

Bourdon tube pressure gauges
Capsule pressure gauges
Diaphragm pressure gauges
Differential pressure gauge
D0, D1, D2, D3, D4, D5, D6, D7, D8, D9

Nominal size: 40, 50, 63, 80, 100, 160, 250


Notes in accordance with Pressure Equipment Directive 2014/68/EU

- The pressure gauges are defined as "pressure accessories" in accordance with article 2, paragraph 1
- The pressurised volume of AFRISO pressure gauge is < 0,1L
- The pressure gauges carry CE marking for fluid group 1 per annex II, diagram 1 when their permissible working pressure is > 200 bar

Applicable standards (dependent on the type)

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

Pressure gauges that do not carry the CE marking are manufactured in accordance with article 4, paragraph 3 "good engineering practice".

Technical specifications: see „Our Products/ Product Range“ at www.afriso.de

Instruction manuals: see "Downloads" at www.afriso.de
Subject to technical modifications.

AFRISO-EURO-INDEX GmbH

Mess-, Regel- und Überwachungsgeräte für Haustechnik, Industrie und Umweltschutz
Lindenstr. 20
74363 Güglingen

Tel: +49 7135 102-0
Fax: +49 7135 102-147
info@afriso.de
www.afriso.de

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 measuring accuracy and long term stability specified, the corresponding load limits must be observed.

Only qualified and authorised people are permitted to install and service the pressure gauges.

You must in addition observe all pertinent regulations in the case of hazardous substances such as oxygen, acetylene, flammable, explosive or toxic substances as well as refrigeration plants, compressors, etc.

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 the specific application observe compliance with all applicable regulations, guidelines and safety requirements as well as the selection criteria (safety aspects) as per EN 837-2 .

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

Failure to observe of the respective regulations may result in severe injuries and/or damage to property.

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.

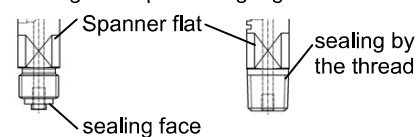
Mounting with spanner:



For cylindrical threads, use flat gaskets, AFRISO profile seals or lens shaped gasket at the sealing face.

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

Sealing of the pressure gauge connections:



The torque depends on the sealing used. In order to obtain a position of the pressure gauge that allows easy reading, threaded connections should be made by means of a female/female connection or a union nut.

For pressure gauge with blow-out device: This device must not be blocked by parts or by dirt.

The distance between the blow-out device and other objects must be at least 20 mm

Liquid filled bourdon tube pressure gauges with measuring ranges of ≤25 bar have a pressure relief opening (blow-out) at the top of the housing. These pressure gauges have appropriate warning labels fitted. The pressure gauge vent according sketch.

Requirements for the installation point

The pressure gauge must be mounted in such a way that it is not subjected to shocks and vibrations, possible using pressure gauge holder.

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 (permitted operating temperature observe).

3. Permissible ambient and operating temperature

Arrange the pressure gauge in such a way that the operating temperature never exceeds or falls below the permissible values. The influences of possible convection or heat radiation, as well as the influence of temperature on the indication accuracy are to be observed!

4. Storage

The pressure gauge should remain in its original packaging until installation for the protection against mechanical damage.

Protect the gauges from excessive humidity and dust.

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

5. Maintenance and repair

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.

Attention: When disassemble the installation and unsuitable storage liquid may be leak.

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

