

# Differential Pressure Gauge With Capsule Element

## Type 716.11, measuring system copper alloy

## Type 736.11, measuring system stainless steel

WIKA Datasheet 7X6.11



for further approvals see page 2

### Applications

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

### Product features

- Differential pressure measuring ranges from 0 ... 1" H<sub>2</sub>O (2.5 mbar)
- As a standard zero adjustment in front
- Ingress protection NEMA 4 (IP 66)
- Case from stainless steel

### Specifications

#### Design

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

#### Nominal size

Type 716.11: 2½" (63 mm), 4" (100 mm), 6" (160 mm)

Type 736.11: 4" (100 mm), 6" (160 mm)

#### Accuracy

(+/-) 1.6% of full scale

#### Scale ranges

Type 716.11:

2½" (63 mm): 0 ... 6" H<sub>2</sub>O (16 mbar) to 0 ... 160" H<sub>2</sub>O (400 mbar)

4" (100 mm): 0 ... 4" H<sub>2</sub>O (10 mbar) to 0 ... 100" H<sub>2</sub>O (250 mbar)

6" (160 mm): 0 ... 2½" H<sub>2</sub>O (6 mbar) to 0 ... 100" H<sub>2</sub>O (250 mbar)

Type 736.11:

4" (100 mm): 0 ... 6" H<sub>2</sub>O (16 mbar) to 0 ... 100" H<sub>2</sub>O (250 mbar)

6" (160 mm): 0 ... 1" H<sub>2</sub>O (2.5 mbar) to 0 ... 100" H<sub>2</sub>O (250 mbar)

or all other equivalent vacuum or compound ranges



Differential Pressure Gauge Type 716.11

#### Pressure limitation

Steady: Full scale value

Fluctuating: 0.9 x full scale value

#### Overpressure safety

Full scale value

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

2½" (63 mm): 160" H<sub>2</sub>O (400 mbar)

4" & 6" (100 mm & 160 mm): 100" H<sub>2</sub>O (250 mbar)

#### Permissible temperature

Ambient: -4 °F ... +140 °F (-20 °C ... +60 °C)

Medium: +158 °F (+70 °C) maximum

#### Temperature error

Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

#### Ingress protection

IP 66 per EN 60529 / IEC 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:

- Stem/direct mounting
- Panel or surface mounting flange (option)
- Mounting bracket for wall or pipe mounting (option)

## Standard version

### Process connection (wetted)

Type 716.11: Copper alloy

Type 736.11: Stainless steel

Lower mount (LM), parallel one behind the other

Size 2½" (63 mm): 2 x ⅛" NPT (male), 14 mm wrench flat

Size 4" & 6" (100 mm & 160 mm): 2 x ½" NPT (male),

22 mm wrench flat

### Pressure element (wetted)

Type 716.11: Copper alloy

Type 736.11: Stainless steel

### Movement (wetted)

Type 716.11: Copper alloy

Type 736.11: Stainless steel

### Dial (wetted)

Aluminium, white, black lettering

### Pointer (wetted)

Aluminium, black

### Zero adjustment (wetted)

Adjusting device for screwdriver in front

### Case (wetted)

Stainless steel, pressure retaining,

Size 4" & 6" (100 mm & 160 mm): with pressure relief disc

### Window (wetted)

Clear non-splintering plastic

### Sealings (wetted)

NBR, silicone

### Bezel ring

Cam ring (bayonet type), stainless steel

## Options

- Other process connection
- Sealings (Type 910.17, see Datasheet 910.17))
- Panel or surface mounting flange
- Mounting bracket for wall or pipe mounting
- Pressure compensating valve - wetted
- Back mount (BM)
- Overpressure safety  
⊕ side with scale ranges  
≤ 0 ... 10" H<sub>2</sub>O (25 mbar): 3X full scale value  
> 0 ... 10" H<sub>2</sub>O (25 mbar): To maximum working pressure  
⊖ side: On request

## Approvals

- **GOST**, metrology/measurement technology, Russia
- **GOST-R**, import certificate, Russia
- **CRN**, safety (e.g. electr. safety, overpressure, ...), Canada

## Certificates <sup>1)</sup>

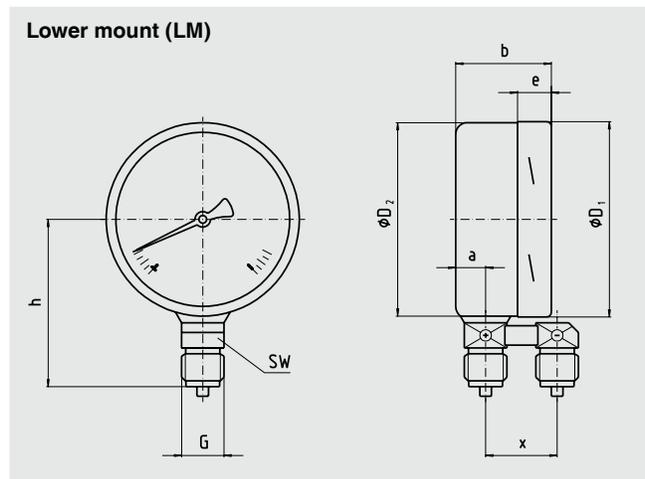
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. indication accuracy)

<sup>1)</sup> Option

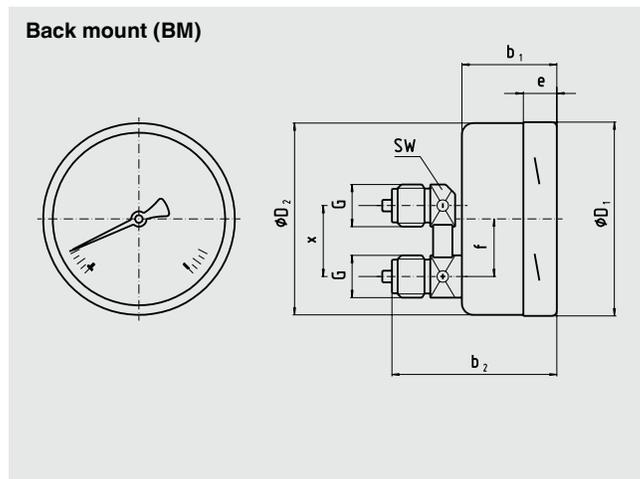
Approvals and certificates, see website

# Dimensions in mm

## Standard version



## Option



| NS  | Dimensions in mm |      |                |                |                |                |      |    |                           |      |    | Weight<br>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   |
| 63  | 11               | 48.5 | 38             | 55             | 64             | 62             | 13.5 | 20 | 2 x G 1/8 B <sup>1)</sup> | 49   | 23 | 14              | 0.23 |
| 100 | 15.5             | 48.5 | 49.5           | 84             | 101            | 99             | 17.5 | 30 | 2 x G 1/2 B               | 87   | 37 | 22              | 0.73 |
| 160 | 15.5             | 48.5 | 51.5           | 87             | 161            | 159            | 17.5 | 50 | 2 x G 1/2 B               | 118  | 37 | 22              | 1.33 |

Process connection per EN 837-3 / 7.3

1) Without spigot

## Ordering information

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

### Ordering information

Pressure gauge model / Nominal size / Scale range / Size of connection / Optional extras required  
 Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.  
 Modifications may take place and materials specified may be replaced by others without prior notice.



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