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

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

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 ½ B (male), 14 mm flats
NS 80:  G ½ B (male), 22 mm flats
NS 100: G ½ 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 ≤ 0 ... 16 bar with compensating valve to vent case

**Bezel ring**
Crimp ring, glossy finish stainless steel, triangular bezel

**Filling liquid**
Glycerine

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 1)**

- 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

Dimensions in mm

**Standard version**

**NG 40, lower mount (LM)**

**NS 40, centre back mount (CBM)**
### Ordering information

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

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