

Differential Pressure Gauges Model 716.05, Compact Design, with Compression Spring and Sealing Diaphragm, High Overpressure Safety

WIKA Data Sheet PM 07.12

Applications

- Differential pressure measurement at measuring points with very low differential pressures and very high one-sided or reciprocal overpressure
- For transparent, clean, non-sticky, non-aggressive media
- Control of ventilator and blast pressures
- Filter monitoring in ventilation and heating systems
- Level measurement in closed tanks

Special Features

- Differential pressure measuring ranges from 0 ... 16 mbar
- High working pressure (static pressure) and high overpressure safety up to 16 bar
- Numerous options for installation, connection form and connection location



Differential Pressure Gauge Model 716.05

Description

Design

Small, compact version
WIKA trade pattern DT-GM 87 10 226

Nominal size in mm

80

Accuracy class

4.0: scale ranges 0 ... 16 mbar and 0 ... 25 mbar
2.5: scale ranges 0 ... 40 mbar to 0 ... 600 mbar

Scale ranges

0 ... 16 mbar to 0 ... 600 mbar
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

Steady: full scale value
Fluctuating: full scale value

Overpressure safety

Either side max. 16 bar

Max. working pressure (static pressure)

16 bar

Operating temperature

Ambient: -15 ... +60 °C
Medium: +70 °C maximum

Temperature effect

When temperature of the measuring system deviates from reference temperature (+20 °C):
max. $\pm 0.5\%$ / 10 K of true scale value

Ingress protection

IP 66 per EN 60 529 / IEC 529

Design and operating principle

- Pressure retaining case interior with rolled diaphragm (secondary pressure element) and metal spring elements (primary pressure element)
- Media chamber ⊕ and ⊖ separated by the rolled diaphragm
- Pressure differential between ⊕ and ⊖-side deflects the rolled diaphragm in an axial direction against the spring elements
- The deflection is transmitted by a connecting rod to the movement
- Overpressure safety is provided by metal bolsters resting against the elastic rolled diaphragm

Standard version

Process connections (wetted)

Lower or back mount, 2 x G 1/8 (female)

Case (wetted)

Aluminium, black, pressure retaining

Ring

Aluminium, black

Pressure element (wetted)

Spring element stainless spring steel

Pressure chamber separating diaphragm (wetted)

Rolled diaphragm, silicone rubber

Sealings (wetted)

NBR

Movement (wetted)

Cu-alloy, wear parts argentan

Dial (wetted)

Aluminium, white, black lettering

Pointer (wetted)

Aluminium, black

Window (wetted)

Glass

Weight

0.64 kg

Mounting

according to affixed symbols,

⊕ high pressure,

⊖ low pressure

Mounting by means of

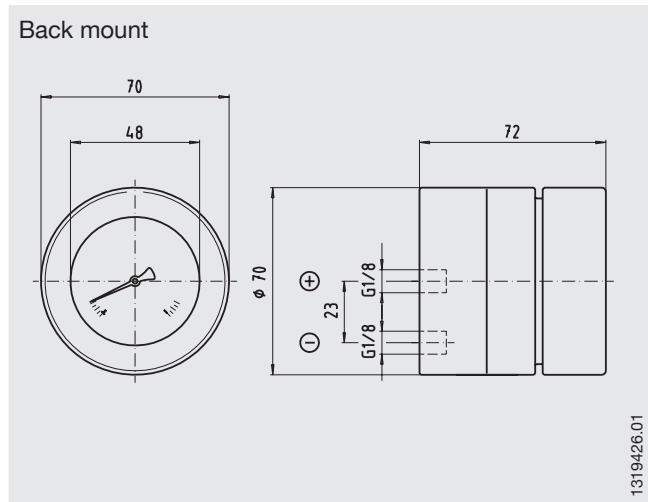
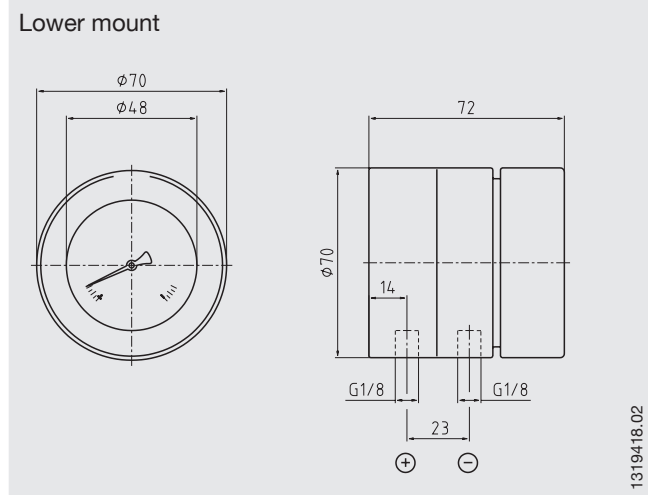
- Rigid tailpipes

Options

- Triangular bezel with mounting devices for panel mounting
- Panel or surface mounting flange (steel, black)
- Connections lateral mount
- Pressure connections male (wetted)
- Scale ranges < 0 ... 16 mbar and > 0 ... 600 mbar (please inquire)
- Overpressure safety > 16 bar
- Max. working pressure (static pressure) > 16 bar

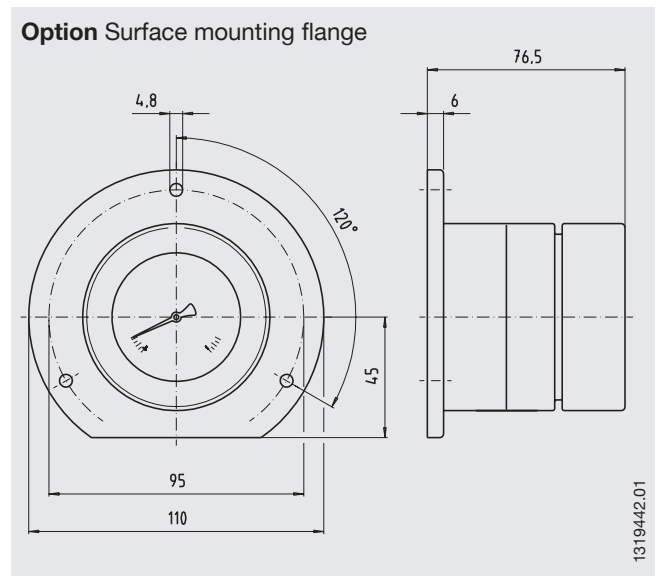
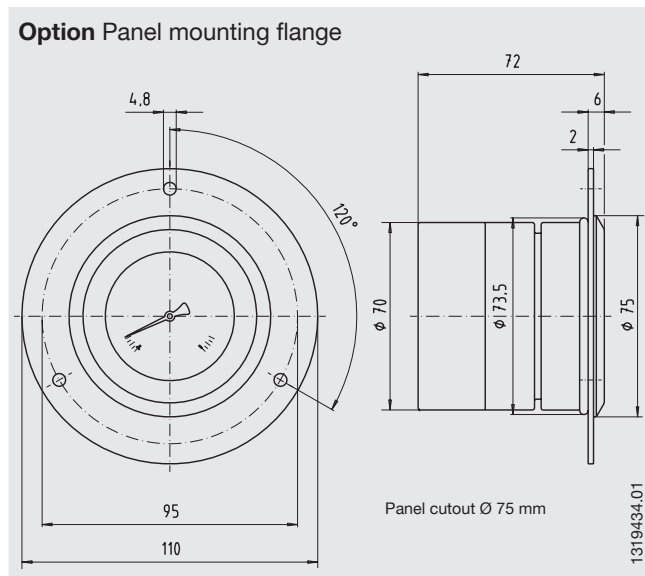
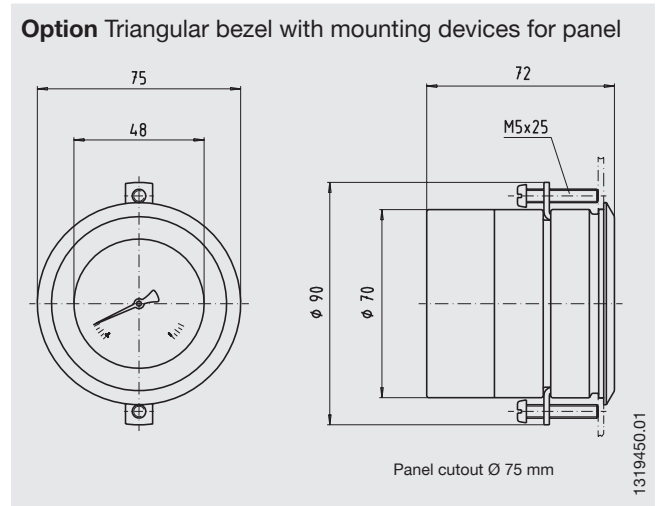
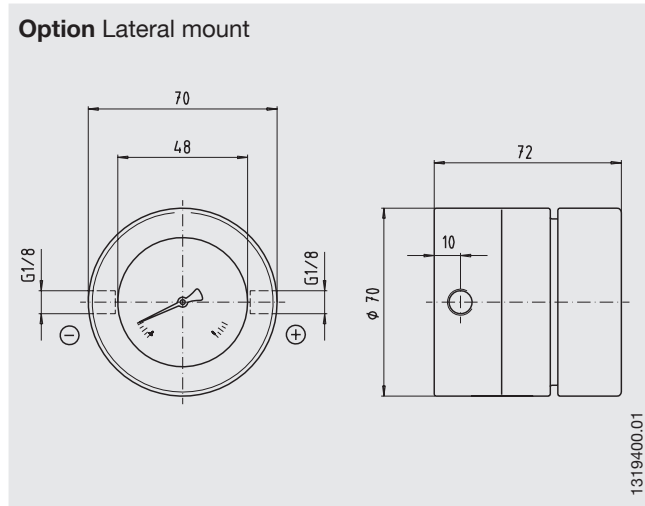
Dimensions in mm

Standard version



Dimensions in mm

Options



Ordering information

Model / Nominal size / Scale range / Connection size / Connection location / Options

Modifications may take place and materials specified may be replaced by others without prior notice.
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.

