

Bourdon tube pressure gauge Model 113.53, standard version with liquid filling

WIKA data sheet PM 01.08



for further approvals
see page 2

Applications

- For measuring points with high dynamic pressure loads or vibrations
- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Hydraulics
- Compressors

Special features

- Vibration and shock resistant
- Robust design
- Stainless steel case with liquid filling
- Scale ranges up to 0 ... 600 bar



Bourdon tube pressure gauge model 113.53.080

Description

Design

EN 837-1

Nominal size in mm

40, 80, 100

Accuracy class

2.5

Scale ranges

NS 40: 0 ... 1 to 0 ... 400 bar

NS 80, 100: 0 ... 1 to 0 ... 600 bar

or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

Steady: 3/4 x full scale value

Fluctuating: 2/3 x full scale value

Short time: Full scale value

Permissible temperature

Ambient: -20 ... +60 °C

Medium: +60 °C maximum

Temperature effect

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

Ingress protection

IP 65 per EN 60529 / IEC 60529

Standard version

Process connection

Copper alloy,
lower mount (LM) or centre back mount (CBM),
NS 40: G 1/8 B (male), 14 mm flats
NS 80: G 1/2 B (male), 22 mm flats
NS 100: G 1/2 B (male), 22 mm flats

Pressure element

Copper alloy, C-type or helical type

Movement

Copper alloy

Dial

Aluminium, white, black lettering, with pointer stop pin

Pointer

Plastic, black

Window

Plastic, crystal-clear

Case

Natural finish stainless steel, with blow-out device at case circumference, 12 o'clock.
Scale ranges $\leq 0 \dots 16$ bar with compensating valve to vent case

Bezel ring

Crimp ring, glossy finish stainless steel, triangular bezel

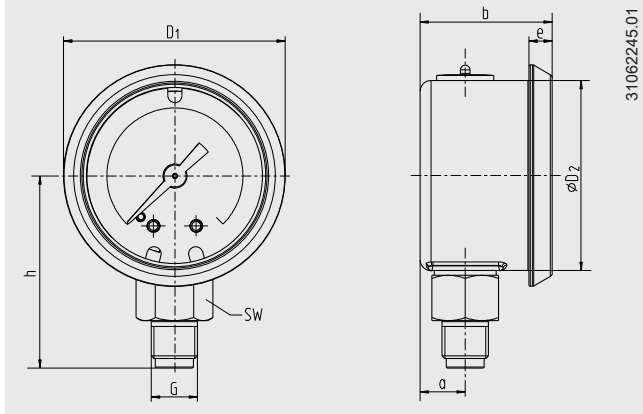
Filling liquid

Glycerine

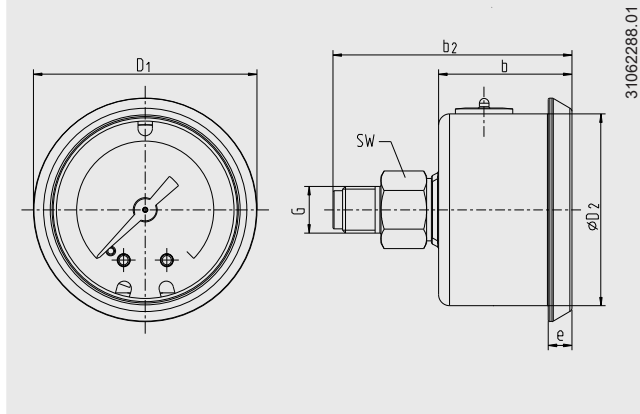
Dimensions in mm

Standard version

NG 40, lower mount (LM)



NS 40, centre back mount (CBM)



Options

- Other process connection
- NS 80, 100: Panel mounting flange, stainless steel, for back mount connection
- NS 80, 100: Surface mounting flange, stainless steel
- Mounting bracket
- Ambient temperature resistant -40 ... +60 °C with silicone oil filling
- NS 80, 100: Accuracy class 1.6

CE conformity

Pressure equipment directive

97/23/EC, PS > 200 bar, module A, pressure accessory

Approvals

- **GOST**, metrology/measurement technology, Russia
- **GOST-R**, import certificate, Russia
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada

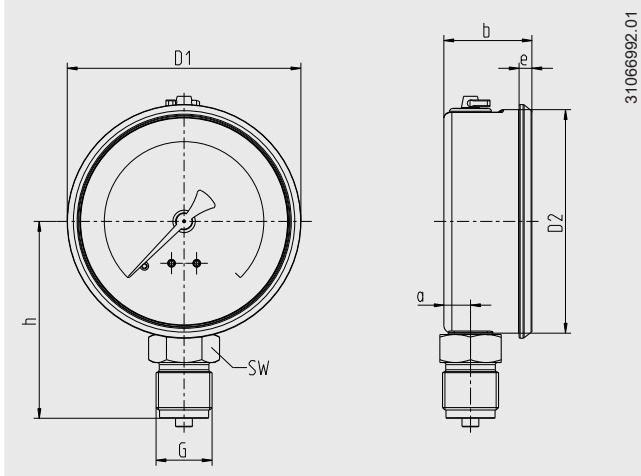
Certificates

- 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. indication accuracy)

1) Option

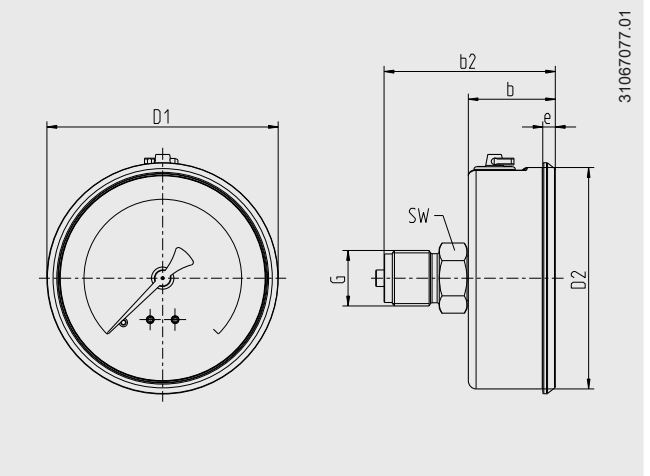
Approvals and certificates, see website

NS 80, lower mount (LM)



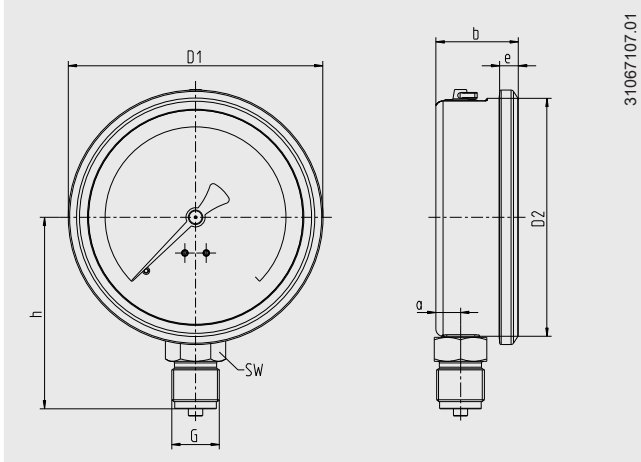
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NS 80, centre back mount (CBM)



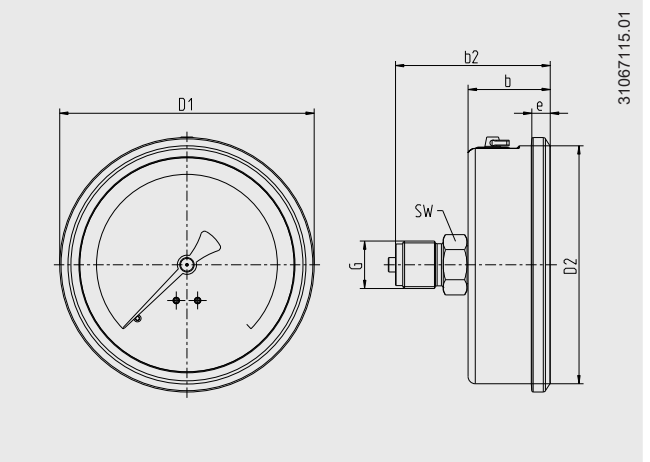
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NS 100, lower mount (LM)



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NS 100, centre back mount (CBM)



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NS	Dimensions in mm									Weight in kg
	a	b ±0.5	b ₂ ±0.5	D ₁	D ₂	e	G	h ±1	SW	
40	9.5	28	50	46.5	40	6	G 1/8 B	40.5	14	0.15
80	9.5	32	62.5	83.5	80	5.5	G 1/2 B	70.5	22	0.35
100	10.5	34.5	65	106.5	100	8	G 1/2 B	80.5	22	0.55

Process connection per EN 837-1 / 7.3

Ordering information

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

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