

# Bourdon Tube Pressure Gauges

## Paper Machine Gauge

### Type 212.40PM - Dry Case

### Type 213.40PM - Liquid-filled Case

WIKA Datasheet 21X.40PM

#### Applications

- With liquid filled case for applications with high dynamic pressure pulsations or vibration
- Paper machines and hydraulic presses
- Suitable for gaseous or liquid media that will not obstruct the pressure system

#### Product Features

- Excellent load-cycle stability and shock resistance
- Front flange for panel mounting
- Solid forged-brass case and connection



Bourdon Tube Pressure Gauge Model 212.40PM

#### Specifications

##### Design

ASME B40.100 & EN 837-1

##### Nominal size

3½" (80 mm)

##### Accuracy class

± 2/1/2% of span (ASME B40.100 Grade A)

##### Ranges

Vacuum / Compound to 200 psi (16 bar)  
Pressure from 15 psi (1 bar) to 15,000 psi (1000 bar)  
or other equivalent units of pressure or vacuum

##### Working pressure

Steady: ¾ full-scale value  
Fluctuating: ⅔ full-scale value  
Short time: full-scale value

##### Operating temperature

Ambient: -40°F to +140°F (-40°C to +60°C) - dry  
-4°F to +140°F (-20°C to +60°C) - glycerine filled  
Medium: max. +140°F (+60°C) ≤ 1,000 psi

##### Temperature error

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

##### Weather protection

Weather resistant (NEMA 4 / IP 66)

##### Pressure connection

Material: copper alloy  
¼" NPT lower back mount (LBM)

##### Bourdon tube

Material: copper alloy  
≤ 1,000 psi (70 bar): C-shape copper alloy  
≥ 1,000 psi (70 bar): helical stainless steel

##### Movement

Copper alloy

##### Dial

White aluminum with black lettering

##### Pointer

Black aluminum

**Case**

Forged brass with integral connection and blowout plug with polished stainless steel front flange. Suitable for liquid filling

**Window**

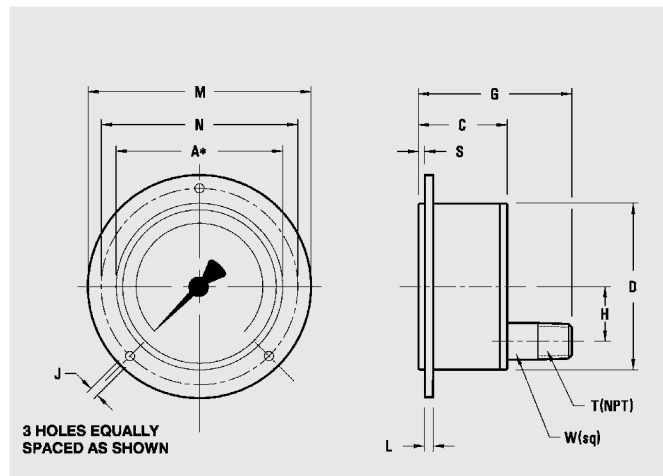
Acrylic with Buna-N gasket

**Case fill**

Glycerine 99.7% - Type 213.40PM

**Optional extras**

- Brass restrictor
- Flat glass or safety glass window
- Silicone or Halocarbon oil case filling
- 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



Size		A	C	D	G	H	J	L	M	N	S	T	W	Weight	
3.5"	mm	80	40	80	65	23	4.8	2	127	112	2.5		22	1.47 lb.	dry
	in	3.14	1.57	3.15	2.56	0.91	0.19	0.08	5.0	4.41	0.10	¼"	0.87	2.25 lb.	filled

Recommended panel cutout is dimension D + 1 mm

**WIKA Instrument, LP**

1000 Wiegand Boulevard  
Lawrenceville, GA 30043-5868  
Tel: 888-WIKA-USA • 770-513-8200  
Fax: 770-338-5118  
E-Mail: info@wika.com  
www.wika.com