


Caution!
 Remnants of measuring mediums inside the pressure gauge could be a danger to human, environment and facilities.
The safety regulations should be considered when handling and storing the removed pressure gauge.

Pressure gauges, which will be sent to us for repair or calibration, have to be free of measuring medium!

7. Advices to the pressure gauges directive 97/23 EG

Pressure gauges are "pressure-involved equipment parts"
According to article 1, paragraph 2.1.4

The volume of the measurement-system in SUCHY-pressure gauges is smaller than 0,1L.

The EC-certification occurs in accordance with fluid group 1 G per appendix 2, from an allowed operating pressure > 200 bar.

Pressure gauges under 200 bar don't have to be signed with the CE sign.

These are made according to paragraph 3 of „the good engineer-practice“.

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Mounting- and operating instructions Pressure gauges

Important advice

 Please read this operating instruction before installing or commissioning pressure gauge!

 Keep the operating instruction in a place, which is accessible to all users at any time.

Used signs:




Caution!




Advice!

1. Selection of the pressure gauges


 The user has to select the measuring instrument under consideration following facts:

- range
- max.plant pressure
- resistance to the measuring medium
- resistance to the ambient air
- resistance to the temperature of the measuring medium,+ ambient air
- connection thread
- assembling position of the connection thread



2. Safety instructions

 Pressure gauges have to be mounted and maintained by trained staff under consideration of point 1.
In the case of overload by too high temperatures or pressures, it is possible that the measuring medium can discharge.
All instruments have to be checked before bringing the pressure gauge into service.


2.1 Using in areas with danger of explosion

-  Pressure gauges for these areas have to possess a prototype test certificate according to ATEX.
They also have to be grounded. I.e. by screw.
The windows only wet clean.




2.2 Using in Oxygen

-  For using in oxygen the pressure gauges with safety equipment according to DIN-EN 837-1 point 9.8 have to be used.
With measuring medium wetted materials have to be in accordance with EN 29539.
-  Pressure gauges with filling are only allowed to use up to a range of 40 bar and a temperature of max.60°C.


2.3 Using in Acetylene

-  For using in acetylene, the pressure gauges with safety equipment according to DIN-EN 837-1 point 9.8 have to be used.
With measuring medium wetted materials have to be in accordance with EN 29539.
(I.e. Bourdon tubes in CuSn8 are not allowed to be used; because of this we supply nominal size 100 with stainless steel measuring systems)

3. Requirements to the mounting location

-  The pipeline to the pressure gauges should be installed free of vibrations and enough sized. If vibrations are unavoidable, please use a filled pressure gauge.
-  You have to protect the pressure gauge against too much pollution and fluctuating temperatures.
The permissible temperature of the measuring medium and the ambient temperature must not be exceeded.
The temperature influence to the accuracy of measurement is about 0, 3 % per 10 K variance to the temperature of adjustment. (20°C)
-  The permissible medium temperature does not only depend on the instrument design, but also on the ignition temperature of the surrounding gases, vapours or dust.
Both aspects have to be taken into account.


4. Installation

-  While screwing in the pressure gauge, the force required for sealing should be applied just through the square of the connector with a suitable tool. (nominal size 63 – 14 mm; nominal size 100 and 160 – 22 mm)
Please avoid force applied through the case!


For sealing flat gaskets in accordance with DIN 16 285 has to be used. The user has to select the sealing materials under consideration following facts:

- maximum plant pressure
- resistance to the measuring medium
- resistance to the temperature of the measuring medium,+ ambient air


5. Temperatures

-  For maximum permissible temperatures of medium and ambient please have a look at datasheet (M XXX 01). The same applies to storage temperatures.

6. Commissioning

-  During the commissioning process pressure peaks and sudden temperature fluctuations must be absolutely avoided.
Please open the shut-off valves slowly.

7. Maintenance and servicing/ Repairs

-  The pressure gauges require no maintenance or servicing.
The measuring accuracy should be checked regular.
The inspection interval is to fix by the user. Tests or recalibrations have to be carried out by qualified persons with appropriate equipment.

8. Disposal

In the case of disposal a pressure gauge, please follow the waste treatments and disposal regulations of your region or country.