

# Absolute Pressure Gauge Series 300 6" Dial

WIKA Datasheet 300A\_6

## Applications

- Suitable for test, laboratory and production applications

## Special features

- Available in nine standard ranges
- Absolute pressure is applied to the case and readout is direct without barometric correction
- Readings are referenced to zero absolute



Absolute Pressure Gauge Model 300 6"

## Standard Features

### Size

6" dial

### Scale length

16"

### Range

To 30 psia

### Accuracy

0.3% of full scale

### Sensitivity

0.2% of full scale

### Case pressure and volume

15 psig maximum, 395-cc volume with an optional, overpressure relief valve available to protect the case

### Maximum case leak rate

Will not exceed  $1.44 \times 10^{-5}$  std cc/sec or 0.0019 psi/hr.

### Case connection

1/8" female NPT with built-in stainless steel filter. Connection located on back of case

### Case construction

Aluminum with tempered-glass window  
Flush mounted by three screws through the bezel

### Material exposed to measured gas

Aluminum, beryllium copper, brass, stainless steel, nylon, E.P.R. Monel, lead, nickel-plated phosphor bronze, soft or silver solder, synthetic sapphire, paper, epoxy cement, TFE, nickel silver, nickel plating, drawing ink, lacquer

### 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 are excess pressure-relief valves for 2 and 15 psig.

### Weight and shipping weight

Approx. 5 lbs.

### 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 300A 6" Absolute Pressure Gauge

### Direct Readout, No Barometric Adjustments

Because applied pressure is referenced against evacuated elements, WIKA gauges read out true absolute pressure directly. No corrections or adjustments required.

### Convenience in the Low Pressure Ranges

Available in the low-pressure ranges (lowest is 0.1-20 mm Hg.). The Series 300 is a reliable, mechanical indicator, which reads absolute pressure directly.

### Excellent Readability

With a 16" scale, the Series 300 offers excellent readability. (In the lowest range, 0.1 to 20 mm Hg, the minimum graduation represents 0.1 mm.) Graduations have ample white space between them. Numbers on the dial are horizontally placed and a mirror ring eliminates parallax errors.

### Calibration is Traceable to National Institute of Standards and Technology (NIST)

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 its own pressure capsule and mechanism. Instruments supplied are certified traceable to NIST.

### Performs Better than the Rated Accuracy of 0.3% of Full Scale

A readable scale, dials individually matched to precision mechanisms, and excellent repeatability add up to an accuracy of 0.3% 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 that fails to perform better than the rated accuracy is rejected.

### Sensitive, Yet Rugged

A small, sensitive capsule responds to minute pressure changes. Low-inertia parts throughout and a linkage containing flexures and jewel bearings mean high sensitivity. The Series 300 has a heavy aluminum case with a tempered-glass dial cover.

Optional excess pressure relief valve in the line is designed to prevent exceeding maximum case pressure. The sub-atmospheric ranges have a check valve, which protects the mechanism from sudden release to atmosphere.

## Series 300A 6" Absolute Pressure Gauge

### Standard Ranges and Ordering Numbers

Range and Calibration	Ordering Number	Graduation
0.1-20 mm Hg	61C-1D-0020	0.1 mm
0-50 mm Hg	61C-1D-0050	0.2 mm
0-100 mm Hg	61C-1D-0100	0.5 mm
0-200 mm Hg	61C-1D-0200	1.0 mm
0-410 mm Hg	61C-1D-0410	2.0 mm
0-800 mm Hg	61C-1D-0800	5.0 mm
390-800 mm Hg	61C-1D-0390	2.0 mm
0-15 psia	61C-1A-0015	0.1 psia
0-30 psia	61C-1A-0030	0.2 psia

