Bourdon tube pressure gauge per DIN 38030
Panel mounting series for rail-vehicle braking systems
Model PG21PB, NS 60, 80 and 100

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

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. ±0.3 %/10 K of the span

**Ingress protection per IEC/EN 60529**
IP43

**Process connection**
- Copper alloy, centre back mount, with restrictor ∅ 1.0 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

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**Window**
Laminated safety glass, reduced light reflections

**Panel fitting**
Single-piece mounting bracket, galvanised steel
Triangular bezel, aluminium, black

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**Options**
- Other process connection
- Restrictor ∅: 0.3 mm or 0.6 mm
- Window: PMMA
- Triangular bezel, polished stainless steel
- Dial: Aluminium, white, dual scale
- Other pointers
- Illumination with 4-way LED
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. material proof for wetted metal parts, indication accuracy)

Approvals and certificates, see website

Dimensions in mm

Standard version

Model PG21PB, NS 60

![Diagram of Model PG21PB, NS 60 with dimensions and components labeled]

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

Model PG21PB, NS 80

Model PG21PB, NS 100

Blow-out plug
Ordering information
Model / Scale range / Process connection / Options