

Capsule pressure gauge, stainless steel

For the process industry, high overload safety

Model 632.51, NS 100 and 160

WIKA data sheet PM 06.06



for further approvals see
page 3

Applications

- Pressure measurement at very low pressures
- For gaseous, aggressive media, also in aggressive environments
- Robust design and ingress protection IP54, suitable for outdoor use

Special features

- High overload safety up to 50 x full scale value
- Measuring chamber protected against unauthorised intervention
- Low measuring error and influence on function from medium pollution



Capsule pressure gauge, model 632.51

Description

Nominal size in mm

100, 160

Accuracy class

1.6

Scale ranges

0 ... 2.5 to 0 ... 100 mbar
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

Steady: Full scale value
Fluctuating: 0.9 x full scale value

Overload safety

50 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. $\pm 0.6 \text{ } \%/10 \text{ K}$ of full scale value

Ingress protection per IEC/EN 60529

IP54

Standard version

Process connection (wetted)

Stainless steel 1.4571, lower mount, G ½ B (male), SW 22

Pressure element (wetted)

Stainless steel 1.4571

Measuring chamber (wetted)

Stainless steel 1.4571

Sealing (wetted)

PTFE

Movement

Stainless steel

Dial

Aluminium, white, black lettering

Pointer

Adjustable pointer, aluminium, black

Zero point setting

Turning of a slotted screw at the adjustable pointer

Case

Stainless steel, with blow-out device

Window

Laminated safety glass

Ring

Bayonet ring, stainless steel

Mounting by means of:

- Rigid measuring lines
- Instrument mounting bracket for wall or pipe mounting (option)
- Mounting flange (option)

Options

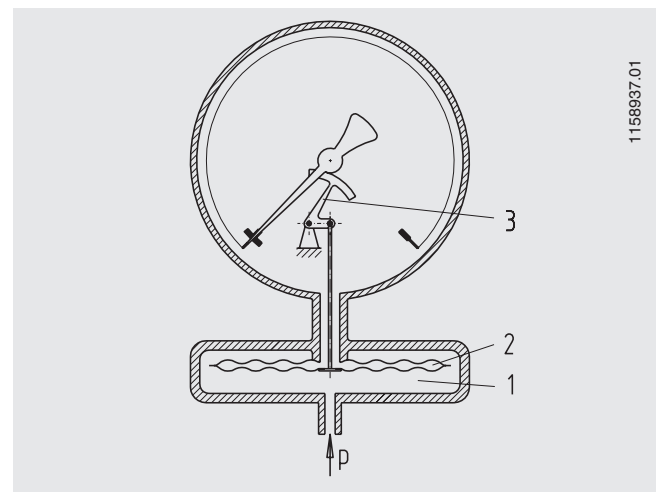
- Other process connection
- Sealings, see data sheet AC 09.08
- Instrument mounting bracket for wall or pipe mounting, see data sheet AC 09.07
- Panel or surface mounting flange (consider measuring chamber!)
- Indication accuracy class 0.6 or 1.0 ¹⁾
- Higher overload safety ¹⁾
- Capsule pressure gauge with switch contacts, see data sheet PV 26.06
- Capsule pressure gauge with output signal, see data sheet PV 16.06

1) After feasibility test

Design and operating principle

- Pressure-sealed measuring chamber (1) with capsule measuring element
- The capsule element (2) is pressurised from outside and moves in strokes (deflection)
- The deflection is transmitted to the movement (3) and indicated
- The overload safety is achieved through the mutually supporting surfaces of both halves of the capsule element

Illustration of the principle



Approvals

Logo	Description	Country
 	EU declaration of conformity ATEX directive (option) Hazardous areas - Ex c Zone 1 gas [Ex II 2G c IIC TX X] Zone 21 dust [Ex II 2D c TX X]	European Union
	EAC (option) ■ EMC directive ■ Pressure equipment directive ■ Low voltage directive ■ Hazardous areas	Eurasian Economic Community
	GOST (option) Metrology, measurement technology	Russia
	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
	BelGIM (option) Metrology, measurement technology	Belarus
	UkrSEPRO (option) Metrology, measurement technology	Ukraine
	Uzstandard (option) Metrology, measurement technology	Uzbekistan
-	CPA (option) Metrology, measurement technology	China

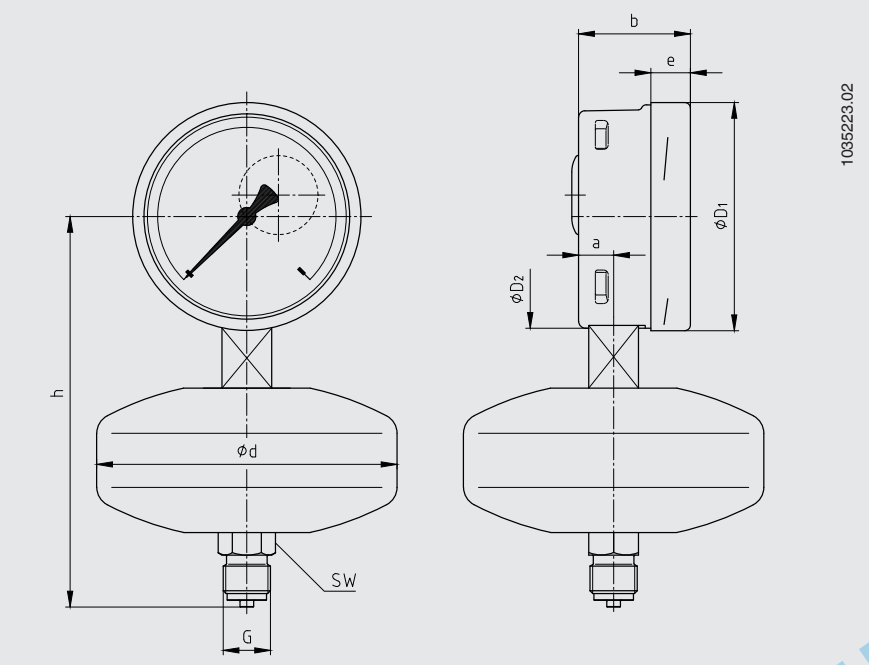
Certificates (option)

- 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	D ₁	D ₂	d	e	G	h ±1	SW	
100	15.5	49.5	101	99	133	17.5	G ½ B	170	22	1.6
160	15.5	49.5	161	159	133	17.5	G ½ B	200	22	2.1

Process connection per EN 837-3/7.3

Ordering information

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

© 10/2008 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.
The specifications given in this document represent the state of engineering at the time of publishing.
We reserve the right to make modifications to the specifications and materials.



WIKAL Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. +49 9372 132-0
Fax +49 9372 132-406
info@wika.de
www.wika.de