

Operating Instructions GB

Pressure Gauges

Examples:



Notes in accordance with Pressure Equipment Directive 97/23/EC

- The pressure gauges are "pressure accessories" in accordance with article 1, paragraph 2.1.4
 - The volume of the pressure bearing housings of WIKA pressure gauges is < 0.1 L
 - The pressure gauges carry the CE marking for fluid group 1G in accordance with annex 2, table 1 when their permissible working pressure exceeds 200 bar
- Pressure gauges that do not carry the CE marking are manufactured in accordance with article 3, paragraph 3 "sound engineering practice".

Applied standards

- 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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1. Safety instructions



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 measuring accuracy and long-term stability specified, the corresponding load limits are to 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.

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

Non-observance of the respective regulations can result in serious injury and/or damage to equipment.

2. Mechanical connection

In accordance with the general technical regulations for pressure gauges (e.g. EN 837-2). When screw-fitting the gauges the force required for this must not be applied through the case or terminal box but just through the spanner flats (with suitable tool) provided for this purpose.



Correct sealing of pressure gauge connections with parallel thread ① shall be by means of a suitable sealing ring, sealing washer or WIKA profile seals. The sealing of tapered threads (e.g. NPT threads) is made by providing the thread ② with additional sealing material like, for example, PTFE tape (EN 837-2).



The torque depends on the seal used. Gauge connection by means of a clamp socket or a union nut is recommended to simplify correct orientation of the gauge. When a blow-out device is fitted to a pressure gauge, it shall be protected against blocking by debris and dirt.

With safety pressure gauges (see dial symbol Ⓢ) it has to be ensured that the free space behind the blow-out back will be at least 15 mm.



After mounting, set the compensating valve (if available) from CLOSE to OPEN.

Requirements on the installation point

If the line to the gauge is not adequately stable for a vibration-free mounting, a measuring instrument support (possibly via a flexible capillary) should be used for fastening. If vibrations cannot be avoided by a suitable installation, liquid-filled gauges should be used. The instruments should be protected against coarse dirt and wide fluctuations in ambient temperature.

3. Admissible ambient and operating temperatures

When mounting the pressure gauge it has to be ensured that, taking the influence of convection and heat radiation into consideration, no upper or lower deviation from the permissible ambient and medium temperatures can occur. The influence of temperature on the indication accuracy is to be observed.

4. Storage

The pressure gauge should remain in its original packing until installation. The gauge should be protected from external damage during storage. Storage temperature range: -40 ... +70 °C. Protect the gauges from humidity and dust.

5. Maintenance / Repairs

The instruments are maintenance-free. Tests should be carried out on a regular basis to guarantee the measuring accuracy of the pressure gauge. The tests or recalibrations have to be carried out by qualified skilled personnel with the appropriate equipment. When dismounting, close the compensating 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.