

# Capsule pressure gauge, stainless steel

## For the process industry

### Models 632.50, 633.50, NS 63, 100, 160

WIKA data sheet PM 06.03



for further approvals  
see page 3

### Applications

- With liquid-filled case for applications with high dynamic pressure loads or vibrations<sup>1)</sup>
- For gaseous, dry and aggressive media, also in aggressive ambience
- Process industry: Chemical/petrochemical, pharmaceutical, biotechnology, machine and power generation industries

### Special features

- Zero adjustment at the front
- All stainless steel construction
- Special connection location on request
- Low scale ranges from 0 ... 2.5 mbar

1) Model 633.50



**Capsule pressure gauge, model 632.50**

## Description

### Design

EN 837-3

### Nominal size in mm

63, 100, 160

### Accuracy class

1.6

### Scale ranges

NS 63: 0 ... 40 mbar to 0 ... 600 mbar

NS 100: 0 ... 16 mbar to 0 ... 600 mbar

NS 160: 0 ... 2.5 mbar to 0 ... 600 mbar

or all other equivalent vacuum or combined pressure and vacuum ranges or all other equivalent vacuum or combined pressure and vacuum ranges

### Pressure limitation

Steady: Full scale value

Fluctuating: 0.9 x full scale value

### Permissible temperature

Ambient: -20 ... +60 °C

Medium: +100 °C maximum

### Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):  
max.  $\pm 0.6 \%$ /10 K of full scale value

### Ingress protection per IEC/EN 60529

IP54 for model 632.50 (without liquid filling)

IP65 for model 633.50 (with liquid filling)

## Standard version

### Process connection

Stainless steel 316L  
Lower mount (LM) or lower back mount (LBM)<sup>1)</sup>  
NS 63: G ¼ B (male), SW 14  
NS 100, 160: G ½ B (male), SW 22

### Pressure element

Stainless steel 316L

### Sealing

FPM/FKM

### Movement

Stainless steel

### Zero adjustment

At the front

### Dial

Aluminium, white, black lettering

### Pointer

Aluminium, black

### Case

Stainless steel

### Window

Laminated safety glass  
(with liquid filling: Clear non-splintering plastic)

### Ring

Bayonet ring, stainless steel

### Filling liquid

Glycerine 86.5 % for scale ranges  $\geq 60$  mbar<sup>2)</sup>









1) only available for model 633.50 with NS 100, 160

2) Option accuracy class 1.0 available from  $\geq 100$  mbar

## Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Accuracy class 1.0 for model 632.50 and scale range  $\geq 40$  mbar (without filling liquid)
- Accuracy class 1.0 for model 633.50 and scale range  $\geq 100$  mbar (with filling liquid)
- Permissible ambient temperatures -40 ... +60 °C
- Overload safety and vacuum safety with  
scale range  $> 25$  mbar: 10 x full scale value  
scale range  $\leq 25$  mbar: 3 x full scale value
- Surface mounting flange
- NS 100 and 160: Panel mounting flange
- NS 100 and 160: Triangular bezel with clamp
- NS 100: From scale range  $\geq 100$  mbar switch contacts (model 831, data sheet AC 08.01)

## Approvals

Logo	Description	Country
 	<b>EU declaration of conformity</b> <ul style="list-style-type: none"> <li>▪ Pressure equipment directive</li> <li>▪ ATEX directive (option) Ex II 2GD c TX</li> <li>Ignition protection type „c“, constructive safety</li> </ul>	European Union
	<b>EAC (option)</b> <ul style="list-style-type: none"> <li>▪ Pressure equipment directive</li> <li>▪ Hazardous areas</li> </ul>	Eurasian Economic Community
	<b>GOST (option)</b> Metrology, measurement technology	Russia
	<b>KazInMetr (option)</b> Metrology, measurement technology	Kazakhstan
-	<b>MTSCHS (option)</b> Permission for commissioning	Kazakhstan
	<b>BelGIM (option)</b> Metrology, measurement technology	Belarus
	<b>UkrSEPRO (option)</b> Metrology, measurement technology	Ukraine
	<b>Uzstandard (option)</b> Metrology, measurement technology	Uzbekistan
-	<b>CPA (option)</b> Metrology, measurement technology	China

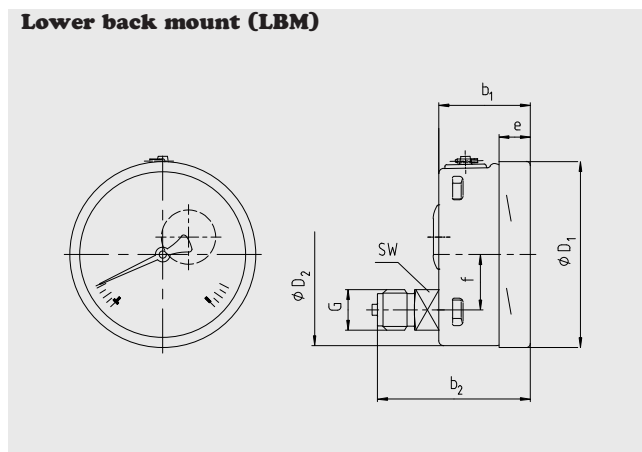
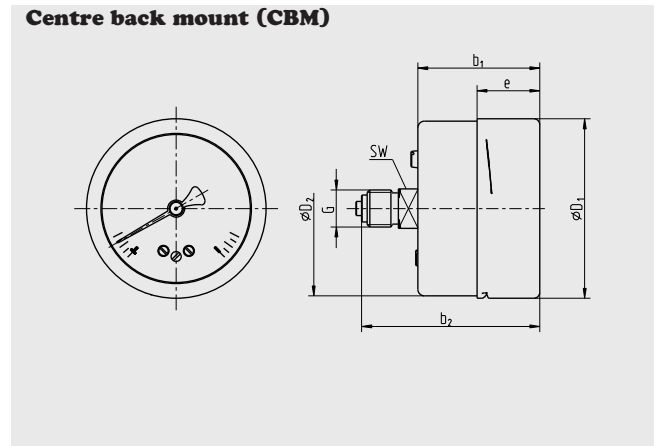
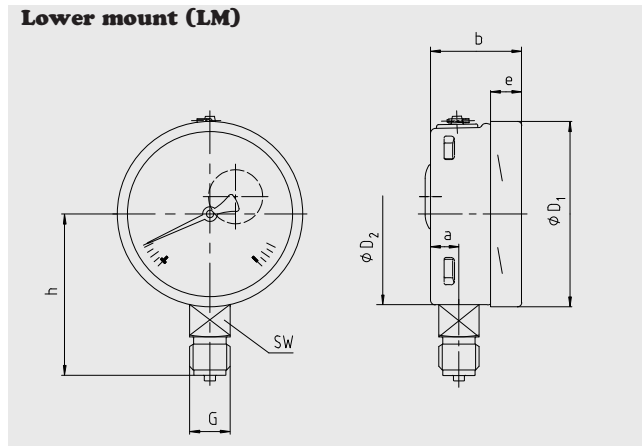
## Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

Approvals and certificates, see website

## Dimensions in mm

### Standard version



NS	Dimensions in mm											Weight in kg
	a	b	b <sub>1</sub>	b <sub>2</sub>	D <sub>1</sub>	D <sub>2</sub>	e	f	G	h ±1	SW	
63	9.5	42	42	63	64	62	22	- <sup>1)</sup>	G ¼ B	52	14	0.19
100	15.5	49.5	49.5	83	101	99	17.5	30	G ½ B	87	22	0.60
160	15.5	49.5	49.5	83	161	159	17.5	50	G ½ B	118	22	1.10

Process connection per EN 837-1 / 7.3  
 1) With NS 63: Centre back mount (CBM)

### Ordering information

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

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