

Bourdon Tube Test Pressure Gauges

Type 01.15: $\pm 0.6\%$ FS

Type 01.16: $\pm 0.6\%$ FS Solid Front

Type 01.17: $\pm 0.25\%$ FS Solid Front

01.15, 01.16, 01.17



These instruments have been designed for laboratories, instrument testing or recalibration facilities and in other applications where accuracy and repeatability are of primary importance. Whenever is requested the conformity to safety normatives EN 837-1 and ANSI B40.1 is possible to use the models 01.16 and 01.17: these instruments have a solid separating wall in stainless steel, placed between the dial and the elastic element and an integral blow out back that is released from the case whenever a pressure is created inside the case, due to leaks or accidental ruptures of the elastic element. They can be used with fluids or gasses that do not have high viscosity and do not crystallize. The wetted parts in beryllium copper of model 01.17 permits higher accuracy, while the ones in AISI 316L of models 01.15 and 01.16 permits to use them in worse working conditions determined by aggressive ambients or process fluids. Each instrument is supplied with a calibration certificate that guarantee the traceability to the National and International master primary instruments. Upon request we can supply the calibration certificate issued by an Internationally recognized laboratory of PTB (DKD Calibration Service).

Functional and constructive characteristics.

01.15.1 all stainless steel

Accuracy class: 0,6 as per EN 837-1.
Ambient temperature: -25...+65 °C.
Process fluid temperature: -40...+150 °C.
Calibration temperature: +20 °C.
Working pressure: max 75% of the full scale value.
Overpressure: 30% of the full scale value.
Protection: IP 55 as per IEC 529.
Socket material: AISI 316L st.st.
Elastic element: AISI 316L st.st. seamless tube.
Welding: AISI 316L TIG.
Case: AISI 304 st.st.
Ring: AISI 304 st.st., bayonet lock.
Window: glass, 4 mm thick.
Movement: stainless steel with internal limit stops for minimum and maximum pressure.
Dial: aluminium, white with black markings and anti-parallax mirror band.
Pointer: balanced, anti-parallax knife-edge micrometer adjustable.
Gaskets: EPDM.

01.16.1 all stainless steel, solid front

Blow out disk: AISI 304 st.st.
Window: laminated safety glass.
Other features: as type 01.15.1.

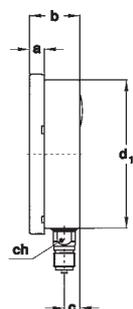
01.17.1 high precision, solid-front

Accuracy class: 0,25 as per EN 837-1.
Ambient temperature: +15...+65 °C.
Process fluid temperature: max +65 °C.
Calibration temperature: +20 °C.
Working pressure: max 75% of the full scale value.
Overpressure (referred to the full scale value): 25% for pressure ranges - 60 bar; 15% for pressure ranges ³ 100 bar.
Protection: IP 55 as per IEC 529.
Socket material: AISI 316L st.st.
Elastic element: beryllium copper.
Welding: silver alloy.
Case: AISI 304 st.st.
Ring: AISI 304 st.st., bayonet lock.
Blow out disk: AISI 304 st.st.
Window: laminated safety glass.
Movement: high precision type.
Dial: aluminium light green with, black markings and anti-parallax mirror band.
Pointer: balanced, anti-parallax knife-edge micrometer adjustable.
Gaskets: EPDM.

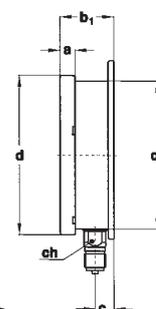
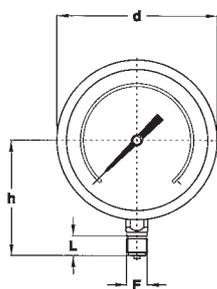
All instruments are supplied with calibration certificate referred to master primary instrument.



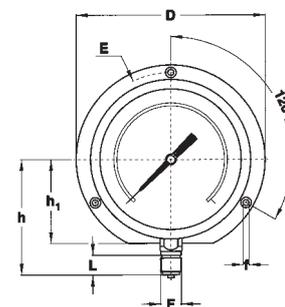
01.15: TYPE , DIMENSIONS AND WEIGHTS

**TYPE A**

stem mounting;
lower connection.

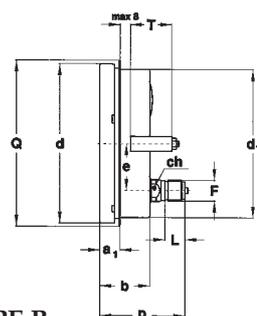
**TYPE C**

surface mounting, back flange;
lower connection.

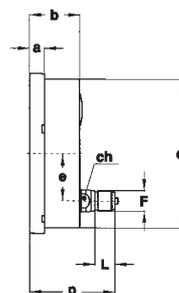
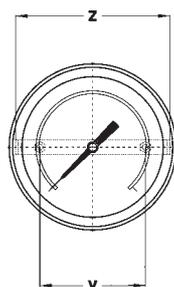


| Type | F | a | b | b ₁ | c | c ₁ | d | d ₁ | f | h | h ₁ | D | E | ch | L | Weight |
|------|-----------------|----|------|----------------|------|----------------|-----|----------------|---|-----|----------------|-----|-----|----|----|----------|
| A | 1/2" BSP or NPT | 15 | 50,5 | - | 15,5 | - | 161 | 149,6 | - | 117 | - | - | - | 22 | 20 | 0,94 Kg. |
| C | 1/2" BSP or NPT | 15 | - | 54 | - | 19 | 161 | 149,6 | 6 | 117 | 85 | 190 | 175 | 22 | 20 | 1,07 Kg. |

(dimensions : mm.)

**TYPE B**

flush mounting, "U"-Clamp;
back connection.

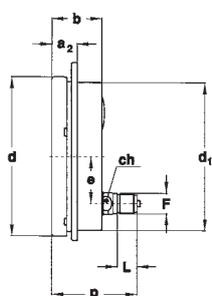
**TYPE D**

stem mounting;
back connection.

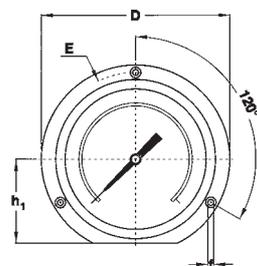


| Type | F | a | a ₁ | a ₂ | b | d | d ₁ | e | f | h ₁ | p | D | E | Q | T | V | Z | ch | L | Weight |
|------|-----------------|----|----------------|----------------|------|-----|----------------|------|---|----------------|------|-----|-----|-----|------|-----|-----|----|----|----------|
| B | 1/2" BSP or NPT | - | 20,5 | - | 50,5 | 161 | 149,6 | 47,8 | - | - | 85,5 | - | - | 164 | 41,5 | 106 | 155 | 22 | 20 | 1,07 Kg. |
| D | 1/2" BSP or NPT | 15 | - | - | 50,5 | 161 | 149,6 | 47,8 | - | - | 85,5 | - | - | - | - | - | - | 22 | 20 | 0,94 Kg. |
| E | 1/2" BSP or NPT | - | - | 25,5 | 50,5 | 161 | 149,6 | 47,8 | 6 | 85 | 85,5 | 190 | 175 | - | - | - | - | 22 | 20 | 1,06 Kg. |

(dimensions : mm.)

**TYPE E**

flush mounting, front flange;
back connection.

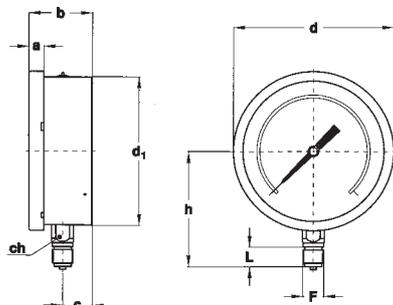
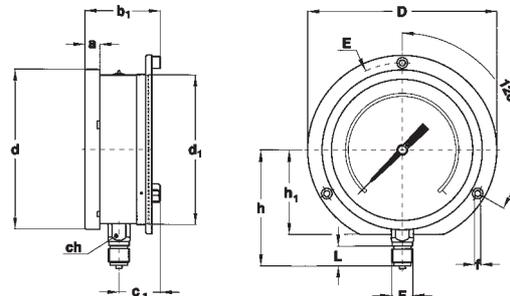


Bourdon Tube Test Pressure Gauge

Type 01.16 and 01.17 - DN 150

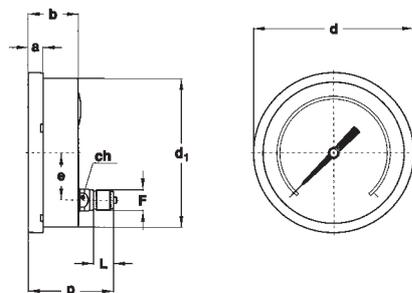
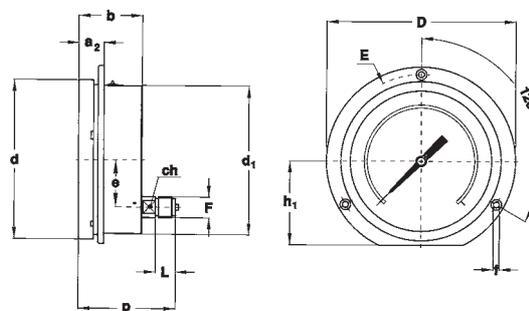
01.16, 01.17

01.16, 01.17: TYPE, DIMENSIONS AND WEIGHTS

**TYPE A**stem mounting,
lower connection.**TYPE C - (only for model 01.16)**surface mounting, back flange;
lower connection.

| Model | Type | F | a | b | b ₁ | c | c ₁ | d | d ₁ | f | h | h ₁ | D | E | L | ch | Weight |
|-------|------|-----------------|----|----|----------------|----|----------------|-----|----------------|---|-----|----------------|-----|-----|----|----|-----------|
| 01.16 | A | 1/2" BSP or NPT | 15 | 64 | - | 30 | - | 161 | 150,5 | - | 117 | - | - | - | 20 | 22 | 1,13 Kg. |
| 01.16 | C | 1/2" BSP or NPT | 15 | - | 75,5 | - | 40,5 | 161 | 150,5 | 6 | 117 | 85 | 190 | 175 | 20 | 22 | 1,26 Kg. |
| 01.17 | A | 1/2" BSP or NPT | 15 | 64 | - | 29 | - | 161 | 150,5 | - | 117 | - | - | - | 20 | 24 | 1,19 Kg. |
| 01.17 | C | 1/2" BSP or NPT | 15 | - | 75,5 | - | 40,5 | 161 | 150,5 | 6 | 117 | 85 | 190 | 175 | 20 | 24 | 1,323 Kg. |

(dimensions : mm.)

**TYPE D**stem mounting;
back connection.**TYPE E**flush mounting, front flange;
back connection.

| Model | Type | F | a | a ₂ | b | d | d ₁ | e | f | h ₁ | p | D | E | L | c | Weight |
|-------|------|-----------------|----|----------------|----|-----|----------------|------|---|----------------|------|-----|-----|----|----|----------|
| 01.16 | D | 1/2" BSP or NPT | 15 | - | 64 | 161 | 150,5 | 47,8 | - | - | 96 | - | - | 20 | 17 | 1,03 Kg. |
| 01.16 | E | 1/2" BSP or NPT | - | 25,5 | 64 | 161 | 150,5 | 47,8 | 6 | 85 | 96 | 190 | 175 | 20 | 17 | 1,13 Kg. |
| 01.17 | D | 1/2" BSP or NPT | 15 | - | 64 | 161 | 150,5 | 47,8 | - | - | 97,5 | - | - | 20 | 17 | 1,10 Kg. |
| 01.17 | E | 1/2" BSP or NPT | - | 25,5 | 64 | 161 | 150,5 | 47,8 | 6 | 85 | 97,5 | 190 | 175 | 20 | 17 | 1,22 Kg. |

(dimensions : mm.)

Bourdon Tube Test Pressure Gauges

Types 01.15, 01.16 and 01.17 - DN 150

01.15, 01.16, 01.17



HOW TO ORDER

CODES & DESCRIPTIONS

01 01- bourdon tube pressure gauges

17 15 - all stainless steel MN15
16 - all stainless steel, solid-front MN16
17 - high precision, solid-front MN17

1

D A - lower connection - stem mounting
B - lower connection - flush mounting, "U" -Clamp
C - lower connection - surface mounting, back flange
D - back connection - stem mounting
E - back connection - flush mounting, front flange

G G - DS150

2 1 - up to 2,5 bar
2 - from 4 to 40 bar
3 - over 40 bar

0/10 bar see ranges table

41M 21M - 1/4" BSP M
23M - 1/4" NPT M
41M - 1/2" BSP M
43M - 1/2" NPT M

A40 see options table

ACCESSORIES

AISI 316 ANCC valve for pressure up to 100 bar, with process connection flanged \varnothing 40 mm and pressure gauge connection 1/4" BSP F. Employed for point to point pressure measurement.

RANGES

| RANGE | Minor graduations | Figure intervals | bar | kPa | MPa | psi |
|-----------|-------------------|------------------|------|-----|-----|------|
| -1...0 | 0,005 | 0,1 | ◆ | | | |
| 0...0,6 | 0,002 | 0,05 | ◆ | | ◆ | |
| 0...1 | 0,005 | 0,1 | ◆ | | ◆ | |
| 0...1,6 | 0,005 | 0,1 | ◆ | | ◆ | |
| 0...2,5 | 0,01 | 0,2 | ◆ | | ◆ | |
| 0...4 | 0,02 | 0,2 | ◆ | | ◆ | |
| 0...6 | 0,02 | 0,5 | ◆ | | ◆ | |
| 0...10 | 0,05 | 1 | ◆ | | ◆ | ◆ |
| 0...16 | 0,05 | 1 | ◆ | | ◆ | ◆ |
| 0...25 | 0,1 | 2 | ◆ | | ◆ | |
| 0...30 | 0,1 | 2 | ◆ | | ◆ | ◆ |
| 0...40 | 0,2 | 2 | ◆ | | ◆ | |
| 0...60 | 0,2 | 5 | ◆ | ◆ | ◆ | ◆ |
| 0...100 | 0,5 | 10 | ◆ | ◆ | | ◆ |
| 0...160 | 0,5 | 10 | ◆ | ◆ | | ◆ |
| 0...250 | 1 | 20 | ◆ | ◆ | | |
| 0...300 | 1 | 30 | ◆ | ◆ | | ◆ |
| 0...400 | 2 | 20 | ◆ | ◆ | | ◆ |
| 0...600 | 2 | 50 | ◆ | ◆ | | ◆ |
| 0...1000 | 5 | 100 | ◆(1) | | | ◆ |
| 0...2000 | 10 | 100 | | | | ◆ |
| 0...3000 | 10 | 200 | | | | ◆ |
| 0...4000 | 20 | 200 | | | | ◆ |
| 0...6000 | 20 | 500 | | | | ◆ |
| 0...10000 | 50 | 1000 | | | | ◆ |
| 0...15000 | 50 | 1000 | | | | ◆(1) |

(1) Available only for mod. 01.17.

OPTIONS

| DESCRIPTION | CODE |
|---|------|
| Carrying case (3) | A40 |
| Nace version for pressure ranges - 40 bar (1) | E30 |
| S.I.T. Certificate for pressure ranges | CE1 |
| S.I.T. Certificate for vacuum ranges | CE3 |
| Oxygen service (2) | P02 |
| AISI 316 ANCC valve | V16 |

(1) option not available for 01.17;

(2) available only for 01.16 - 01.17;

(3) available only for lower connection, stem mounting



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