

φ35, φ40

GW35・45 Pressure Gauge for Semiconductor Industry

Outline

GW35 and GW45 are designed for offering excellent performance even with highly pure semiconductor gas process media or in environmental atmosphere surrounded by corrosive gas. These gauges are suitable for the use in semiconductor process application, especially for highly-pure process media measurement with great care of air-tightness and air-cleanliness.



Features

- Primarily internal components (Bourdon tube, socket, case and movement etc.) are made of stainless steel to resist to corrosion both against process media and environmental atmosphere.
- The wetted parts like pressure sensing element are welded by argon arc welding and manufactured under strict quality controls inspecting proof pressure and air-tightness.

*To maximize performance, please select the pressure range with your common operating pressure should be 30 to 65% of the pressure range. Furthermore, please ensure that the wetted parts materials listed are suitable for the use against measuring gas or liquid.


List of grade

Grade	BA (Bright Annealing)	EP (Electro Polishing)
Wetted parts material	SUS316L	SUS316L (Gas contact surface polished)
Cleaning level	Class IV (ANSI B40, 1M-1979)	10 and under particles of 0.2 μm or greater
Leak test	1.01×10 ⁻⁹ Pa·m ³ /s and under	
Cleaning	① Coarse cleaning ② Ultrasonic cleaning ③ Finish cleaning ④ N ₂ gas flushing	
Work area	① General work area ② Clean room (Class 10,000) ③ Clean bench (Class 100)	
Adjustment test media	N ₂ gas	
Packing form	Sealed polyethylene bag	

GW35·45

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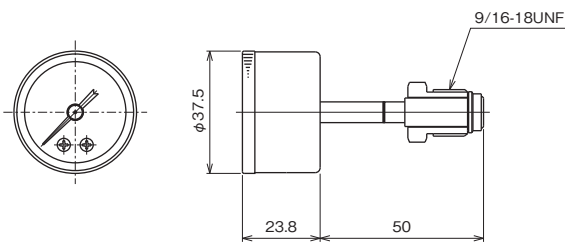
Specification

Item	Description
Fluid	Air or liquid
Mounting	Back connection...  D-frame (Center back screw, stem)
Size	φ35 (Model: GW35) φ40 (Model: GW45)
Connection	9/16-18UNF
Material	Bourdon tube, Connecting part SUS316L Case SUS304 Movement SUS
Enclosure	Indoor use
Welding	Argon arc welded
Pressure range	0 to 0.4MPa → 0 to 3.5MPa -0.1 to 0.3MPa → -0.1 to 2MPa
Operating temperature	-5 to 45°C
Accuracy	±3%F.S.
Leakage (Helium leak rate)	1.01×10^{-9} Pa · m ³ /s and under
Cleaning level	EP Grade: 10 particles and under with the diameter 0.2 μm or greater. BA Grade: Class IV (ANSI B40, 1M-1979)
Weight	φ35: Approx. 75 g φ40: Approx. 90 g

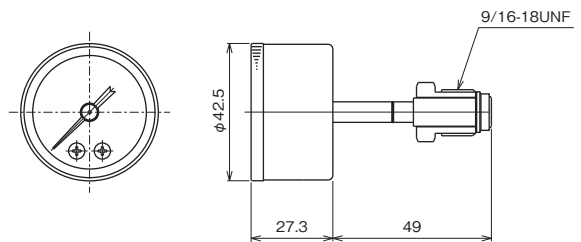
Dimensions

Unit: mm

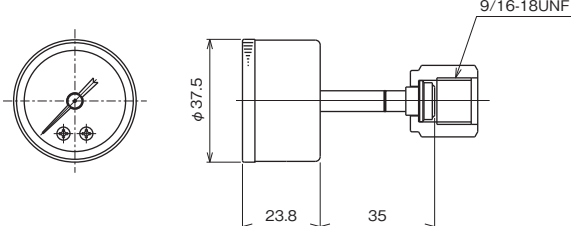
GW35-1E□



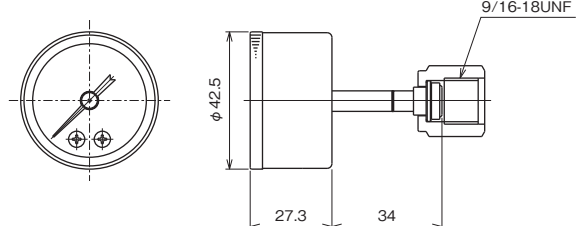
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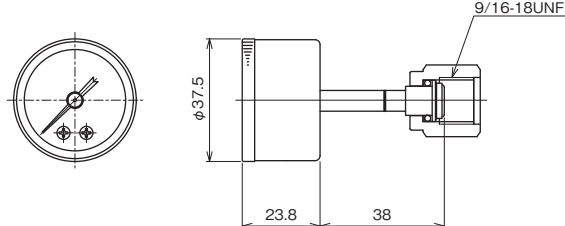
GW35-1G□



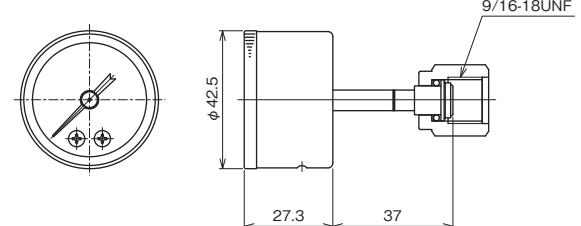
GW45-1G□



GW35-1Q□



GW45-1Q□

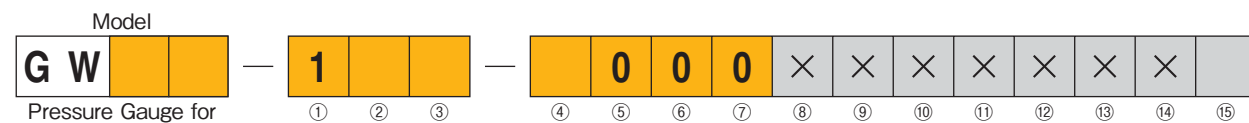


GW35·45

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Model number configuration

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



Model number		Selective spec.		Additional spec. (Option)		
Model	3	5	Grade	Mounting	Case material / Outer	Wetted parts material
			BA	φ35 Back connection	SUS304	SUS316L
	4	5	EP	φ35 Back connection	SUS304	SUS316L (Polished gas contact surface)
			BA	φ40 Back connection	SUS304	SUS316L
			EP	φ40 Back connection	SUS304	SUS316L (Polished gas contact surface)
① Mounting		1	D-frame (Center back screw, stem)			
② Connection		E	9/16-18UNF (1/4CVC Male nut)			
		G	9/16-18UNF (1/4CVC Female nut)			
		Q	9/16-18UNF (1/4UJR Female nut, With pure ring)			
			Other specifications			
③ Wetted parts by grade		3	SUS316L: BA Grade			
		4	SUS316L: EP Grade			
④ Pressure range		1	-0.1 to 0.3, 0.4, 0.6, 1, 1.5, 2MPa Compound gauge			
		2	0 to 0.4, 0.6, 1, 1.5, 2, 2.5, 3.5MPa			
⑤ Accuracy		0	Standard (±3.0%F.S.)			
⑥ Pointer		0	Standard type			
⑦ Glass		0	Standard			
⑮ Document		0	Nil			
		1	Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, mill test report, strength calculation, attended inspection			

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

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