



High Precision Gauge Pressure Indicators

Series 300 6" Dial



For routine test and production uses, this capsule-type gauge offers an acceptable balance among size, readability, accuracy, and price. Available in 18 standard ranges (including vacuum and compound ranges), the Series 300 is convenient to use. Pressure is applied to the capsule through a single connection in the case. Readings are referenced to atmospheric pressure in the case.

STANDARD FEATURES

- Accuracy:** 0.33% of full scale
- Ranges:** To 100 psig
- Sensitivity:** 0.2% of full scale
- Scale length:** 16" through one pointer revolution.
- Dial diameter:** 6"

- Pressure element volume:** 2.5 cc for the range 0-10" water; 2.0 cc for all other ranges.

- Case connection:** 1/8" female NPT with built-in SS filter. Connection located on bottom of case.

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

- Case construction:** Cast, anodized aluminum with a high-strength, scratch-resistant plastic dial cover. Flush mounted by three screws through the bezel.

STANDARD RANGES AND ORDERING NUMBERS

Series 300 6" Gauge Pressure Indicators

Range and Calibration	Ordering Number	Graduation
0-10" water	62C-2C-0010	0.05"
0-20" water	62C-2C-0020	0.1"
0-40" water	62C-2C-0040	0.2"
0-60" water	62C-2C-0060	0.5"
0-100" water	62C-2C-0100	0.5"
0-200" water	62C-2C-0200	1.0"
0-300" water	62C-2C-0300	2.0"
0-400" water	62C-2C-0400	2.0"

Range and Calibration	Ordering Number	Graduation
0-15 psi	62C-2A-0015	0.1 psi
0-30 psi	62C-2A-0030	0.2 psi
0-60 psi	62C-2A-0060	0.5 psi
0-100 psi	62C-2A-0100	0.5 psi

Vacuum and Compound Ranges

Range	Ordering Number	Graduation
-10" water to 0	62C-3C-0010*	0.05"
-20" water to 0	62C-3C-0020*	0.1"
-400" water to 0	62C-3C-0400*	2.0"
-5 to 0 to 5" water	62C-5C-0010*	0.05"
-10 to 0 to 10" water	62C-5C-0020*	0.1"
-20 to 0 to 20" water	62C-5C-0040*	0.2"

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

STANDARD FEATURES (cont.)

Zero

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

Material exposed to measured

gas: Beryllium copper, brass, soft solder in ranges to 100" water; silver and soft solder in ranges above 100" water.

Options: Calibration in most metric units available at no extra cost. Other calibration units and two sets of graduations on the same dial are available at extra cost. 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.

Weight and shipping

weight: 4lb. and 6lb.

Order

information: When ordering, please specify ordering number, range, and mounting angle. (Extra cost if mounting angle is other than vertical.). Options as listed above.

Note: This gauge should not be used for corrosive gases or for liquids of any kind.

Series 300 6" High Precision Gauge Pressure Indicator

Convenience in the Low Pressure Ranges

Available in the low-pressure ranges (down to 0 to 10-in. water), the Series 300 is a reliable mechanical indicator which reads out gauge pressure directly. It is less expensive, more convenient, and gives results comparable to complicated electric transducers and lab-type liquid columns.

Excellent Readability

With a 16-inch scale, the Series 300 offers excellent readability. (In the lowest range, 0 to 10 in. water, the minimum graduation represents 0.05 in. water.) Graduations have ample white space between them. This and a knife-edge pointer read-out is better than 0.1 % of full scale. Numbers on the dial are horizontally placed and a mirror ring eliminates parallax errors.

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 matches precisely the characteristics of its own pressure capsule and mechanism. Calibration is against precision mercury or water manometers or precision dead-weight testers. These are certified traceable to NIST.

Performs Better than the Rated Accuracy Of 0.33% of Full Scale

A readable scale, individually matched dials and mechanisms, excellent repeatability, and a precision mechanism add up to an accuracy of 0.33% and a sensitivity of 0.2% of full scale. These figures are the minimum performance which can be expected. After rigorous testing, any Series 300 Gauge which fails to better the rated accuracy is rejected.

Sensitive, Rugged, and Overpressure Protected

A small, sensitive capsule responds to minute pressure changes. Low-inertia parts throughout and a linkage containing flexures and jewel bearings mean high sensitivity. Yet the mechanism is rugged and resists damage by on-the-job handling. The case is heavy cast aluminum with a high-strength plastic dial cover. A blow-out plug in the back of the case is designed to relieve at the slightest pressure build-up. Overpressuring the instrument up to 25% above its full scale range will not damage the mechanism nor affect accuracy.

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