Duplex pressure gauge per DIN 38030
Panel mounting series for rail-vehicle braking systems
Model PG21DPB, NS 60, 80, 100 and 130

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

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. ±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 - 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 ∅: 0.3 mm or 0.6 mm
- Window: PMMA
- Triangular bezel, polished stainless steel
- Dial: Aluminium, white, dual scale
- 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. material proof for wetted metal parts, indication accuracy)

Approvals and certificates, see website

Dimensions in mm

Standard version

Model PG21DPB, NS 60

View X

- Compression ring per DIN 3861
- Union nut SW14 per DIN 3870

Included in delivery:
- Bulb fitting
- Light slot (2x)
- for control panel thickness 2 ... 4 mm

Dimensions in mm

- Standard version

Blow-out plug

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Model PG21DPB, NS 80

View X

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

for control panel thickness 2 ... 4 mm

Model PG21DPB, NS 100

View X

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

for control panel thickness 2 ... 4 mm
Ordering information
Model / Scale range / Process connection / Options

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

View X