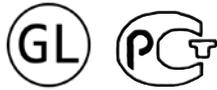


# Bourdon Tube Pressure Gauges Model 213.53, Liquid Filling, Stainless Steel Case

WIKA Data Sheet PM 02.12



## Applications

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

## Special Features

- Vibration and shock resistant
- Especially sturdy design
- NS 63 and 100 approved by German Lloyd and Gosstandart
- Scale ranges up to 0 ... 1000 bar



**Bourdon Tube Pressure Gauge, Model 213.53.100,  
Lower Mount**

## Description

### Design

EN 837-1

### Nominal size in mm

50, 63, 100

### Accuracy class

NS 50, 63: 1.6

NS 100: 1.0

### Scale ranges

NS 50: 0 ... 1 to 0 ... 40 bar

NS 63, 100: 0 ... 0.6 to 0 ... 1000 bar

or all other equivalent vacuum or combined pressure and vacuum ranges

### Pressure limitation

NS 50, 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

### Operating 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 60 529 / IEC 529

### Process connection

Cu-alloy,  
lower mount (LM) or back mount  
NS 50, 63: G ¼ B (male), 14 mm flats  
NS 100: G ½ B (male), 22 mm flats

### Pressure element

NS 50, 63:  
< 60 bar: Cu-alloy, C-type  
≥ 60 bar: Cu-alloy, helical type  
NS 100:  
< 100 bar: Cu-alloy, C-type  
≥ 100 bar: stainless steel 316L, helical type

### Movement

Cu-alloy

### Dial

NS 50, 63: Plastic, white, with pointer stop pin  
NS 100: Aluminium, white, black lettering

### Pointer

NS 50, 63: Plastic, black  
NS 100: Aluminium, black

### Window

Plastic, crystal-clear

### Case

Natural finish stainless steel, with pressure relief at case circumference, 12 o'clock.  
O-Ring seal between case and connection.  
Ranges ≤ 0 ... 16 bar with compensating valve to vent case.

### Bezel ring

Crimp ring, glossy finish stainless steel, triangular bezel

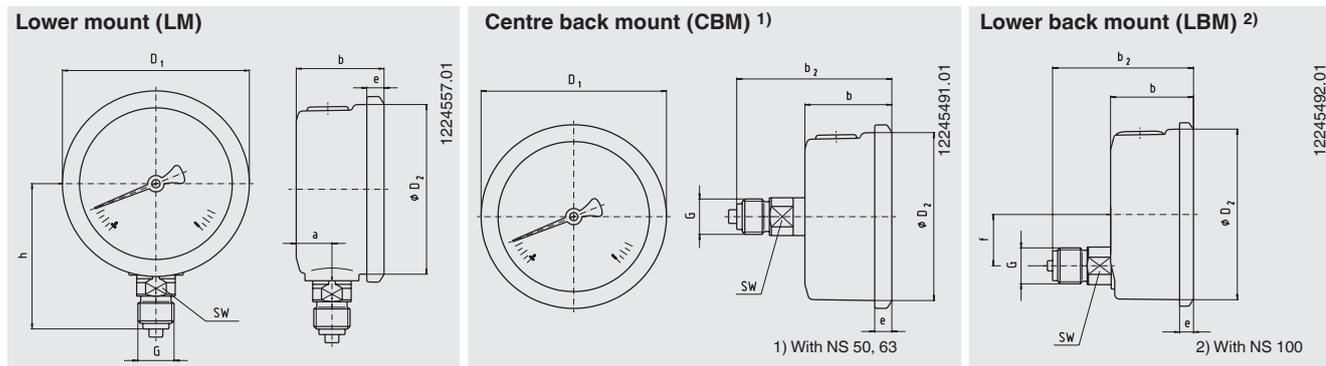
### Filling liquid

Glycerine 99.7 %

### Options

- NS 50, 63: measuring system and movement from stainless steel (model 233.53)
- NS 100: zero point adjustment (in front)
- Increased medium temperature up to 100 °C with special soft solder
- Ambient temperature resistant -40 ... +60 °C with silicone oil filling
- Panel mounting flange, stainless steel, for back connection
- Surface mounting flange, stainless steel (not NS 50)
- Mounting clamp (for back connection)

## Dimensions in mm



NS	Dimensions in mm									Weight in kg	
	a	b ± 0.5	b <sub>2</sub> ± 0.5	D <sub>1</sub>	D <sub>2</sub>	e	f	G	h ± 1		SW
50	12	30	55	55	50	5.5	-	G ¼ B	48	14	0.15
63	13	32	56	68	62	6.5	-	G ¼ B	54	14	0.21
100	15.5	48	81,5	107	100	8	30	G ½ B	87	22	0.80

Process connection per EN 837-1 / 7.3

## Ordering information

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

Modifications may take place and materials specified may be replaced by others without prior notice.  
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.



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