



## **BP SERIES**

# Pressure gauges for low pressures generally used for gas

- capsule pressure element;
- ◆ copper-berillium or stainless steel capsule;
- ♦ NS 63 100 150;
- ◆ ranges included between -6 and 400 mbar.









## **TECHNICAL FEATURES**

#### Nominal sizes

- 63 (minimum range 60 mbar);
- 100 (minimum range 6 mbar);
- 150 (minimum range 6 mbar).

#### Execution

- A... direct vertical mounting;
- B... surface mounting;
- C... flush mounting;
- D... direct horizontal mounting;
- ...2 stainless steel capsule, brass movement, AISI 316L stainless steel pressure connection (NS 100 and 150);
- ...3 copper-berillium capsule, brass movement, brass pressure connection (NS 63 and 100).

#### Casing

- case and ring in AISI 304 stainless steel with bayonet bezel for execution 2 as an alternative for execution 3 NS 100;
- black painted steel case for execution 3.

#### Protection degree (according to EN 60529)

- IP 55 for dry execution 2;
- IP 43 for execution 3.
- IP 67 (option V66 and V72) for execution 2;

## Window

- glass for NS 100 and 150;
- plastic snap-fit for NS 63.

#### Blow-out device

- blow out plug for NS 100 and 150.

## Pressure connection (according EN 837-3)

Gas (BSP) or NPT thread as F dimension shown in BP tables:

- brass (execution 3);
- AISI 316L (execution 2).

## Pressure element

- copper-berillium capsule (execution 3);
- stainless steel capsule AISI 316Ti (execution 2).

## Movement

brass.

### Zero adjustment

- on the dial.

## • Ranges (according to EN 837-3)

#### o Graduation:

- pressure gauges: 0 ÷ 6; 0 ÷ 10; 0 ÷ 16; 0 ÷ 25; 0 ÷ 40; 0 ÷ 60; 0 ÷ 100; 0 ÷ 160; 0 ÷ 250; 0 ÷ 400;
- vacuum gauges: -6 ÷ 0; -10 ÷ 0; -16 ÷ 0; -25 ÷ 0; -40 ÷ 0; -60 ÷ 0; -100 ÷ 0; -160 ÷ 0; -250 ÷ 0; -400 ÷ 0;
- compound gauges: on request. (divisions as per table C1 at page P04)
- other graduations not normalized.

## o Unit of pressure:

- mbar, kPa, and psi for single or double range.

## o Scale angle:

- 270 °.

#### Working pressure (referred to full scale deflection)

- from 1/10 to 2/3.

## Over-pressure (referred to full scale deflection)

- not allowed.

## Pointer

- aluminium not adjustable.

#### Dia

 white aluminium with black figures (for dial modifications see available options).

#### Accuracy (according to EN 837-3)

- class 1,6 (± 1,6% of full scale deflection).

#### Ambient temperature

--10 ÷+50 °C.

#### Thermal drift

- out of optimum ambient temperature values included within  $+15 \div +25$  °C, the thermal drift affects the instruments accuracy of 0,5% every 10 °C.

# • Operating temperature

- -10  $\div$  +60 °C for execution 3;
- -10  $\div$  +120 °C for execution 2.





## **APPLICATIONS**

- Accessories (see AM series)
  - cooling siphons, recommended when high temperature are involved;
  - valves;

- dampers for control of process fluid entry speed into the instrument;
- adjusting over-pressure protectors to cut automatically off the instrument from the circuit.

#### **OPTIONS**

Window

laminated safety glass for NS 100 and 150. (identification V17)

- Degreasing for oxygen service for execution 2. (identification V31)
- Screwed pressure connection different from standard. (identification V42)
- Changes to the dial
  - serial number; (identification V50)
  - specific dial; (identification V51)
  - red mark; (identification V52)
  - writings; (identification V53)
  - TAG number; (identification V54)
  - dial without logo; (identification V56)
  - double logo (Fantinelli + customer);(identification V57)

- customer's logo.
   (identification V58)
- AISI 316 stainless steel case and ring as alternative to AISI 304 stainless steel for execution 2. (identification V61)
- Liquid filling

silicone fluid filled casing (minimum range 100 mbar pressure). (identification V66)

• IP 67 casing not fillable. (identification V72)

Metal tag plate
 AISI 316 stainless steel for tag number.
 (identification V82)

## **DOCUMENTATION**

- Fantinelli calibration certificate class 1,6 rising pressure. (identification V93)
- ACCREDIA calibration certificate (identification V98)

- Complementary documents
  - o certificate of compliance with the order EN 10204 2.2.
  - o technical documentation including;
    - drawings and technical informations;
    - installation and maintenance instructions.
  - o inspection and test certificate EN 10204-3.1.
  - o material certificates (execution 2 only).
  - o PED declaration.
  - o ATEX declaration (II 2 G/D).

# **TECHNICAL INFORMATIONS**

Capsule pressure gauge

execution A2/A3: bottom connection for direct mounting.

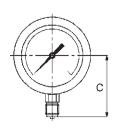
execution B2: bottom connection for surface

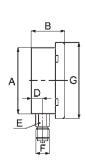
mounting with 3-hole fixing.

execution C2/C3: back connection for flush

mounting with 3-hole fixing.

**execution D2/D3:** back connection for direct mounting.



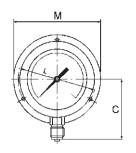


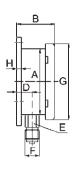
# **Table BP 322-A2/A3**

Model BP322	DN	А	В	С	D	Е	F	G	Н	1	L	М	N	Ø fori 120°	PESO ~ kg
А3	63	63	34	52	10	14	1/4	63							0,17
A2	100	103	50	92	16,5	22	1/2	118							0,51
А3	100	98	49	85	16	22	1/2	100							0,49
A2	150	150	50	116	16,5	22	1/2	166							0,78



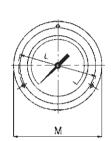


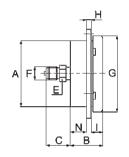




# Table BP 322-B2

Model BP322	DN	Α	В	С	D	Е	F	G	Н	ı	L	М	N	Ø fori 120°	PESO ~ kg
В2	100	103	57	92	23,5	22	1/2	118	7		126	140		5	0,64
B2	150	150	57	116	23,5	22	1/2	166	7		178	192		5	1,02

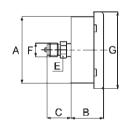




## **Table BP 322-C2/C3**

Model BP322	DN	Α	В	С	D	Е	F	G	Н	ı	L	М	N	Ø fori 120°	PESO ~ kg
C3	63	64	38	15		14	1/4	62	2	1,5	75	85	34,5	3,6	0,21
C2	100	103	50	38		22	1/2	118	7	19	126	140	24	5	0,60
C2	150	150	50	38		22	1/2	166	7	19	178	192	24	5	0,91





# **Table BP 322-D2/D3**

Model BP322	DN	А	В	С	D	Е	F	G	Н	ı	L	М	N	Ø fori 120°	PESO ~ kg
D3	63	63	38	15		14	1/4	63							0,14
D2	100	103	50	38		22	1/2	118							0,51
D3	100	98	49	38		22	1/2	100							0,49
D2	150	150	50	38		22	1/2	166							0,78