

# 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 2

### 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 environment
- 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 ... 4 mbar
- As a standard zero adjustment in front
- Ingress protection IP 66
- Case from stainless steel

### Description

#### Design

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

#### Nominal size in mm

Model 716.11: NS 63, 100, 160

Model 736.11: NS 100, 160

#### Accuracy class

1.6

#### Scale ranges

Model 716.11: NS 63: 0 ... 16 to 0 ... 400 mbar

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)

NS 63: 400 mbar

NS 100, 160: 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

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:

- 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 (LM), parallel one behind the other

NS 63: 2 x G 1/8 B (male), 14 mm flats

NS 100, 160: 2 x G 1/2 B (male), 22 mm flats

### 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)

Adjusting device for screwdriver in front

### Case (wetted)

Stainless steel, pressure retaining,

NS 100, 160: With blow-out device PUR

### Window (wetted)

Clear non-splintering plastic

### Sealings (wetted)

NBR, silicone

### Bezel ring

Cam ring (bayonet type), 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 (data sheet AC 09.07)
- Pressure compensating valve (data sheet AC 09.11) - wetted
- Back mount (BM)
- 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

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

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

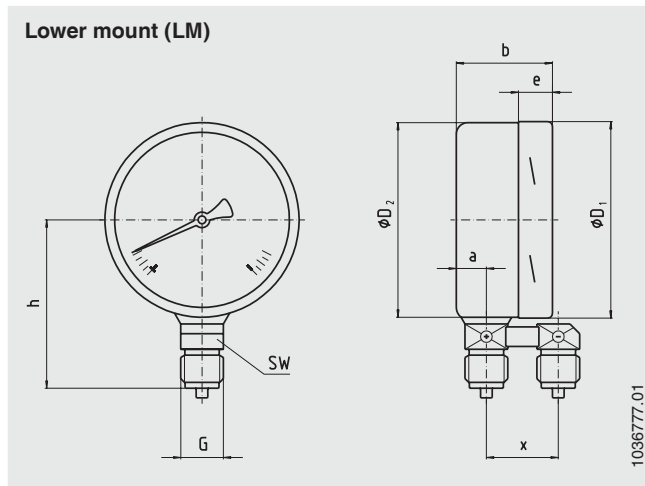
- 2.2 test report per EN 10204 (e.g. state-of-the-art manufacturing, material proof, indication accuracy)
- 3.1 inspection certificate per EN 10204 (e.g. material proof for wetted metallic parts, indication accuracy)

1) Option

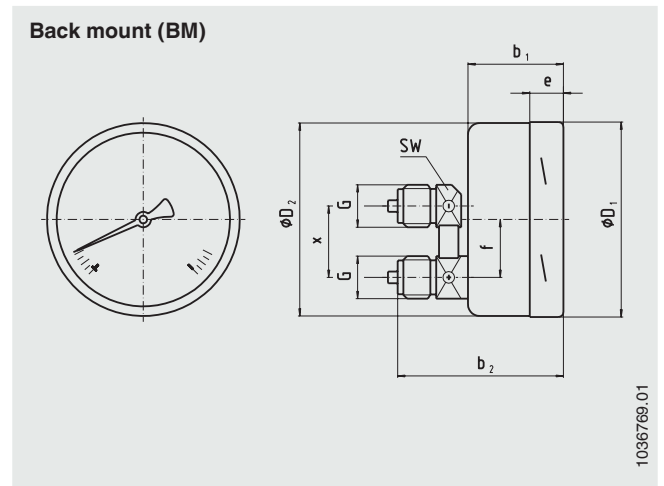
Approvals and certificates, see website

# Dimensions in mm

## Standard version



## Option



NS	Dimensions in mm												Weight in kg
	a	b	b <sub>1</sub>	b <sub>2</sub>	D1	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

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

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