

## Bourdon tube pressure gauge, copper alloy Model 113.13, liquid filling, plastic case



for further approvals  
see page 3

### Applications

- For measuring points with high dynamic pressure loads and 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
- Design per EN 837-1
- Scale ranges up to 0 ... 400 bar



**Bourdon tube pressure gauge model 113.13**

## Description

The model 113.13 is a liquid-filled pressure gauge with plastic case.

The liquid filling causes damping of the internal components and contributes to an increased vibration resistance and shock resistance.

The pressure gauges are suitable for installation in machines and plants where vibrations and shocks are expected.

These pressure gauges are based on the proven Bourdon tube measuring system. The deflection of the Bourdon tube is transmitted to a movement and indicated.

The plastic case and the window are welded together and an O-ring seal seals the process connection at the case. In this way the instrument fulfils the high requirements for IP65 ingress protection. With accuracy class 2.5 and the available

nominal sizes 40, 50 and 63, this model is suited for a wide range of applications in industry. The mounting bracket, which is available as an option, enables the panel mounting of pressure gauges with back mount process connection. The nominal size 63 mm version with back mount process connection is alternatively offered with a mounting flange on the front of the instrument. This mounting flange is used, when, for example, panel mounting is only possible from the front.

**Specifications****Version**

EN 837-1

**Nominal size in mm**

40, 50, 63

**Accuracy class**

2.5

**Scale ranges**

0 ... 1.6 to 0 ... 400 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.  $\pm 0.4 \%$ /10 K of the span**Process connection**

Copper alloy,

Lower mount (radial) or centre back mount,

NS 40: Centre back mount, G 1/8 B (male), SW 14

NS 50, 63: G 1/4 B (male), SW 14

**Pressure element**

Copper alloy

**Movement**

Copper alloy

**Dial**

Plastic, white, black lettering, with pointer stop pin

**Pointer**

Plastic, black

**Case**

Plastic, black

**Window**

Plastic, crystal-clear (PMMA), welded with case

**Filling liquid**

Glycerine







**Ingress protection**

IP65 per EN/IEC 60529

**Options**

- Panel mounting flange (only for NS 63 and back mount)
- Mounting clamp (only for back mount)
- Customer-specific version

## Approvals

Logo	Description	Country
	<b>EU declaration of conformity</b> Pressure equipment directive	European Community
	<b>EAC</b> Pressure equipment directive	Eurasian Economic Community
	<b>GOST</b> Metrology, measurement technology	Russia
	<b>KazInMetr</b> Metrology, measurement technology	Kazakhstan
-	<b>MTSCHS</b> Permission for commissioning	Kazakhstan
	<b>BelGIM</b> Metrology, measurement technology	Belarus
	<b>UkrSEPRO</b> Metrology, measurement technology	Ukraine
-	<b>CPA</b> Metrology, measurement technology	China
-	<b>CRN</b> Safety (e.g. electr. safety, overpressure, ...)	Canada

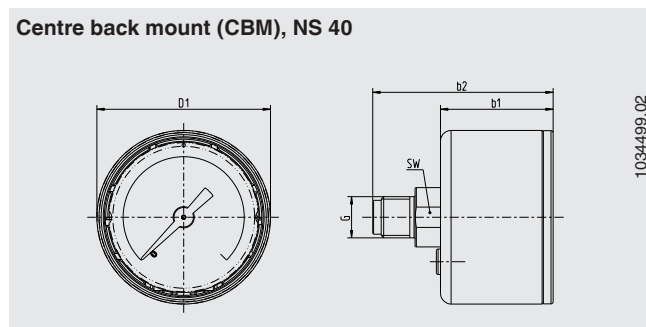
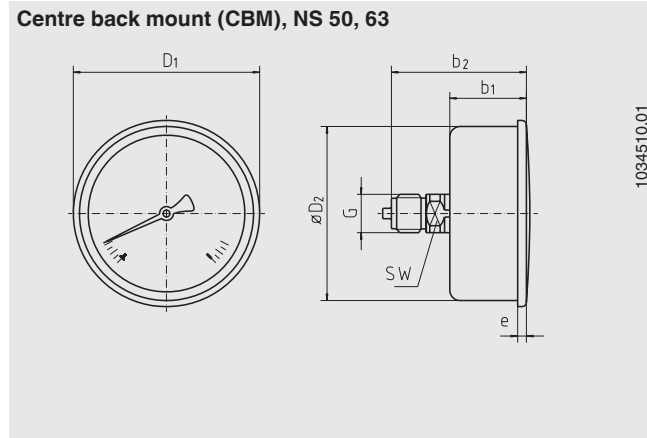
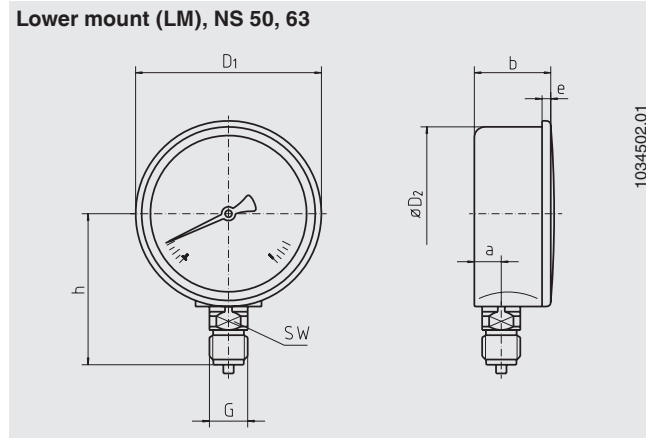
## Certificates (option)

- 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. indication accuracy)

Approvals and certificates, see website

## Dimensions in mm

### Standard version



NS	Dimensions in mm										Weight in kg
	a	b	b1	b2	D1	D2	e	G	h ± 1	SW	
40	-	-	26.5	42.5	41	-	-	G 1/8 B	-	14	0.13
50	11.5	27	29	53	55	51	5	G 1/4 B	48	14	0.17
63	11.5	27	29	53	68	62.5	5	G 1/4 B	54	14	0.21

Process connection per EN 837-1 / 7.3