

GA__

Grade 0.6 Pressure Gauge

Overview

This pressure gauge is designed for high accuracy made of stainless bourdon tube with dustproof structure. High accurate pressure gauge can be utilized for high accurate pressure measurement, R&D purpose and as test gauge for calibration purpose.

Features

- Bourdon tube is designed for high accuracy made of stainless material (SUS316) contributing to high corrosion resistance.
- It features blow out protection in case of event when pressure gauge breaks while monitoring.

*To maximize performance, select full scale pressure range to indicate normal operating pressure which comes to conditions below.

For constant pressure : The maximum operating pressure should not exceed three-quarters of the full-scale range.

For fluctuating pressure: The maximum operating pressure should not exceed two-thirds of the full-scale range.

Select appropriate wetted parts compatible with process fluid (gas and liquid) which the gauge will be subjected.

Please refer to JIS B 7505-1 for details.

*Specify use no oil for oxygen service.

Specify corrosion resistant and use no oil for Acetylene measurement application.



JIS compliance

No JIS mark available for
GA1□, GA26 and GA36

Specifications 1

Media:


Gases, liquids*

Size:

φ100, φ150, φ200

Type:

Stem ·····  B type (Mounting hole)

Panel ·····  D type (Mounting clamp, mounting hole, and stand with handle)

JIS mark available model:

GA21, GA31

Connection:

G3/8B, G1/2B, 1/2NPT, R3/8, R1/2

*Consult us for nonstandard connections.

Wetted parts:

General type

Bourdon tube SUS316

Socket CAC203

*Available up to 10MPa

Corrosion resistant type

Bourdon tube SUS316

Socket SCS14 or SUS316

Pressure range:

0 to 0.1MPa → 0 to 160MPa

-0.1 to 0MPa → -0.1 to 2.5MPa

Operating temperature range:

-5 to 45°C

Accuracy:

Grade 0.6 (According to JIS accuracy class)

*JIS class 0.6 accuracy equivalent for GA1□, GA26, GA36

Blow out protection:

Blow out protection is used to protect window being blown up in case of high pressure leak happen from the failure of bourdon tube. The disc breaks and releases inner over pressure.

Caution To maintain appropriate performance, space wider than 10mm against wall behind installing gauge is needed. Modification toward disk and plug, blocking out the disk are prohibited.

Pointer:

Twisted pointer

Case material · finish:

ADC12 (AC7A for GA3□) · Black

Weight:

φ100 Approx. 0.8kg

φ150 Approx. 1.5kg

φ200 Approx. 2.1kg

Treatment: (Option)

Use no oil and water ··· Oil/Water used in manufacturing the gauges had been flushed out & no oil/water residue remained inside its wetted parts.

Customized dial: (Option)

Capacity scale, dual scale, characters, circled and colored dial

*Caution

This pressure gauge is tested by water as its pressure media for calibration process. If customer's process media is gases, it is possible to utilize air for calibration. Specify accordingly.

(*Calibration is done by air when use no oil / and water are specified.)

Specifications 2

Minimum scale:

Pressure range (MPa)	Minimum scale (MPa)
0.1	0.001
0.16	0.001
0.25	0.002
0.4	0.002
0.6	0.005
1	0.01
1.6	0.01
2.5	0.02
4	0.02
6	0.05
10	0.1
16	0.1
25	0.2

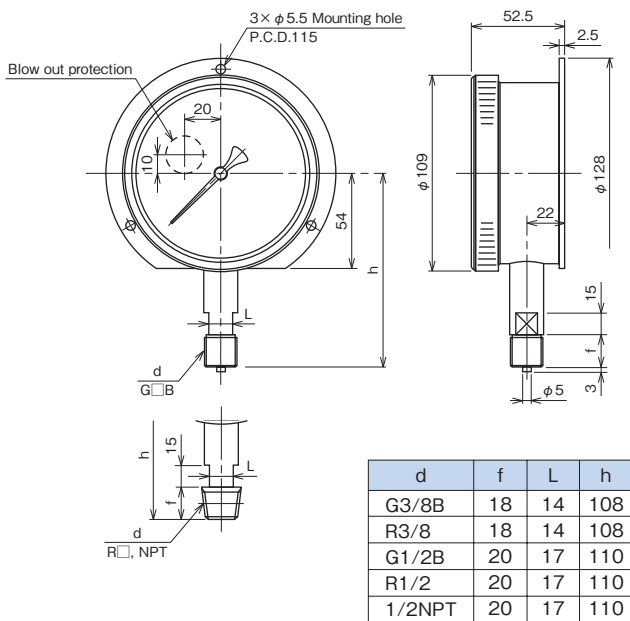
Pressure range (MPa)	Minimum scale (MPa)
40	0.2
60	0.5
100	1
160	1
-0.1 to 0	0.001
-0.1 to 0.1	0.002
0.16	0.002
0.25	0.002
0.4	0.005
0.6	0.005
1	0.01
1.6	0.02
2.5	0.02

Dimensions 1

Unit: mm

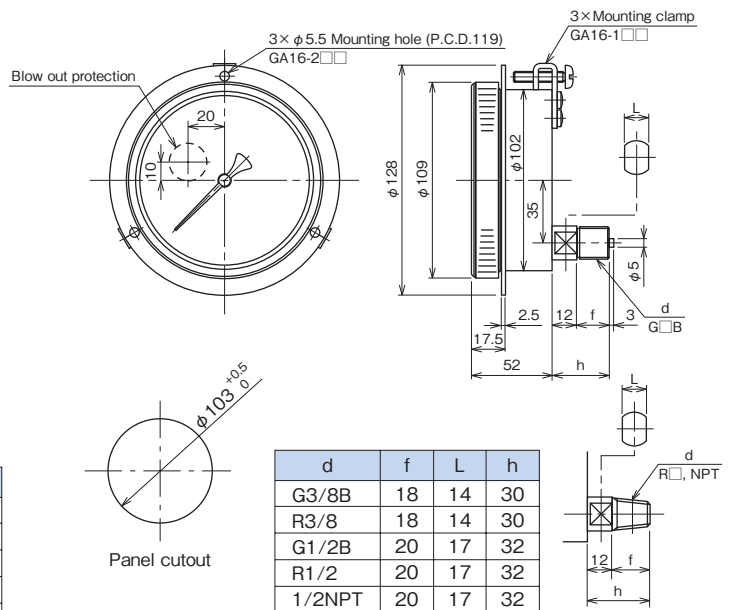
φ100

Stem



GA11-2

Panel



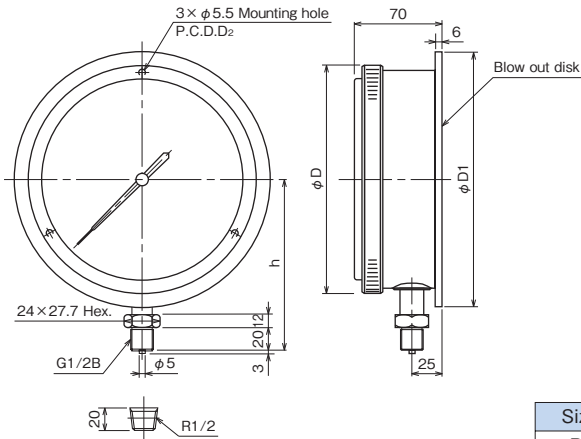
GA16-

For wall mounting type, secure "Release hole" aligning on the position of blowout back for releasing over pressure appropriately.

Dimensions 2

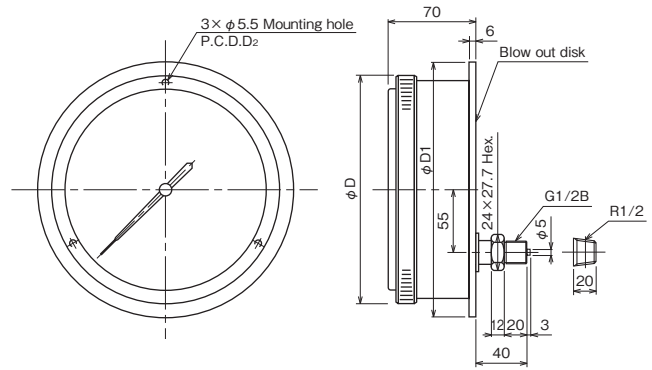
Unit: mm

φ 150 · 200 Stem



GA21-2□□
GA31-2□□

Panel

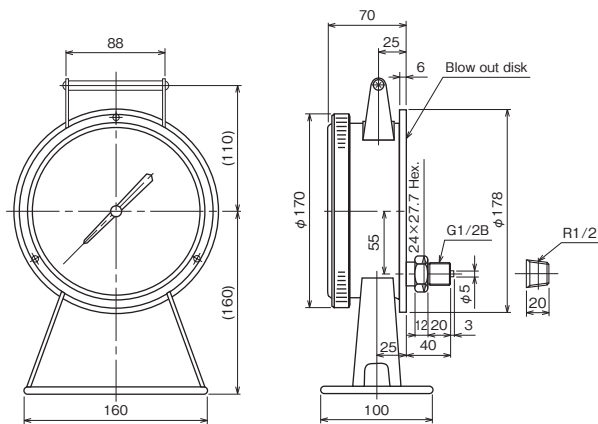


Size	φ 150	φ 200
D	170	224
D ₁	178	235
D ₂	165	220
h	123	152

GA26-2□□
GA36-2□□

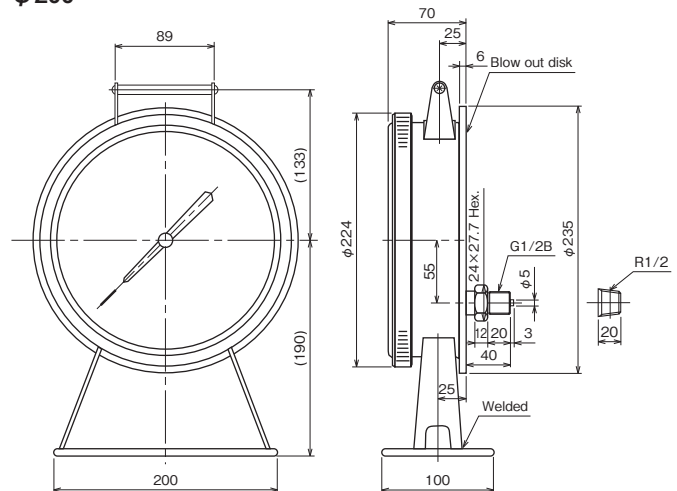
For wall mounting type, secure space for working blowout back (Back plate) (wider than 10mm) against wall behind installing gauge.

Panel (Stand with handle) φ 150



GA26-94□
GA26-99□

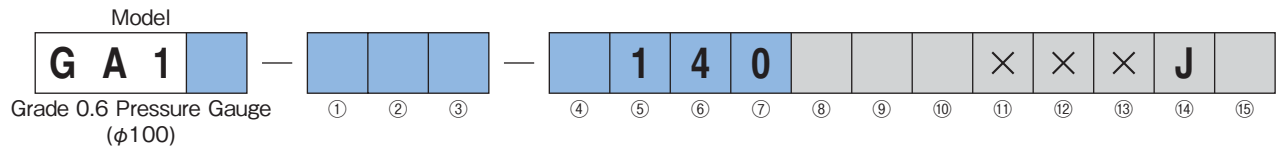
Panel (Stand with handle) φ 200



GA36-94□
GA36-99□

Model number configuration

Please specify the model number, each specs and the range for ordering.



Model number		Product specifications		Additional specifications (Optional)	
Type	1 6	Stem			
		Panel			
① Type	1	Stem	Panel		
		2	B type (Mounting hole)		D type (Mounting hole)
② Connection	3	G3/8B			
	4	G1/2B			
	6	1/2NPT			
	8	R3/8			
	9	R1/2			
		Others			
③ Wetted parts	1	General type	Available up to 10MPa		
	3	Corrosion resistant type	SUS made		
④ Pressure range (MPa)	1	-0.1 to 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5 Compound range			
	2	-0.1 to 0, 0 to 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5			
	3	0 to 4, 6, 10			
	4	0 to 16, 25 Corrosion resistant type only			
⑤ Accuracy	1	Equivalent to Grade 0.6			
⑥ Pointer	4	Twisted pointer**			
⑦ Window	0	Inorganic window, Acrylic window (10MPa and above)			
		その他指定			
⑧ Treatment	0	Not required			
	1	Use no oil			
	2	Use no water			
	3	Use no oil & water			
⑨ Throttle	0	Not required			
	1	FS10-011 (General type)			
		FS10-013 (Corrosion resistant type)			
	3	FS10-081 (With pipe)			
⑩ Other additional spec.	0	Not required			
	1	Required (Specify required additional spec below.) Verification standard inspection mark, customized dial*1, case finish, wood external box, verification standard inspection			
⑭ Class	J	Equivalent to JIS grade 0.6*2			
⑮ Documents	0	Not required			
	1	Required (Specify required additional spec below.) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Mill test report Calibration test report (One-part one sheet) Inspection / Traceability certificate Attending inspection			

Please specify pressure range and unit of measure along with corresponding ordering code.

About grade 0.6 pressure gauge with verification standard inspection mark

0.6 pressure gauge with verification standard inspection mark is available in the ranges below only. Note after the verification, it only assures 1.6% grade accuracy.
Available model: GA11, GA16

Pressure range (MPa)	JIS 0.6 grade
0.1	○
0.25	○
0.6	○
1	○
2.5	○
6	○
10	○

** Consult for zero adjustable pointer.
Not available for product with verification standard inspection mark

***Attention**
This pressure gauge is tested by water as its pressure media for calibration process. If customer's process media is gases, it is possible to utilize air for calibration. Specify accordingly. (*Calibration is done by air when use no oil / and water are specified.)

*1 Capacity scale, dual scale, characters, circled and colored line

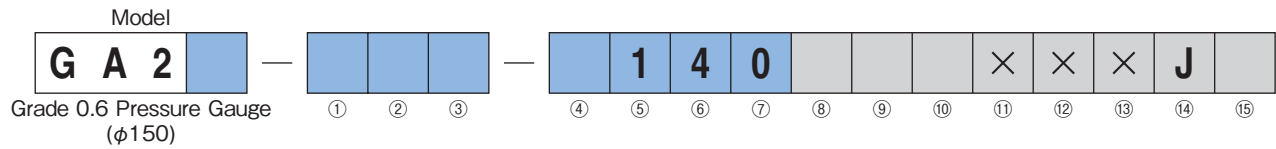
***2 For φ100, no JIS mark is available. (Width of dial scale and pointer are partially incompatible with specification JIS specifies.)**

* Specify code "X" to refer N/A

φ150 Grade 0.6 Pressure Gauge

Model number configuration

Please specify the model number, each specs and the range for ordering.



Model number		Product specifications	Additional specifications (Optional)
Type	1 Stem 6 Panel (Not JIS mark available)		
① Type	2 B type (Mounting hole) 9 D type (Stand with handle)	Stem	Panel
② Connection	4 G1/2B		
	6 1/2NPT *1	GA26-9□□ not available	
	9 R1/2		
	Others*1	GA26-9□□ not available	
③ Wetted parts	1 General type	Available up to 10MPa	
	3 Corrosion resistant type	SUS made	
④ Pressure range (MPa)	1 -0.1 to 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5	Compound range	
	2 -0.1 to 0, 0 to 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5		
	3 0 to 4, 6, 10		
	4 0 to 16, 25	Corrosion resistant type only	
	5 0 to 40, 60	Corrosion resistant type only	
	6 0 to 100	Corrosion resistant type only	
	7 0 to 160	Corrosion resistant type only	
⑤ Accuracy	1	JIS 0.6 grade ※GA26 equivalent to JIS0.6 grade	
⑥ Pointer	4	Twisted pointer※	
⑦ Window	0	Standard (Acrylic window)	
⑧ Treatment	0	Not required	
	1	Use no oil	
	2	Use no water	
	3	Use no oil & water	
⑨ Throttle	0	Not required	
	1	FS10-011 (General type) FS10-013 (Corrosion resistant type)	
	3	FS10-081 (With pipe)	
⑩ Other additional spec.	0	Not required	
	1	Required (Specify required additional spec below.) Verification standard inspection mark, customized dial*2, case finish, wood external box, verification standard inspection	
⑭ Class	J	GA21 JIS grade 0.6*3 GA26 Equivalent to JIS grade 0.6	
⑮ Documents	0	Not required	
	1	Required (Specify required additional spec below.) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Mill test report Calibration test report (One-part one sheet) Inspection / Traceability certificate Attending inspection	

Please specify pressure range and unit of measure along with corresponding ordering code.

About grade 0.6 pressure gauge with verification standard inspection mark

0.6 pressure gauge with verification standard inspection mark is available in the ranges below only. Note after the verification, it only assures 1.6% grade accuracy. Available model: GA21, GA26

Pressure range (MPa)	JIS 0.6 grade
0.1	○
0.25	○
0.6	○
1	○
2.5	○
6	○
10	○
25	○
60	○
100	○

※ Standard comes with zero adjustable pointer but product with verification standard inspection mark.

***Attention**
This pressure gauge is tested by water as its pressure media for calibration process. If customer's process media is gases, it is possible to utilize air for calibration. Specify accordingly. (*Calibration is done by air when use no oil / and water are specified.)

*1 JIS only available for pipe thread

*2 Capacity scale, dual scale, characters, circled and colored line

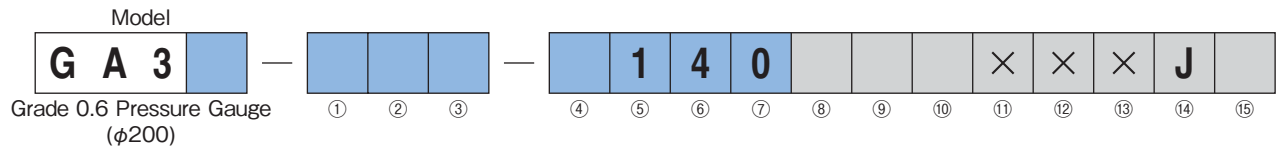
***3 JIS mark is only available for GA21 (Stem) (Position of panel/flange is incompatible with what JIS specifies.)**

* Specify code "X" to refer N/A

φ200 Grade 0.6 Pressure Gauge

Model number configuration

Please specify the model number, each specs and the range for ordering.



Model number		Product specifications	Additional specifications (Optional)
Type	1 Stem 6 Panel (Not JIS mark available)		
① Type	2 B type (Mounting hole) 9 D type (Stand with handle)	Stem	Panel
② Connection	4 G1/2B		
	6 1/2NPT *1	GA36-9□□ not available	
	9 R1/2		
	Others*1	GA36-9□□ not available	
③ Wetted parts	1 General type	Available up to 10MPa	
	3 Corrosion resistant type	SUS made	
④ Pressure range (MPa)	1 -0.1 to 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5	Compound range	
	2 -0.1 to 0, 0 to 0.1, 0.16, 0.25, 0.4, 0.6, 1, 1.6, 2.5		
	3 0 to 4, 6, 10		
	4 0 to 16, 25	Corrosion resistant type only	
	5 0 to 40, 60	Corrosion resistant type only	
	6 0 to 100	Corrosion resistant type only	
	7 0 to 160	Corrosion resistant type only	
⑤ Accuracy	1 JIS 0.6 grade ※GA36 equivalent to JIS0.6 grade		
⑥ Pointer	4 Twisted pointer		
⑦ Window	0 Standard (Acrylic window)		
⑧ Treatment	0	Not required	
	1	Use no oil	
	2	Use no water	
	3	Use no oil & water	
⑨ Throttle	0	Not required	
	1	FS10-011 (General type) FS10-013 (Corrosion resistant type)	
	3	FS10-081 (With pipe)	
⑩ Other additional spec.	0	Not required	
	1	Required (Specify required additional spec below.) Customized dial *2, case finish, wood external box	
⑭ Class	J	GA31 JIS grade 0.6 *3 GA36 Equivalent to JIS grade 0.6	
⑮ Documents	0	Not required	
	1	Required (Documents available upon request) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Mill test report Calibration test report (One-part one sheet) Inspection / Traceability certificate Attending inspection	

Please specify pressure range and unit of measure along with corresponding ordering code.

***Attention**
This pressure gauge is tested by water as its pressure media for calibration process. If customer's process media is gases, it is possible to utilize air for calibration. Specify accordingly. (*Calibration is done by air when use no oil / and water are specified.)

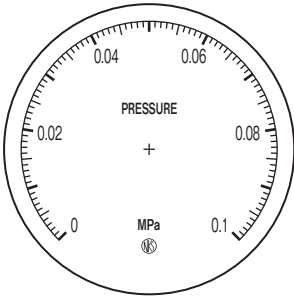
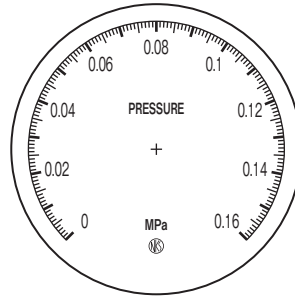
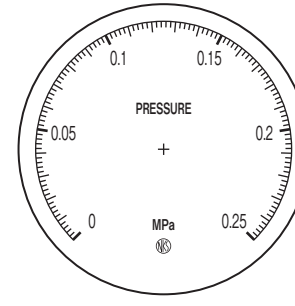
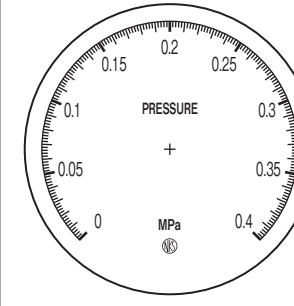
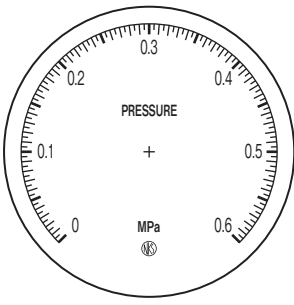
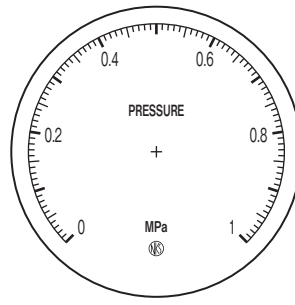
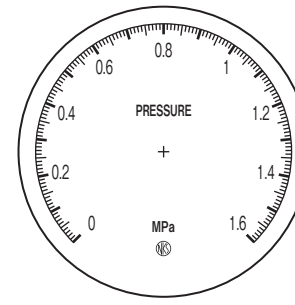
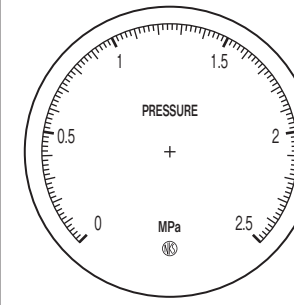
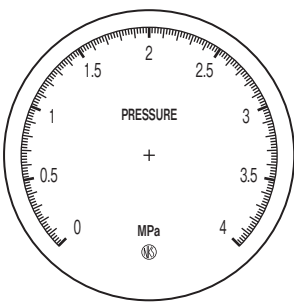
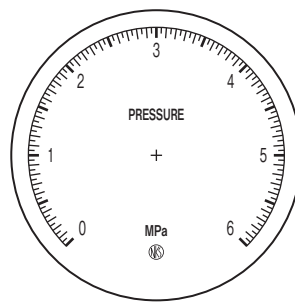
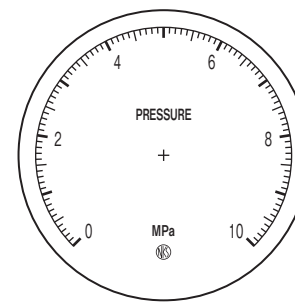
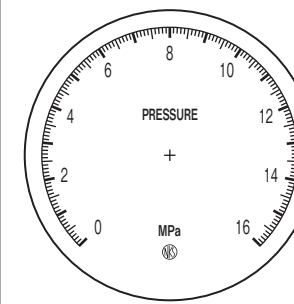
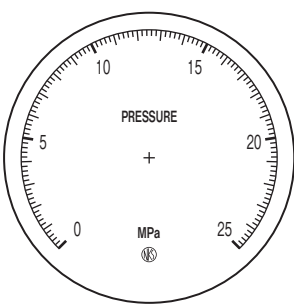
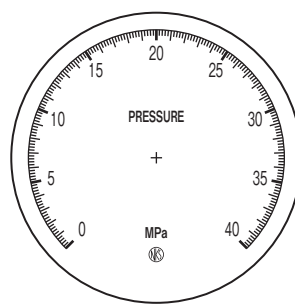
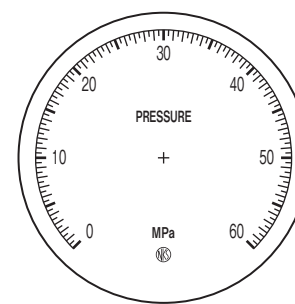
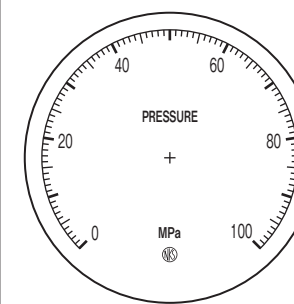
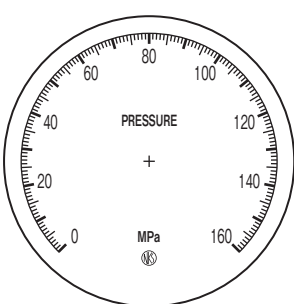
*1 JIS only available for pipe thread
*2 Capacity scale, dual scale, characters, circled and colored line

***3 JIS mark is only available for GA31 (Stem) (Position of panel flange is incompatible with what JIS specifies.)**

* Specify code "X" to refer N/A

JIS 0.6 grade dial design (JIS 0.6 grade pressure gauge)

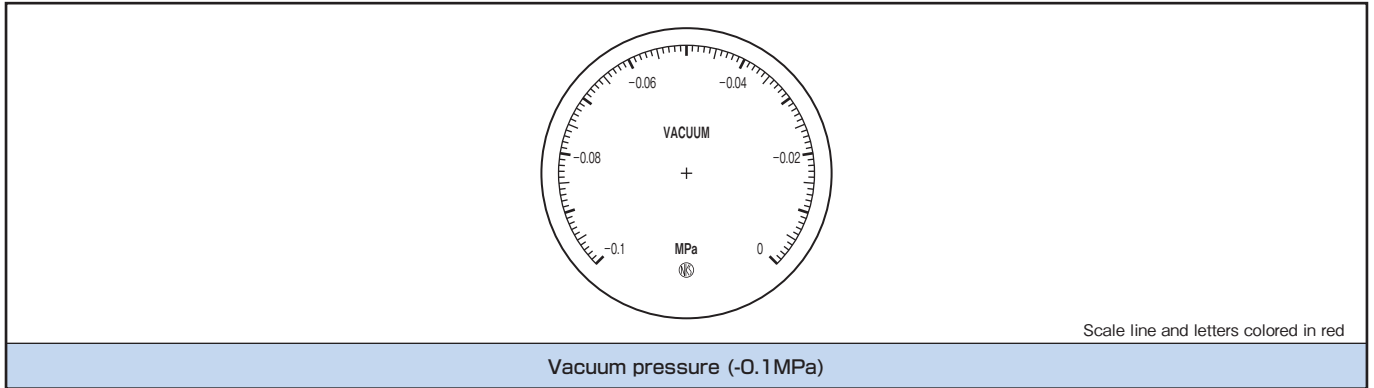
[Attention] These drawings are sample. Details may be different from actual.

			
Pressure gauge (0.1MPa)	Pressure gauge (0.16MPa)	Pressure gauge (0.25MPa)	Pressure gauge (0.4MPa)
			
Pressure gauge (0.6MPa)	Pressure gauge (1MPa)	Pressure gauge (1.6MPa)	Pressure gauge (2.5MPa)
			
Pressure gauge (4MPa)	Pressure gauge (6MPa)	Pressure gauge (10MPa)	Pressure gauge (16MPa)
			
Pressure gauge (25MPa)	Pressure gauge (40MPa)	Pressure gauge (60MPa)	Pressure gauge (100MPa)
			
Pressure gauge (160MPa)			

Pressure Gauge Dial Design

JIS 0.6 grade dial design (JIS 0.6 grade pressure gauge)

[Attention] These drawings are sample. Details may be different from actual.



JIS 0.6 grade dial design (JIS 0.6 grade pressure gauge)

[Attention] These drawings are sample. Details may be different from actual.

<p>Vacuum dial line and numbers colored red</p>	<p>Vacuum dial line and numbers colored red</p>	<p>Vacuum dial line and numbers colored red</p>	<p>Vacuum dial line and numbers colored red</p>
Compound range (-0.1 to 0.1MPa)	Compound range (-0.1 to 0.16MPa)	Compound range (-0.1 to 0.25MPa)	Compound range (-0.1 to 0.4MPa)
<p>Vacuum dial line and numbers colored red</p>	<p>Vacuum dial line and numbers colored red</p>	<p>Vacuum dial line and numbers colored red</p>	<p>Vacuum dial line and numbers colored red</p>
Compound range (-0.1 to 0.6MPa)	Compound range (-0.1 to 1MPa)	Compound range (-0.1 to 1.6MPa)	Compound range (-0.1 to 2.5MPa)