Bourdon Tube Pressure Gauge
Model 213.40 Industrial Series Liquid Filled

Applications
- Intended for adverse service conditions where pulsation or vibration exists
- Suitable for gaseous or liquid media that will not obstruct the pressure system
- Hydraulics & compressors

Special features
- Vibration and shock resistant
- Solid forged-brass case and socket
- Pressure ranges up to 15,000 psi

Standard Features

Design
ASME B40.100 & EN 837-1

Sizes
2½" & 4" (63 & 100 mm)

Accuracy class
2½": ± 2/1/2% of span (ASME B40.100 Grade A)
4": ± 1% of span (ASME B40.100 Grade 1A)

Ranges
Vacuum / Compound to 200 psi
Pressure from 15 psi to 15,000 psi
or other equivalent units of pressure or vacuum

Working pressure
2½": Steady: 3/4 scale value
    Fluctuating: 2/3 full scale value
    Short time: full scale value
4": Steady: full scale value
    Fluctuating: 0.9 x full scale value
    Short time: 1.3 x full scale value

Operating temperature
Ambient: -4°F to +140°F (-20°C to +60°C) - glycerine filled
-40°F to +140°F (-40°C to +60°C) - silicone filled
Medium: max. +140°F (+60°C) - soldered system
max. +212°F (+100°C) - brazed system

Temperature error
Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.3% for every 18°F (10°C) rising or falling. Percentage of span.

Weather protection
Weather tight (NEMA 4X / IP 65)

Pressure connection
Material: copper alloy
Lower mount (LM) or center back mount (CBM) - 2½”
Lower mount (LM) or lower back mount (LBM) - 4”
1/4” NPT or 1/2” NPT limited to wrench flat area

Bourdon tube
2½” Size- Material: Copper alloy
30” Hg (VAC) to 1,000 PSI- C-type (soldered)
1,500 PSI to 15,000 PSI- helical type (soldered)
4” Size- Material: Copper alloy < 1,000 PSI
316 stainless steel > 1,500 PSI
30” Hg (Vac) to 1,000 PSI- C-type (soldered)
1,500 PSI to 15,000 PSI- helical type (brazed)

Movement
Copper alloy

Dial
White aluminum with black lettering, 2½” with stop pin

Pointer
Black aluminum
### Case
Gold-painted forged brass with integral connection and vent plug

### Bezel ring
Gold-plated ABS cover ring (2½")
Chrome-plated brass cover ring (4”)

### Window
Acrylic with Buna-N gasket

### Case fill
Glycerine 99.7%

### Optional extras
- Brass restrictor
- Front or rear flange
- U-clamp mounting
- Laminated safety glass or flat glass window
- Red drag pointer or mark pointer
- Silicone or Fluorolube case filling
- Special connections limited to wrench flat area
- Custom dial layout
- Other pressure scales available
  - bar, kPa, MPa, kg/cm² and dual scales

---

**Dimensions**

#### Case fill
Glycerine 99.7%

#### Optional extras
- Brass restrictor
- Front or rear flange
- U-clamp mounting
- Laminated safety glass or flat glass window
- Red drag pointer or mark pointer
- Silicone or Fluorolube case filling
- Special connections limited to wrench flat area
- Custom dial layout
- Other pressure scales available
  - bar, kPa, MPa, kg/cm² and dual scales

---

**Recommended panel cutout is dimension D + 1.8 mm = 102.8 mm**