

Duplex pressure gauge per DIN 38030

Panel mounting series for rail-vehicle braking systems

Model PG21DPB, NS 60, 80, 100 and 130

WIKA data sheet PM 02.16

Applications

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

Special features

- Two process connections and two independent pointers
- 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



Fig. left: Model PG21DPB, NS 60

Fig. right: Model PG21DPB, NS 100

Description

The model PG21DPB Bourdon tube pressure gauge is used in rail vehicles, buses and heavy goods vehicles with compressed-air brakes. The instrument is based on two independently operating Bourdon tube measuring systems and is therefore able to show the pressure from two measuring points on one display.

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 and, directly, via a filament bulb or LED with BA9s bulb fitting.

The model PG21DPB is also available in customer-specific versions, e.g. with individual dial layout.

Specifications

Design

DIN 38030

Nominal size in mm

60, 80, 100 and 130

Accuracy class

1.0 (NS 80, 100, 130)

1.6 (NS 60)

Scale ranges

NS 60, 80, 100: 0 ... 6 bar, 0 ... 10 bar, 0 ... 12 bar, 0 ... 16 bar

NS 130: 0... 12 bar

Pressure limitation

NS 80, 100, 130:

Fluctuating: Full scale value

Short time: 1.3 x full scale value

NS 130:

Fluctuating: 0.75 x full scale value

Short time: 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, 130: M16 x 1.5 R10 24°K

Pressure element

Copper alloy

Movement

Copper alloy

Dial

Aluminium, black

Scale and lettering, white

Pointer

Aluminium

1 pointer at the top, red and 1 pointer at the bottom, yellow (RAL colours per DIN 38030)

Case

NS 60, 80, 100: Stainless steel 1.4301

NS 130: Steel, black

Illumination

Indirect: Light slots

Direct: Light bulb, 3 W (NS 60: 2 W), DC 24 V, BA9s lamp holder

Window

NS 60, 80, 100: Laminated safety glass, reduced light reflections

NS 130: Instrument glass

Panel fitting

NS 60, 80, 100: Single-piece mounting bracket, galvanised steel

Triangular bezel, aluminium, black

NS 130: 2 surface mounting lugs, galvanised steel

BB - Slip-on bezel light slots, 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

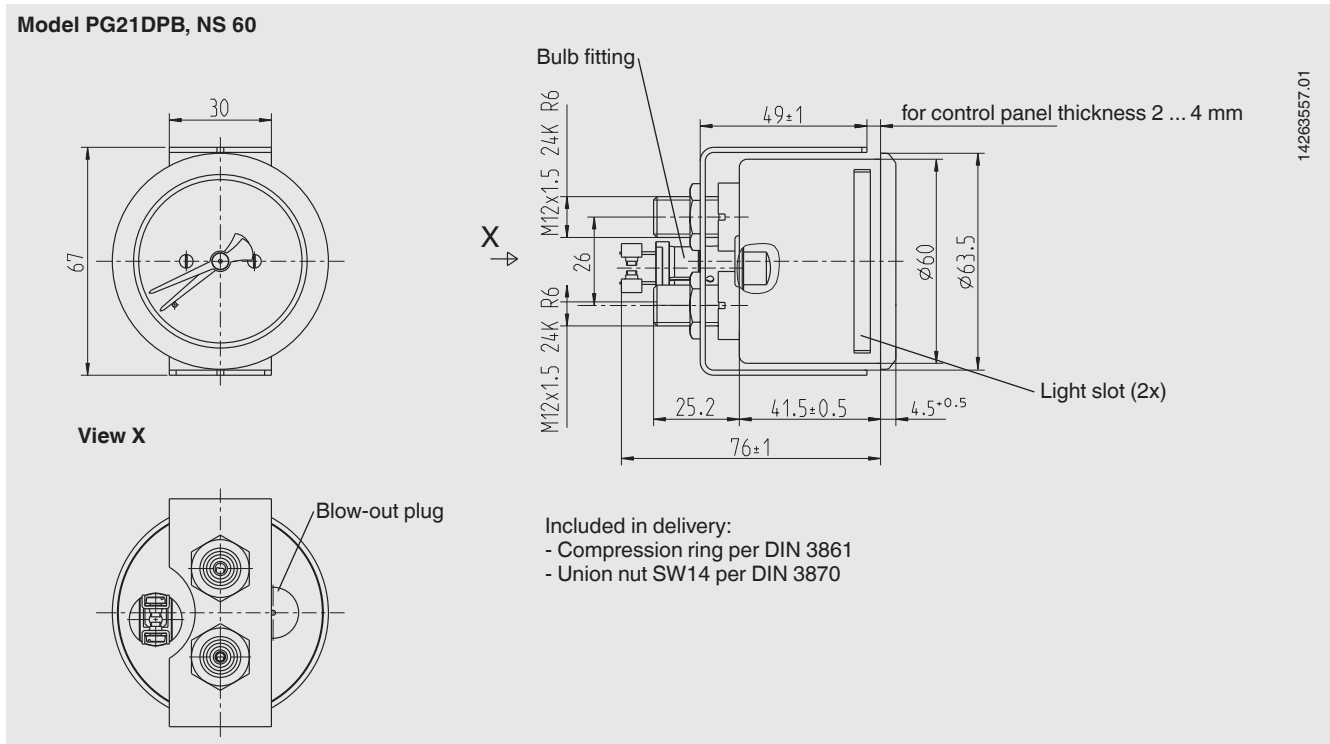
Certificates (option)

- 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)

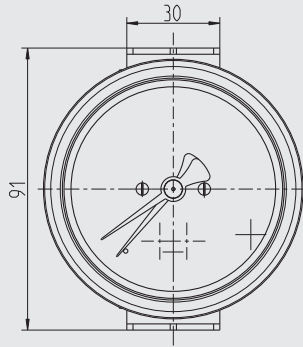
Approvals and certificates, see website

Dimensions in mm

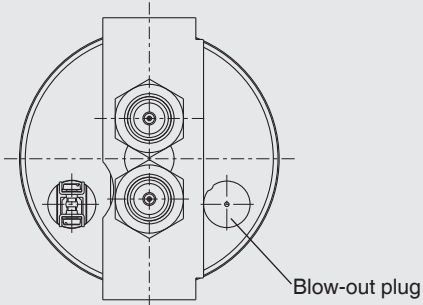
Standard version



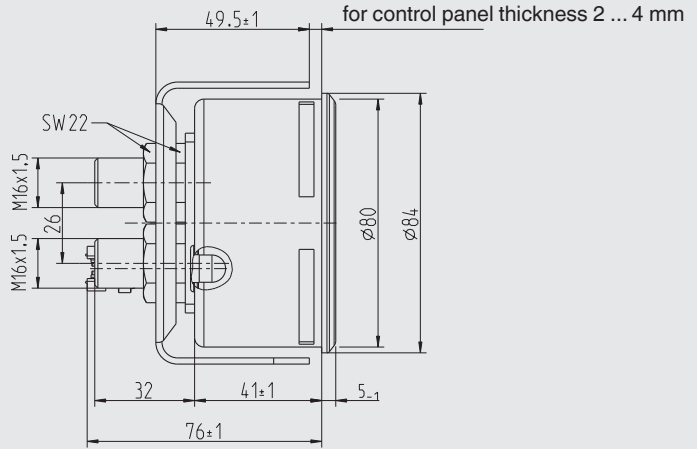
Model PG21DPB, NS 80



View X



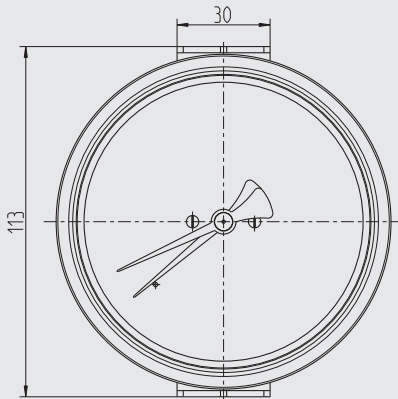
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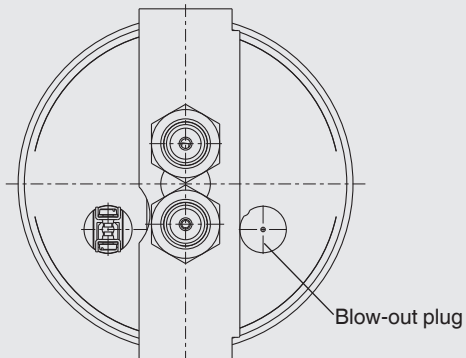
- Included in delivery:
- Compression ring per DIN 3861
 - Union nut SW14 per DIN 3870

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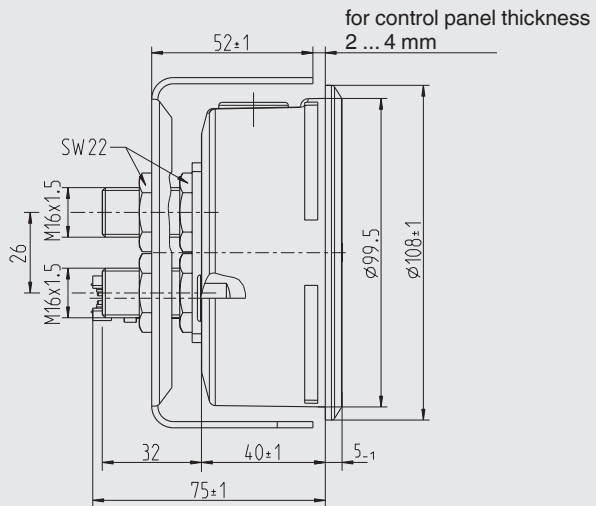
Model PG21DPB, NS 100



View X



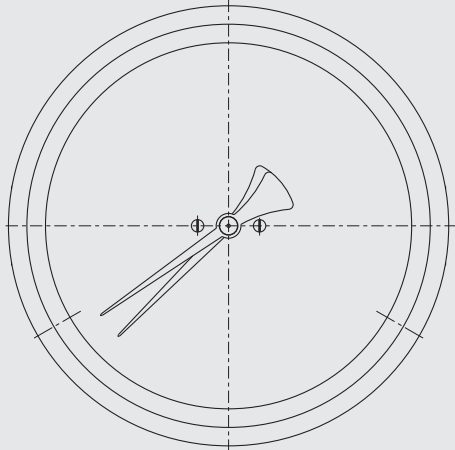
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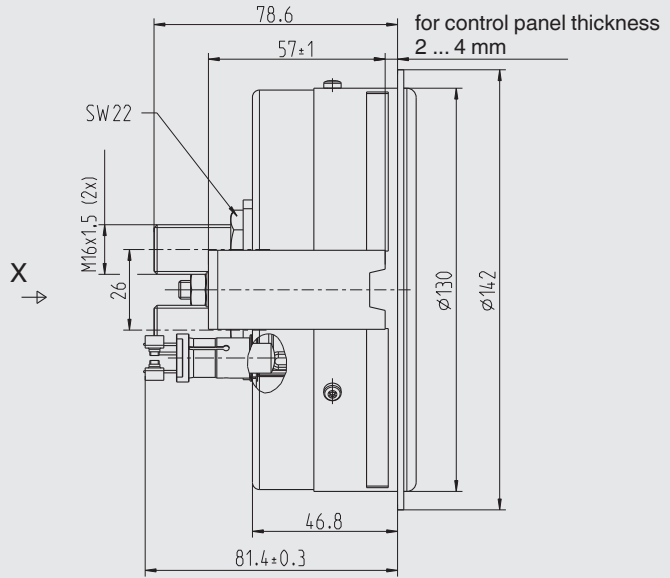
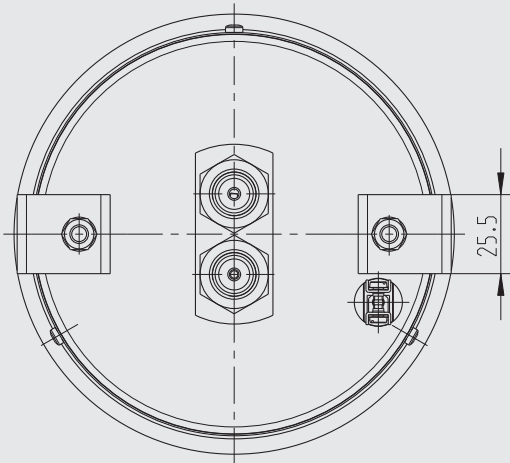
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Model PG21DPB, NS 130



View X



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 - Union nut SW14 per DIN 3870

Ordering information

Model / Scale range / Process connection / Options

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