



# Grade 0.5 Pressure Gauges

## OUTLINE

This pressure gauge has been designed for high-precision applications and is equipped with a stainless steel Bourdon tube. Its case is of dustproof type. As a gauge high-precision measurement for research work, this pressure gauge is used for research and experiment, and for calibrating secondary gauges as a standard pressure gauge.

## FEATURES

- A Bourdon tube of this gauge has been especially designed for high-precision applications. This Bourdon tube is also provided with excellent corrosion resistance.
- To secure safety of operation in case this pressure gauge breaks during direct reading, a blowout disk window is provided as a standard.
- \* In case of selecting pressure gauge, choose the pressure range which can be used in between 30~65% of full scale, so that the gauge can give its full capacity.
- \* Also should be confirmed whether the wetted parts material is suitable for the fluid or not.

## SPECIFICATION 1

### Fluid:


Gas or liquid

### Size:

100 DIA., 150 DIA., 200 DIA.

### Mounting:

Stem.....  Type B (Mounting hole)

Panel.....  Type D (Mounting clamp, Mounting hole, With handle)

### Connection:

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

\* For other connections, please contact us.

### Wetted parts material:

#### General use

Bourdon tube 316 st.st.

Socket YBSc3

\* Available up to 10MPa

#### Corrosion-proof use

Bourdon tube 316 st.st.

Socket 316 st.st.

### Pressure range:

0 ~ 0.1 → 0 ~ 200MPa (0 ~ 1 → 0 ~ 2000kgf/cm<sup>2</sup>)

-0.1 ~ 0 → -0.1 ~ 2MPa

(76cmHg ~ 0kgf/cm<sup>2</sup> → 76cmHg ~ 20kgf/cm<sup>2</sup>)

### Operating temperature:

-5 ~ 40°C

### Accuracy:

±0.5 ~ F.S.

\* ±0.75 % F.S. is available, contact NKS for details.

### Blowout disk:

When an emergency, Bourdon tube exploded, it open up internal-pressure from blowout disk, and blowout disk prevents puncture of window

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

### Pointer:

Twist pointer

### Case material finishing:

ADC12(In case of GA3□ AC7A)·Black

### Weight:

100 DIA. Approx. 0.8 kg

150 DIA. Approx. 1.5 kg

200 DIA. Approx. 2.1 kg

### Treatment: (Option)

Use no oil-water... Produce it to be not oil or water in wetted parts

### Dial scale specified: (Option)

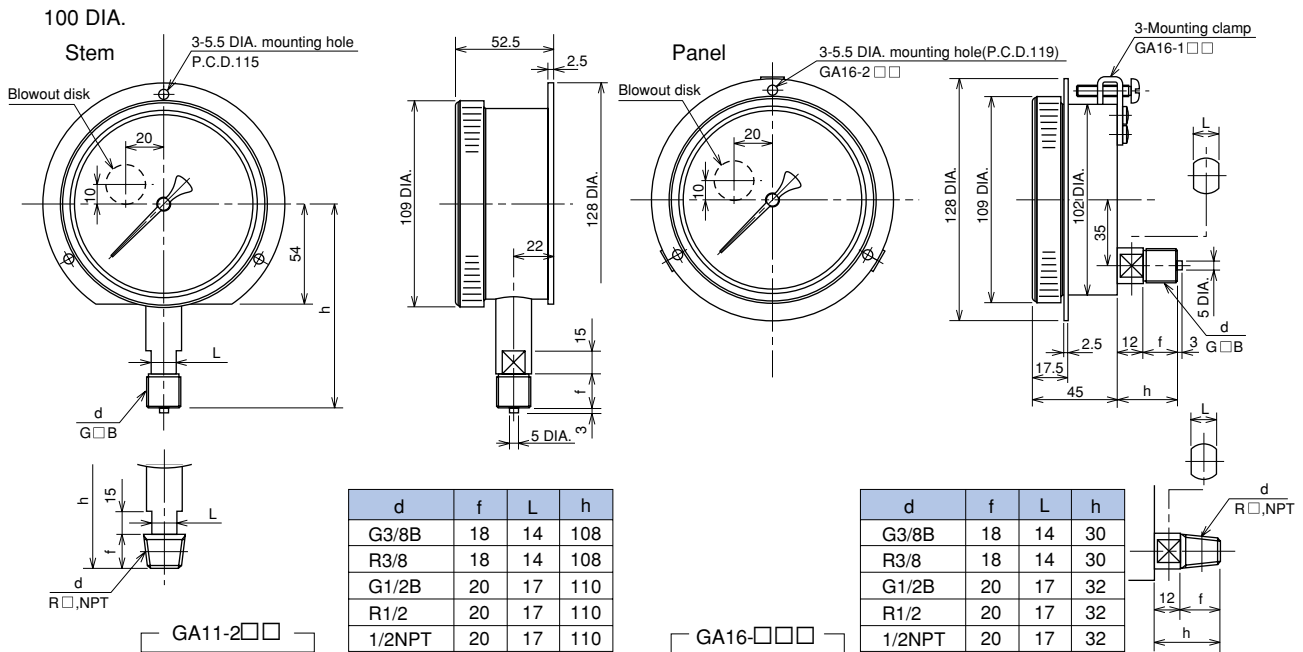
Capacity scale, Dual scale, Printed words, Colored circle

## SPECIFICATION 2

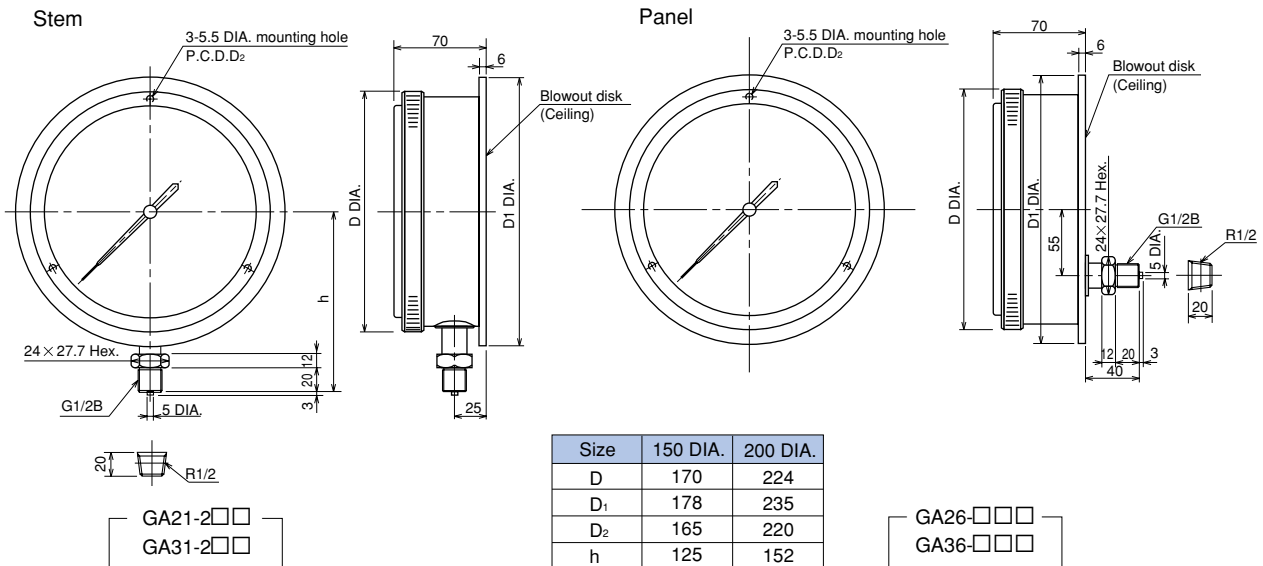
Minimum graduation:

| Pressure range MPa (kgf/cm <sup>2</sup> ) | Minimum graduation MPa (kgf/cm <sup>2</sup> ) | Pressure range MPa (kgf/cm <sup>2</sup> )   | Minimum graduation MPa (kgf/cm <sup>2</sup> ) |
|-------------------------------------------|-----------------------------------------------|---------------------------------------------|-----------------------------------------------|
| 0 ~ 0.1 (0 ~ 1)                           | 0.001 (0.01)                                  | 0 ~ 35 (0 ~ 350)                            | 0.5 (5)                                       |
| 0 ~ 0.2 (0 ~ 2)                           | 0.002 (0.02)                                  | 0 ~ 50 (0 ~ 500)                            | 0.5 (5)                                       |
| 0 ~ 0.3 (0 ~ 3)                           | 0.005 (0.05)                                  | 0 ~ 70 (0 ~ 700)                            | 1 (10)                                        |
| 0 ~ 0.4 (0 ~ 4)                           | 0.005 (0.05)                                  | 0 ~ 100 (0 ~ 1000)                          | 1 (10)                                        |
| 0 ~ 0.6 (0 ~ 6)                           | 0.005 (0.05)                                  | 0 ~ 150 (0 ~ 1500)                          | 2 (20)                                        |
| 0 ~ 1 (0 ~ 10)                            | 0.01 (0.1)                                    | 0 ~ 200 (0 ~ 2000)                          | 2 (20)                                        |
| 0 ~ 1.5 (0 ~ 15)                          | 0.02 (0.2)                                    | -0.1 ~ 0 (76cmHg ~ 0 kgf/cm <sup>2</sup> )  | 0.001 (1cmHg)                                 |
| 0 ~ 2 (0 ~ 20)                            | 0.02 (0.2)                                    | -0.1 ~ 0.1 (76cmHg ~ 1kgf/cm <sup>2</sup> ) | 0.002 (2cmHg-0.02 kgf/cm <sup>2</sup> )       |
| 0 ~ 2.5 (0 ~ 25)                          | 0.02 (0.2)                                    | -0.1 ~ 0.2 (76cmHg ~ 2)                     | 0.005 (2cmHg-0.05)                            |
| 0 ~ 3.5 (0 ~ 35)                          | 0.05 (0.5)                                    | -0.1 ~ 0.3 (76cmHg ~ 3)                     | 0.005 (2cmHg-0.05)                            |
| 0 ~ 5 (0 ~ 50)                            | 0.05 (0.5)                                    | -0.1 ~ 0.4 (76cmHg ~ 4)                     | 0.005 (5cmHg-0.05)                            |
| 0 ~ 7 (0 ~ 70)                            | 0.1 (1)                                       | -0.1 ~ 0.6 (76cmHg ~ 6)                     | 0.005 (5cmHg-0.05)                            |
| 0 ~ 10 (0 ~ 100)                          | 0.1 (1)                                       | -0.1 ~ 1 (76cmHg ~ 10)                      | 0.01 (10cmHg-0.1)                             |
| 0 ~ 15 (0 ~ 150)                          | 0.2 (2)                                       | -0.1 ~ 1.5 (76cmHg ~ 15)                    | 0.02 (10cmHg-0.2)                             |
| 0 ~ 25 (0 ~ 250)                          | 0.2 (2)                                       | -0.1 ~ 2 (76cmHg ~ 20)                      | 0.02 (10cmHg-0.2)                             |

## DIMENSION (Unit:mm)



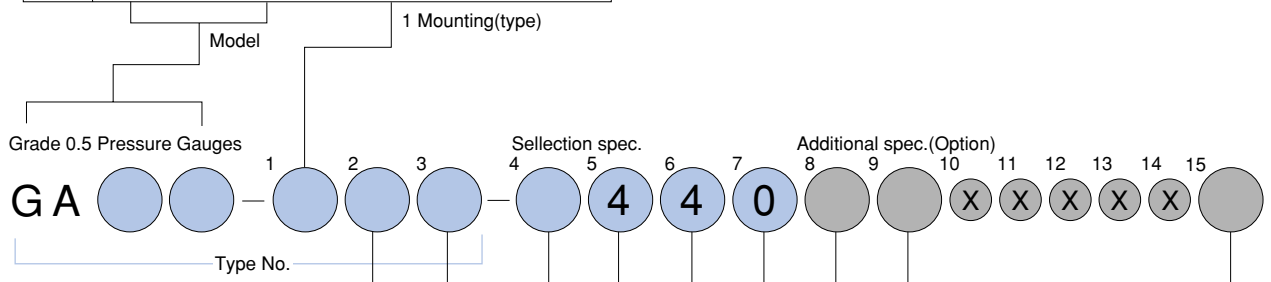
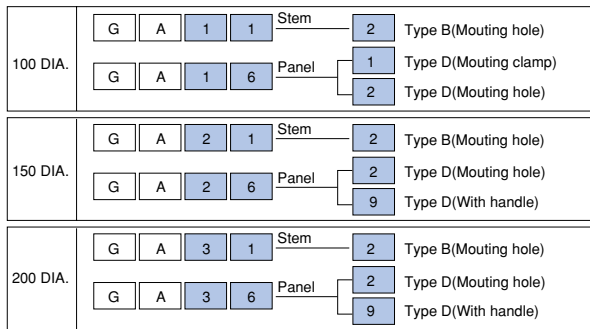
**150 • 200 DIA.**



# Type No. constitution

Please specify Type No., each specification and range, when ordering.

Note: For this Model, there is no applicable item for the figures X, but please specify X when ordering.



## 2 Connection

- 3 G3/8B Applicable GA1 □ only.
- 4 G1/2B
- 6 1/2NPT
- 8 R3/8 Applicable GA1 □ only.
- 9 R1/2

## 3 Wetted parts material

- 1 General use Applicable to 10MPa range.
- 3 Corrosion-proof use

## 4 Pressure range (MPa)

(When ordering, please specify pressure range & unit.)

|                                                                                                | GA1 □ | GA2 □ | GA3 □ |
|------------------------------------------------------------------------------------------------|-------|-------|-------|
| 1 -0.1~0.1, 0.2, 0.3, 0.4<br>-0.1 ~ 0.6, 1, 1.5, 2                                             | ○     | ○     | ○     |
| 2 0 ~ 0.1, 0.2, 0.3, 0.4, 0.6<br>0 ~ 1, 1.5, 2, 2.5, 3.5<br>-0.1 ~ 0                           | ○     | ○     | ○     |
| 3 0 ~ 5, 7, 10                                                                                 | ○     | ○     | ○     |
| 4 0 ~ 15 Applicable corrosion-proof use only<br>0 ~ 25, 35 Applicable corrosion-proof use only | ○     | ○     | ○     |
| 5 0 ~ 50, 70 Applicable corrosion-proof use only                                               | —     | ○     | ○     |
| 6 0 ~ 100 Applicable corrosion-proof use only                                                  | —     | ○     | ○     |
| 7 0 ~ 150 Applicable corrosion-proof use only                                                  | —     | ○     | ○     |
| 8 0 ~ 200 Applicable corrosion-proof use only                                                  | —     | ○     | ○     |

## 9 Other additional spec.

- 0 Nil
- 1 Please specify your requirement  
Dial scale specified  
Wooden housing box

## 8 Treatment

- 0 Nil
- 1 Use no oil
- 2 Use no water
- 3 Use no oil-water

## 7 Window

- 0 Acrylic glass  
(10MPa range below of GA11-16)  
is inorganic glass

## 6 Pointer

- 4 Twist pointer

## 5 Accuracy

- 4 ±0.5%F.S.

## 15 Document

- 0 Nil
- 1 Please specify your requirement  
Drawing one sheet, Instruction manual  
Inspection procedure, Mill sheet  
Test report