

Highly vibration-proof and durable type

SU4 Glycerine Bath Type Sanitary Gauges

Outline

This pressure gauge is specially designed to be used for pressure measuring in a variety of fields where hygiene is taking into consideration, such as food, medicine, cosmetics and biology.

Features

- The inside of the case is filled with glycerin, which reduces the burden on the movable part through pulsation and vibration, and also prevents abrasion of the internal link structure.
- Uses a stainless steel diaphragm.
- Case protective construction: IP65
- The radiation tube type excels in endurance and external washability.



1S Ferrule wetted parts




The diaphragm is optimized for the inside diameter of ISO (IDF) 1S pipes, keeping contamination to a bare minimum through optimal fitting.



Diaphragm diameter: φ23





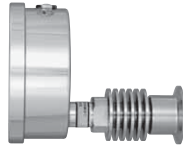
Radiation shape

Selectable radiation shapes from expanded lineup to accommodate variety of operating temperature environments.

Radiation shape		Standard	Radiation fin	Radiation tube
Externals		 SU41	 SU43	 SU4E
	Operating temperature range	Wetted parts: -5 to 100°C Ambient: -5 to 40°C	Wetted parts: -5 to 135°C Ambient: -5 to 60°C	
Allowable temperature range	Wetted parts	-5 to 150°C		
	Ambient	-5 to 60°C		

Mounting type

Available with selectable mounting types for variety of applications allows for space-saving.

Stem type			Back type*	
A-frame	A-frame, Radiation fin shape	A-frame, Radiation tube shape	DA-frame	DA-frame, Radiation fin shape
				

* The shape of the radiation tube cannot be manufactured.

Specifications

Radiation shape		Standard				Radiation fin				Radiation tube			
Size		φ 75		φ 100		φ 75		φ 100		φ 75		φ 100	
Model		SU40	SU45	SU41	SU46	SU42	SU47	SU43	SU48	SU4C	SU4E		
Shape		A-frame	DA-frame	A-frame	DA-frame	A-frame	DA-frame	A-frame	DA-frame	A-frame			
Accuracy		± 1.5% F.S. at 23°C											
Wetted parts material	Diaphragm	SUS316L											
	Fitting	SUS316 or SUS316L (selectable)											
Pressure range		0 to 0.1 → 0 to 5MPa -0.1 to 0 → 0.1 to 2MPa											
Temperature coefficient		Mounting periphery 0.2% F.S./°C or less Wetted parts 0.1% F.S./°C or less											
Filled liquid		Propylene glycol (Vacuum, Compound gauge: Silicone oil)											
Case material		φ 75 ··· Inner frame: CAC203 Chrome plate, Outer frame: C3604BD Chrome plate φ 100 ··· Inner frame: CAC203 Chrome plate, Outer frame: C3771 Chrome plate											
Glass		Inorganic glass or organic glass (Acrylic)											
Needle clamp		Nil											
Zero-adjustable pointer		Nil											
Vent plug		Standard equipment * 1											
Case protection construction		IP65 * 2											

* 1 To prevent errors caused by internal pressure when the range is 1MPa or less, please make sure to raise the vent plug when measuring pressure.

* 2 When the range is 1MPa or less, it will be IP65 when the vent plug is lowered.

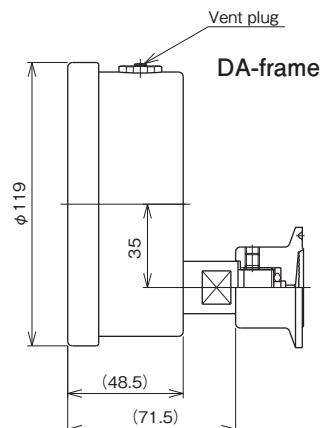
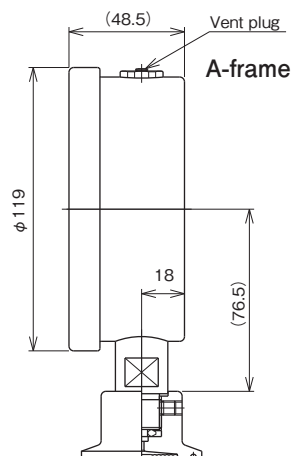
Dimensions 1

(Ferrule type)

Unit: mm

[Standard shape]

φ 100

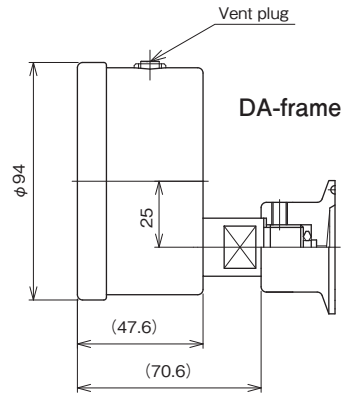
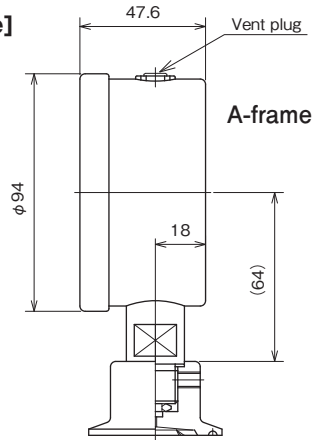


Dimensions 2

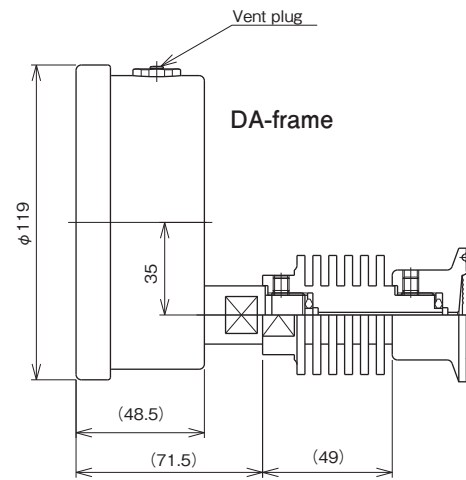
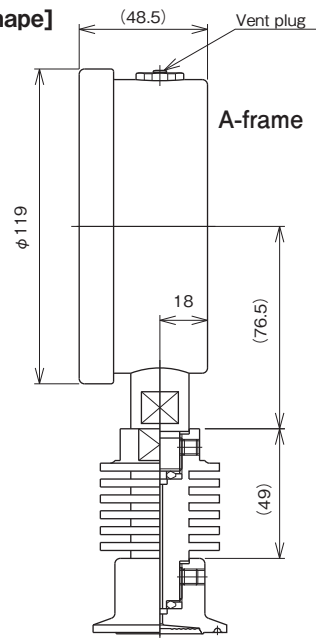
(Ferrule type)

Unit: mm

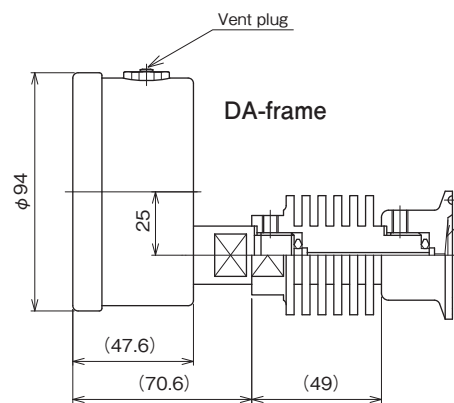
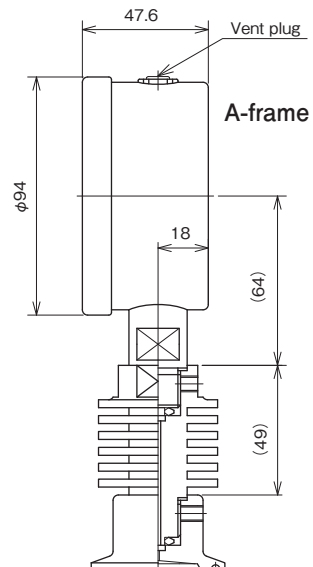
[Standard shape]
φ 75



[Radiation fin shape]
φ 100



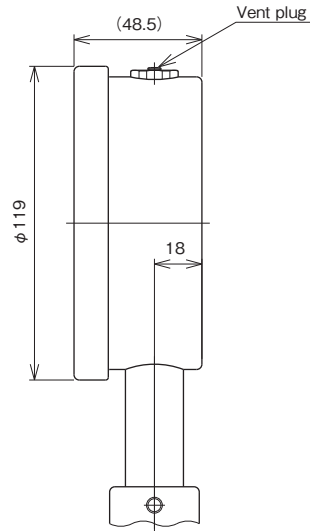
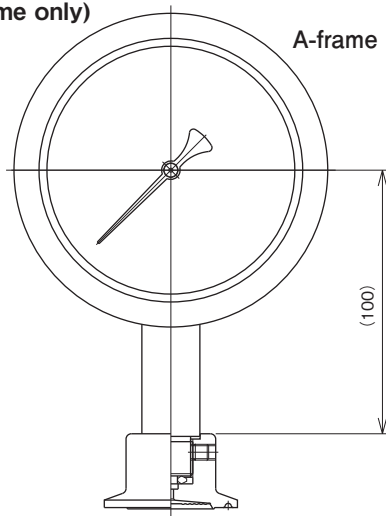
φ 75



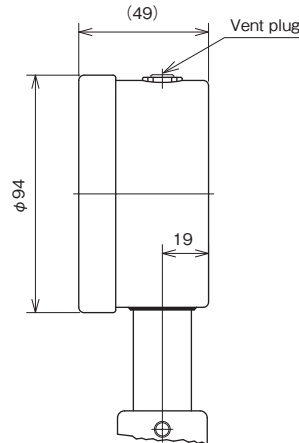
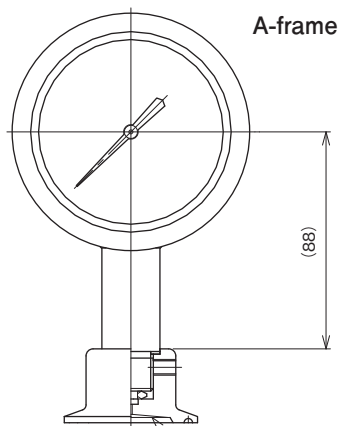
Dimensions 3 (Ferrule type)

Unit: mm

[Radiation tube shape]
 $\phi 100$ (A-frame only)



$\phi 75$ (A-frame only)

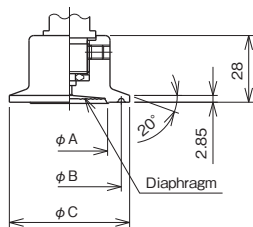


Dimensions 4

Unit: mm

[Connection type]

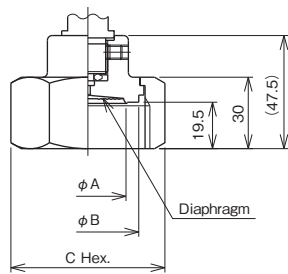
Ferrule type



Ferrule size	A	B	C
1S	23	43.5	50.5
1½S	32		
2S	47	56.5	64

ISO (IDF) Standard

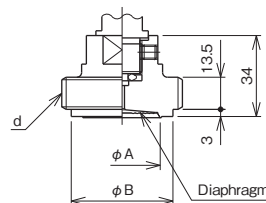
Nut type



Nut size	A	B	C
1½S	32	42.7	56x64.7
2S	47	56.2	71x82

ISO (IDF) Standard

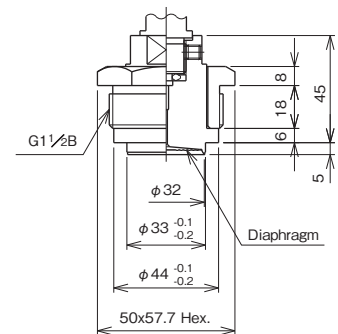
Male type



Thread size d	A	B
1½S	32	42.7
2S	47	56.2

ISO (IDF) Standard

Universal thread type



ISO (IDF) Standard

(ϕ 100) Standard, Radiation fin shape

Model number configuration

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

Model

S U 4 — — — — — 0 × × × × × × × ×

Glycerine Bath Type Sanitary Gauges ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

Model number		Selective spec.	Additional spec. (Option)
Case	4	Inner frame: CAC203 Chrome plate, Outer frame: C3771 Chrome plate, (Glycerin) (Glycerin)	
Shape	Size	Frame	Radiation shape
	1	A-frame	Standard
	3		Radiation fin
	6	DA-frame	Standard
8	Radiation fin		
① Connection type *1	1	Ferrule type (Please use within proofpressure of the clamp and gasket)	
	2	Nut type	
	3	Male type	
	4	Universal thread type ②③ G1½B only	
② Connection size	2	1S (Only Ferrule type can be manufactured)	
	3	1½S or G1½B (Only universal thread type can be manufactured with G1½B)	
	4	2S	
	5	2½S	
	6	3S	
③ Wetted parts material *2	3	SUS316	
	4	SUS316L	
	5	SUS316 Buff finish (Universal thread type cannot be manufactured)	
	6	SUS316L Buff finish (Universal thread type cannot be manufactured)	
④ Pressure range (MPa)	1	-0.1 to 0.6, 1, 1.5, 2	Compound gauge For ② size 2
		-0.1 to 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2	Compound gauge For ② size 3
		-0.1 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2	Compound gauge For ② size 4, 5 and 6
	2	0 to 0.6, 1, 1.5, 2, 2.5, 3.5	For ② size 2
		0 to 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2, 2.5, 3.5, 5	For ② size 3 (5MPa Ferrule cannot be manufactured)
		0 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2, 2.5, 3.5, -0.1 to 0	For ② size 4
		0 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2, -0.1 to 0	For ② size 5 and 6
⑤ Accuracy	0	Standard (\pm 1.5%F.S.)	
⑦ Glass	0	Inorganic glass	
	1	Organic glass (Acrylic)	
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	

Please specify the pressure range and units separately besides selection of range code.

⚠ Cautions

- *1 Please use it within the range of proofpressure of connected parts (clamp, nut, and gasket, etc.). When using Ferrule types, many commercial clamps have a pressure resistance of 1MPa or less. Please keep the pressure at 1MPa or less as long as you are not using special-purpose items.

[Manufacturing range]

- Filled liquid: Propylene glycol (Vacuum, Compound gauge: Silicone oil)
- Wetted parts material: Diaphragm: SUS316L, Fitting: SUS316 or SUS316L
- *2 Please contact us for electrolytic polishing wetted parts and passivation treatment specifications.

* Parts required for installation, such as clamps, nuts, gaskets, etc., are to be prepared by the user.

* Specify "X" if there is no specification item.

Glycerine Bath Type Sanitary Gauges (φ 100) Radiation tube shape

Model number configuration

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

Model

S U 4 E — — — — — 0 × × × × × × × ×

Glycerine Bath Type Sanitary Gauges ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

Model number		Selective spec.		Additional spec. (Option)	
Case	4	Inner frame: CAC203 Chrome plate, Outer frame: C3771 Chrome plate, (Glycerin) (Glycerin)			
Shape	Size	φ 100	Frame	A-frame	Radiation shape
	E				Radiation tube
① Connection type *1	1	Ferrule type (Please use within proofpressure of the clamp and gasket)			
	2	Nut type			
② Connection size	2	1S (Only Ferrule type can be manufactured)			
	3	1½S			
	4	2S			
③ Wetted parts material *2	3	SUS316			
	4	SUS316L			
	5	SUS316 Buff finish			
	6	SUS316L Buff finish			
④ Pressure range (MPa)	1	-0.1 to 0.6, 1, 1.5, 2		Compound gauge	For ② size 2
		-0.1 to 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2		Compound gauge	For ② size 3
	2	-0.1 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2		Compound gauge	For ② size 4
		0 to 0.6, 1, 1.5, 2, 2.5, 3.5			For ② size 2
⑤ Accuracy	0	Standard (±1.5%F.S.)			
⑦ Glass	0	Inorganic glass			
	1	Organic glass (Acrylic)			
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			

Please specify the pressure range and units separately besides selection of range code.

⚠ Cautions

- * 1 Please use it within the range of proofpressure of connected parts (clamp, nut, and gasket, etc.). When using Ferrule types, many commercial clamps have a pressure resistance of 1MPa or less. Please keep the pressure at 1MPa or less as long as you are not using special-purpose items.

[Manufacturing range]

- Filled liquid: Propylene glycol (Vacuum, Compound gauge: Silicone oil)
- Wetted parts material: Diaphragm; SUS316L, Fitting; SUS316 or SUS316L
- * 2 Please contact us for electrolytic polishing wetted parts and passivation treatment specifications.

* Parts required for installation, such as clamps, nuts, gaskets, etc., are to be prepared by the user.

* Specify "X" if there is no specification item.

Model number configuration

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

Model

S U 4 — — — — — 0 × × × × × × × ×

Glycerine Bath Type Sanitary Gauges ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

Model number		Selective spec.	Additional spec. (Option)
Case	4	Inner frame: CAC203 Chrome plate, Outer frame: C3604BD Chrome plate, (Glycerin)	
Shape	Size	$\phi 75$	Radiation shape
	0		Standard
	2		Radiation fin
	5		Standard
7	Radiation fin		
① Connection type *1	1	Ferrule type (Please use within proofpressure of the clamp and gasket)	
	2	Nut type	
	3	Male type	
	4	Universal thread type ②③ G1½B only	
② Connection size	2	1S (Only Ferrule type can be manufactured)	
	3	1½S or G1½B (Only universal thread type can be manufactured with G1½B)	
	4	2S	
	5	2½S	
	6	3S	
③ Wetted parts material *2	3	SUS316	
	4	SUS316L	
	5	SUS316 Buff finish (Universal thread type cannot be manufactured)	
	6	SUS316L Buff finish (Universal thread type cannot be manufactured)	
④ Pressure range (MPa)	1	-0.1 to 0.6, 1, 1.5, 2	Compound gauge For ② size 2
		-0.1 to 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2	Compound gauge For ② size 3
		-0.1 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2	Compound gauge For ② size 4, 5 and 6
	2	0 to 0.6, 1, 1.5, 2, 2.5, 3.5	For ② size 2
		0 to 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2, 2.5, 3.5, 5	For ② size 3 (5MPa Ferrule cannot be manufactured)
		0 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2, 2.5, 3.5, -0.1 to 0	For ② size 4
		0 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2, -0.1 to 0	For ② size 5 and 6
⑤ Accuracy	0	Standard ($\pm 1.5\%$ F.S.)	
⑦ Glass	0	Inorganic glass	
	1	Organic glass (Acrylic)	
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	

Please specify the pressure range and units separately besides selection of range code.

⚠ Cautions

- *1 Please use it within the range of proofpressure of connected parts (clamp, nut, and gasket, etc.).
When using Ferrule types, many commercial clamps have a pressure resistance of 1MPa or less.
Please keep the pressure at 1MPa or less as long as you are not using special-purpose items.

[Manufacturing range]

- Filled liquid: Propylene glycol (Vacuum, Compound gauge: Silicone oil)
- Wetted parts material: Diaphragm; SUS316L, Fitting; SUS316 or SUS316L
- *2 Please contact us for electrolytic polishing wetted parts and passivation treatment specifications.

*Parts required for installation, such as clamps, nuts, gaskets, etc., are to be prepared by the user.

*Specify "X" if there is no specification item.

Model number configuration

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

Model

S U 4 C — — — — — 0 × × × × × × × × ×

Glycerine Bath Type Sanitary Gauges ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮

Model number		Selective spec.		Additional spec. (Option)	
Case	4	Inner frame: CAC203 Chrome plate, Outer frame: C3604BD Chrome plate, (Glycerin)			
Shape	Size	Frame	Radiation shape		
	C	$\phi 75$	A-frame	Radiation tube	
① Connection type *1	1	Ferrule type (Please use within proofpressure of the clamp and gasket)			
	2	Nut type			
② Connection size	2	1S (Only Ferrule type can be manufactured)			
	3	1½S			
	4	2S			
③ Wetted parts material *2	3	SUS316			
	4	SUS316L			
	5	SUS316 Buff finish			
	6	SUS316L Buff finish			
④ Pressure range (MPa)	1	-0.1 to 0.6, 1, 1.5, 2		Compound gauge For ② size 2	
		-0.1 to 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2		Compound gauge For ② size 3	
	2	-0.1 to 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 1, 1.5, 2		Compound gauge For ② size 4	
		0 to 0.6, 1, 1.5, 2, 2.5, 3.5		For ② size 2	
⑤ Accuracy	0	Standard ($\pm 1.5\%$ F.S.)			
⑦ Glass	0	Inorganic glass			
	1	Organic glass (Acrylic)			
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			

Please specify the pressure range and units separately besides selection of range code.

⚠ Cautions

- *1 Please use it within the range of proofpressure of connected parts (clamp, nut, and gasket, etc.). When using Ferrule types, many commercial clamps have a pressure resistance of 1MPa or less. Please keep the pressure at 1MPa or less as long as you are not using special-purpose items.

[Manufacturing range]

- Filled liquid: Propylene glycol (Vacuum, Compound gauge: Silicone oil)
- Wetted parts material: Diaphragm; SUS316L, Fitting; SUS316 or SUS316L
- *2 Please contact us for electrolytic polishing wetted parts and passivation treatment specifications.

* Parts required for installation, such as clamps, nuts, gaskets, etc., are to be prepared by the user.

* Specify "X" if there is no specification item.