

Bourdon tube pressure gauge, copper alloy or stainless steel

Edgewise panel design

Models 214.11, 234.11

WIKA data sheet PM 02.07



for further approvals
see page 3

Applications

- For gaseous and liquid media that are not highly viscous or crystallising and will not attack copper alloy parts
- Model 214.11: Measuring system copper alloy
- Model 234.11: Measuring system stainless steel, also for aggressive media

Special features

- Built-in case per DIN 43700
- Nominal sizes NS 96 x 96 and NS 72 x 72 available
- Ingress protection IP42



**Bourdon tube pressure gauge model 214.11,
NS 96 x 96, edgewise panel design**

Description

The models 214.11 and 234.11 have been specifically designed for panel mounting and therefore feature a back mount process connection. With their outer dimensions of 96 x 96 mm and 72 x 72 mm in accordance with DIN 43700, the instruments can be installed in corresponding control cabinets and operator panels without any need for adaptation.

Panel mounting is simply carried out using two clamping brackets directly screwed to the case.

The instruments are based on the proven Bourdon tube measuring system. On pressurisation, the deflection of the Bourdon tube, proportional to the incident pressure, is transmitted to the movement via a link and indicated.

The wetted parts of model 214.11 are made of a copper alloy, those of model 234.11 are made of stainless steel.

Specifications

Design

DIN 43700

Nominal size in mm

96 x 96, 72 x 72

Accuracy class

NS 96 x 96: Class 1.0

NS 72 x 72, 96 x 96: Class 1.6

Scale ranges

NS 96 x 96: 0 ... 0.6 to 0 ... 1,000 bar

NS 72 x 72: 0 ... 0.6 to 0 ... 400 bar

or all other equivalent vacuum or combined pressure and vacuum ranges

Permissible temperature

Ambient: -20 ... +60 °C

Medium: +60 °C maximum (soft soldered)

+100 °C maximum (brazed)

Pressure limitation

■ NS 96 x 96

Steady: Full scale value

Fluctuating: 0.9 x full scale value

Short time: 1.3 x full scale value

■ NS 72 x 72

Steady: 3/4 x full scale value

Fluctuating: 2/3 x full scale value

Short time: Full scale value

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):

max. $\pm 0.4 \%$ /10 K of full scale value

Ingress protection

IP42 per EN/IEC 60529

Process connection

Copper alloy (> 100 bar stainless steel 316L)

Connection location: ■ Centre back mount

■ Lower back mount (only NS 96 x 96)

NS 96 x 96: G 1/2 B (male), SW 22

NS 72 x 72: G 1/4 B (male), SW 14

Pressure element

< 100 bar: Copper alloy, C-type, soft soldered

≥ 100 bar: Stainless steel 316L, helical or spiral type, brazed

Movement

Copper alloy, wear parts argentan

Dial

Aluminium, white, black lettering

NS 72 x 72 and 96 x 96 with pointer stop pin

Pointer

Aluminium, black

Case / Chassis (DIN 43700)

Steel, galvanised

Basic case

Plastic

Window

Instrument glass

Panel frame

Steel, black, narrow, snap-fit

Options






■ Other process connection

■ Measuring system stainless steel 316L (model 234.11)

■ Duplex measuring system max. 60 bar

■ Wide panel frame

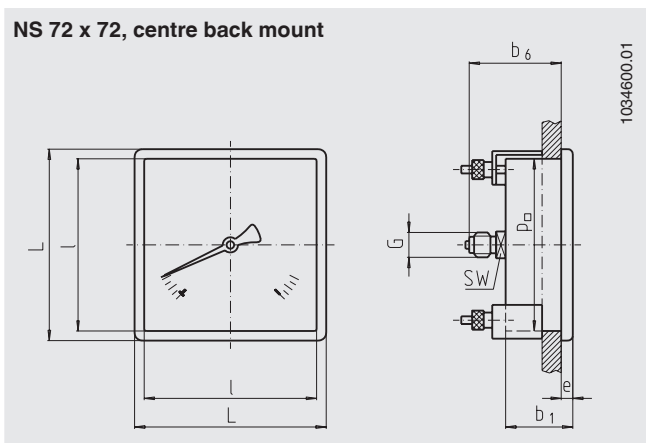
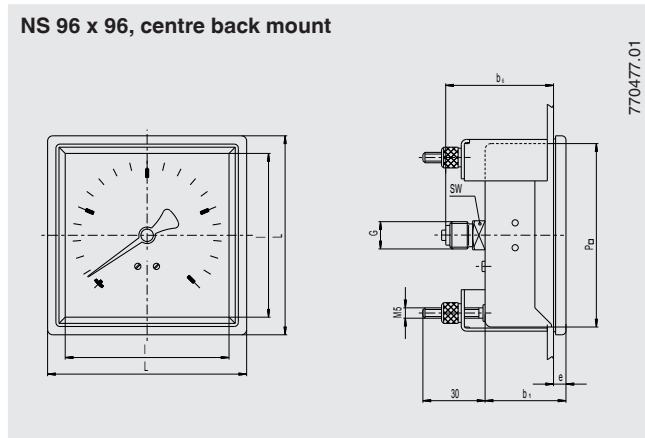
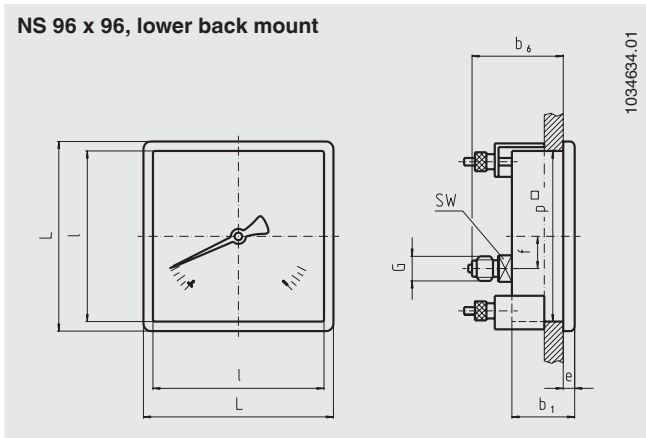
Approvals

Logo	Description	Country
	EU declaration of conformity Pressure equipment directive	European Union
	GOST (option) Metrology, measurement technology	Russia
	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
	BelGIM (option) Metrology, measurement technology	Belarus
	Uzstandard (option) Metrology, measurement technology	Uzbekistan
-	CPA (option) Metrology, measurement technology	China
-	CRN 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)

Dimensions in mm



NS, connection location	Dimensions in mm									Weight in kg
	b ₁	b ₆	e	f	G	L	l	p□	SW	
96 x 96, lower back mount	44	73	6	30	G ½ B	96	79	88.5	22	0.60
96 x 96, centre back mount	35	47	6	-	G ¼ B	96	79	88.5	14	0.60
72 x 72, centre back mount	29	42	6	-	G ¼ B	72	57	66	14	0.30

Process connection per EN 837-1 / 7.3

Ordering information

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

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