

# Absolute Pressure Gauge Series 300 2.75" Dial

WIKA Datasheet 300 275A

## Applications

- Suitable for routine test, laboratory, and production applications

## Special Features

- Accurate and compact size
- Available in 10 standard ranges
- Readout is direct, without barometric or temperature corrections
- Readings are referenced to zero absolute



Absolute Pressure Gauge Series 300 - 2.75" Dial

## Standard Features

### Size

2¾" dial

### Scale length

7" through one pointer revolution

### Range

To 100 psia

### Accuracy

0.33% of full scale

### Sensitivity

0.2% of full scale

### Case pressure and volume

150 psig, maximum, and 179 cc

### Maximum case leak rate

Will not exceed  $0.645 \times 10^{-5}$  std cc/sec or 0.0019 psi/hr

### Case connection

½" female NPT with built-in stainless steel filter

### Case construction

Anodized aluminum with tempered-glass window  
Flush mounted by four mounted screws through the bezel

### Material exposed to measured gas

Aluminum, Beryllium copper, brass, stainless steel, nylon, Hypalon, Monel, lead, nickel-plated phosphor bronze, soft or silver solder, synthetic sapphire, paper, epoxy cement, TFE, nickelsilver, nickel plating, drawing ink, lacquer

### Options

Calibration in most metric units available at no extra cost. Other units of calibration and excess-pressure-relief valves for 2, 15, and 100 psig are available at extra cost.

### Weight and shipping weight

App. 2 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 300 2.75" Absolute Pressure Gauge

### Direct Readout, No Barometric Adjustments

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

### Compact For Space Saving

The Series 300 has a dial only 2¾" in diameter and a scale 7" long. The gauge is compact, yet offers adequate readability.

### 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% full scale. These figures are the minimum performance which can be expected. After rigorous testing, any Series 300 gauge which 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.

This Series 300 gauge has an anodized aluminum case with a tempered-glass window. Instruments will withstand overpressure up to 10% above full scale without damaging the mechanism nor affecting accuracy.

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

## Series 300 2.75" Absolute Pressure Gauge

### Standard Ranges and Ordering Numbers

Range and Calibration	Ordering Number	Graduation
0-50 mm Hg	61D-1D-0050	0.5 mm
0-100 mm Hg	61D-1D-0100	1.0 mm
0-200 mm Hg	61D-1D-0200	2.0 mm
0-410 mm Hg	61D-1D-0410	5.0 mm
0-800 mm Hg	61D-1D-0800	10.0 mm
390-800 mm Hg	61D-1D-0390	5.0 mm
0-15 psia	61D-1A-0015	0.2 psia
0-30 psia	61D-1A-0030	0.5 psia
0-60 psia	61D-1A-0060	1.0 psia
0-100 psia	61D-1A-0100	1.0 psia

