

REFERENCE

EN 837-3
ANSI B 40.100
IS 3624

CERTIFICATE

ISO 9001 : 2008
ISO 14001 : 2004
BS OHSAS 18001 : 2007

1 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 persons authorized 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 must be checked and, if necessary, replaced before decommissioning the plant. Non-observance of the respective regulations can result in serious injury and/or damage to equipment.

2 General:

In accordance with the general technical regulations for pressure gauges (e.g. EN 837-2). When screwing the gauges in the force required for this must not be applied through the case or terminal box, rather only through the spanner flats provided for this purpose (using a suitable tool). Correct sealing of pressure gauge connections with parallel threads must be using suitable sealing rings / sealing washers. The sealing of tapered threads (e.g. NPT threads) is made by providing the thread with additional sealing material such as, for example, PTFE tape (EN 837-2). The torque depends on the seal used. Connecting the gauge using a clamp socket or a union nut is recommended, so that it is easier to orientate the gauge correctly. 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 dial symbol k) it must be ensured that the free space behind the blow-out back is at least 15 mm. After mounting, set the compensating valve (if available) from CLOSE to OPEN.

3

The capsule pressure gauges is using for measure very low pressure ranges (less than 1 bar pressure) ,In this gauges the capsule is acting as a sensing element, which is made of two diaphragm , the thickness is very less / delicate part, when apply pressure the capsule get expand and move linear. A precision mechanism translates the linear displacement of the diaphragm connecting rod to angular movement of the gauge's dial pointer. The pointer's displacement range of 270° corresponds to the full scale pressure.

4

The pressure gauge should be kept 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 INSTALLATION

To ensure safe working during installation and servicing, suitable shut-off valves must be installed in the plant, enabling the device:

- To be depressurized or taken out of operation
- To be disconnected from the mains supply

6

Gauges should always be mounted by using the wrench / Spanner flats (squares) provided on the pressure connection. Under no circumstances should the pressure connection be tightened by applying force to the gauge case by hand.

7

It is preferable to mount gauges in a location free from mechanical vibration. If this is not possible, a liquid filled gauge or a flexible capillary connection is necessary.

8

The gauge should be located so that it is not exposed to abnormally low or high temperatures. This may cause an additional accuracy error, depending on the deviation from the reference temperature of 25°C.

MAINTENANCE

All the gauges should be checked regularly for wear and tear, accuracy, and proper functioning by comparing them to a precision test gauge or a dead weight tester. Replace all broken or damaged parts immediately.