# Bourdon Tube Pressure Gauges Test Gauge with ± 0.25% Accuracy Type 312.20

# **Applications**

- Calibration and testing laboratories
- Suitable for gaseous or liquid media that will not obstruct the pressure system or corrode copper alloy wetted parts

# **Special features**

- High accuracy (± 0.25% of span)
- Mirrored band on dial
- Knife edge adjustable pointer
- Pressure ranges up to 10,000 psi

# **Standard Features**

Design ASME B40.100 & EN 837-1

**Sizes** 6" (160 mm)

Accuracy class ± 0.25% of span (ASME B40.100 Grade 3A)

Ranges (all ranges not stocked) Vacuum / Compound to 200 psi Pressure from 10 psi to 10,000 psi or other equivalent units of pressure or vacuum

# Working pressure

Steady:full scale valueFluctuating:0.9 x full scale valueShort time:1.3 x full scale value

**Operating temperature** Ambient: -40°F to +140°F (-40°C to +60°C) Medium: +180°F (+80°C) maximum

# Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C)  $\pm$ 0.4% for every 18°F (10°C) rising or falling. Percentage of span.

Weather protection Weather resistant (NEMA 3 / IP 54)

WIKA Datasheet 312.20 07/2008

# Mechanical Pressure Measurement





#### Bourdon Tube Pressure Gauge Model 312.20

**Pressure connection** 

Material: copper alloy Lower mount (LM) or lower back mount (LBM) 1/4" NPT or 1/2" NPT limited to wrench flat area

### Bourdon tube

 $\leq$  1,000 PSI: copper alloy, C-type, soft soldered  $\geq$  1,500 PSI: 316 stainless steel, helical type, brazed

Movement Copper alloy with nickel-alloy wearable parts

**Dial** White aluminum with black lettering and mirrored band

**Pointer** Black aluminum with knife edge, friction adjustable

### Case

304 stainless steel with Buna-N vent plug and polished stainless steel bayonet ring.

Window Laminated safety glass

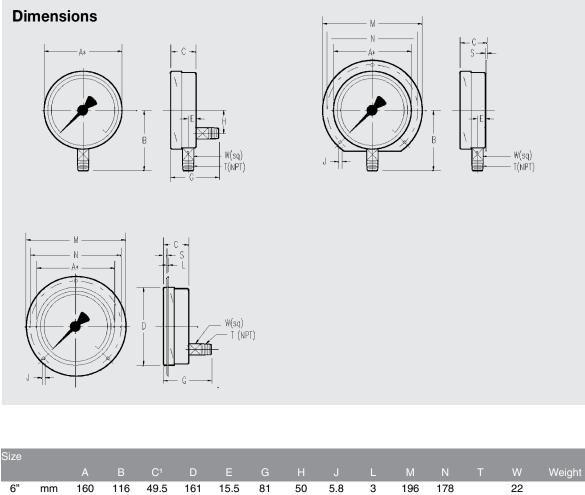
Window gasket Buna-N

Standard scale psi



### **Optional extras**

- Brass restrictor
- Stainless steel front or rear flange
- NIST calibration certificate
- Solid front safety case (Type 312.30)
- Special connections limited to wrench flat area
- Custom dial layout
- Other pressure scales available
  - bar, kPa, MPa, kg/cm<sup>2</sup> and dual scales



•							•.		0.0	U U					
	in	6.0	4.57	1.95	6.34	0.61	3.19	1.97	0.23	0.12	7.72	7.0	1/2"	0.86	2.42 lb
-															

 $^1\,\text{For ranges}\,{\leq}\,60$  psi and  ${\geq}\,1,500$  psi, C dimension changes to 2.58" (65.5 mm)

### Recommended panel cutout is dimension D + 1.5 mm

#### Page 2 of 2

#### Ordering information

Pressure gauge model / Nominal size / Scale range / Size of connection / Optional extras required Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice. WIKA Datasheet 312.20 07/2008



WIKA Instrument Corporation 1000 Wiegand Boulevard Lawrenceville, GA 30043 Tel (770) 513-8200 Toll-free 1-888-WIKA-USA Fax (770) 338-5118 E-Mail info@wika.com www.wika.com