

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
	EAC (option) Pressure equipment directive	Eurasian Economic Community
	GOST Metrology, measurement technology	Russia
	KazInMetr (option) Metrology, measurement technology	Kazakhstan
-	MTSCHS (option) Permission for commissioning	Kazakhstan
	BelGIM (option) Metrology, measurement technology	Belarus
	UkrSEPRO (option) Metrology, measurement technology	Ukraine
	Uzstandard (option) Metrology, measurement technology	Uzbekistan
-	CPA Metrology, measurement technology	China
-	CRN Safety (e.g. electr. safety, overpressure, ...)	Canada

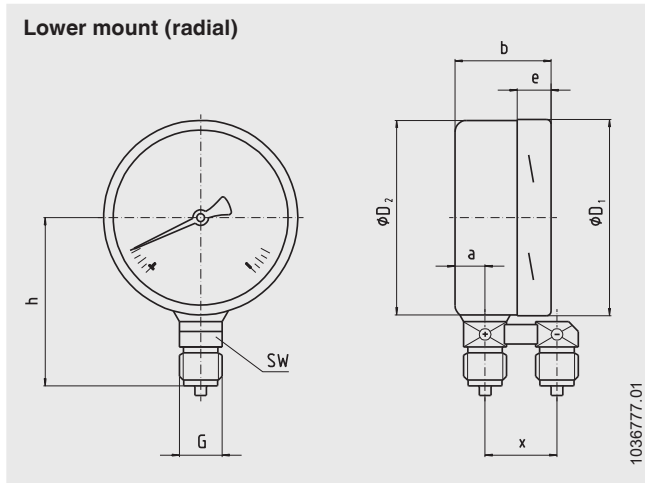
Certificates (option)

- 2.2 test report
- 3.1 inspection certificate

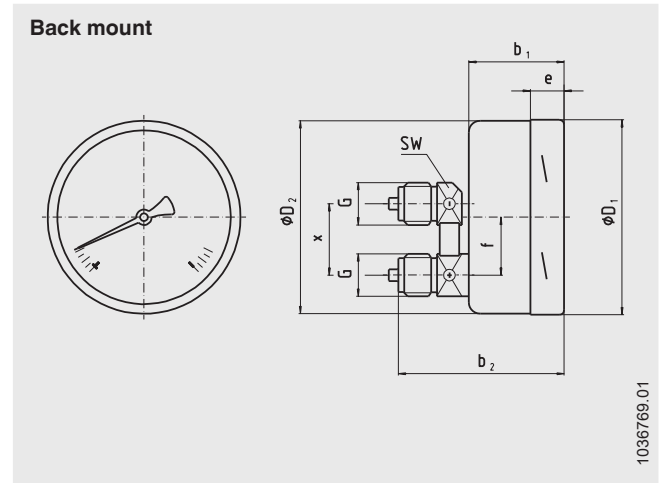
Approvals and certificates, see website

Dimensions in mm

Standard version



Option



NS	Dimensions in mm												Weight in kg
	a	b	b ₁	b ₂	D ₁	D ₂	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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