

# 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

#### Special features

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

#### Standard Features

##### Design

ASME B40.100 & EN 837-1

##### Sizes

3½" (80 mm)

##### Accuracy class

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

##### Ranges

Vacuum / Compound to 200 psi

Pressure from 15 psi to 15,000 psi

or other equivalent units of pressure or vacuum

##### Working pressure

Steady: 3/4 scale value

Fluctuating: 2/3 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

max. +212°F (+100°C) ≥ 1,500 psi

##### Temperature error

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



**Bourdon Tube Pressure Gauge Model 212.40PM**

##### Weather protection

Weather resistant (NEMA 4 / IP 54)

##### Pressure connection

Material: copper alloy

1/4" NPT lower back mount (LBM)

##### Bourdon tube

Material: copper alloy

≤ 1,000 PSI: C-type, soldered

≥ 1,500 PSI: helical type, brazed

##### Movement

Copper alloy

##### Dial

White aluminum with black lettering

##### Pointer

Black aluminum

##### Case

Gold-painted forged brass with integral connection and blowout plug with polished stainless steel front flange. Suitable for liquid filling

##### Window

Acrylic with Buna-N gasket

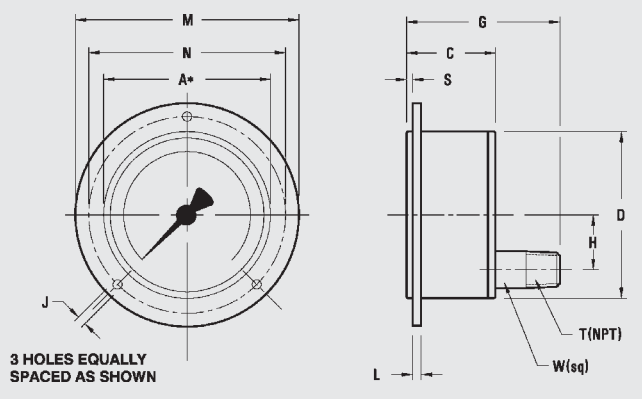
### Case fill

Glycerine 99.7% - Type 213.40PM

### Optional extras

- Brass restrictor
- Flat glass or safety glass window
- Silicone or Fluorolube 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

### Dimensions



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	3.5	1.57	3.15	2.56	0.91	0.19	0.08	5.0	4.41	0.10	1/4"	0.87	2.25 lb.	filled

Recommended panel cutout is dimension D + 1 mm

#### 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.



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