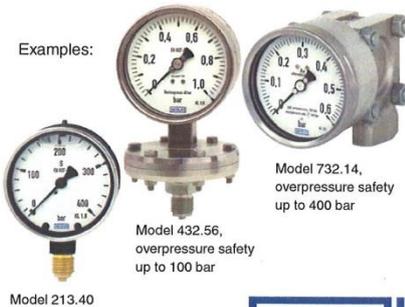


Operating instructions EN
Pressure gauges

Examples:



Model 213.40

 Model 432.56,
overpressure safety
up to 100 bar

 Model 732.14,
overpressure safety
up to 400 bar


Part of your business

Notes per current pressure equipment directive

- The pressure gauges are defined as "pressure accessories"
- The volume of the "pressure-bearing housings" of WIKAI pressure gauges is < 0.1 L
- The pressure gauges carry CE marking for fluid group 1 per annex II, diagram 1 when their permissible working pressure is > 200 bar

Instruments that do not carry the mark are manufactured per article 4, paragraph 3 "sound engineering practice".

Applicable standards (depending on model)

- EN 837-1 Bourdon tube pressure gauges, dimensions, metrology, requirements and testing
- EN 837-2 Selection and installation recommendations for pressure gauges
- EN 837-3 Diaphragm and capsule pressure gauges, dimensions, metrology, requirements and testing

 Specifications: See data sheet at www.wika.de

Subject to technical modifications.

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WIKAI 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

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1. Safety

WARNING!

Before installation, commissioning and operation, ensure that the appropriate pressure gauge has been selected in terms of measuring range, design and suitable wetted material (corrosion) for the specific measuring conditions. In order to guarantee the measurement accuracy and long-term stability specified, the corresponding load limits must be observed.

Only qualified persons authorised by the plant manager are permitted to install, maintain and service the pressure gauges.

For hazardous media such as oxygen, acetylene, flammable or toxic gases or liquids, and refrigeration plants, compressors, etc., in addition to all standard regulations, the appropriate existing codes or regulations must also be followed.

From pressure gauges which do not correspond to a safety version per EN 837 highly pressurised media might leak out through the possibly bursting window in case of a component failure. For gaseous media and working pressures > 25 bar a pressure gauge with safety version S3 is recommended per EN 837-2.

After an external fire, pressure media can leak out, particularly at soft solder joints. All instruments must be checked and, if necessary, replaced before recommissioning the plant.

Non-observance of the respective regulations can cause serious injuries and/or damage to the equipment.

2. Mechanical connection

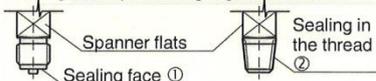
In accordance with the general technical regulations for pressure gauges (e.g. EN 837-2). When screwing the instruments in, the force required to do this must not be applied through the case, but only through the spanner flats provided for this purpose, and using a suitable tool.

For parallel threads, use flat gaskets, lens-type sealing rings or WIKAI profile sealings at the

Installation with open-ended spanner



Sealing of the pressure gauge connections



sealing face ①. With tapered threads (e.g. NPT threads), sealing is made in the threads ② using additional sealing materials, e.g. PTFE tape (EN 837-2).

The torque depends on the sealing used. In order to orientate the measuring instrument so that it can be read as well as possible, a connection with clamp socket or union nut should be used.

When a blow-out device is fitted to a pressure

gauge, it must be protected against being blocked by debris and dirt. With safety pressure gauges (see ⑤) there must be a free space of > 15 mm behind the blow-out back.

After installation, open the vent valve (if available) or set from CLOSE to OPEN. With models 4 and 7, do not open the flange mounting screws. The version of the vent valve depends on the model and can deviate from the above illustration!


Requirements for the installation point

If the line to the measuring instrument is not adequately stable, a measuring instrument holder should be used for fastening (and possibly via a flexible capillary). If vibrations cannot be avoided by means of suitable installation, instruments with liquid filling should be used. The instruments should be protected against coarse dirt and wide fluctuations in ambient temperature.

Note for model 732.14, for front bezel mounting: The front bezel serves as centring and as the aperture in the mounting panel. Securing and thus the weight-bearing must be made via the pressure connection piping.

3. Permissible ambient and operating temperatures

When mounting the pressure gauge it must be ensured that, taking into consideration the influence of convection and heat radiation, no deviation above or below the permissible temperature limits can occur. Observe the influence of temperature on the indication accuracy!

4. Storage

To protect the pressure gauges from mechanical damage keep them in the original packaging until installation.

Protect the measuring instruments from humidity and dust.

Storage temperature range: -40 ... +70 °C

Storage temperature range model PG23LT: -70 ... +70 °C

5. Maintenance and repairs

The pressure gauges are maintenance-free. Regular checks should be carried out to ensure the measurement accuracy. Checks or recalibrations must only be carried out by qualified skilled personnel with the appropriate equipment. When dismounting, close the vent valve (if available).



WARNING! Residual media in dismantled pressure gauges can result in a risk to persons, the environment and equipment. Take sufficient precautionary measures.

Applies to the following articles:

Standard pressure gauge, double scale

Standard pressure gauge, connection radial bottom

Article No.	Type No.
101652 to 101669	110.32-KD to 119-KD

Standard pressure gauge, connection, rear, centr.

Article No.	Type No.
101670 to 101462	110.43-KD to 219-KD

Standard pressure gauge, Single scale bar

Standard pressure gauge, single scale bar, connection radial bottom

Article No.	Type No.
101680 to 101725	110.30-K to 126-K

Standard pressure gauge, single scale bar, connection, rear, centric

Article No.	Type No.
101726 to 101763	110.41-K to 226-K

Standard pressure gauge, steel housing, single scale bar

Standard pressure gauge, single scale bar, connection radial bottom

Article No.	Type No.
101764 to 101809	110.30 to 127

Standard pressure gauge, single scale bar, connection, rear, centric

Article No.	Type No.
101810 to 101848	110.41 to 226

Standard pressure gauge, front ring

Standard pressure gauge, single scale bar, connection, rear, centric

Article No.	Type No.
101849 to 101878	300/40 to 309/63

Standard pressure gauge with front ring, black, connection, rear, centric

Article No.	Type No.
101879 to 101910	319/40 to 329/63

Standard pressure gauge, triangle front ring, connection, rear, centric101944

Article No.	Type No.
101911 to 101943	110.70 to 110.104

Standard pressure gauge, plastic- or steel housing, single scale bar**Standard pressure gauge, single scale bar, different connections**

Article No.	Type No.
101944 to 102015	5301 to 258

Welding technology pressure gauge**Welding technology pressure gauge, oxygen, connection radial bottom,**

Article No.	Type No.
101297 to 101300	401 to 413

Pressure gauge, robust design**Pressure gauge, robust design, diff. connections**

Article No.	Type No.
102016 to 102102067	500 to 613

Glycerine pressure gauge, diff. types**Glycerine pressure gauge, diff. types and connections**

Article No.	Type No.
102068 to 102405	700-K to 5022

Standard pressure gauge CrNi steel design, diff. types**Standard pressure gauge CrNi steel design, diff. types and connections**

Article No.	Type No.
102406 to 134044	4101 to 4097

Pressure gauge for mbar, diff. types

Pressure gauge for mbar, diff. types and connections

Article No.	Type No.
102517 to 102560	5840 to 6826

Micrometre pressure gauge

Micrometre pressure gauge, connection radial bottom

Article No.	Type No.
102561 to 102577	1158 to 1173

Differential pressure gauge

Differential pressure gauge, 2 parallel radial male end connections below

Article No.	Type No.
102578 to 102583	1201 to 1206

Diaphragm pressure gauge

Diaphragm pressure gauge, diff. types and connections

Article No.	Type No.
102584 to 102594	PL 1901 to PL 2107

Contact pressure gauge

Contact pressure gauge, magnetic spring contact, connection radial bottom

Article No.	Type No.
102595 to 102614	2201 to 3313
129742 to 129753	2201-ES to 2212-ES