

# Bourdon tube pressure gauge per DIN 38030

## Panel mounting series for rail-vehicle braking systems

### Model PG21PB, NS 60, 80 and 100

WIKA data sheet PM 02.14

#### Applications

- Pneumatic braking systems for rail vehicles and commercial vehicles
- Pressure measurement for brake cylinders and pressure vessels

#### Special features

- Case from stainless steel
- Accuracy class 1.0 and 1.6 (NS 60)
- Scale ranges from 0 ... 6 bar to 0 ... 16 bar
- Overload safety to 1.3 x full scale value
- Ingress protection IP43



Fig. left: Model PG21PB, NS 60  
 Fig. right: Model PG21PB, NS 80  
 Fig. bottom: Model PG21PB, NS 100

#### Description

The model PG21PB Bourdon tube pressure gauge is used in rail vehicles, buses and heavy goods vehicles with compressed-air brakes.

The stainless steel case and the measuring system from a special copper alloy are the basis for very good measuring properties. The instrument is designed for high load-cycling conditions and a good resistance to environmental influences.

On all models, the dials are illuminated, glare-free, by a special light guide. The illumination of the dial is possible, indirectly, via light slots in the case or, directly, via a filament bulb or LED with BA9s bulb fitting.

For the safety of the vehicle driver, the instrument is designed with a shatterproof window and a blow-out device at the case back.

The model PG21PB is also available in customer-specific versions, e.g. with individual dial layout.

## Specifications

### Design

DIN 38030

### Nominal size in mm

60, 80 and 100

### Accuracy class

1.0 (NS 80 and 100)

1.6 (NS 60)

### Scale ranges

0 ... 6 bar, 0 ... 10 bar, 0 ... 12 bar, 0 ... 16 bar

### Pressure limitation

Fluctuating: Full scale value

Short time: 1.3 x full scale value

### Permissible temperature

Ambient: -25 ... +80 °C

Medium: -20 ... +60 °C

### Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C): max.  $\pm 0.3 \%$ /10 K of the span

### Ingress protection per IEC/EN 60529

IP43

### Process connection

Copper alloy, centre back mount, with restrictor  $\varnothing 1^{-0.2}$  mm

NS 60: M12 x 1.5 R6 24°K

NS 80, 100: M16 x 1.5 R10 24°K

### Pressure element

Copper alloy

### Movement

Copper alloy

### Dial

Aluminium, black

Scale and lettering, white

### Pointer

Aluminium, white or yellow (RAL colours per DIN 38030)

### Case

Stainless steel 1.4301

### Illumination

Indirect: Light slots

Direct: Light bulb, 3 W (NS 60: 2 W), DC 24 V,

BA9s lamp holder

### Window

Laminated safety glass, reduced light reflections

### Panel fitting

Single-piece mounting bracket, galvanised steel

Triangular bezel, aluminium, black

## Options

- Other process connection
- Restrictor  $\varnothing$ : 0.3 mm or 0.6 mm
- Window: PMMA
- Triangular bezel, polished stainless steel
- Dial: Aluminium, white, dual scale
- Higher luminosity with LED
- Other pointers

## Certificates (option)

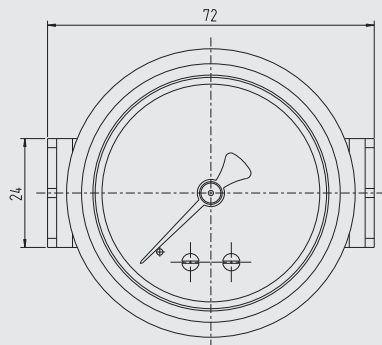
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

Approvals and certificates, see website

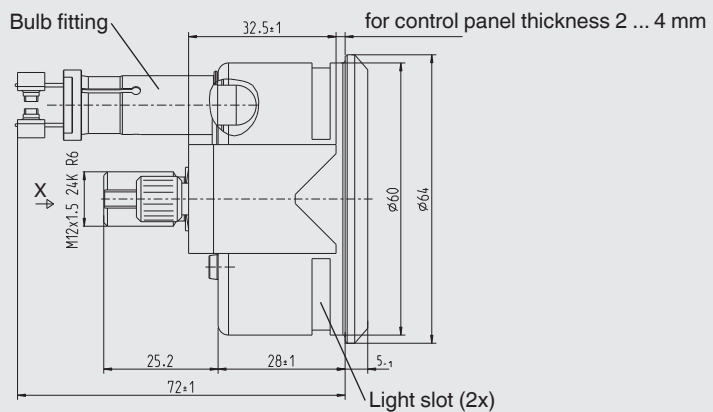
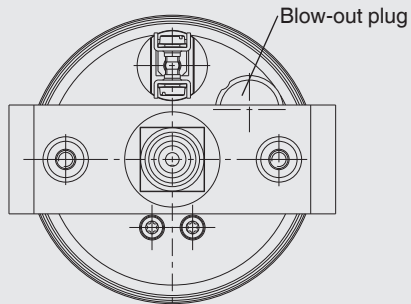
## Dimensions in mm

### Standard version

#### Model PG21PB, NS 60



View X

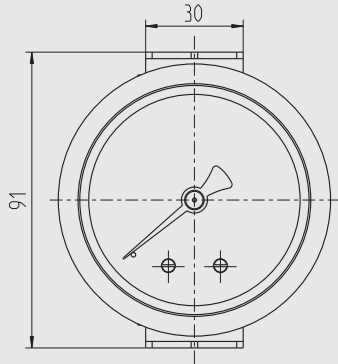


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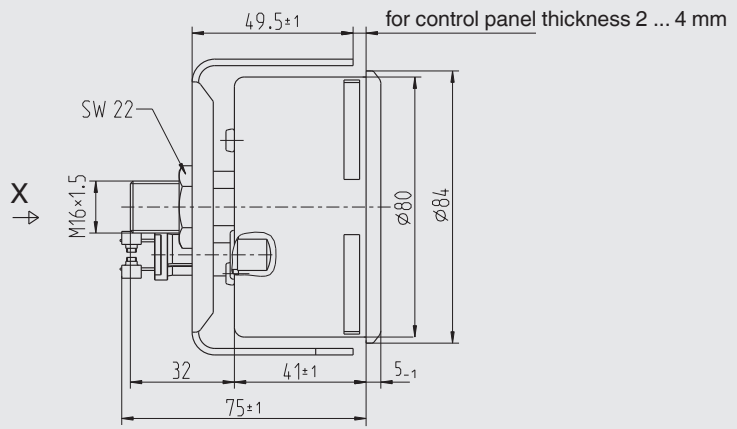
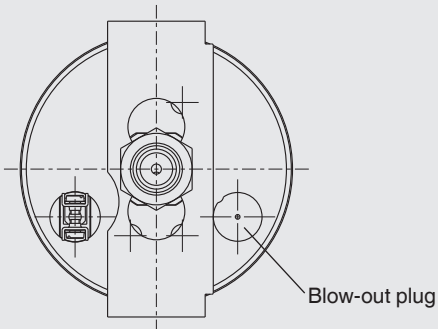
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- Union nut SW 14 per DIN 3870

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**Model PG21PB, NS 80**



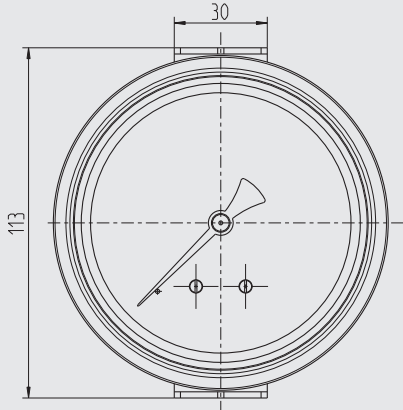
**View X**



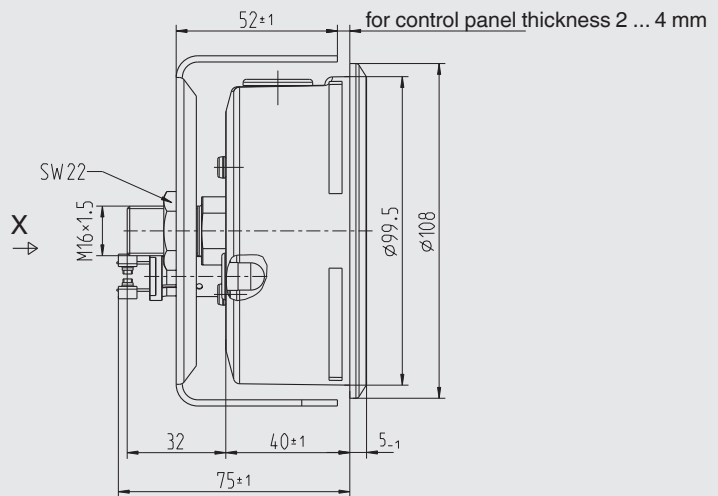
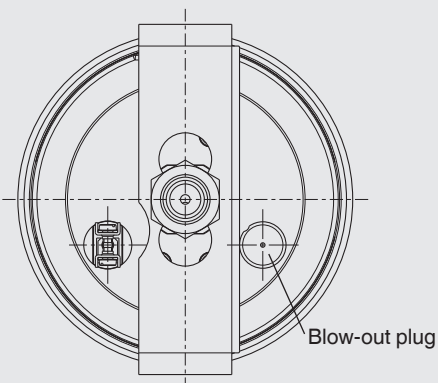
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- Compression ring per DIN 3861
  - Union nut SW 14 per DIN 3870

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**Model PG21PB, NS 100**



**View X**



- Included in delivery:
- Compression ring per DIN 3861
  - Union nut SW 14 per DIN 3870

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## Ordering information

Model / Scale range / Process connection / Options

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