



Process Industrial Pressure Gauges

(Old JIS standard products are also available.)

OUTLINE

Corresponds to JIS B 7505-1999 Bourdon tube type pressure gauge. It is a pressure gauge with a construction which transmits the elastic deformation (movement) of a Bourdon tube to a pointer, and is easy to handle because its construction is simple. Also, wide pressure range measurements are performed and it is used in a wide range of fields.

FEATURES

- Can also be used under rain, frost, etc. conditions by adoption of sealed case. (JIS C 0920 IP43 equivalent)
- Pressure gauge measurement range is wide and it can respond even when corrosion-proof is demanded.

* When selecting a pressure gauge, select the pressure range over which the gauge will demonstrate top performance in a working pressure range within 30 to 65% of full scale. Also check whether the wetted parts material is suitable for the gas or fluid to be measured.

* When using with oxygen, please specify "Use no oil". When using with acetylene, please specify corrosion-proof use and "Use no oil".

SPECIFICATIONS 1

Fluid:

Gas or liquid


Case construction: Seal type


Sealed construction which is equivalent to JIS C 0920, IP43 but not sealed completely.


Size:

60 DIA. (Model: BA□□), 75 DIA. (Model: BC□□)
100 DIA. (Model: BE□□), 150 DIA. (Model: BG□□)
200 DIA. (Model: BJ□□), 300 DIA. (Model: BL□□)

Mounting:

Stem ...  Type A

 Type B (Mounting hole)

Panel ...  Type D (Mounting clamp, mounting hole)

Connection: Refer to the document "Screw for JIS pipe" in the technical sheet.

G1/4B (PF), G3/8B (PF), G1/2B (PF), 1/2NPT
R1/4 (PT), R3/8 (PT), R1/2 (PT), 1/4NPT, 3/8NPT

* For other connections, please contact us.

Wetted parts materials:

Wetted parts generally mean the Bourdon tube and socket. These parts contact the measured medium (gas or liquid) directly.

| Purpose | Socket | Bourdon tube |
|------------------------------------|---|--|
| General use | CAC203, C3604BD SUS316 or SCS14 (Depending on pressure range) | C6872T or SUS316 (Depending on pressure range, performance) |
| Ammonia use Corrosion-proof use | SUS316 or SCS14 | SUS316 |

Pressure range:

0~40kPa → 0~100MPa

-0.1~0 → -0.1~2.5MPa

* For details, refer to the Minimum Graduation table in SPECIFICATIONS 4.

Accuracy:

±1.6% F.S. (JIS standard)

±1.5% F.S. (Old JIS standard mark)

±1.0% F.S. upon request.

(100DIA., 150DIA. and 200DIA. for the range 0.1MPa or over)

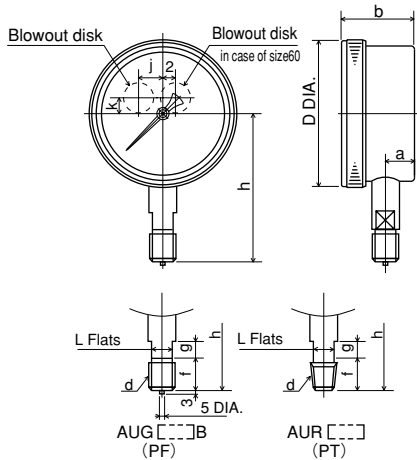
Process Industrial Pressure Gauges

SPECIFICATIONS 2

Mounting · Dimensions: (Unit:mm)

Stem

Type A ... Socket is mounted directly onto the pipe. (Stem mounting)



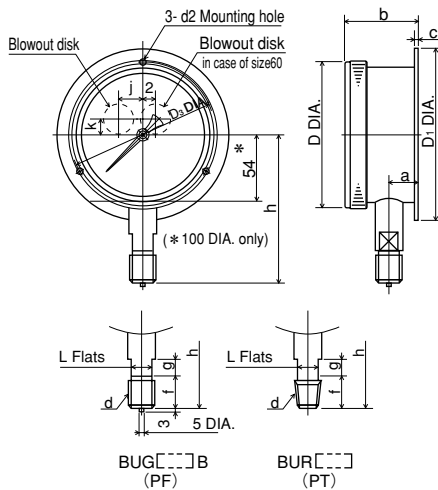
| Size | Shape of connection | Case | | | | | | | | connection | | | | Model number |
|------|---------------------|---------------|--------------|------------|--------------|----|----|----|----|------------|-----|----------------------|--|--------------|
| | | d | D | a | b | j | k | f | g | L | h | | | |
| 60 | U | G1/4B R1/4 | 70 | 11.5 | 32 | — | 8 | 16 | 10 | 12 | 58 | BA10-1□□ | | |
| | U | G3/8B R3/8 | 84 (86) | 16.5 | 41 (41.5) | 15 | 10 | 18 | 12 | 14 | 70 | BC10-1□□ BC12-1□□ | | |
| 100 | U | G3/8B R3/8 | 109 (110) | 22 (23) | 52.5 (54) | 20 | 10 | 18 | 15 | 14 | 108 | BE10-1□□ | | |
| | U | G1/2B R1/2 | 109 (110) | 22 (23) | 52.5 (54) | 20 | 10 | 20 | 15 | 17 | 110 | BE12-1□□ | | |
| 150 | U | G3/8B R3/8 | 159 (162) | 25 | 59 (59.5) | 20 | 10 | 18 | 15 | 14 | 123 | BG10-1□□ | | |
| | U | G1/2B R1/2 | 159 (162) | 25 | 59 (59.5) | 20 | 10 | 20 | 15 | 17 | 125 | BG12-1□□ | | |

() Dimension of plastic case

Weight:

| Size | Weight (g) |
|------|-------------|
| 60 | Approx. 300 |
| 75 | 500 |
| 100 | 800 |
| 150 | 1600 |
| 200 | 2400 |
| 300 | 4600 |

Type B ... Back flange is fastened to panel by screw. (Surface mounting)



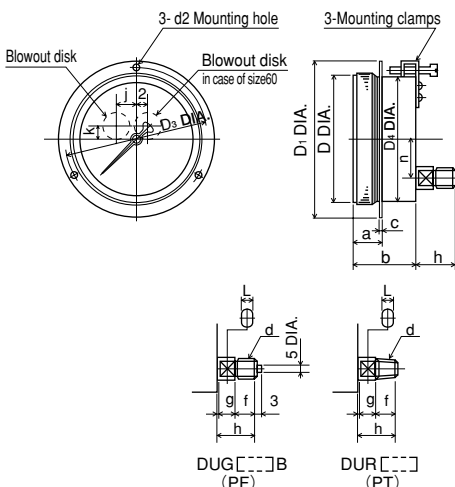
| Size | Shape of connection | Case | | | | | | | | | | connection | | | | Model number | |
|------|---------------------|---------------|--------------|----------------|----------------|------------|--------------|--------------|----------------|----|----|------------|----|----|-----|----------------------|--|
| | | d | D | D ₁ | D ₃ | a | b | c | d ₂ | j | k | f | g | L | h | | |
| 60 | U | G1/4B R1/4 | 70 | 80 | 72 | 11.5 | 32 | 2 | 4.5 | — | 8 | 16 | 10 | 12 | 58 | BA10-2□□ | |
| | U | G3/8B R3/8 | 84 (86) | 98 | 88 | 16.5 | 41 (41.5) | 2 (4) | 4.5 | 15 | 10 | 18 | 12 | 14 | 70 | BC10-2□□ BC12-2□□ | |
| 100 | U | G3/8B R3/8 | 109 (110) | 128 | 115 | 22 (23) | 52.5 (54) | 2.5 (4) | 5.5 | 20 | 10 | 18 | 15 | 14 | 108 | BE10-2□□ | |
| | U | G1/2B R1/2 | 109 (110) | 128 | 115 | 22 (23) | 52.5 (54) | 2.5 (4) | 5.5 | 20 | 10 | 20 | 15 | 17 | 110 | BE12-2□□ | |
| 150 | U | G3/8B R3/8 | 159 (162) | 178 | 165 | 25 | 59 (59.5) | 2.5 (4.5) | 5.5 | 20 | 10 | 18 | 15 | 14 | 123 | BG10-2□□ | |
| | U | G1/2B R1/2 | 159 (162) | 178 | 165 | 25 | 59 (59.5) | 2.5 (4.5) | 5.5 | 20 | 10 | 20 | 15 | 17 | 125 | BG12-2□□ | |
| 200 | U | G1/2B R1/2 | 210 | 235 | 220 | 24 | 60 | 2.5 | 5.5 | 20 | 10 | 20 | 15 | 17 | 152 | BJ10-2□□ | |
| 300 | U | G1/2B R1/2 | 312 | 340 | 323 | 28 | 73 | 3.5 | 5.5 | 0 | 0 | 20 | 15 | 17 | 205 | BL10-2□□ | |

() Dimension of plastic case

For surface mounting, please provide a 25mm dial. hole in the wall for blowout disk.

Panel

Type D ... Panel mounting by screw or clamp.



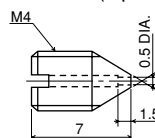
| Size | Shape of connection | Case | | | | | | | | | | connection | | | | Model number | | | |
|------|---------------------|---------------|--------------|----------------|----------------|----------------|----------------|--------------|------------|----------------|----|------------|----|----|----|--------------|------------|----------|--|
| | | d | D | D ₁ | D ₃ | D ₄ | a | b | c | d ₂ | n | j | k | f | g | | L | h | |
| 60 | U | G1/4B R1/4 | 70 | 80 | 72 | 64 | 14 | 32 | 2 | * 3.3 | 20 | — | 8 | 16 | 10 | 12 | 28 | BA15-□□□ | |
| | U | G3/8B R3/8 | 84 | 98 | 88 | 77 | 18 | 40.5 | 2 | * 3.3 | 25 | 15 | 10 | 18 | 12 | 14 | 30 | BC15-□□□ | |
| 100 | U | G3/8B R3/8 | 109 (110) | 128 | 119 | 102 (104) | 17.5 (20.5) | 45 (46.5) | 2.5 (4) | 5.5 | 35 | 20 | 10 | 18 | 12 | 14 | 30 (29) | BE15-□□□ | |
| | U | G1/2B R1/2 | 109 (110) | 128 | 119 | 102 (104) | 17.5 (20.5) | 45 (46.5) | 2.5 (4) | 5.5 | 35 | 20 | 10 | 20 | 12 | 17 | 32 (31) | BE17-□□□ | |
| 150 | U | G3/8B R3/8 | 159 | 178 | 169 | 152 | 21.5 | 61 | 2.5 | 5.5 | 55 | 20 | 10 | 18 | 12 | 14 | 30 | BG15-□□□ | |
| | U | G1/2B R1/2 | 159 | 178 | 169 | 152 | 21.5 | 61 | 2.5 | 5.5 | 55 | 20 | 10 | 20 | 12 | 17 | 32 | BG15-□□□ | |
| 200 | U | G1/2B R1/2 | 210 | 235 | 220 | 203 | 28 | 63 | 3 | 5.5 | 55 | 20 | 10 | 20 | 12 | 17 | 32 | BJ15-□□□ | |
| 300 | U | G1/2B R1/2 | 312 | 340 | 323 | 304 | 30.5 | 64 | 3.5 | 5.5 | 55 | 0 | 35 | 20 | 12 | 17 | 32 | BL15-□□□ | |

() Dimension of plastic case

* For M3 screw.

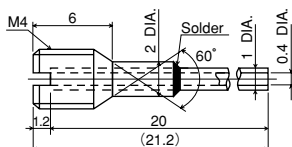
For surface mounting, please provide a 25mm dial. hole in the wall for blowout disk.

Throttle: (Option)



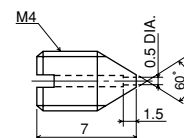
FS10-011

Material:
C3604BD



FS10-081 (With pipe)

Material: C3604BD
(Pipe: C1100T)



Corrosion-Proof:
FS10-013

Material: SUS316

SPECIFICATIONS 3

Specifications & additional spec.

Blowout disk:

When the Bourdon tube explodes in an emergency, it vents the internal pressure from the blowout disk and blowout disk prevents the window from puncturing.

Note: To maintain normal function, when installing, please provide a space of at least 10mm behind the gauge.
Don't process or stop up the blowout disk.

Movement:

We can supply different movement (optional) in accordance with the application. (SUS movement, vibration-proof movement, etc.)

Pointer:

In addition to standard type, zero adjustable pointer is also available. If maximum pointer (For maximum pressure) or setting pointer (For measure) is required, please choose from selection spec.

Leave pointer specification

Manufacturing range: 60 DIA. ~ 200 DIA.

Pressure gauge: 0.2MPa or over

Compound gauge: -0.1 to 0.1MPa or over

Vacuum gauge: production impossible

Set pointer specification

External adjustment for 60 DIA. only

Standard specification has a pointer scale caulking

Window:

Standard: Inorganic glass or organic glass
(10 MPa or over, excluding H, HV)

In addition to standard glass, special material glass, such as tempered glass, non-glare glass are also available.

Function:

Standard, Steam use (M), Heat-proof (H), Vibration-proof (V), Steam use & Vibration-proof (MV), Heat-proof · Vibration proof (HV)

* Division of application is based on JISB7505 Bourdon gauge.

Treatment:

Use no oil / Use no water ... Manufactured so that oil and/or water does not remain on the wetted parts.

Option:

Case color ... For non-standard, please specify.

Connection:

We have three methods of connecting the wetted parts.

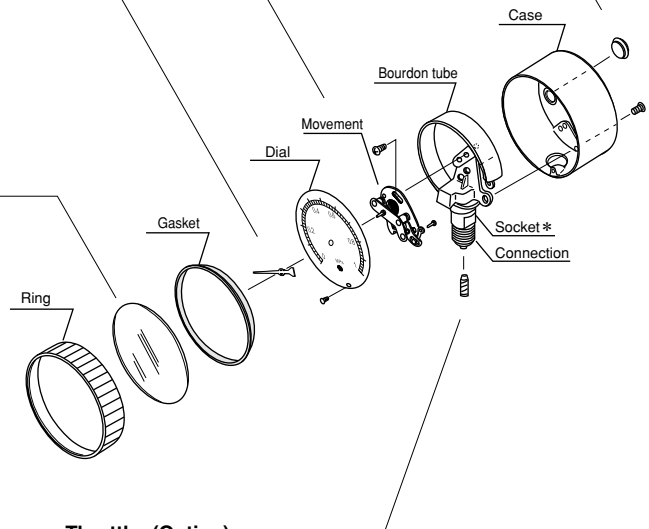
Soldering ... For brass series material.

Silver soldering ... For brass series material and stainless steel material.

TIG welding ... For connecting between stainless steel material.

* Socket:

There is U Socket: both side cut in the shape of hook spanner wrench to stabilize pressure gauge.



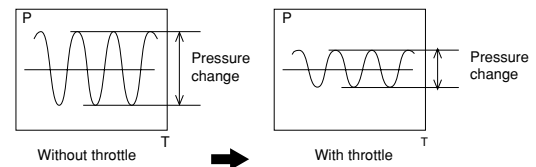
Throttle: (Option)

The input port is equipped with a throttle to reduce pulsating pressure. Select it from the following models: FS10-011, FS10-081 (with pipe), corrosion-proof use FS10-013

Pulsating pressure:

Caused by the pump characteristic of the pump generator and is the general term for the top and bottom pressure drift and is very harmful to a pressure gauge.

[THROTTLE EFFECT]



CASE COLOR, CASE MATERIAL

Case color: Black (Standard color)

Case material: Metal case Aluminium alloy

Plastic case Bakelite

Process Industrial Pressure Gauges

SPECIFICATIONS 4

Minimum graduation:

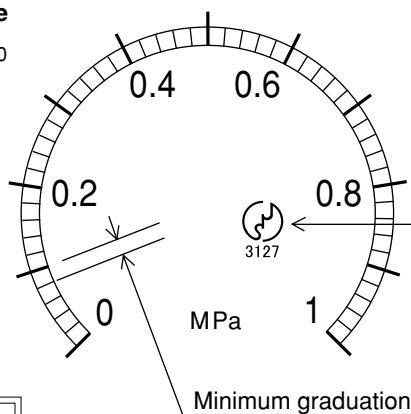
Scale divisions are different according to range and dial size. Minimum graduations are shown in the following table.

| | Pressure Range (MPa) | Size · Accuracy | | | | | | | | | | | |
|----------------|----------------------|-----------------|-------|-------------|-------|----------------|-------|-------|----------|-------|-------|----------|-------|
| | | 60 DIA. | | 75 DIA. | | 100 · 150 DIA. | | | 200 DIA. | | | 300 DIA. | |
| | | JIS 1.6% | 1.5% | JIS 1.6% | 1.5% | JIS | | | JIS | | | 1.5% | |
| Pressure gauge | 0 ~ 40kPa | — | — | — | — | 1 | — | 1 | 1 | — | 1 | — | — |
| | ~ 0.05 | — | — | — | — | — | — | 0.001 | — | — | 0.001 | — | — |
| | ~ 0.06 | — | — | — | — | 0.001 | — | — | 0.001 | — | — | — | — |
| | ~ 0.08 | — | — | — | — | — | — | 0.002 | — | — | 0.002 | — | — |
| | ~ 0.1 | 0.002 | 0.005 | 0.002 | 0.005 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| | ~ 0.16 | 0.005 | — | 0.005 | — | 0.005 | 0.002 | — | 0.005 | 0.002 | — | — | — |
| | ~ 0.2 | — | 0.01 | — | 0.01 | — | — | 0.005 | — | — | — | 0.005 | 0.005 |
| | ~ 0.25 | 0.005 | — | 0.005 | — | 0.005 | 0.005 | — | 0.005 | 0.005 | — | — | — |
| | ~ 0.3 | — | 0.01 | — | 0.01 | — | — | 0.01 | — | — | — | 0.01 | 0.01 |
| | ~ 0.4 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.005 | 0.01 | 0.01 | 0.005 | 0.01 | 0.01 | 0.01 |
| | ~ 0.6 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 |
| | ~ 1 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| | ~ 1.5 | — | 0.05 | — | 0.05 | — | — | 0.05 | — | — | — | 0.05 | 0.05 |
| | ~ 1.6 | 0.05 | — | 0.05 | — | 0.05 | 0.02 | — | 0.05 | 0.02 | — | — | — |
| | ~ 2 | — | 0.1 | — | 0.1 | — | — | 0.05 | — | — | 0.05 | 0.05 | 0.05 |
| | ~ 2.5 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| | ~ 3.5 | — | 0.1 | — | 0.1 | — | — | 0.1 | — | — | 0.1 | 0.1 | 0.1 |
| | ~ 4 | 0.1 | — | 0.1 | — | 0.1 | 0.05 | — | 0.1 | 0.05 | — | — | — |
| | ~ 5 | — | 0.2 | — | 0.2 | — | — | 0.1 | — | — | — | 0.1 | 0.1 |
| | ~ 6 | 0.1 | — | 0.1 | — | 0.1 | 0.1 | — | 0.1 | 0.1 | — | — | — |
| | ~ 7 | — | 0.2 | — | 0.2 | — | — | 0.2 | — | — | — | 0.2 | 0.2 |
| | ~ 10 | 0.2 | 0.5 | 0.2 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | ~ 15 | — | 0.5 | — | 0.5 | — | — | 0.5 | — | — | — | 0.5 | 0.5 |
| | ~ 16 | 0.5 | — | 0.5 | — | 0.5 | 0.2 | — | 0.5 | 0.2 | — | — | — |
| | ~ 25 | 0.5 | 1 | 0.5 | 1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | ~ 35 | — | — | — | 1 | — | — | 1 | — | — | — | 1 | — |
| | ~ 40 | — | — | 1 | — | 1 | 0.5 | — | 1 | 0.5 | — | — | — |
| | ~ 50 | — | — | — | 2 | — | — | 1 | — | — | — | 1 | — |
| ~ 60 | — | — | — | — | 1 | 1 | — | 1 | 1 | — | — | — | |
| ~ 70 | — | — | — | — | — | — | 2 | — | — | — | 2 | — | |
| ~ 100 | — | — | — | — | 2 | 2 | 2 | 2 | 2 | 2 | 2 | — | |
| Vacuum | -0.1 ~ 0 | 0.002 | 0.005 | 0.002 | 0.005 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | |
| | -0.1 ~ 0.1 | 0.005 | 0.01 | 0.005 | 0.01 | 0.005 | 0.002 | 0.005 | 0.005 | 0.002 | 0.005 | 0.005 | |
| | ~ 0.16 | 0.005 | — | 0.005 | — | 0.005 | 0.005 | — | 0.005 | 0.005 | — | — | |
| | ~ 0.2 | — | 0.01 | — | 0.01 | — | — | 0.01 | — | — | 0.01 | 0.01 | |
| | ~ 0.25 | 0.01 | — | 0.01 | — | 0.01 | 0.005 | — | 0.01 | 0.005 | — | — | |
| | ~ 0.3 | — | 0.02 | — | 0.02 | — | — | 0.01 | — | — | 0.01 | 0.01 | |
| | ~ 0.4 | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | |
| | ~ 0.6 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 | |
| | ~ 1 | 0.02 | 0.05 | 0.02 | 0.05 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | |
| | ~ 1.5 | — | 0.05 | — | 0.05 | — | — | 0.05 | — | — | 0.05 | 0.05 | |
| Compound gauge | ~ 1.6 | 0.05 | — | 0.05 | — | 0.05 | 0.02 | — | 0.05 | 0.02 | — | — | |
| | ~ 2 | — | 0.1 | — | 0.1 | — | — | 0.05 | — | — | 0.05 | 0.05 | |
| | ~ 2.5 | 0.05 | 0.1 | 0.05 | 0.1 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | |

* The ranges and sizes in are type approved products.

Example of scale

Size 100 · 150



Scale Options

Capacity scale, dual scale, printed words or colored circle, etc. are available as option.

In case with JIS trademark:
JIS plant authorized number 3127 comes under JIS trademark.

TYPE APPROVAL

If an approved product is required:

We were approved and qualified as a state-approved manufacturer and the pressure ranges and size of the gauges specified in the table in "Specifications 4" were obtained on November 1, 1996.

From this entitlement, our inspection equals that of the previous inspection.

Also, instead of the approved mark, there will be the standard conformance mark of proof labelled on the approved products.

Type Approval Number:

Brass as the material of the Bourdon Tube x 951
SUS as x 9618

State-Approved Manufacturer Number:

272001

Model number configuration

When ordering, please specify the model number, each spec and range.

Model name

B A 1

Process Industrial Pressure Gauges
(60 DIA.)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ × ⑫ × ⑬ × ⑭ ⑮

| Model number | | Selective spec. | | Additional spec. (Option) | |
|---|------------------------|--|---|---------------------------|--|
| Model | 0 | Stem | Metal case | | |
| | 5 | Panel | Metal case | | |
| ① Mounting | 1 | Stem | Type A | | |
| | 2 | Panel | Type D (Mounting clamp) | | |
| ② Connection | 2 | Stem | G1/4B | | |
| | 7 | Panel | R1/4 | | |
| | | Others | | | |
| ③ Wetted parts materials | 1 | General use | | | |
| | 2 | Ammonia use | SUS | | |
| | 3 | Corrosion-proof use | SUS | | |
| (When ordering, please specify the range and units separately.) | ④ Pressure range (MPa) | 2 | -0.1~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5 Compound | | |
| | | 3 | -0.1~0, 0~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5, 3.5 | | |
| | | 4 | 0~4, 5, 6, 7, 10 | | |
| | | 5 | 0~15, 16, 25 | | |
| | | | | | |
| ⑤ Function | 0 | Standard | | | |
| | A | M: Steam use | | | |
| | C | V: Vibration-proof type | | | |
| | D | MV: Steam use · Vibration-proof type | | | |
| ⑥ Pointer | 0 | Standard | | | |
| | 2 | Zero adjustable (spring type) Not a type-approved product. | | | |
| ⑦ Window | 0 | Standard | | | |
| | 2 | Tempered glass | | | |
| | 3 | Non-glare treatment glass | | | |
| | 6 | Non-frost coat treatment glass | | | |
| | | Others | | | |
| ⑧ Treatment | 0 | Nil | | | |
| | 1 | Use no oil | | | |
| | 2 | Use no water | | | |
| | 3 | Use no oil & water | | | |
| ⑨ Throttle | 0 | Nil | | | |
| | 1 | FS10-011 or FS10-013 Corrosion-proof use | | | |
| | 3 | FS10-081 (With pipe) | | | |
| ⑩ Other additional spec. | 0 | Nil | | | |
| | 1 | Required (Please specify the desired documents separately.) Approved products, Dial scale *, Case color Movement | | | |
| ⑭ Class | J | JIS Accuracy ±1.6% | | | |
| | X | Not JIS | | | |
| ⑮ Documents | 0 | Nil | | | |
| | 1 | Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill sheet, test report (1 pc 1 copy), inspection / traceability certificate, attended inspection | | | |

③ Wetted parts materials

| Purpose | Socket | Bourdon tube | Connecting |
|--|--|--|---|
| 1 General use <small>(Not available for 50MPa or over.)</small> | Pressure range 35MPa or less: CAC203 But BA10 only C3604BD Pressure range 35MPa or over: SUS316 or SCS14 | Pressure range 3.5MPa or less: · General type, Vibration-proof type C6872T · Steam use corrosion-proof type, Heat-proof type Steam use · vibration-proof type, Heat-proof · vibration-proof type SUS316 Pressure range 3.5MPa or over: SUS316 | Soldering for between brass and SUS316 Silver soldering for brass and SUS316 Tig-welding for between SUS316 |
| 2 Ammonia use | *SUS316 or SCS14 | SUS316 | Tig-welding |
| 3 Corrosion-proof use | *SUS316 or SCS14 | SUS316 | Tig-welding |

*SUS316 is BA10 only

Manufacturing range

* Scale Options: Capacity scale, dual scale, printed words or colored circle

Specify "X" if there is no specification item.

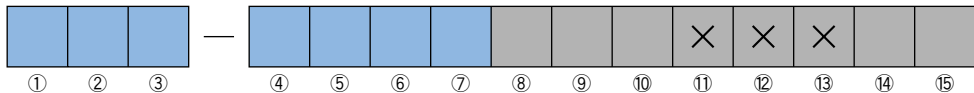
Process Industrial Pressure Gauges

Model number configuration

When ordering, please specify the model number, each spec and range.

Model name

B C 1



Process Industrial Pressure Gauges
(75 DIA.)

| Model number | | Selective spec. | Additional spec. (Option) |
|--------------------------|---|--|---------------------------|
| Model | 0 | Stem | Metal case |
| | 2 | Stem | Plastic case |
| | 5 | Panel | Metal case |
| ① Mounting | | Stem | Panel |
| | 1 | Type A | Type D (Mounting clamp) |
| | 2 | Type B (Mounting hole) | Type D (Mounting hole) |
| ② Connection | 2 | G1/4B | |
| | 3 | G3/8B | |
| | 7 | R1/4 | |
| | 8 | R3/8 | |
| | | Others | |
| ③ Wetted parts materials | 1 | General use | Not available for 40MPa |
| | 2 | Ammonia use | SUS |
| | 3 | Corrosion-proof use | SUS |
| ④ Pressure range (MPa) | 2 | -0.1~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5 Compound | |
| | 3 | -0.1~0, 0~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5, 3.5 | |
| | 4 | 0~4, 5, 6, 7, 10 | |
| | 5 | 0~15, 16, 25, 35 | |
| | 6 | 0~40, 50 | |
| | | Others | |
| ⑤ Function | 0 | Standard | |
| | A | M: Steam use | |
| | C | V: Vibration-proof type | |
| | D | MV: Steam use · Vibration-proof type | |
| ⑥ Pointer | 0 | Standard | |
| | 1 | Zero adjustable (micro meter type) Not a type-approved product. | |
| | 2 | Zero adjustable (spring type) Not a type-approved product. | |
| | 5 | Max pointer | |
| | 6 | Setting pointer | |
| | | Others | |
| ⑦ Window | 0 | Standard | |
| | 2 | Tempered glass | |
| | 3 | Non-glare treatment glass | |
| | 6 | Non-frost coat treatment glass | |
| | | Others | |
| ⑧ Treatment | 0 | Nil | |
| | 1 | Use no oil | |
| | 2 | Use no water | |
| | 3 | Use no oil & water | |
| ⑨ Throttle | 0 | Nil | |
| | 1 | FS10-011 or FS10-013 Corrosion-proof use | |
| | 3 | FS10-081 (With pipe) | |
| ⑩ Other additional spec. | 0 | Nil | |
| | 1 | Required (Please specify the desired documents separately.) Approved products, Dial scale *, Case color Movement | |
| ⑭ Class | J | JIS Accuracy ±1.6% | |
| | X | Not JIS | |
| ⑮ Documents | 0 | Nil | |
| | 1 | Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill sheet, test report (1 pc 1 copy), inspection / traceability certificate, attended inspection | |

(When ordering, please specify the range and units separately.)

③ Wetted parts materials

| Purpose | Soket | Bourdon tube | Connecting |
|------------------------------------|---|---|---|
| 1 General use | Pressure range 35MPa or less: CAC203 But BA10 only C3604BD | Pressure range 3.5MPa or less: · General type, Vibration-proof type C6872T · Steam use corrosion-proof type, Heat-proof type | Soldering for between brass and SUS316 |
| (Not available for 50MPa or over.) | Pressure range 35MPa or over: SUS316 or SCS14 | Steam use · vibration-proof type, Heat-proof · vibration-proof type SUS316 Pressure range 3.5MPa or over: SUS316 | Silver soldering for brass and SUS316 Tig-welding for between SUS316 |
| 2 Ammonia use | * SUS316 or SCS14 | SUS316 | Tig-welding |
| 3 Corrosion-proof use | * SUS316 or SCS14 | SUS316 | Tig-welding |

*SUS316 is BA10 only

Manufacturing range

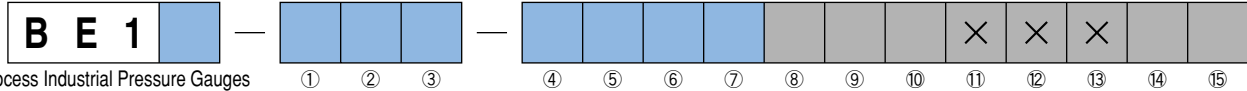
* Scale Options: Capacity scale, dual scale, printed words or colored circle

Specify "X" if there is no specification item.

Model number configuration

When ordering, please specify the model number, each spec and range.

Model name



Process Industrial Pressure Gauges
(100 DIA.)

| Model number | | | Selective spec. | Additional spec. (Option) |
|--------------|---|--------------------|-----------------|---------------------------|
| Model | 0 | Stem Metal case | | |
| | 2 | Stem Plastic case | | |
| | 5 | Panel Metal case | | |
| | 7 | Panel Plastic case | | |

| ① Mounting | Stem | | Panel | |
|------------|------|------------------------|-------------------------|--|
| | 1 | Type A | Type D (Mounting clamp) | |
| | 2 | Type B (Mounting hole) | Type D (Mounting hole) | |

| ② Connection | 3 | G3/8B | 9 | R1/2 |
|--------------|---|--------|---|--------|
| | 4 | G1/2B | K | 1/4NPT |
| | 6 | 1/2NPT | L | 3/8NPT |
| | 8 | R3/8 | | Others |

| ③ Wetted parts materials | 1 | General use | Not available for 40MPa or over | |
|--------------------------|---|---------------------|---------------------------------|--|
| | 2 | Ammonia use | SUS | |
| | 3 | Corrosion-proof use | SUS | |
| | 4 | Anti-corrosion use | SUS316L | |

(When ordering, please specify the range and units separately.)

| ④ Pressure range (MPa) | 1 | 0~30, 40kPa, 0~0.05, 0.06, 0.08 *2 | | |
|------------------------|---|---|--|--|
| | 2 | -0.1~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5 Compound | | |
| | 3 | -0.1~0, 0~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5, 3.5 | | |
| | 4 | 0~4, 5, 6, 7, 10 | | |
| | 5 | 0~15, 16, 25, 35 | | |
| | 6 | 0~40, 50, 60, 70 | | |
| | 7 | 0~100 | | |

| ⑤ Function | 0 | Standard | D | MV: Steam use · Vibration-proof type |
|------------|---|-------------------------|---|---------------------------------------|
| | A | M: Steam use | E | HV: Heat-proof · Vibration-proof type |
| | B | H: Heat-proof type | 3 | Accuracy: ±1.0%F.S. (0.1MPa or over) |
| | C | V: Vibration-proof type | | |

| ⑥ Pointer | 0 | Standard | |
|-----------|---|------------------------------------|------------------------------|
| | 1 | Zero adjustable (micro meter type) | Not a type-approved product. |
| | 2 | Zero adjustable (spring type) | Not a type-approved product. |
| | 5 | Max pointer | |
| | 6 | Setting pointer | |

| ⑦ Window | 0 | Standard | |
|----------|---|--------------------------------|--|
| | 2 | Tempered glass | |
| | 3 | Non-glare treatment glass | |
| | 6 | Non-frost coat treatment glass | |
| | | Others | |

| ⑧ Treatment | 0 | Nil | |
|-------------|---|--------------------|--|
| | 1 | Use no oil | |
| | 2 | Use no water | |
| | 3 | Use no oil & water | |

| ⑨ Throttle | 0 | Nil | |
|------------|---|--|--|
| | 1 | FS10-011 or FS10-013 Corrosion-proof use | |
| | 3 | FS10-081 (With pipe) | |

| ⑩ Other additional spec. | 0 | Nil | |
|--------------------------|---|---|--|
| | 1 | Required (Please specify the desired documents separately.) Approved products, Dial scale*1, Case color Endurance movement | |

| ⑭ Class | J | JIS Accuracy ±1.6% | |
|---------|---|--------------------|--|
| | X | Not JIS | |

| ⑮ Documents | 0 | Nil | |
|-------------|---|---|--|
| | 1 | Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill sheet, test report (1 pc 1 copy), inspection / traceability certificate, attended inspection | |

③ Wetted parts materials

| Purpose | Socket | Bourdon tube | Connecting |
|---|--|--|---|
| 1 General use (Not available for 50MPa or over.) | Pressure range 35MPa or less: CAC203 But BA10 only C3604BD Pressure range 35MPa or over: SUS316 or SCS14 | Pressure range 3.5MPa or less: · General type, Vibration-proof type C6872T · Steam use corrosion-proof type, Heat-proof type · Steam use · vibration-proof type, Heat-proof · vibration-proof type SUS316 Pressure range 3.5MPa or over: SUS316 | Soldering for between brass and SUS316 Silver soldering for brass and SUS316 Tig-welding for between SUS316 |
| 2 Ammonia use | * SUS316 or SCS14 | SUS316 | Tig-welding |
| 3 Corrosion-proof use | * SUS316 or SCS14 | SUS316 | Tig-welding |

* SUS316 is BA10 only

Manufacturing range

- *1 Scale Options: Capacity scale, dual scale, printed words or colored circle
- *2 BE12 is not available for 30kPa.
BE17 is available for 0.1MPa or over.

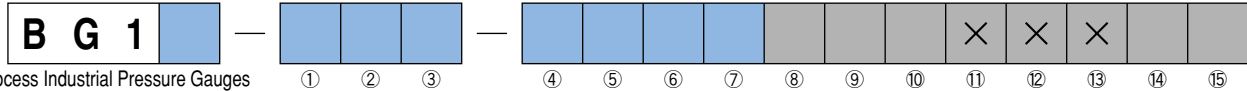
Specify "X" if there is no specification item.

Process Industrial Pressure Gauges

Model number configuration

When ordering, please specify the model number, each spec and range.

Model name



Process Industrial Pressure Gauges
(150 DIA.)

| Model number | | Selective spec. | | Additional spec. (Option) | | |
|---|------------------------|--|---|---------------------------|--|--|
| Model | 0 | Stem | Metal case | | | |
| | 2 | Stem | Plastic case | | | |
| | 5 | Panel | Metal case | | | |
| ① Mounting | Stem | | Panel | | | |
| | 1 | Type A | Type D (Mounting clamp) | | | |
| | 2 | Type B (Mounting hole) | Type D (Mounting hole) | | | |
| ② Connection | 3 | G3/8B | 8 | R3/8 | | |
| | 4 | G1/2B | 9 | R1/2 | | |
| | 6 | 1/2NPT | Others | | | |
| ③ Wetted parts materials | 1 | General use | Not available for 40MPa or over | | | |
| | 2 | Ammonia use | SUS | | | |
| | 3 | Corrosion-proof use | SUS | | | |
| (When ordering, please specify the range and units separately.) | ④ Pressure range (MPa) | 1 | 0~40kPa, 0~0.05, 0.06, 0.08 | | | |
| | | 2 | -0.1~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5 Compound | | | |
| | | 3 | -0.1~0, 0~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5, 3.5 | | | |
| | | 4 | 0~4, 5, 6, 7, 10 | | | |
| | | 5 | 0~15, 16, 25, 35 | | | |
| | | 6 | 0~40, 50, 60, 70 | | | |
| | | 7 | 0~100 | | | |
| ⑤ Function | 0 | Standard | | | | |
| | A | M: Steam use | | | | |
| | B | H: Heat-proof type | | | | |
| | C | V: Vibration-proof type | | | | |
| | D | MV: Steam use · Vibration-proof type | | | | |
| | E | HV: Heat-proof · Vibration-proof type | | | | |
| | 3 | Accuracy: ±1.0% F.S. (0.1 MPa or over) | | | | |
| ⑥ Pointer | 0 | Standard | | | | |
| | 1 | Zero adjustable (micro meter type) Not a type-approved product. | | | | |
| | 2 | Zero adjustable (spring type) Not a type-approved product. | | | | |
| | 5 | Max pointer | | | | |
| | 6 | Setting pointer | | | | |
| | ⑦ Window | | 0 | Standard | | |
| | | 2 | Tempered glass | | | |
| | | 3 | Non-glare treatment glass | | | |
| | | 6 | Non-frost coat treatment glass | | | |
| | | Others | | | | |
| ⑧ Treatment | 0 | Nil | | | | |
| | 1 | Use no oil | | | | |
| | 2 | Use no water | | | | |
| | 3 | Use no oil & water | | | | |
| ⑨ Throttle | 0 | Nil | | | | |
| | 1 | FS10-011 or FS10-013 Corrosion-proof use | | | | |
| | 3 | FS10-081 (With pipe) | | | | |
| ⑩ Other additional spec. | 0 | Nil | | | | |
| | 1 | Required (Please specify the desired documents separately.) Approved products, Dial scale*, Case color Movement | | | | |
| ⑭ Class | J | JIS Accuracy ±1.6% | | | | |
| | X | Not JIS | | | | |
| ⑮ Documents | 0 | Nil | | | | |
| | 1 | Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill sheet, test report (1 pc 1 copy), inspection / traceability certificate, attended inspection | | | | |

③ Wetted parts materials

| Purpose | Socket | Bourdon tube | Connecting |
|------------------------------------|---|--|---|
| 1 General use | Pressure range 35MPa or less: CAC203 But BA10 only C3604BD | Pressure range 3.5MPa or less: · General type, Vibration-proof type C6872T · Steam use corrosion-proof type, Heat-proof type | Soldering for between brass and SUS316 Silver soldering for brass and SUS316 |
| (Not available for 50MPa or over.) | Pressure range 35MPa or over: SUS316 or SCS14 | Steam use · vibration-proof type, Heat-proof · vibration-proof type SUS316 Pressure range 3.5MPa or over: SUS316 | Tig-welding for between SUS316 |
| 2 Ammonia use | * SUS316 or SCS14 | SUS316 | Tig-welding |
| 3 Corrosion-proof use | * SUS316 or SCS14 | SUS316 | Tig-welding |

*SUS316 is BA10 only

Manufacturing range

* Scale Options: Capacity scale, dual scale, printed words or colored circle

Specify "X" if there is no specification item.

Model number configuration

When ordering, please specify the model number, each spec and range.

Model name

B J 1

① ② ③

④ ⑤ ⑥ ⑦

⑧ ⑨ ⑩

⑪ × ⑫ × ⑬ × ⑭ ⑮

Process Industrial Pressure Gauges
(200 DIA.)

| Model number | | Selective spec. | Additional spec. (Option) |
|---|--|---|--|
| Model | 0 Stem 5 Panel | | |
| ① Mounting | 1 Stem 2 Type B (Mounting hole) | | Panel Type D (Mounting clamp) Type D (Mounting hole) |
| ② Connection | 4 G1/2B 6 1/2NPT 9 R1/2 Others | | |
| ③ Wetted parts materials | 1 General use 2 Ammonia use 3 Corrosion-proof use | Not available for 40MPa or over SUS SUS | |
| (When ordering, please specify the range and units separately.) | ④ Pressure range (MPa) | 1 0~40kPa, 0~0.05, 0.06, 0.08 | |
| | | 2 -0.1~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5 Compound | |
| | | 3 -0.1~0, 0~0.1, 0.16, 0.2, 0.25, 0.3, 0.4, 0.6, 1, 1.5, 1.6, 2, 2.5, 3.5 | |
| | | 4 0~4, 5, 6, 7, 10 | |
| | | 5 0~15, 16, 25, 35 | |
| | | 6 0~40, 50, 60, 70 | |
| | | 7 0~100 | |
| ⑤ Function | 0 Standard A M: Steam use 3 Accuracy: ±1.0% F.S. (0.1 MPa or over) | | |
| ⑥ Pointer | 0 Standard 1 Zero adjustable (micro meter type) 2 Zero adjustable (spring type) 5 Max pointer 6 Setting pointer | | |
| ⑦ Window | 0 Standard 2 Tempered glass 3 Non-glare treatment glass Others | | |
| ⑧ Treatment | 0 Nil 1 Use no oil 2 Use no water 3 Use no oil & water | | |
| ⑨ Throttle | 0 Nil 1 FS10-011 or FS10-013 Corrosion-proof use 3 FS10-081 (With pipe) | | |
| ⑩ Other additional spec. | 0 Nil 1 Required (Please specify the desired documents separately.) Dial scale *, Case color, Movement | | |
| ⑭ Class | J JIS Accuracy ±1.6% X Not JIS | | |
| ⑮ Documents | 0 Nil 1 Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill sheet, test report (1 pc 1 copy), inspection / traceability certificate, attended inspection | | |

| ③ Wetted parts materials | | | |
|---|--|--|--|
| Purpose | Socket | Bourdon tube | Connecting |
| 1 General use (Not available for 50MPa or over.) | Pressure range 35MPa or less: CAC203 But BA10 only C3604BD Pressure range 35MPa or over: SUS316 or SCS14 | Pressure range 3.5MPa or less: General type, Vibration-proof type C6872T Steam use corrosion-proof type, Heat-proof type Steam use vibration-proof type, Heat-proof vibration-proof type SUS316 Pressure range 3.5MPa or over: SUS316 | Soldering for between brass Silver soldering for brass and SUS316 Tig-welding for between SUS316 |
| 2 Ammonia use | * SUS316 or SCS14 | SUS316 | Tig-welding |
| 3 Corrosion-proof use | * SUS316 or SCS14 | SUS316 | Tig-welding |

*SUS316 is BA10 only

* Size 200 DIA. (BJ10 · BJ15) are not type approved products.

Manufacturing range

* Scale Options: Capacity scale, dual scale, printed words or colored circle

Specify "X" if there is no specification item.

Process Industrial Pressure Gauges

Model number configuration

When ordering, please specify the model number, each spec and range.

Model name

| | | | | | | | | | | | | | | | | | | |
|----------|----------|----------|---|---|---|--|----------|----------|---|---|---|---|---|---|---|---|---|---|
| B | L | 1 | | | | | 0 | 0 | | | | | X | X | X | X | | |
| | | | ① | ② | ③ | | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ | ⑪ | ⑫ | ⑬ | ⑭ | ⑮ |

Process Industrial Pressure Gauges
(300 DIA.)

| | | | |
|--------------|--|-----------------|---------------------------|
| Model number | | Selective spec. | Additional spec. (Option) |
|--------------|--|-----------------|---------------------------|

| | | |
|-------|---|-------|
| Model | 0 | Stem |
| | 5 | Panel |

| | | | |
|---------------|---|------------------------|-------------------------|
| ① Mounting | | Stem | Panel |
| | 1 | Type A | Type D (Mounting clamp) |
| | 2 | Type B (Mounting hole) | Type D (Mounting hole) |

| | | |
|-----------------|---|-------|
| ② Connection | 4 | G1/2B |
| | 9 | R1/2 |

| | | |
|-----------------------------|---|-------------------------|
| ③ Wetted parts materials | 1 | General use |
| | 2 | Ammonia use SUS |
| | 3 | Corrosion-proof use SUS |

(When ordering, please specify the range and units separately.)

| | | |
|---------------------------|---|--|
| ④ Pressure range (MPa) | 2 | -0.1~0.1, 0.2, 0.3, 0.4, 0.6, 1, 1.5, 2 Compound |
| | 3 | -0.1~0, 0~0.1, 0.2, 0.3, 0.4, 0.6, 1, 1.5, 2, 2.5, 3.5 |
| | 4 | 0~5, 7, 10 |
| | 5 | 0~15, 25 |

| | | |
|---------------|---|----------|
| ⑤ Function | 0 | Standard |
|---------------|---|----------|

| | | |
|--------------|---|------------------------------------|
| ⑥ Pointer | 0 | Standard |
| | 1 | Zero adjustable (micro meter type) |
| | 2 | Zero adjustable (spring type) |

| | | |
|-------------|---|----------|
| ⑦ Window | 0 | Standard |
|-------------|---|----------|

| | | |
|----------------|---|--------------------|
| ⑧ Treatment | 0 | Nil |
| | 1 | Use no oil |
| | 2 | Use no water |
| | 3 | Use no oil & water |

③ Wetted parts materials

| Purpose | Socket | Bourdon tube | Connecting |
|--|--|---|---|
| 1 General use (Not available for 50MPa or over.) | Pressure range 35MPa or less: CAC203 But BA10 only C3604BD Pressure range 35MPa or over: SUS316 or SCS14 | Pressure range 3.5MPa or less: · General type, Vibration-proof type C6872T · Steam use corrosion-proof type, Heat-proof type Steam use · vibration-proof type, Heat-proof · vibration-proof type SUS316 Pressure range 3.5MPa or over: SUS316 | Soldering for between brass and SUS316 Silver soldering for brass and SUS316 Tig-welding for between SUS316 |
| 2 Ammonia use | * SUS316 or SCS14 | SUS316 | Tig-welding |
| 3 Corrosion-proof use | * SUS316 or SCS14 | SUS316 | Tig-welding |

* SUS316 is BA10 only

* Size 300 DIA. (BL10 · BL15) are not type approved products.

Manufacturing range

* Scale Options: Capacity scale, dual scale, printed words or colored circle

Specify "X" if there is no specification item.

| | | |
|-----------------------------|---|---|
| ⑨ Throttle | 0 | Nil |
| | 1 | FS10-011 or FS10-013 Corrosion-proof use |
| | 3 | FS10-081 (With pipe) |
| ⑩ Other additional spec. | 0 | Nil |
| | 1 | Required (Please specify the desired documents separately.) Dial scale *, Case color, Movement |
| ⑮ Documents | 0 | Nil |
| | 1 | Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill sheet, test report (1 pc 1 copy), inspection / traceability certificate, attended inspection |

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