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.

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

Window
Laminated safety glass, reduced light reflections

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

Options
- Other process connection
- Restrictor Ø: 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

Included in delivery:
- Compression ring per DIN 3861
- Union nut SW 14 per DIN 3870
Model PG21PB, NS 80

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

Model PG21PB, NS 100

Included in delivery:
- Compression ring per DIN 3861
- Union nut SW 14 per DIN 3870
Ordering information
Model / Scale range / Process connection / Options