

Bourdon tube pressure gauge, stainless steel

For panel mounting

Model PG23CP

WIKA data sheet PM 02.24



for further approvals see page 3

Applications

- For gaseous and liquid aggressive media that are not highly viscous or crystallising, also in aggressive environments
- Specifically for the requirements within the process industry, mainly in the chemical and petrochemical industry, the oil and gas industry, power engineering and also in water/wastewater technology
- Particularly suitable for use in wellhead control panels (WHCPs) and hydraulic power units (HPUs)

Special features

- All welded mounting ring to avoid the ingress of water into the panel (ingress protection IP66)
- All stainless steel construction
- Optionally as safety version "S3" per EN 837-1

Description

The high-quality model PG23CP pressure gauge has been designed especially for the requirements of the process industry. This safety pressure gauge is mainly used for applications in the chemical and petrochemical industry, the oil and gas industry, power engineering and also in water/wastewater technology.

Typical measuring points are on control units and control panels such as hydraulic power units (HPUs). For secure mounting of the instrument, a high-quality front bezel is used. The mounting situations mainly require an IP66 ingress protection. For this reason, the sealing of the model PG23CP to the panel is made using an all welded mounting ring and a matched flat gasket.

Pressure gauges for the process industry are manufactured completely from stainless steel for increased corrosion resist-



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ance. This enables use in the measurement of aggressive gaseous or liquid media, also in aggressive environments. In the EN 837-1 standard for pressure gauges, safety versions are defined. For most applications, a safety version is not required. WIKA already manufactures the model PG23CP in the "S1" safety version. This design includes an additional blow-out opening, which vents any impermissible overpressure in the case (e.g. from a burst Bourdon tube) through the back of the case.

For harsh operating conditions (e.g. vibration), the instruments are also available with an optional liquid filling.

Standard version

Version

EN 837-1

Nominal size in mm

63, 100

Accuracy class

NS 63: 1.6

NS 100: 1.0

Scale ranges

NS 63: 0 ... 1 to 0 ... 1,000 bar

NS 100: 0 ... 0.6 to 0 ... 1,600 bar

or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

NS 63:	Steady:	3/4 x full scale value
	Fluctuating:	2/3 x full scale value
	Short time:	Full scale value
NS 100:	Steady:	Full scale value
	Fluctuating:	0.9 x full scale value
	Short time:	1.3 x full scale value

Permissible temperature

Ambient: -40 ... +60 °C

Medium: +200 °C maximum

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max. $\pm 0.4 \%$ /10 K of full scale value

Ingress protection per IEC/EN 60529

IP65

IP66 at the front, after professional panel mounting

Process connection

Stainless steel 316L (NS 63: 1.4571)

Lower back mount

NS 63: 1/4 NPT (male), SW 11

NS 100: 1/2 NPT (male), SW 17

Pressure element

Stainless steel 316L

C-type or helical type

Movement

Stainless steel

Dial

Aluminium, white, black lettering

NS 63 with pointer stop pin

Pointer

Aluminium, black

Case

Stainless steel, all welded mounting ring, with blow-out device at case circumference, o'clock (NS 63) and on the back of the case (NS 100), scale ranges $\leq 0 \dots 16$ bar with compensating valve to vent case

Window

Laminated safety glass (NS 63: Polcarbonate)

Ring

Bayonet ring, stainless steel






Sealing

Flat gasket from NBR 2.5 mm

Options

- Other process connection, e.g. autoclave MP: 1/4-28 UNF LH-2A SM250CX20 and autoclave HP: 1/4-28 UNF LH-2A M250C
- Sealings (model 910.17, see data sheet AC 09.08)
- Safety version "S3" with solid baffle wall and blow-out back per EN-837-1
- Restrictor
- Filling liquid glycerine or glycerine-water mixture
Permissible ambient temperature: -20 ... +60 °C, medium temperature: +100 °C maximum
- Filling liquid silicone oil M50

Approvals

Logo	Description	Country
	EU declaration of conformity <ul style="list-style-type: none"> ■ Pressure equipment directive PS > 200 bar, module A, pressure accessory ■ ATEX directive (option) Ignition protection type “c”, constructive safety 	European Union
	EAC (option) <ul style="list-style-type: none"> ■ Hazardous areas 	Eurasian Economic Community
	GOST (option) Metrology, measurement technology	Russia
	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
	Uzstandard (option) Metrology, measurement technology	Uzbekistan

Certificates (option)

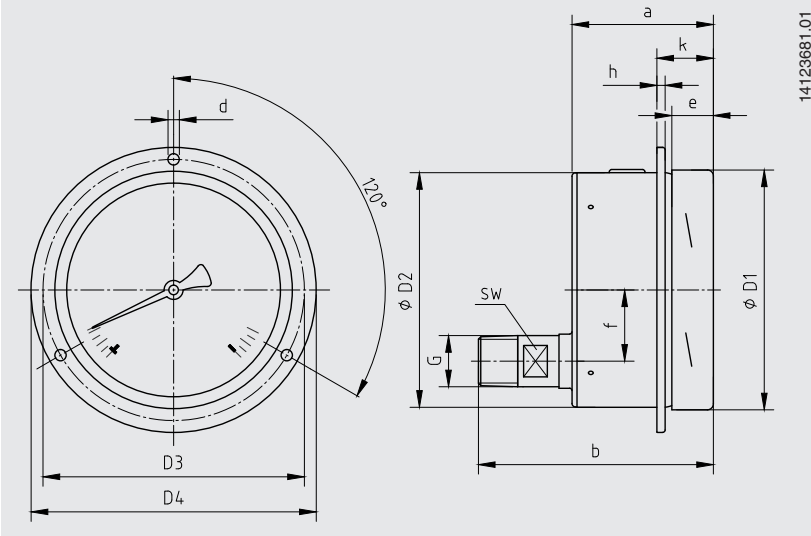
- 2.2 test report per EN 10204
- 3.1 inspection certificate per EN 10204

Approvals and certificates, see website

Dimensions in mm

Standard version

Lower back mount



NS	Dimensions in mm													Weight in kg	
	a	b	D1	D2	D3	D4	d	e	f	h	k	G	SW	unfilled	filled
63	42	69	63	63	75	85	4.8	14.5	18.5	2.5	15	¼ NPT	11	0.16	0.20
100	59.5	99	101	100	116	132	4.8	17	30	3	21	½ NPT	17	0.60	0.90

Process connection per EN 837-1 / 7.3

Ordering information

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

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