

# Industrial pressure gauges MS-100K

- ✓ Casing diameter Ø100
- Material of casing, process connection and measuring element - stainless steel
- ✓ Accuracy 1%

#### Application, construction

MS-100 pressure gauges are applicable to the measurement of the pressure of liquids and gases at temperatures up to 150°C. The range of pressures of the measured medium should correspond to 3/4 of the reading range of the pressure meter for constant pressures or 2/3 of the reading range for pulsating pressures. The casing box is made of stainless steel and has a window made of industrial glass. The pressure gauge's measuring element and process connection are made of stainless steel (or brass for version with diaphragm seals).

#### **Technical data**

#### Standard measurement ranges:

**0...**1, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 60, 100, 160, 250, 400 bar **-1...**0, 0.6, 1.5, 5, 9, 15 bar

Accuracy Diameter of the casing Ø100

0H18N9 (304ss) Material of the casing

Material of process connection

H17N13M2T (316Ti), and measuring element

**Process connection** G1/2" or M20×1.5

Process connection outlet bottom (special version: back)



Operating temperature range Medium temperature range Degree of protection

-20...60°C 0...150°C IP 54

(IP 65: glycerine version)

#### **Special versions**

casing filled with glycerine glycerine back connection

## Pressure gauges with diaphragm seals

Burdon tube pressure gauges are mechanical pressure measuring devices, which are sensitive to many factors typical of industrial applications. The use of diaphragm seals will significantly improve the reliability of the pressure gauge, and is often a necessary condition for measurements to be made.

Pressure gauges with appropriate diaphragm seals are used:

#### to measure the pressure of media which are:

- contaminated, viscous, solidifying,
- at high or low temperature,
- chemically reactive;

#### in cases of:

- mechanical vibration of the system,
- pulsating pressure;

### where there is a need for:

- protection of the system against unsealing in case of a fault with the manometer.
- aseptic measurement conditions in the food and pharmaceuticals industries.

The full range of diaphragm seals which can be used with pressure gauge is described in detail in Chapter III: Diaphragm Seals. The temperature range of the medium measured using a pressure gauge with diaphragm seal depends on the choice of diaphragm seal and may lie between -60 and +315°C

With an appropriate selection of pressure gauge and diaphragm seal, taking into account the width of the measurement range, the measurement accuracy of the unit is in accordance with the precision class of the pressure gauge. Detailed recommendations concerning the range of usability of diaphragm seals combined with manometers are contained in Chapter III: Diaphragm

Ordering procedure



Type of process connection (G1/2", M20×1.5) or type of diaphragm seal according to the diaphragm seals data sheets

#### Example



MS-100K manometer with S-Mazut diaphragm seal for measurement of high-viscosity, high-temperature media

Example: MS-100K pressure gauge / range 0 ÷ 6 bar / glycerine / G1/2" process

MS-100 / 0 ÷ 6 bar / glycerine / G1/2"