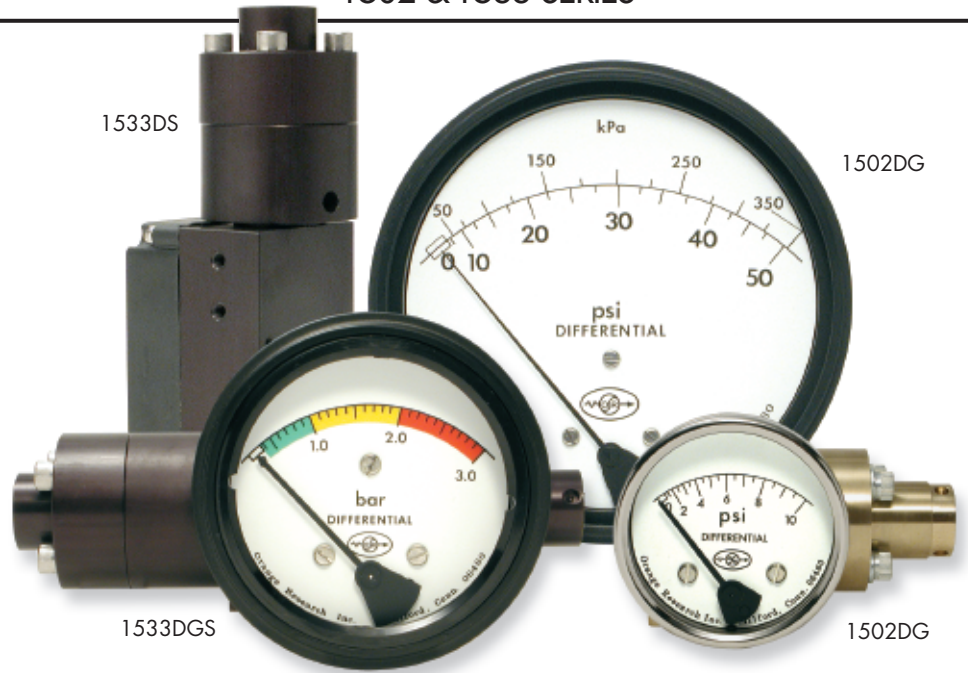


**0-5 to 0-300 psid**

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.

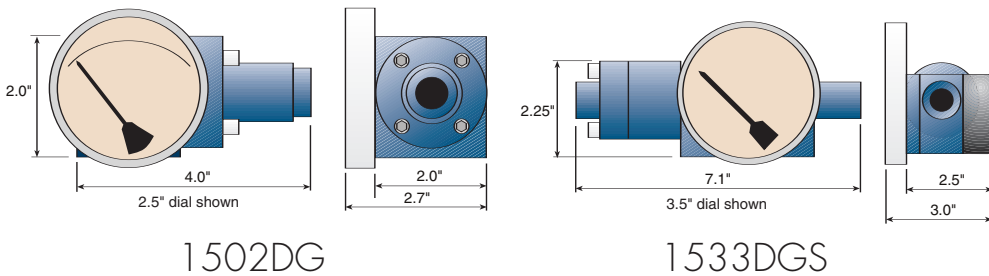
As differential pressure changes the diaphragm sensor magnet moves proportionally. This movement is tracked by a pointer magnet, which rotates and displays the reading on an easy-to-read 2.5 to 6 inch dial.

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***
1502DG	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	Not available
1533DGS/DS/DGT/DT	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

D=Diaphragm G=Gauge S=Switch T=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**  
**1533DGS - 1A - 2.5B - A 0-5 psid, 1, 3, E**

1533DGS Model	1A Pressure Body	2.5B Dial Case	A Electrical	0-5 psid Range	1, 3, E Options (more on pg. 5)
1502DG	<i>In-line ports:</i>	2.5B = 2.5" basic	A = SPST, N.O.	0-10, 0-15, 0-20, 0-25,	1 = 1/2" NPT
1533DGS	1A = aluminum	3.5B = 3.5" basic	B = SPST, N.C.	0-30, 0-35, 0-40, 0-50,	2 = plastic lens
1533DS	1C = 316 stainless steel	4.5B = 4.5" basic	C = SPDT	0-60, 0-80, 0-100,	3 = liquid filled (glycerine)
	1E = brass	6B = 6.0" basic	A-A = 2 ea. - A	0-125, 0-150, 0-200,	4 = follower pointer
<i>More models above</i>	<i>Change "1" above to "4" for back ports; to "5" for bottom ports</i>	<i>Change "B" to "F" above for flanged dial case</i>	B-B = 2 ea. - B	0-250, 0-300 psid	5 = Teflon coated magnet/spring
	<i>Back/bottom ports and brass N/A on 1533 series</i>		C-C = 2 ea. - C		6 = red arc (specify range)
			R2 = relay		7 = dual scale (specify both)
			T2 = transmitter		8 = high temperature
					Special Diaphragm & Seals (See standards above)
					E = EPDM
					F = Fluorosilicone
					V = Viton
					T = Teflon (o-ring seals only)