

Bourdon tube pressure gauge, stainless steel

For high pressure applications to 40,000 psi

Model PG23HP-S, standard version

WIKA data sheet PM 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 generators

Special features

- Safety pressure gauge in solid front design with blow-out back. In compliance with the requirements and test conditions of the
- DIN 16001 high-pressure standard
- Wetted parts from 316L stainless steel
- Long service life in static pressure applications
- Scale ranges from 0 ... 30,000 psi up to 0 ... 40,000 psi



Bourdon tube pressure gauge model PG23HP-S

Description

The model PG23HP-P Bourdon tube pressure gauge has been designed specifically for high-pressure applications up to 40,000 psi (3000 bar).

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

WIKA manufactures and qualifies model PG23HP-P in accordance with the requirements of the new DIN 16001 high pressure standard in the "S3" safety version. The safety version solid-front design features a laminated safety glass, a solid wall between the measuring system and a blow-out back. In the event of a Bourdon tube failure, the release of energy and media is directed to the back of gauge, protecting the operator in front of the gauge.

A silicone oil case filling to increase the dampening effect in applications where shocks and vibrations are present is available as an option.

The well-proven fully all welded stainless steel construction guarantees a long service time and a permanently sealed structure.

Specifications

Design

DIN 16001

Nominal size in mm

4" (100 mm) and 6" (160 mm)

Accuracy

± 2/1/2 % of full span per ASME B40.100 Grade A
Class 1.6 per EN 837-1

Scale ranges

0 ... 30,000 psi (2,000 bar)

0 ... 40,000 psi (2,500 bar)

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 ... +140°F (-40...+60 °C)

Medium: +392°F (+200 °C) maximum (dry gauges)

+212°F (+100 °C) maximum (liquid filled gauges)

Temperature effect

Additional temperature error if the media temperature deviates from the reference temperature of +67°F (+20°C):
Max. ±0.4 % of full scale value per 18°F temperature change

Ingress protection

IP65 per IEC/EN 60529

Process connection

Stainless steel 316L

NS 100: Lower mount or back mount

NS 160: Lower mount only

- G½B (up to max. 40,000 psi / 2,500 bar)
- 9/16 - 18 UNF (female) with 60° sealing cone per Autoclave Engineers
- M16 x 1.5 (female) with inner sealing cone 60°
- 5/8 - 18 UNF (female) with inner sealing cone 60°
- others on request

Pressure element

316L stainless steel, helical type

Movement

Stainless steel

Dial

Aluminium, white, black lettering

Pointer

Aluminium black, adjustable

Case

Stainless steel, safety design with solid front and blow-out back

Window

Laminated safety glass

Ring

Bayonet ring, stainless steel


Filling liquid (optional)

Silicone oil M50

Options

- Ingress protection IP66 (NEMA 4/4X)
- 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

Approvals

Logo	Description	Country
	EU declaration of conformity <ul style="list-style-type: none">■ Pressure equipment directive PS > 200 bar, module A, pressure accessory	European Union

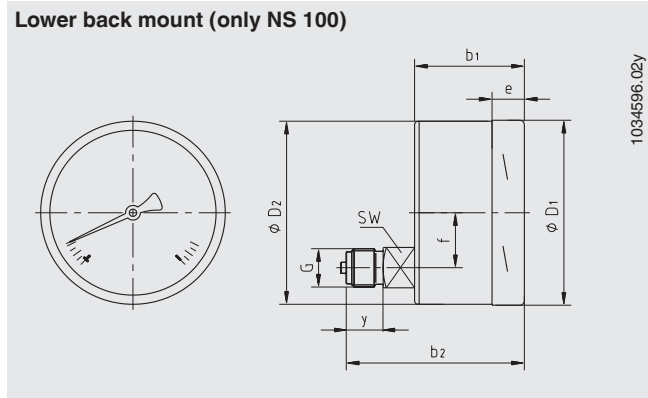
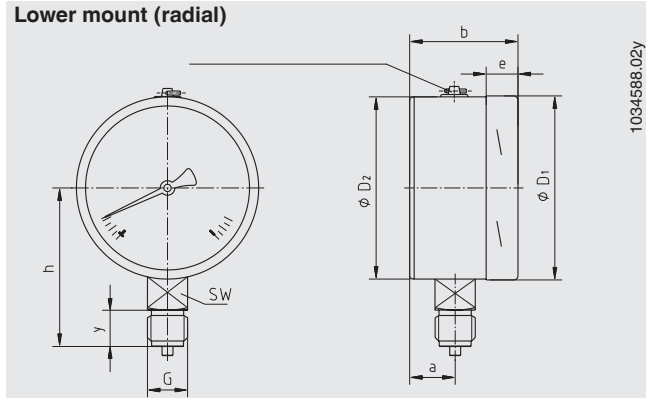
Certificates (option)

- 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)

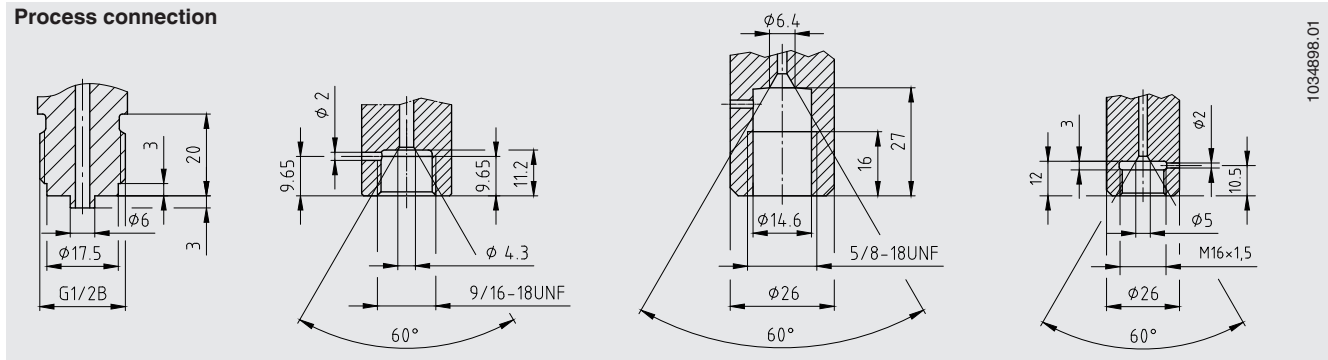
Approvals and certificates, see website

Dimensions in mm

Standard version



NS	Dimensions in mm												Weight in kg	
	a	b	b ₁	b ₂	D ₁	D ₂	e	f	G	h ±1	y	SW	unfilled	filled
100	25	59	59.5	93	101	99	17	30	G ½ B	87	23	22	0.65	1.08
160	27	65	-	-	161	159	17.5	-	G ½ B	118	23	22	1.30	2.34



Ordering information

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

© 10/2017 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.
 The specifications given in this document represent the state of engineering at the time of publishing.
 We reserve the right to make modifications to the specifications and materials.



WIKAL Instrument, LP
 1000 Wiegand Boulevard
 Lawrenceville, GA 30043
 Tel (770) 513-8200 Toll-free 1-888-WIKA-USA
 Fax (770) 338-5118
 E-Mail info@wika.com
 www.wika.com