



## SP 100 SERIES

### Bourdon tube pressure gauges for general purpose

- ◆ watertight casing, dry or liquid filled execution;
- ◆ NS 40 - 50 - 63 - 80 - 100;
- ◆ ranges included between 1 and 600 bar.

These instruments are manufactured for all those industry's sectors which require highest quality pressure gauges with stainless steel casing.



## TECHNICAL FEATURES

- **Nominal sizes**
  - 40 - 50 - 63 - 80 and 100.
- **Casing**
  - case and crimped ring in AISI 304 st. st. (execution G).
- **Protection degree (according to EN 60529)**
  - IP 65.
- **Window**
  - plastic.
- **Blow-out device**
  - blow out plug.
- **Filling liquid**
  - glycerine.
- **Pressure connection (according to EN 837-1)**
  - brass or AISI 316L stainless steel with Gas (BSP), BSPT or NPT thread as F dimension shown in SP tables, otherwise only on request, different from those indicated.
- **Pressure element**
  - phosphor bronze for execution 1;
  - AISI 316L stainless steel for execution 2.
- **Welding**
  - see table SP 3 at page SP11 for execution 1;
  - TIG for execution 2.
- **Movement**
  - brass for execution 1;
  - stainless steel for execution 2.
- **Ranges (according to EN 837-1)**
  - **Maximum value:**
    - 600 bar.
- **Graduation:**
  - pressure gauges: 0 ÷ 1; 0 ÷ 1,6; 0 ÷ 2,5; 0 ÷ 4; 0 ÷ 6; 0 ÷ 10; 0 ÷ 16; 0 ÷ 25; 0 ÷ 40; 0 ÷ 60; 0 ÷ 100; 0 ÷ 160; 0 ÷ 250; 0 ÷ 400; 0 ÷ 600;
  - vacuum gauges: -1 ÷ 0.  
(divisions as per table C1 at page P08)
  - other graduations not normalized for single or double range (on request only).
- **Unit of pressure:**
  - bar, kPa, MPa, kg/cm<sup>2</sup> and psi for single or double range.
- **Scale angle:**
  - 270°.
- **Working pressure (referred to full scale deflection)**
  - steady from 1/10 to 3/4;
  - fluctuating from 1/10 to 2/3;
  - pulsating from 1/10 to 1/2.
- **Over-pressure (occasionally allowed)**
  - 125% of full scale value for measuring range ≤ 100 bar;
  - 115% of full scale value for measuring ranges from > 100 to ≤ 600 bar.
- **Pointer**
  - aluminium not adjustable.
- **Dial**
  - white aluminium with black figures.
- **Accuracy (according to EN 837-1)**
  - class 1,6.
- **Ambient temperature**
  - -20 ÷ +60 °C.
- **Service conditions**
  - see table SP 3 at page SP05.

**Table SP 3**  
Welding – service conditions

| Welding      | Material   |                  | Service conditions |     |              |
|--------------|------------|------------------|--------------------|-----|--------------|
|              | Connection | Pressure element | Temperature °C     |     | Pressure bar |
|              |            |                  | min.               | max | max          |
| Tin alloy    | Brass      | Phosphor bronze  | -10                | 80  | 100          |
| Silver alloy | Brass      | Phosphor bronze  | -30                | 80  | 600          |



## APPLICATIONS

- **Accessories**  
(see AM series)

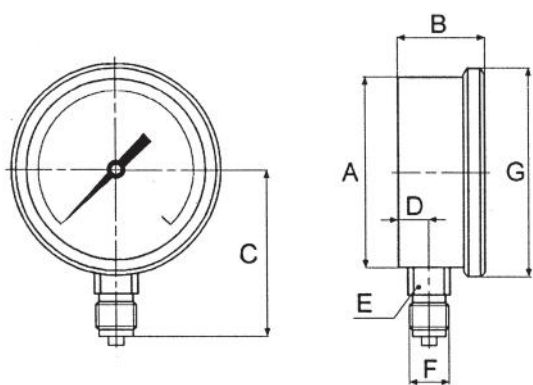
## OPTIONS

- **Silver alloy welding**  
(identification V22)
- **Restrictor**  
applicable to pressure connection to reduce the process fluid entry speed.  
(identification V26)
- **Process connection**  
not 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. (sigla di identification V58)

## DOCUMENTATION

- **Complementary documents**
  - o certificate of compliance with the order EN 10204-2.2.
  - o technical documentation.
  - o PED declaration.

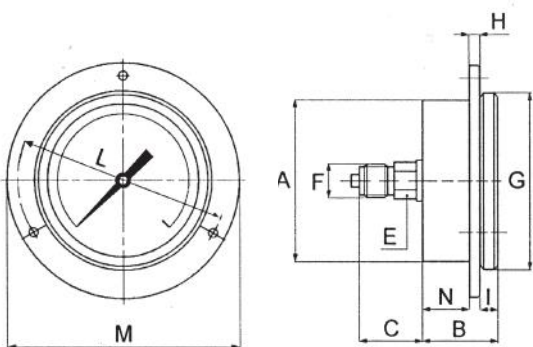
## TECHNICAL INFORMATIONS



**Table SP 108**

| DN  | A   | B  | C  | D   | E  | F   | G   | H | I | L | M | N | ∅ fori 120° | PESO ~ kg es. D es. F |
|-----|-----|----|----|-----|----|-----|-----|---|---|---|---|---|-------------|-----------------------|
| 40  | 41  | 25 | 42 | 8,5 | 11 | 1/8 | 47  |   |   |   |   |   |             | 0,06 0,08             |
| 50  | 51  | 29 | 51 | 9   | 14 | 1/4 | 59  |   |   |   |   |   |             | 0,10 0,14             |
| 63  | 61  | 31 | 53 | 9,5 | 14 | 1/4 | 69  |   |   |   |   |   |             | 0,18                  |
| 80  | 80  | 31 | 65 | 10  | 14 | 1/4 | 89  |   |   |   |   |   |             | 0,21 0,36             |
| 100 | 101 | 34 | 87 | 11  | 22 | 1/2 | 110 |   |   |   |   |   |             | 0,89                  |

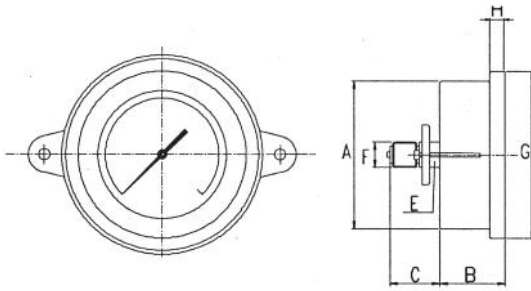
Pressure gauge with bottom connection for local mounting.



**Table SP 111**

| DN  | A   | B  | C  | D  | E  | F   | G   | H   | I  | L   | M   | N    | ∅ fori 120° | PESO ~ kg es. D es. F |
|-----|-----|----|----|----|----|-----|-----|-----|----|-----|-----|------|-------------|-----------------------|
| 63  | 63  | 30 | 27 | 0  | 14 | 1/4 | 69  | 2,5 | 6  | 75  | 84  | 21,5 | 3,6         | 0,21                  |
| 80  | 82  | 31 | 27 | 19 | 14 | 1/4 | 89  | 1   | 12 | 95  | 110 | 18   | 5           | 0,25 0,40             |
| 100 | 101 | 34 | 40 | 29 | 22 | 1/2 | 110 | 1   | 17 | 118 | 132 | 16   | 6           | 0,92                  |

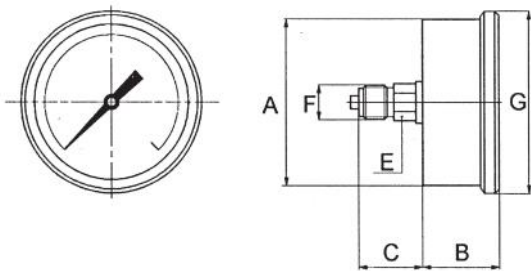
Pressure gauge with back connection for flush mounting with 3 fixing holes.



**Table SP 112**

| DN  | A   | B  | C  | D  | E  | F   | G   | H | I | L | M | N | ∅ fori 120° | PESO ~ kg |
|-----|-----|----|----|----|----|-----|-----|---|---|---|---|---|-------------|-----------|
| 63  | 61  | 30 | 27 | 0  | 14 | 1/4 | 69  | 6 |   |   |   |   |             | 0,22      |
| 100 | 101 | 34 | 40 | 29 | 22 | 1/2 | 110 | 8 |   |   |   |   |             | 0,93      |

Pressure gauge with back connection for flush mounting with clamp fixing.



**Table SP 115**

| DN  | A   | B  | C  | D  | E  | F   | G   | H | I | L | M | N | ∅ fori 120° | PESO ~ kg<br>es. D es. |
|-----|-----|----|----|----|----|-----|-----|---|---|---|---|---|-------------|------------------------|
| 63  | 61  | 30 | 27 | 0  | 14 | 1/4 | 69  |   |   |   |   |   |             | 0,19                   |
| 80  | 80  | 31 | 27 | 19 | 14 | 1/4 | 89  |   |   |   |   |   |             | 0,20 0,30              |
| 100 | 101 | 34 | 40 | 29 | 22 | 1/2 | 110 |   |   |   |   |   |             | 0,86                   |

Pressure gauge with back connection for local mounting.

**note:** informations shown in this series may be changed at any time without prior notice.