

Low Pressure Gauges



OUTLINE

This pressure gauge measures a low pressure which Bourdon tube type pressure gauge cannot measure, not only directly measuring a pressure but also measuring capacity quantity and liquid depth in a tank. However, measuring liquid entering into a pressure element causes an error of performance. So, it is requested a medium like air according to an air purging method be applied.

FEATURES

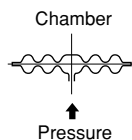
- As a hermetic case is applied, pressure measuring can be performed without the effect of dust, etc.
- Any size (in graduations) of pressure gauge can be selected, making reading easier.
- This gauge is simple in construction, making measuring and maintenance easier.
- * In case of selecting pressure 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.

CONSTRUCTION

The displacements of pressure elements, either being chamber type or Bellows type, are applied to measure the pressure. The displacements being magnified by the amplifying mechanism with the built-in precision movement are transmitted to the pointer.

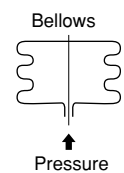
Chamber type

This type is a fixed two corrugated metallic discs and uses the displacements by being pressurized inside as is shown below.



Bellows type




This type is a cylindrical bellows with one closed side and uses the displacements by being pressurized inside from the other opened side, as is shown below.



SPECIFICATION 1

Fluid:
Gas

Size:
75 DIA.(Model: GL13), 100 DIA.(Model: GL10, GL15, GL20, GL25)
150 DIA.(Model: GL21, GL26), 200 DIA.(Model: GL22, GL27)

Mounting:
Stem.....  Type A
 Type B
Panel.....  Type D (Mounting clamp)

Pressure element:
Chamber type or bellows type
* Bourdon tube type is also available with 75DIA. and its ranges are 0 ~ 20, 0 ~ 50kPa.

Connection:
G3/8B

Gas contact part (Element):
Chamber Phosphor bronze (C5191P)
Bellows Phosphor bronze (C5212R) or 316L st.st.

Pressure range:
75 DIA.
0 ~ 5 → 0 ~ 15kPa (0 ~ 500 → 0 ~ 1500mmH₂O)
100 DIA.
0 ~ 2 → 0 ~ 30kPa (0 ~ 200 → 0 ~ 3000mmH₂O)
150 DIA.
0 ~ 4 → 0 ~ 30kPa (0 ~ 400 → 0 ~ 3000mmH₂O)
200 DIA.
0 ~ 2, 0 ~ 3kPa (0 ~ 200, 0 ~ 300mmH₂O)

SPECIFICATION 2

Operating temperature:
-5°C ~ 40°C

Accuracy:
±2% F.S.

Minimum graduation:
Inorganic glass

Minimum graduation:

Case material finishing:

Aluminum alloy casting (AC7A) or Aluminium alloy die casting (ADC12)·Black color (Nylon/black for GL13)

Construction:
IP22 equivalency

Weight:
Approx.0.5kgs ~ Approx.1.45kgs

100 DIA. Chamber type

Pressure range kPa (mmH ₂ O)	Minimum graduation kPa (mmH ₂ O)	Element material GL10-231, GL15-131
0 ~ 2 (0 ~ 200)	0.05 (5)	C5191P (Phosphor bronze)
0 ~ 3 (0 ~ 300)	0.1 (10)	

100·150 DIA. Bellows type

Pressure range kPa (mmH ₂ O)	Minimum graduation kPa (mmH ₂ O)	Element material			
		100 DIA. General use GL20-231 GL25-131	100 DIA. Corrosion-proof use GL20-233 GL25-133	150 DIA. General use GL21-231 GL26-131	150 DIA. Corrosion-proof use GL21-233 GL26-133
0 ~ 4 (0 ~ 400)	0.1 (10)	C5212R (Phosphor bronze)	316Lst.st.	C5212R (Phosphor bronze)	316Lst.st.
0 ~ 5 (0 ~ 500)	0.1 (10)				
0 ~ 7 (0 ~ 700)	0.2 (20)				
0 ~ 10 (0 ~ 1000)	0.2 (20)				
0 ~ 15 (0 ~ 1500)	0.5 (50)				
0 ~ 20 (0 ~ 2000)	0.5 (50)				
0 ~ 30 (0 ~ 3000)	1 (100)				

200 DIA. Bellows type

Pressure range kPa (mmH ₂ O)	Minimum graduation kPa (mmH ₂ O)	Element material GL22-233, GL27-133
0 ~ 2 (0 ~ 200)	0.05 (5)	316L st.st.
0 ~ 3 (0 ~ 300)	0.1 (10)	

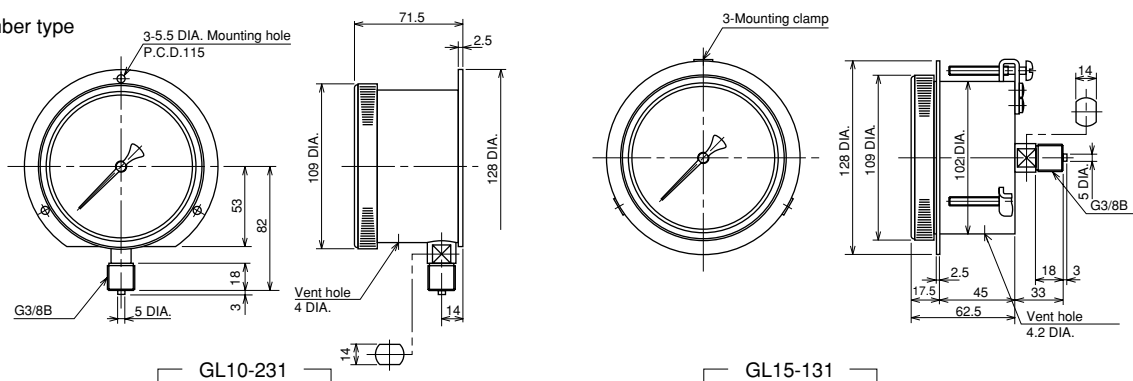
75 DIA. Chamber type (General-purpose type)

Pressure range kPa (mmH ₂ O)	Minimum graduation kPa (mmH ₂ O)	Element material GL13-131
0 ~ 5 (0 ~ 500)	0.2 (20)	C5191P (Phosphor bronze)
0 ~ 7 (0 ~ 700)	0.2 (20)	
0 ~ 10 (0 ~ 1000)	0.5 (50)	
0 ~ 15 (0 ~ 1500)	0.5 (50)	

DIMENSIONS 1

100 DIA.

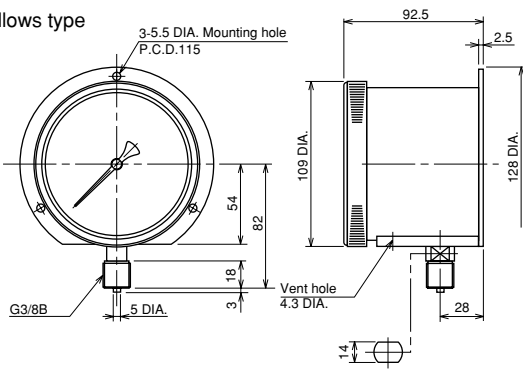
Chamber type



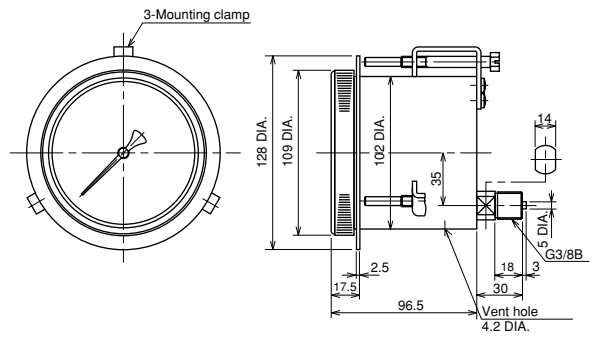
DIMENSION 2

100 DIA.

Bellocs type



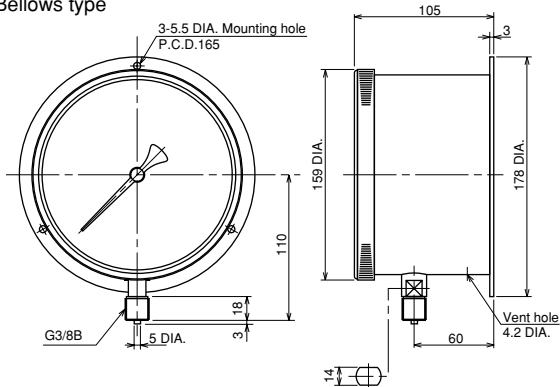
GL20-231
-233



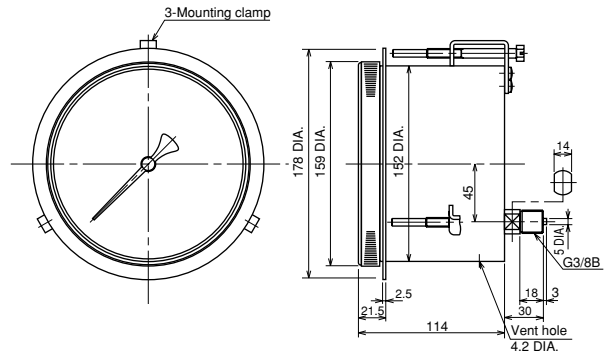
GL25-131
-133

150 DIA.

Bellocs type



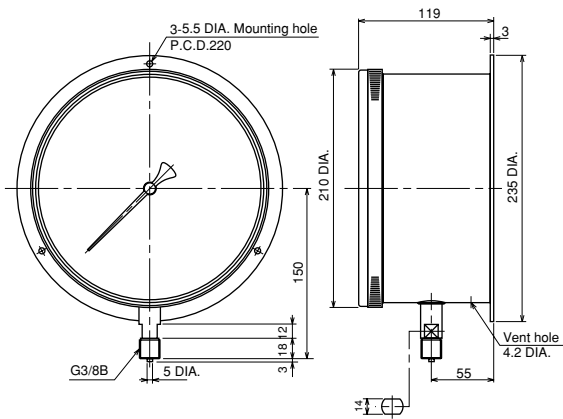
GL21-231
-233



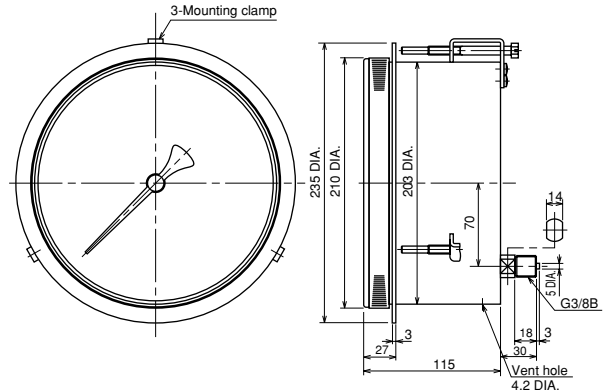
GL26-131
-133

200 DIA.

Bellocs type



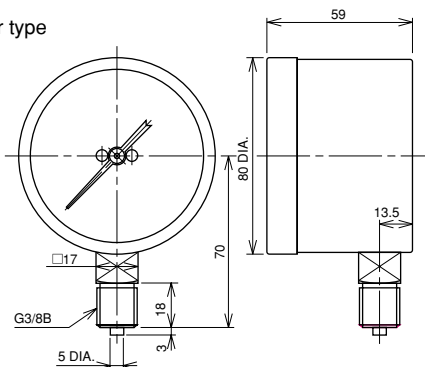
GL22-233



GL27-133

75 DIA.

Chamber type



GL13-131

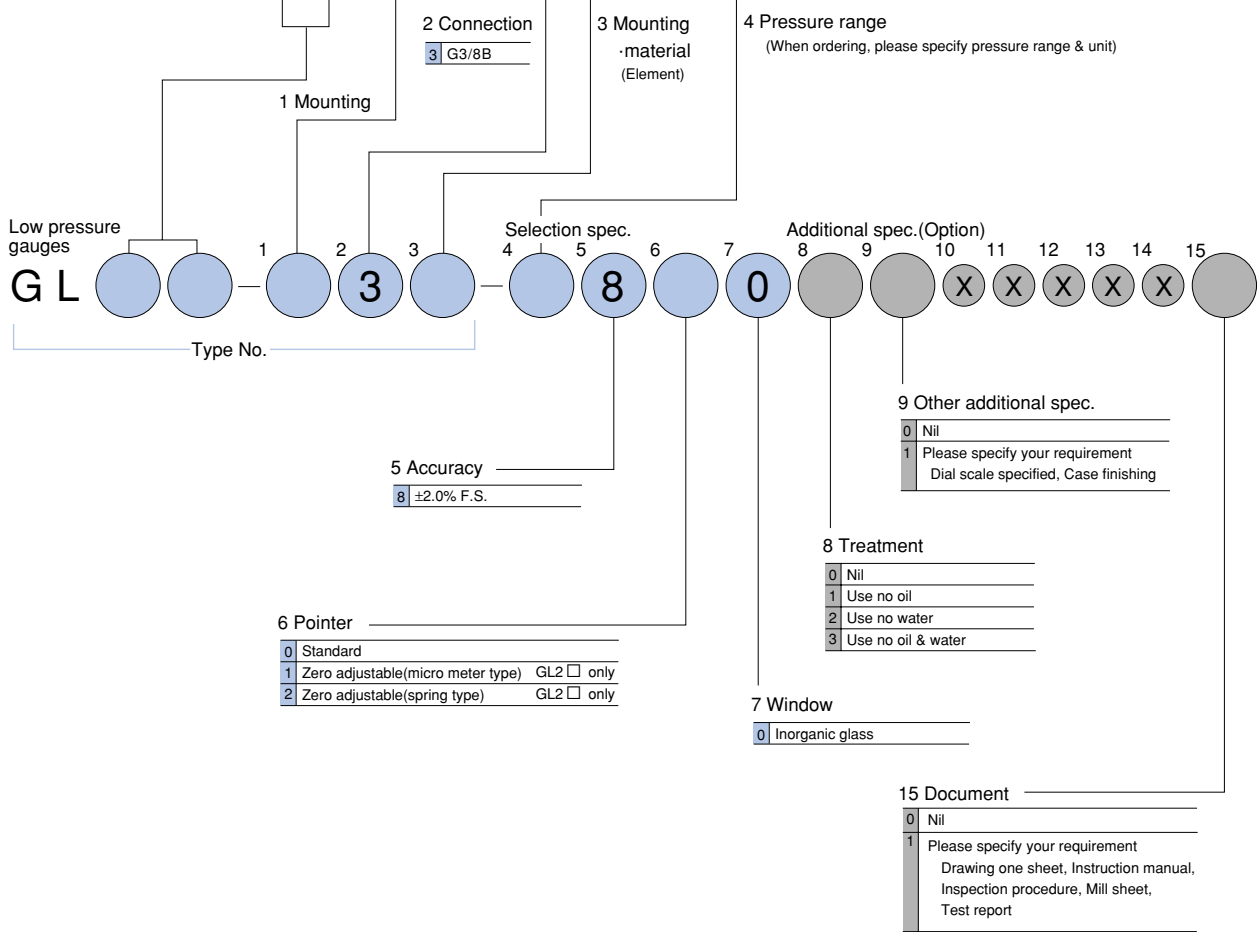
Type No. constitution

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.

Construction Size

Chamber type	100 DIA.	G	L	1	0	2	Type B	3	1	C5191P	1	0 ~ 2, 3 kPa
		G	L	1	5	1	Type D (Mounting clamp)	3	1	C5191P	1	0 ~ 2, 3 kPa
75 DIA.	G	L	1	3	1	Type A	3	1	C5191P	2	0 ~ 5, 7, 10, 15 kPa	
	100 DIA.	G	L	2	0	2	Type B	3	1	C5212R	1	0 ~ 4, 5, 7, 10, 15, 20, 30 kPa
G		L	2	5	1	Type D (Mounting clamp)	3	3	316Lst.st.	1	0 ~ 7, 10, 15, 20, 30 kPa	
G		L	2	1	2	Type B	3	1	C5212R	1	0 ~ 4, 5, 7, 10, 15, 20, 30 kPa	
G		L	2	6	1	Type D (Mounting clamp)	3	3	316Lst.st.	1	0 ~ 7, 10, 15, 20, 30 kPa	
150 DIA.	G	L	2	1	2	Type B	3	1	C5212R	1	0 ~ 4, 5, 7, 10, 15, 20, 30 kPa	
	G	L	2	6	1	Type D (Mounting clamp)	3	3	316Lst.st.	1	0 ~ 7, 10, 15, 20, 30 kPa	
200 DIA.	G	L	2	2	2	Type B	3	3	316Lst.st.	1	0 ~ 2, 3 kPa	
	G	L	2	7	1	Type D (Mounting clamp)	3	3	316Lst.st.	1	0 ~ 2, 3 kPa	



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