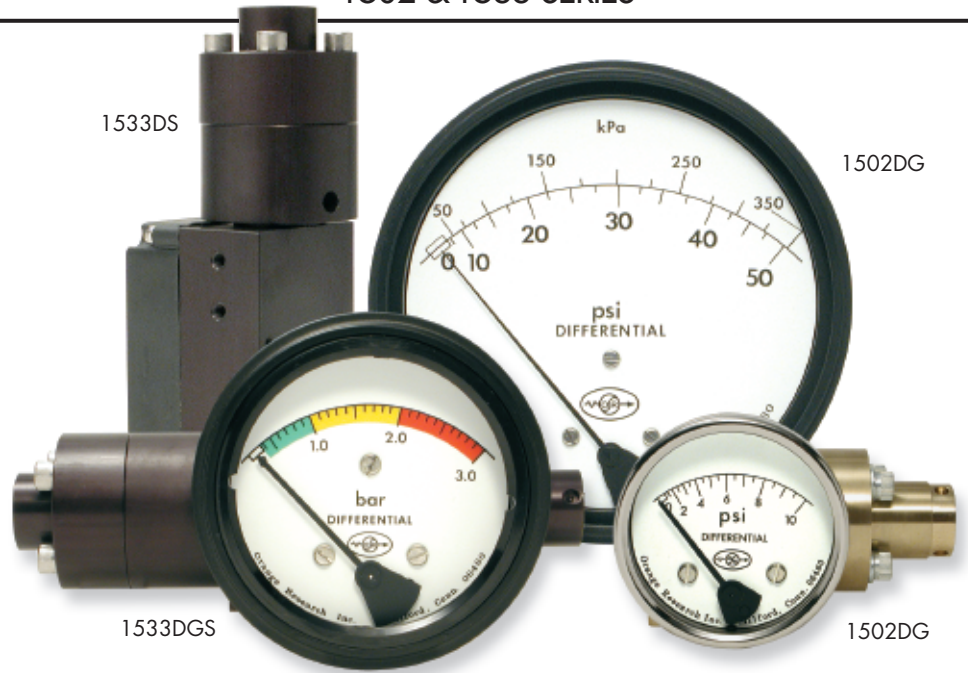


**0-5 to 0-300 psid**

Heavy-duty Diaphragm Sensor for High DP Liquids or Gases

**Features**

- High DP ranges
- Rugged, weatherproof design
- Gauge, switch and transmitter versions



Our 1502 and 1533 models have a heavy-duty diaphragm that is designed for high differential pressures, to 300 psid. This extends the range of our diaphragm sensor DP line – much higher than the more sensitive 1516 model. Though heavy-duty, the diaphragms are still flexible and repeatable enough to match the  $\pm 2\%$  accuracy of our other DP gauges.

Model 1502 is a gauge with a single switch option (uncovered), while our model 1533 is always supplied with up to two switches or a transmitter within a NEMA 4X enclosure.

A rolling diaphragm sensor separates the high and low-pressure ports making these models popular for gases as well as liquids. There is no bypass between the two ports as with our piston models.

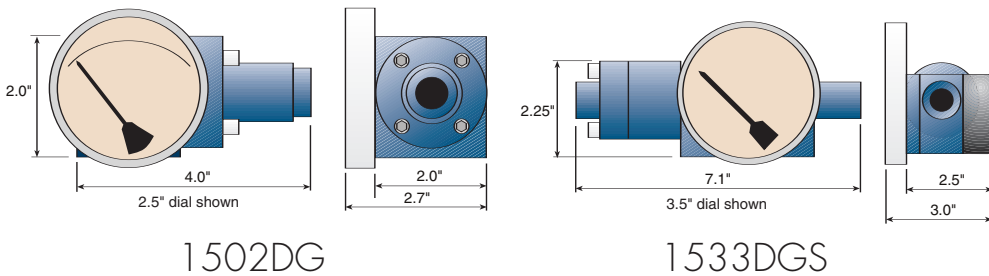
As differential pressure changes the diaphragm sensor magnet moves proportionally. This movement is tracked by a pointer magnet, which rotates and displays the reading on an easy-to-read 2.5 to 6 inch dial.

Select from a variety of options such as follower pointers, red arcs and mounting brackets along with switch, relay or transmitter outputs. More details on these models can be found on our DP introduction pages 2-5. Electrical details are on pages 26-27.

*Note: Reverse pressure should be avoided with these rolling diaphragm models. If this occurs the diaphragm may not return to its original position.*

**Dimensions**

Detailed drawings on website.



**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>1502DG/DGS</b> DG = Diaphragm Gauge DGS = Diaphragm Gauge-Switch	0-10* to 0-300 psid (0-0.33 to 0-20 bar)	3000 psig (200 bar)/200°F (93°C)	2%	1/4" NPT	1 switch No enclosure
<b>1533DGS/DS/DGT/DT</b> DGS = Diaphragm Gauge-Switch DS = Diaphragm Switch DGT = Diaphragm Gauge-Transmitter DT = Diaphragm Transmitter	0-10* to 0-300 psid (0-0.33 to 0-20 bar)	3000 psig (200 bar)/200°F (93°C)	2%	1/4" NPT	1 or 2 switches NEMA 4X  transmitter

\*Fluorosilicone diaphragm is standard for 0-10 psid, Buna diaphragm is standard for above 0-10 psid

\*\*Ranges available by diaphragm material:

- Fluorosilicone: 0-10 to 0-300 psid
- Buna: 0-15 to 0-300 psid
- EPDM: 0-15 to 0-300 psid
- Viton: 0-25 to 0-300 psid

\*\*\*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**  
**1502DGS - 1A - 2.5B - A 0-5 psid, 1, 3, E**

1502DGS	1A	2.5B	A	0-5 psid	1, 3, E
Model	Pressure Body	Dial Case	Switch	Range	Options (more on pg. 5)
1502DG	<i>In-line ports:</i>	2.5B = 2.5" basic	A = SPST, N.O.	0-5, 0-8, 0-10, 0-15,	1 = 1/2" NPT
1502DGS	1A = aluminum	3.5B = 3.5" basic	B = SPST, N.C.	0-20, 0-25, 0-30, 0-35,	2 = plastic lens
	1C = 316 stainless steel	4.5B = 4.5" basic	C = SPDT	0-40, 0-50, 0-60, 0-80,	3 = liquid filled (glycerine)
1533DGS	1E = brass	6B = 6.0" basic	A-A = 2 ea. - A	0-100, 0-125, 0-150,	4 = follower pointer
1533DS			B-B = 2 ea. - B	0-200, 0-250, 0-300	5 = Teflon coated magnet/spring
1533DGT	<i>Change "1" above to</i>	<i>Change "B" to "F"</i>	C-C = 2 ea. - C	psid	6 = red arc (specify range)
1533DT	<i>"4" for back ports; to</i>	<i>above for flanged</i>	R2 = relay		7 = dual scale (specify both)
	<i>"5" for bottom ports</i>	<i>dial case</i>	T1 = transmitter		8 = high temperature
	<i>Back/bottom ports and</i>				Special Diaphragm & Seals
	<i>brass N/A on 1533</i>				(See standards above)
	<i>series</i>				E = EPDM
					F = Fluorosilicone
					V = Viton
					T = Teflon (o-ring seals only)