

# Differential pressure gauge with capsule element

## Model 716.11, measuring system copper alloy

## Model 736.11, measuring system stainless steel

WIKA data sheet PM 07.07



for further approvals  
see page 3

### Applications

- Differential pressure measurement at measuring points with very low differential pressures, for gaseous, dry, clean, oil and grease free media
- Model 736.11 also for aggressive media and ambience
- Filter monitoring in ventilation and heating systems
- Filter monitoring in overpressure and clean rooms
- Differential pressure controlled monitoring of ventilator and blast pressures

### Special features

- Differential pressure measuring ranges from 0 ... 2.5 mbar
- As a standard zero adjustment in front
- Ingress protection IP66
- Case from stainless steel

### Description

#### Design

For very low differential pressures, DT - GM 87 10 226

#### Nominal size in mm

100, 160

#### Accuracy class

1.6

#### Scale ranges

Model 716.11: NS 100: 0 ... 10 to 0 ... 250 mbar  
NS 160: 0 ... 6 to 0 ... 250 mbar  
Model 736.11: NS 100: 0 ... 16 to 0 ... 250 mbar  
NS 160: 0 ... 2.5 to 0 ... 250 mbar

or all other equivalent vacuum or combined pressure and vacuum ranges

#### Pressure limitation

Steady: Full scale value

Fluctuating: 0.9 x full scale value



Differential pressure gauge model 716.11

#### Overpressure safety

Full scale value

#### Max. working pressure (static pressure)

250 mbar

#### Permissible temperature

Ambient: -20 ... +60 °C

Medium: +70 °C maximum

#### Temperature effect

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

#### Ingress protection

IP66 per IEC/EN 60529

## Design and operating principle

- Pressure retaining case with capsule measuring element,  
⊕ pressure is retained in capsule element  
⊖ pressure is retained in case
- Pressure differential between ⊕ and ⊖ side deflects the capsule element
- The deflection is transmitted to the movement and indicated

Mounting according to affixed symbols, ⊕ high pressure and ⊖ low pressure

### Mounting by means of:

- Rigid measuring lines
- Panel or surface mounting flange (option)
- Mounting bracket for wall or pipe mounting (option)

## Standard version

### Process connection (wetted)

Model 716.11: Copper alloy  
Model 736.11: Stainless steel  
Lower mount (radial), parallel in line  
2 x G ½ B (male), SW 22

### Pressure element (wetted)

Model 716.11: Copper alloy  
Model 736.11: Stainless steel

### Movement (wetted)

Model 716.11: Copper alloy  
Model 736.11: Stainless steel

### Dial (wetted)

Aluminium, white, black lettering

### Pointer (wetted)

Aluminium, black

### Zero adjustment (wetted)

Adjustment appliance for screwdriver in front

### Case (wetted)

Stainless steel, pressure retaining  
With blow-out device PUR

### Window (wetted)

Clear non-splintering plastic

### Sealings (wetted)

NBR, silicone

### Bezel ring

Bayonet ring, stainless steel

## Options

- Other process connection
- Sealings (model 910.17, see data sheet AC 09.08)
- Panel or surface mounting flange
- Mounting bracket for wall or pipe mounting (model 910.16, see data sheet AC 09.07)
- Valve manifold for differential pressure gauges (model 910.25, see data sheet AC 09.11)
- Back mount
- Overpressure safety
  - ⊕ side with scale ranges  
0 ... 2.5 mbar to 0 ... 25 mbar: 3 x full scale value  
≥ 0 ... 40 mbar: To maximum working pressure
  - ⊖ side: On request

## Approvals

| Logo  | Description  | Country                     |
|---|--|-----------------------------|
|  | <b>EAC</b><br>Pressure equipment directive             | Eurasian Economic Community |
|  | <b>GOST</b><br>Metrology, measurement technology       | Russia                      |
|  | <b>KazInMetr</b><br>Metrology, measurement technology  | Kazakhstan                  |
| -   | <b>MTSCHS</b><br>Permission for commissioning          | Kazakhstan                  |
|  | <b>BelGIM</b><br>Metrology, measurement technology     | Belarus                     |
|  | <b>Uzstandard</b><br>Metrology, measurement technology | Uzbekistan                  |

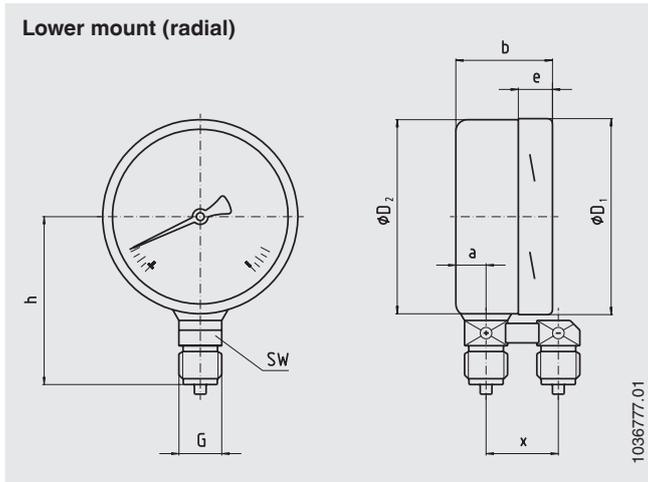
## Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

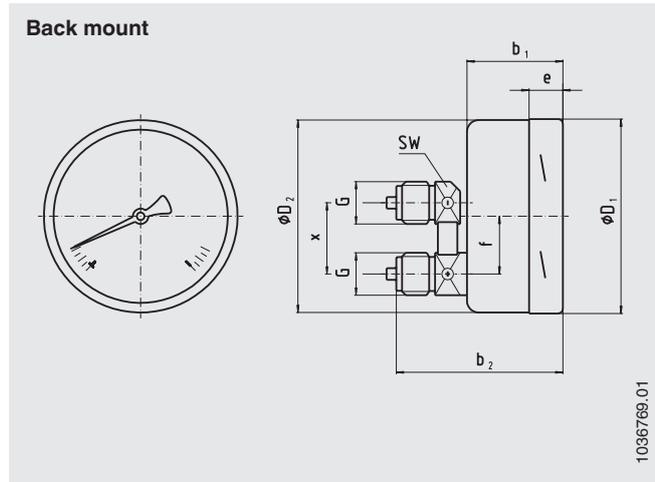
Approvals and certificates, see website

# Dimensions in mm

## Standard version



## Option



| NS  | Dimensions in mm |      |                |                |                |                |      |    |           |      |    |    | Weight in kg |
|-----|------------------|------|----------------|----------------|----------------|----------------|------|----|-----------|------|----|----|--------------|
|     | a                | b    | b <sub>1</sub> | b <sub>2</sub> | D <sub>1</sub> | D <sub>2</sub> | e    | f  | G         | h ±1 | X  | SW |              |
| 100 | 15.5             | 48.5 | 49.5           | 84             | 101            | 99             | 17.5 | 30 | 2 x G ½ B | 87   | 37 | 22 | 0.73         |
| 160 | 15.5             | 48.5 | 51.5           | 87             | 161            | 159            | 17.5 | 50 | 2 x G ½ B | 118  | 37 | 22 | 1.33         |

Process connection per EN 837-3 / 7.3

## Ordering information

Model / Nominal size / Scale range / Max. working pressure (static pressure) ... mbar / Connection size / Connection location / Options

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