

GV95 · 97

Glycerin Bath Type

Small Pressure Gauge

Improved with high temperature application

Overview

This stainless-steel enclosed pressure gauge is filled with liquid to protect moving parts preventing from wear of built-in link mechanism cause by vibration. This long life pressure resistant gauge is suitable for the use where vibration always presents with easy maintenance.

Features

- Small and lightweight design for limited space
- High vibration resistance with less chance of link mechanism wear suitable for the use where vibration always presents.
- Safety mark (Set pointer) is available for guide for normal pressure monitoring set with arrow figure.

*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.



GV95: ϕ 35 Type

⚠ Caution

This gauge is prohibited to use in application in oxygen, chlorinate, nitric acid, or hydrogen peroxide water service. The gauge can be exploded in the event of leak of filled glycerin chemically reacting with prohibited medias.

Specifications 1

Caution:

Gases or liquids compatible with brass and used solder (Gases or liquids compatible with SUS316 and brass and used silver solder for high temperature application)

Size:

ϕ 35, ϕ 50

Connection:

R1/4, R1/8, G1/4B* with throttle

*Our accessories (Adapter, dampener, pressure valve) are not applicable due to its design and figure.

Wetted parts:

Bourdon tube C2680 (SUS316 for high temperature application)

Socket C3604

Seal Soldered (Silver soldered for high temperature application)

Pressure range:

0 to 0.25MPa→0 to 4MPa (C type bourdon tube)

0 to 6MPa→0 to 40MPa (Helical bourdon tube)

Operating temperature:

-5 to 45°C (Standard specification)

-5 to 60°C (High temperature application)

Accuracy:

\pm 3%F.S.

Window:

Selectable organic or tempered (organic)

Case material·finish:

SUS304·Not polished

Filling liquid:

Aqueous glycerin solution

⚠ Caution

Rubber gasket is used for preventing leakage of filled liquid (glycerin).

Glycerin does not dissolve or swell the rubber gasket but additive may possibly soak out in a long time use causing slight discoloration of glycerin.

Discoloration of glycerin does not affect the function of gauges.

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.

*[Use no oil] or [Use no oil and water] not available for 40MPa

Enclosure rating:

Equivalent to IP65

(Pulled vent plug down for 1MPa and below. IP44 for pulled vent plug up)

Weight:

ϕ 35 Approx. 120g

ϕ 50 Approx. 170g

Specifications 2

Blow out protection: (Equipped on the top of pressure gauge)

Blowout disk 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.

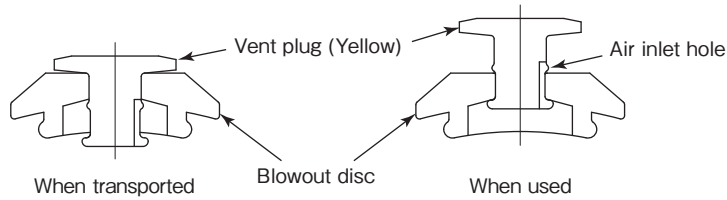
【Caution】

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.

About vent plug

For pressure 1MPa and below, pressure, compound and vacuum gauge have a chance to indicate error due to its inner pressure change caused by ambient temperature change. Ensure to pull up yellow vent plug on the top with vent hole to let in air.

Please note that there are possibilities to slightly come out glycerin and/or aqueous glycerin solution attached to the inner part of the vent plug when the yellow vent plug is pulled up and damage nearby equipment. Please also restrict that the mounting position should be vertical only.



*Pull vent plug down when leak of glycerin is considerable, or outdoor use or place in high humidity. Note that indication error can be generated based on the above reason.

Safety mark (Set pointer):

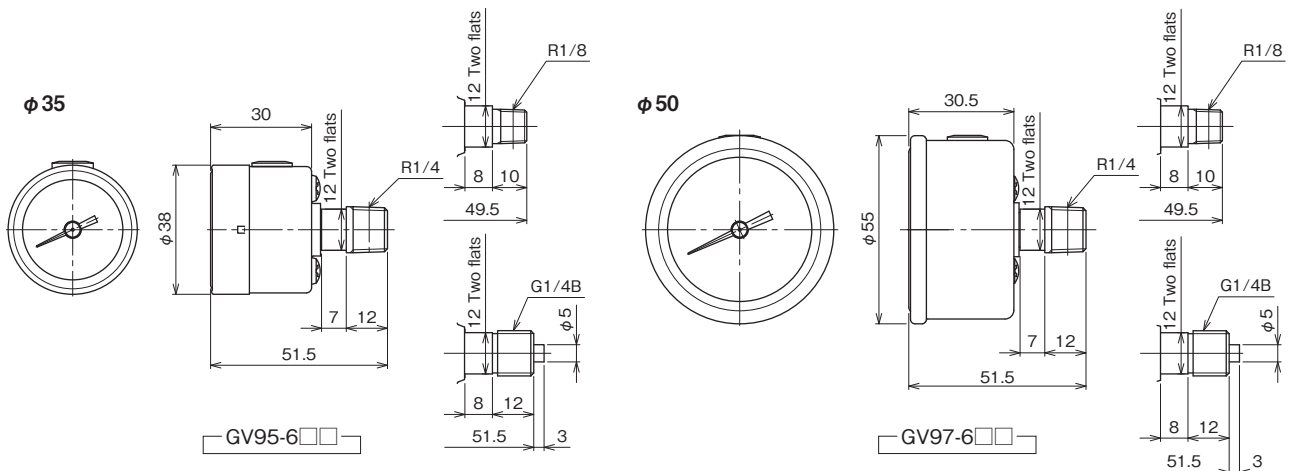
Green colored safety mark can move to arbitrary position.

For indication of set value	For indication of setting range
Combination of two marks forms arrow to indicate set value.	Two left and right safety mark move to upper and lower limit.

* Two safety marks always come when specified.

Dimensions

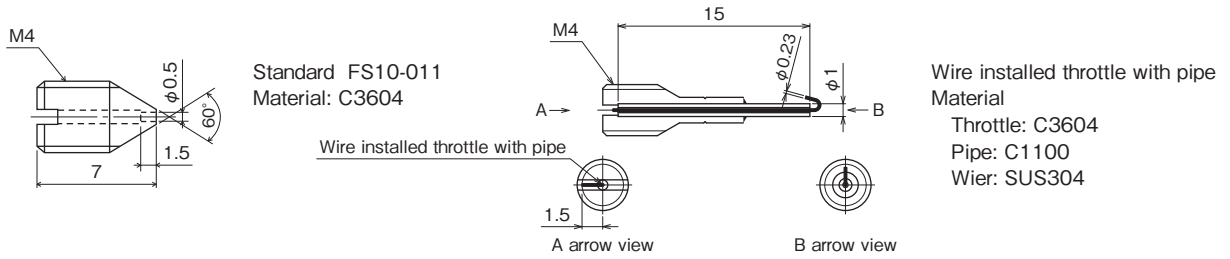
Unit: mm



Throttle

Throttle that fits inside the orifice of the pressure gauge for reducing pressure impact if gauge is subjected to pulsation.

Dimension



Throttle effect

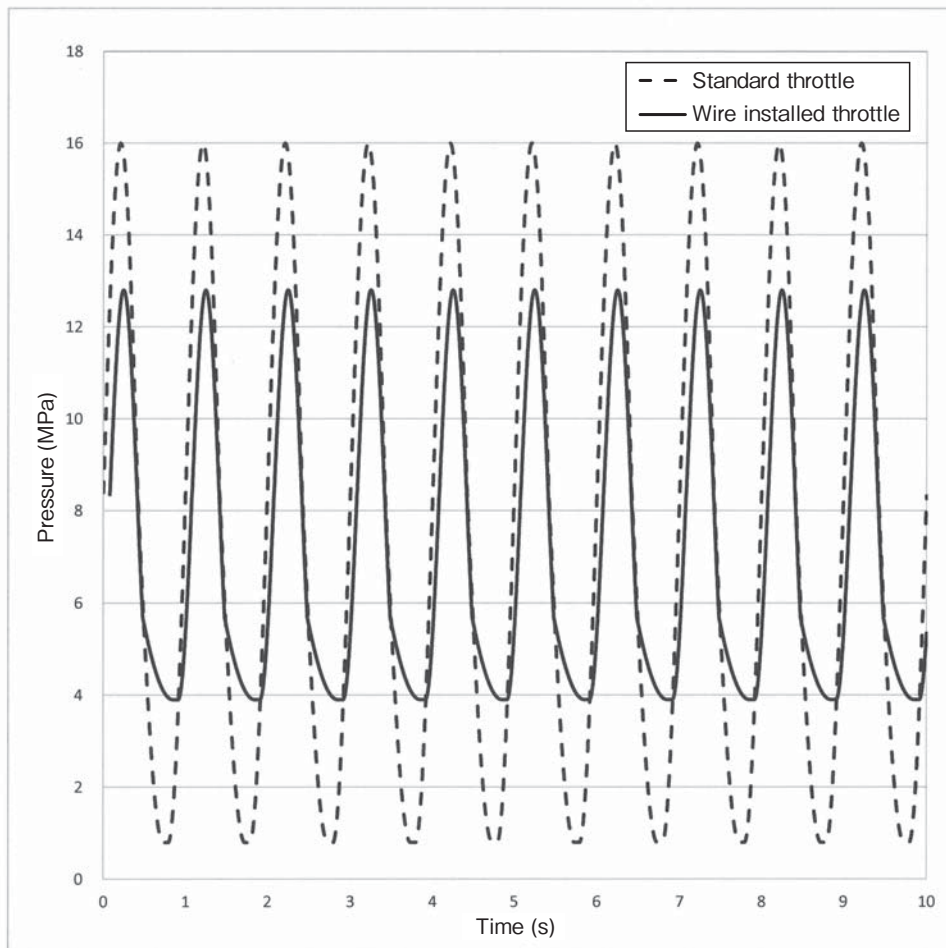
Condition of pressurization

Pressure media: General operating hydraulic fluid

Pulsation: 1 to 16MPa

Pressure variable cycle: 1Hz

Temperature condition: Room temperature



Model number configuration

Please specify for ordering the model number and each specs.

Model

G	V	9		—	6						0	0					×	×	×	×		
					①	②	③				④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮

Glycerin Bath Type Small Pressure Gauge

Model number	Product specifications	Additional specifications (Optional)
Model	5 φ35	
	7 φ50	
① Type	6	Center back
② Connection	2	G1/4B*1
	6	R1/8
	7	R1/4
③ Wetted parts	1	Standard specification Bourdon tube: C2680 Socket: C3604 Pressure range 0 to 40MPa not available
	8	High temperature application Bourdon tube: SUS316 Socket: C3604 Available only for 0 to 16, 25, 40MPa
④ Pressure range (MPa)	2	0 to 0.25, 0.4, 0.6, 1
	3	0 to 1.6, 2.5, 4
	4	0 to 6, 10, 16, 25
	5	0 to 40 (Available only for high temperature application)
⑤ Accuracy	0	Standard (±3%F.S.)
⑥ Pointer	0	Standard
	6	Safety mark *2 (Set pointer)
⑦ Window	0	Standard (Inorganic)
⑧ Treatment	0	Not required
	1	Use no oil (Except for 40MPa range)
	2	Use no water
	3	Use no oil & water (Except for 40MPa range)
⑨ Throttle	0	Standard (FS10-011)
	H	Wire installed throttle with pipe
⑩ Other additional spec.	0	Not required
	1	Required (Specify required additional spec below.)
⑮ Documents	0	Not required
	1	Required (Specify required additional spec below.) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Attending inspection

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

*1 G1/4B is not adapted for our accessories (Adapter, dampener, pressure valve) due to its design and figure.

*2 Two safety marks always come when specified. (Refer to specification 2)

* Specify code "X" to refer N/A