Bourdon tube pressure gauge, stainless steel
For highest pressure applications to 3,000 bar
Model PG23HP-S

Applications
- For liquid media in high-pressure applications (e.g. water, hydraulic oil)
- Test benches (e.g. for hydraulic components)
- Water jet cutting
- High-pressure cleaning
- High-pressure generation

Special features
- Safety pressure gauge with solid baffle wall designed in compliance with the requirements and test conditions of the DIN 16001 high-pressure standard
- Wetted parts from stainless steel 316L
- Long service life with static pressure profiles
- Scale ranges: 0 ... 2,000 bar, 0 ... 2,500 bar and 0 ... 3,000 bar

Description

The model PG23HP-S Bourdon tube pressure gauge has been designed specifically for high-pressure applications up to 3,000 bar.

Typical measuring points for this pressure gauge can be found in water jet cutting, high-pressure cleaning and test bench construction.

WIKA manufactures and qualifies the model PG23HP-S in accordance with the requirements of the new DIN 16001 high-pressure standard in the “S3” safety version. The safety version is made up of laminated safety glass, a solid baffle wall between measuring system and dial and a blow-out back. In the event of a failure, the operator is protected at the front side, as media or components can only be ejected via the back of the instrument.

The proven, all-welded construction ensures a long service life and permanent sealing.

The resistance to shock and vibration can be increased by the optional silicone oil case filling.

WIKA data sheet PM 02.28 - 12/2018
Specifications

Case
Stainless steel, with solid baffle wall (Solidfront) and blow-out back

Window
Laminated safety glass

Ring
Bayonet ring, stainless steel

Case filling (option)
Silicone oil M50

Options
- Ingress protection IP66
- Panel mounting flange, stainless steel or polished stainless steel
- Surface mounting lugs on the back, stainless steel
- Mark pointer adjustable from the outside
- Mark pointer on bayonet ring adjustable from the outside

Design
DIN 16001

Nominal size in mm
100, 160

Accuracy class
1.6

<table>
<thead>
<tr>
<th>Scale range in bar</th>
<th>Scale range in psi</th>
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</thead>
<tbody>
<tr>
<td>0 ... 2,000</td>
<td>0 ... 30,000</td>
</tr>
<tr>
<td>0 ... 2,500</td>
<td>0 ... 40,000</td>
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<tr>
<td>0 ... 3,000</td>
<td></td>
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</tbody>
</table>

Pressure limitation
Steady: 3/4 x full scale value
Fluctuating: 2/3 x full scale value
Short time: Full scale value

Permissible temperature
Ambient: -40 … +60 °C
Medium: +200 °C maximum with unfilled instruments
+100 °C maximum with filled instruments

Temperature effect
When the temperature of the measuring system deviates from the reference temperature (+20 °C):
max. ±0.4 %/10 K of full scale value

Ingress protection
IP65 per IEC/EN 60529

Process connection
Stainless steel 316L
NS 100: Lower mount (radial) or back mount
NS 160: Lower mount (radial)
- G ½ B (up to max. 2,500 bar)
- M16 x 1.5 (female) with inner sealing cone 60°
Subsequent threads per "Autoclave Engineers"
- 9/16 - 18 UNF (female) with 60° sealing cone
- 5/8 - 18 UNF x 27 (female) with inner sealing cone 60°
- Others on request

Pressure element
Stainless steel 316L, helical type

Movement
Stainless steel

Dial
Aluminium, white, black lettering

Pointer
Aluminium, black
Approvals

<table>
<thead>
<tr>
<th>Logo</th>
<th>Description</th>
<th>Country</th>
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<tr>
<td>![CE]</td>
<td>EU declaration of conformity</td>
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<td>- Pressure equipment directive</td>
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<td>- PS &gt; 200 bar, module A, pressure accessory</td>
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<td>- EMC directive</td>
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<td>- Low voltage directive</td>
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<td>Permission for commissioning</td>
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</table>

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 metallic parts, indication accuracy)

Approvals and certificates, see website
Dimensions in mm

Standard version

<table>
<thead>
<tr>
<th>NS</th>
<th>Dimensions in mm</th>
<th>Weight in kg</th>
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<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td>100</td>
<td>25</td>
<td>59</td>
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<tr>
<td>160</td>
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Ordering information

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