



# High Precision Gauge Pressure Indicators

## Series 1000 6" Dial



Series 1000 gauges have capsules up to and including the 150 psig range and Bourdon tubes in the higher ranges. Pressure is applied to the capsule or Bourdon tube through a single case connection. Readings are referenced to atmospheric pressure in the case. Available in 26 standard ranges, (including vacuum and compound ranges) Series 1000 Gauges combine aneroid convenience with precision-liquid-column accuracy. They are compact, yet readability is excellent.

### STANDARD FEATURES

**Ranges:** to 1000 psig  
**Accuracy:** 0.1% of full scale  
**Repeatability:** 0.03% of full scale  
**Sensitivity:** 0.01% of full scale  
**Hysteresis:** 0.1% of full scale for ranges of 150 psi and below; 0.2% of full scale for 200 psi and above

**Maximum temperature effect:** 0.1% of full scale per 10°C/50°F change from 23°C/73.4°F

**Scale length:** 30" through two pointer revolutions

**Dial diameter:** 6"

**Pressure element volume:** Ranges 150 psi and below: 6.9 cc with pointer at zero; 8.6 cc, at full scale. Ranges 200 psi and above: 10 cc. For the range 1-125" water only: 6.3 cc with pointer at zero; 8.0 cc, at full scale

### STANDARD RANGES AND ORDERING NUMBERS

Series 1000 6" Gauge Pressure Indicators

Range and Calibration	Ordering Number	Graduation
0-4.5 psi	62B-2A-0005	0.01 psi
0-10 psi	62B-2A-0010	0.02 psi
0-15.5 psi	62B-2A-0015	0.02 psi
0-20 psi	62B-2A-0020	0.05 psi
0-30 psi	62B-2A-0030	0.05 psi
0-45 psi	62B-2A-0045	0.1 psi
0-60 psi	62B-2A-0060	0.1 psi
0-100 psi	62B-2A-0100	0.2 psi
0-150 psi	62B-2A-0150	0.2 psi
0-200 psi	62B-2A-0200	0.5 psi
0-300 psi	62B-2A-0300	0.5 psi
0-500 psi	62B-2A-0500	1.0 psi
0-1000*psi	62B-2A-1000	2.0 psi

\*This range calibrated for liquid service only, but an additional error of 1-1500 is possible when used to measure gas pressure.

Range and Calibration	Ordering Number	Graduation
0-125" water	62B-2C-0125	0.2"
0-280" water	62B-2C-0280	0.5"
0-800 mm Hg	62B-2D-0800	1.0 mm
0-31.5 mm Hg	62B-2B-0031	0.05"
0-60" Hg	62B-2B-0060	0.1"
0-120" Hg	62B-2B-0120	0.2"
0-200" Hg	62B-2B-0200	0.5"
0-300" Hg	62B-2B-0300	0.5"

### Vacuum and Compound Ranges

Range	Ordering Number	Graduation
-30" Hg to 0	62B-3B-0030**	0.05"
-15 to 0 to 15" Hg	62B-5B-0030**	0.05"
-30 to 0 to 30" Hg	62B-5B-0060**	0.1"
-30 to 0 to 90" Hg	62B-5B-0120**	0.2"
-30 to 0 to 270" Hg	62B-5B-0300**	0.5"

\*\* Can be calibrated as shown, or in any other standard pressure unit at no extra cost. Specify if other than in Hg.

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## STANDARD FEATURES (cont.)

**Liquid service:** Gauges with ranges of 200, 300, and 500 psi (Bourdon tubes) can be calibrated for liquid service as an option. The 0-1000 psi range is calibrated for liquid service only.

**Case pressure:** Cases are open to atmosphere.

**Bleed tube:** Ranges of 200, 300, and 500 psi (Bourdon tubes), when calibrated for liquid service, have bleed tubes to facilitate filling and flushing. On the 1000 psi range, a bleed tube is standard.

**Case connections:** 150 psi and below, 1/8" female NPT; 200 psi and above, 1/4" female NPT. Both have a built-in stainless steel filter and are located in the bottom of the case.

**Case construction:** Anodized aluminum with high-strength, scratch-resistant plastic dial cover. Bezel has no screw holes; the case has special clips, which make flush mounting easy.

**Zero adjustment:** A zero adjustment is accessible through the front of the case.

### Materials exposed to measured gas:

150 psi and below (capsule): Ni-Span C®; brass, 303 stainless steel, soft solder, silver solder. 303 stainless tubing and adapter with silver solder at the pressure connection are optional instead of brass and soft solder in the ranges up to and including 150 psi, but standard in the ranges of 200 psi and above.

200 psi and above (Bourdon tube): Ni-Span C®, 302, 303, and 304 stainless steel, Easy-flow #45 brazing alloy, silver solder, nylon or TFE.

**Options:** Calibration in most metric units available at no extra cost. Other calibration units are available at extra cost. Gauges with a range of 200 psi and higher can be calibrated for liquid service. (The 0-1000 psi range is calibrated only for liquid service.) Bleed tube on 200, 300, and 500 psi ranges (bleed tube is standard on 0-1000 psi). Also available installed in a compact, suitcase-type carrying case with a shock-mounted panel for the gauge. The cover is easily removed and connections can be made without removing the gauge from the case. (In the Series 1000 Gauge two sets of graduations on the same dial are not available).

**Weight and shipping weight:** 5 ½ lb. and 7 lb.

**Ordering information:** When ordering, please specify ordering number, range, and mounting angle. (Extra cost if mounting angle is other than vertical).

**Note:** Gases and liquids must be non-corrosive.

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## Series 1000 6" High Precision Gauge Pressure Indicator

### High Accuracy and Compact Size

Accuracy is 0.1% of full scale; dial diameter only 6 inches. This combination of high accuracy and compact size makes for smaller and more efficient test stands, such as consoles for ground support equipment. The 6-inch size saves dollars in panel construction: It saves 36% in panel space over single-revolution gauges, which have 10 ½" diameter dials.

### Excellent Readability

The pointer covers full scale in two revolutions, permitting a scale 30" long. This is more than twice as long as same-size single-revolution gauges. It permits up to 1000 scale graduations with a minimum of 1/32" of white space between them. This and a knife-edge pointer allow readings to better than 0.03% of full scale.

### Performs Better than the Rated Accuracy

Excellent readability, 0.03% repeatability, custom dial calibration, and individual matching and adjustment of each mechanism to its dial add up to an accuracy of 0.1% and a sensitivity of 0.01% of full scale. These figures are the minimum, which can be expected. After rigorous testing, any W&T Gauge which fails to better the rated accuracy is rejected.

### Accurate Readout at a Glance

Compact size makes readout convenient as well as accurate. The operator takes readings from one position, which is not possible with large diameter gauges. This cuts fatigue and errors. A revolution indicator is included and a mirror ring eliminates parallax errors. The graduations are easily seen; bold numbers are horizontally placed.

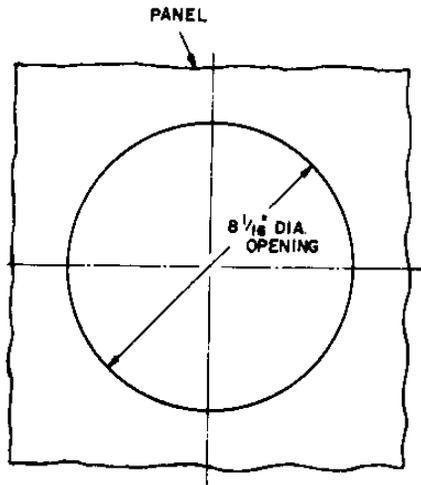
### Calibration is Traceable to National Institute of Standards and Technology

A computer-assisted plotter marks calibration points and the graduations between them on each dial. This produces a scale, which precisely matches the characteristics of each mechanism and pressure element. Calibration may be with any of several precision mercury manometers or primary standard pneumatic piston gauges. These are certified traceable to NIST.

### Solid-Front Construction

The case has a heavy aluminum solid-front and a blow-out-plug back. The pressure inlet is only 1 1/16" in diameter; the blow-out-plug is 1 ½". This design gives excellent protection against excessive pressure as the plug relieves at the slightest build-up. The case is heavy cast aluminum with a high-strength, scratch-resistant plastic dial cover. Overpressuring the instrument up to 25% above its full scale range will not damage the mechanism nor affect accuracy.

Series 1000 6" Gauge Pressure Indicator



PANEL OPENING

