

# DIFFERENTIAL PRESSURE GAUGES UNI-DIRECTIONAL OR BI-DIRECTIONAL

20 to 500 psi  
Uni-directional or Bi-directional

## PGD-45 Series



PGD-45B-30/30, shown smaller than actual size. See next page for dimensions.



PGD-45L-30, shown smaller than actual size. See next page for dimensions.

- ✓ Heavy-Duty Construction
- ✓ Double-Strength, Shatter-Resistant Glass
- ✓ 2-1-2% ANSI Grade A Accuracy

OMEGA's PGD Series differential pressure gauges are rugged industrial gauges that indicate the difference between 2 input connections. Differential ranges provide the maximum resolution for applications in which one input is always at a higher pressure than the other. In cases in which one input can be higher or lower than the other, a bi-directional differential range should be used.

The PGD Series is constructed with 2 independent Bourdon tubes. The opposing Bourdon tubes are linked

to a single pinion gear that rotates a pointer for direct pressure readings. By using 2 independent Bourdon tubes, the gauge can handle liquids or gases on either or both ports.

The large 4½" dial makes reading pressure easy. Each gauge is equipped with a micrometer adjustment for rezeroing the gauge. Gauges are available with ports located in the lower (six o'clock) position or in the rear (for panel mounting).

PGD Series gauges are available with ports located in the back of the gauge (shown at left), or in the lower (six o'clock) position (shown at right).

## SPECIFICATIONS

**Accuracy:** 2-1-2%, ANSI Grade A  
2% first 10%, 1% middle 80%,  
2% top 10%

**Dial Size:** 4½"

**Dial Arc:** 210°

**Window:** Double-strength glass

**Connection:** ¼ MNPT

**Sensor Type:** Bourdon tube

**Wetted Parts:**

**Tube:** Bronze

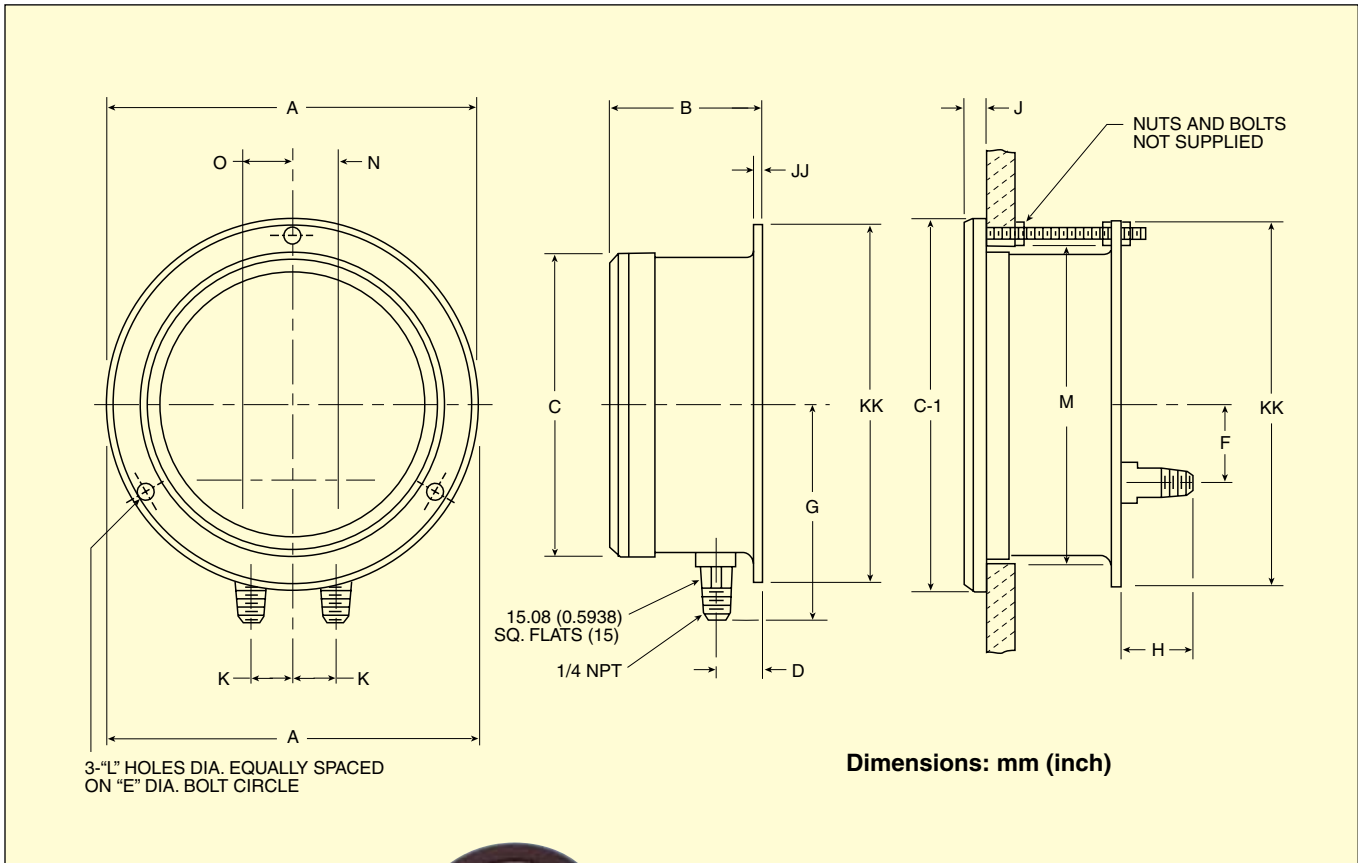
**Fittings:** Brass

**Case:** Black epoxy-coated aluminum

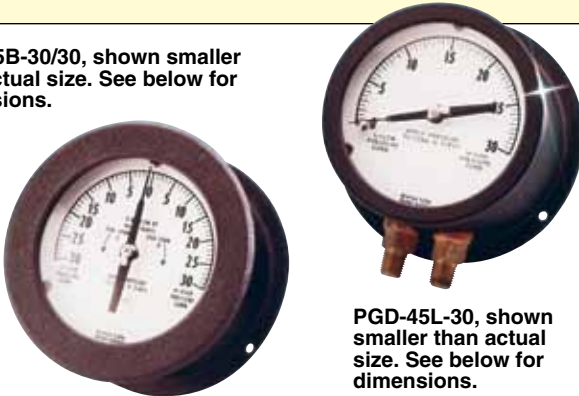
**Operating Temperature:** 65°C (150°F)

**Weight:** 1.4 kg (3 lb)

# DIFFERENTIAL OR BI-DIRECTIONAL RANGES



**PGD-45B-30/30**, shown smaller than actual size. See below for dimensions.



**PGD-45L-30**, shown smaller than actual size. See below for dimensions.

RANGE CODE	RANGE (psi)	FIGURE INTERVAL	MINOR GRADUATION	STATIC PRES. LIMIT (psi)*
20	0/20	5	0.2	30
30	0/30	5	0.5	60
60	0/60	10	1	120
100	0/100	10	1	200
200	0/200	20	2	300
600	0/600	100	10	900
1K	0/1000	100	10	1500
15/15	15/0/15	5	0.5	60
30/30	30/0/30	10	1	120
50/50	50/0/50	10	1	200
100/100	100/0/100	20	2	300
200/200	200/0/200	50	5	600
500/500	500/0/500	100	10	1500

To Order		
MODEL NO.	DIAL SIZE	CONNECTION
PGD-45B-(* )	4 1/2"	Back
PGD-45L-(* )	4 1/2"	Lower

\* Insert range code from table at right.  
**Ordering Example:** PGD-45B-30, 114 mm (4 1/2") differential pressure gauge with back input connection and 0 to 30 psi uni-directional range.

\* Maximum pressure that can be applied to either port on the gauge.  
**PGD-FMR**, black flush mount ring for panel mounting.

**Dimensions: mm (inch)**

GAUGE SIZE	A	B	C	C1	D	E	F	G	H	J	K	L	M	N	O	JJ	KK
4 1/2"	149 (5 7/8)	82 (3 1/32)	126 (4 15/16)	149 (5 7/8)	26 (1 1/16)	137 (5 3/8)	27 (1 1/16)	91 (3 3/16)	40 (1 9/16)	5 (3/16)	15 (1 9/32)	6 (7/32)	125 (4 15/16)	17 (2 1/32)	17 (2 1/32)	3 (1/8)	148 (5 13/16)