

# Differential pressure gauge

## For very low differential pressures from 2.5 mbar

### Models 716.11 and 736.11, copper alloy and 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



Differential pressure gauge model 716.11

#### 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 ... 25 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

##### Overload 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 manifolds (models IV3x, IV5x, see data sheet AC 09.23)
- Back mount
- Overload 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 (option)</b> Pressure equipment directive	Eurasian Economic Community
	<b>GOST</b> Metrology, measurement technology	Russia
	<b>KazInMetr (option)</b> Metrology, measurement technology	Kazakhstan
-	<b>MTSCHS (option)</b> Permission for commissioning	Kazakhstan
	<b>BelGIM (option)</b> Metrology, measurement technology	Belarus
	<b>UkrSEPRO (option)</b> Metrology, measurement technology	Ukraine
	<b>Uzstandard (option)</b> Metrology, measurement technology	Uzbekistan
-	<b>CPA</b> Metrology, measurement technology	China
-	<b>CRN</b> Safety (e.g. electr. safety, overpressure, ...)	Canada

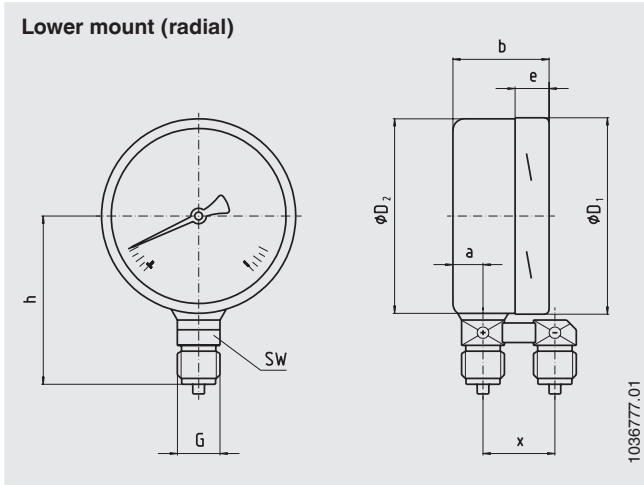
## Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

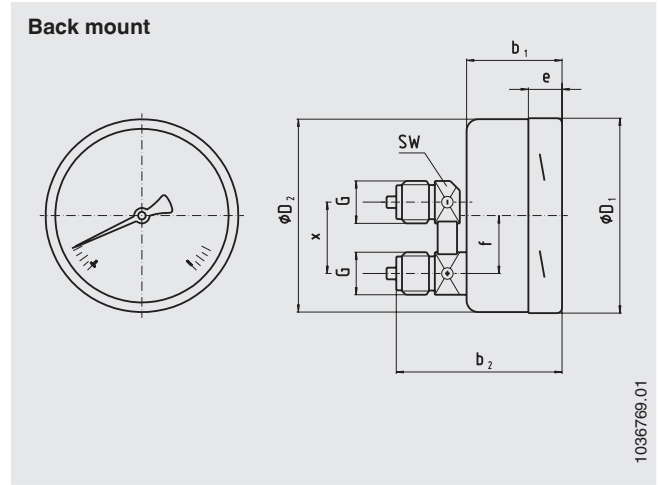
Approvals and certificates, see website

# 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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