

Brake pressure test instrument, copper alloy

Model PG21BP-1, single pressure gauge

Model PG21BP-2, dual pressure gauge

WIKA data sheet PM 02.18

Applications

- Functional checks of compressed air braking systems
- Dual pressure gauge for functional checks in vehicles with two independent lines

Special features

- Declaration of conformity in accordance with the German Measurement and Verification Ordinance (MessEV), appendix 4, module D1
- Calibration certificate (option) per ISO/IEC 17025 for inspection bodies per ISO/IEC 17020
- Lead sealing with security tag
- Scale range: 0 ... 16 or 0 ... 25 bar

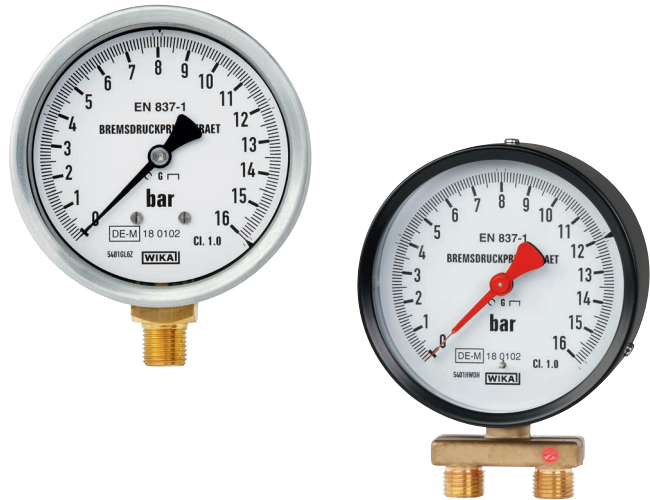


Fig. left: Model PG21BP-1, single pressure gauge
Fig. right: Model PG21BP-2, dual pressure gauge

Description

For the functional testing of compressed air braking systems, pressure measuring instruments with declarations of conformity in accordance with the German Measuring and Verification Ordinance (MessEV) are required. Module D1 of appendix 4 of the MessEV defines the quality assurance and the audit of the production process.

In testing plants for compressed air braking systems, single pressure gauges are used for one pressure line and dual pressure gauges for two independent pressure lines. The dual pressure gauge features two pointers (red and black) so that both pressure values can be read from a single scale.

To detect tampering, the case is lead-sealed to the ring by a security tag. Any opening of the instrument, e.g. for pressure gauge adjustment, destroys this lead seal.

For inspection bodies with accreditation in accordance with ISO/IEC 17020, a calibration certificate can be generated by WIKA. Since 1982, the WIKA calibration and service centre in Klingenberg has been a member of the German Calibration Service (Deutscher Kalibrierdienst - DKD) and is accredited to EN ISO/IEC 17025.

Specifications

	PG21BP-1	PG21BP-2
Version	Bourdon tube pressure gauge, copper alloy per MessEV, appendix 4, module D1	
Nominal size	100 mm	
Accuracy class	1.0 per EN 837-1	
Scale range	<ul style="list-style-type: none"> ■ 0 ... 16 bar ■ 0 ... 25 bar 	■ 0 ... 16 bar
Pressure limitation		
Steady	Full scale value	¾ x full scale value
Fluctuating	0.9 x full scale value	⅔ x full scale value
Short time	1.3 x full scale value	Full scale value
Permissible temperature range		
Ambient	-40 ... +60 °C [-104 ... +140 °F]	-25 ... +60 °C [-77 ... +140 °F]
Medium	-20 ... +80 °C [-68 ... +176 °F]	-20 ... +60 °C [-68 ... +140 °F]
Temperature effect	When the temperature at the measuring system deviates from the reference temperature +20 °C [+68 °F]: max. ±0.4 %/10 K of full scale value	
Ingress protection per IEC/EN 60529	IP54	IP33
Process connection	<ul style="list-style-type: none"> ■ G ¼ B ■ G ½ B (with/without spigot) ■ M16 x 1.5 (with/without spigot) 	
Connection location	<ul style="list-style-type: none"> ■ Lower mount (radial) ■ Lower back mount 	Lower mount (radial)
Protection cap (option)	Article number 2037800 (blue)	

Other scale ranges on request.

Materials

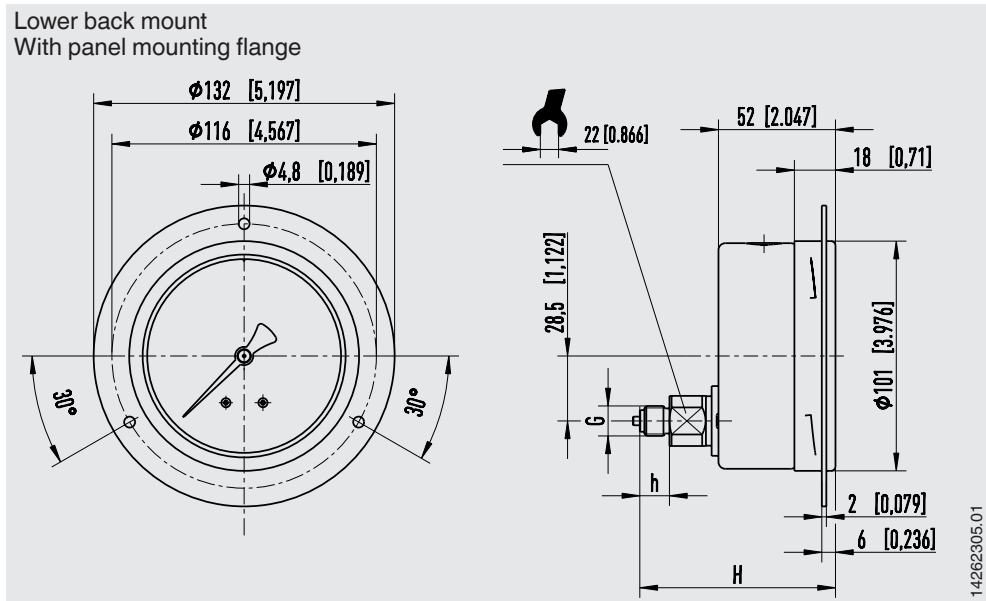
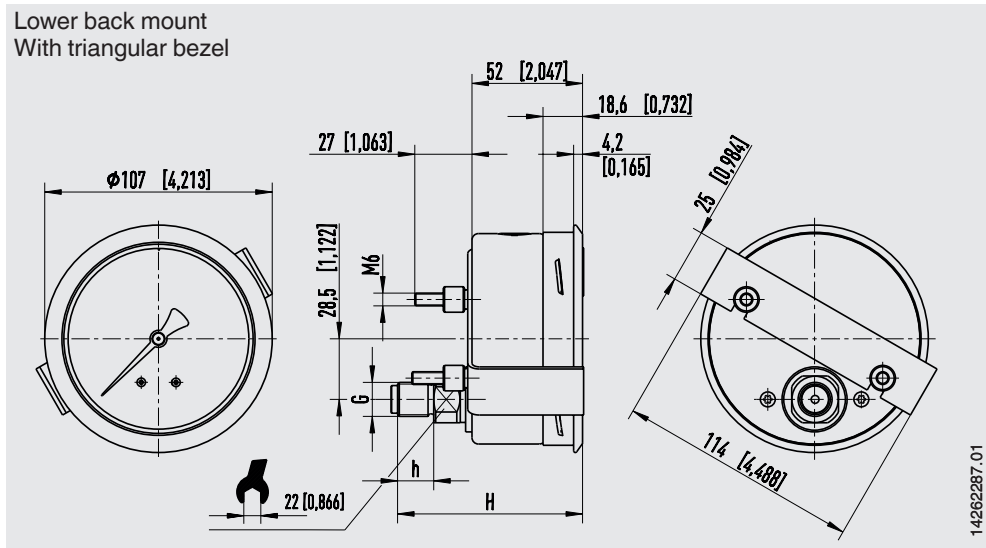
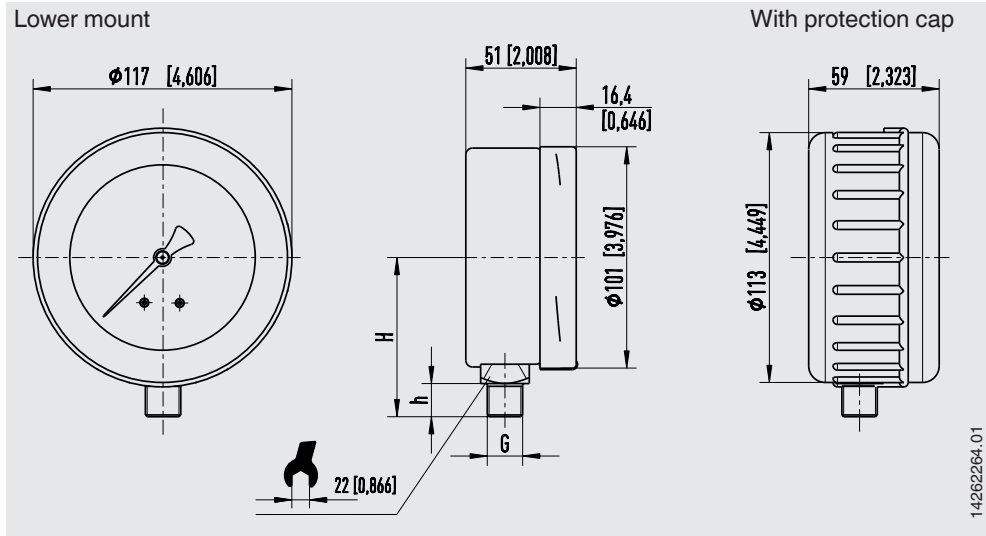
Component	PG21BP-1		PG21BP-2
	Standard	Option	
Pressure element	Copper alloy	-	Copper alloy
Movement	Copper alloy, wear parts argentan	-	Copper alloy, wear parts argentan
Pointer	Aluminium, black	Knife edge pointer	1 pointer at the top, red and 1 pointer at the bottom, black
Dial	Aluminium	-	Aluminium
Window	Instrument glass	Polycarbonate	Instrument glass
Case	Aluminium	-	Aluminium
Ring	Steel	-	Steel
Triangular bezel ¹⁾	-	Stainless steel	-
Panel mounting flange ¹⁾	-	Stainless steel	-

1) Option for back mount version

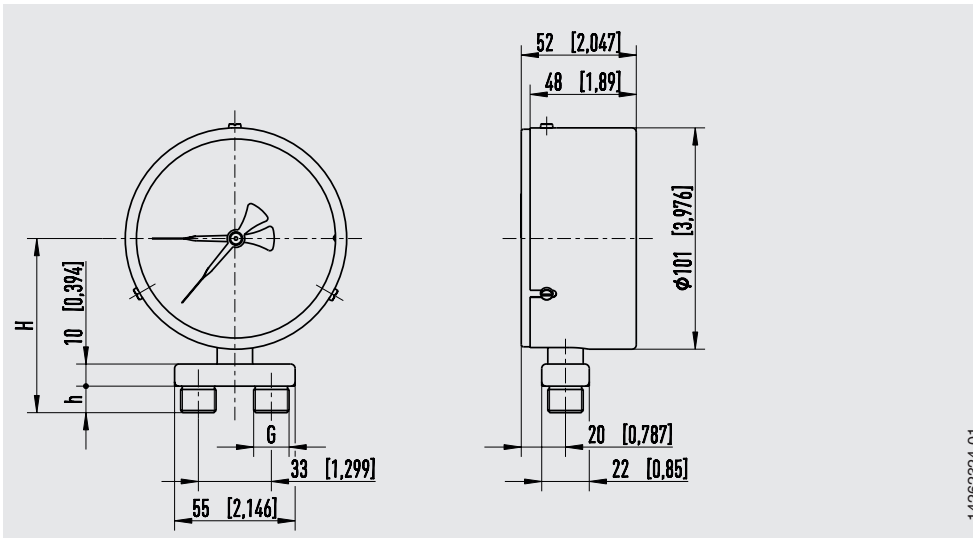
Other materials on request.

Dimensions in mm [in]

Model PG21BP-1



Model PG21BP-2



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Certificates (option)

Calibration certificate per ISO/IEC 17025

Approvals and certificates, see website

Ordering information

Model / Scale range / Process connection / Connection location / Options

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We reserve the right to make modifications to the specifications and materials.

