

PRESSURE GAUGES

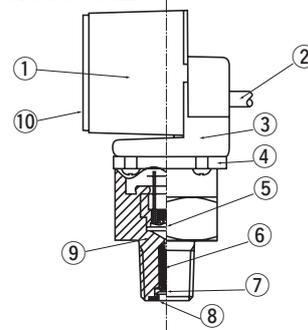
PG-35H



FEATURES

- For high pressure
- For corrosive gases and liquids compatible with SUS316L stainless steel diaphragm
- Compact • Light weight • Drip-proof structure (30 mm sq • 200 g • IP65)
- Low consumption by nondisplay mode
- Set data protection by panel lock function

INTERNAL STRUCTURE (R 1/4)



	Part name	Material
①	Shield case	PBT (Polybutyleneterephthalate)
②	Push cable	Vinyl chlorid resin
③	Adaptor	Aluminum
④	Sensor holder	SUS316L
⑤	Diaphragm	SUS316L
⑥	M4 screw	SUS303 (R2 only)
⑦	Push nut	Spring steel (R2 only)
⑧	Plug	SUS303 (R2 only)
⑨	Fitting	R2 : Iron, Nickel G3 : SUS316
⑩	Panel sheet	Polyester

MODEL NUMBER DESIGNATION

PG - 35 H - 104 R - NR 2 B

Series name

Pressure range

104 : - 0.1 ~ 10 MPa
354 : - 0.1 ~ 35 MPa

Pressure reference

R : Compound pressure (Negative pressure ~ Positive pressure)

Port

Blank : Stem mount
B : Back mount

Fitting

R2 : R 1/4
G3 : G 3/8

Switch output interface

N : NPN open collector
P : PNP open collector

LIST OF MODEL NUMBERS

Port	Fitting	Pressure reference		Gauge	
		Switch output interface	Rated pressure range	-0.1 ~ 10 MPa	-0.1 ~ 35 MPa
Stem mount	R2 (R 1/4)	NPN		PG-35H-104R-NR2	PG-35H-354R-NR2
		PNP	⊕	PG-35H-104R-PR2	PG-35H-354R-PR2
	G3 (G 3/8)	NPN		PG-35H-104R-NG3	PG-35H-354R-NG3
		PNP	⊕	PG-35H-104R-PG3	PG-35H-354R-PG3
Back mount	R2 (R 1/4)	NPN	⊕	PG-35H-104R-NR2B	PG-35H-354R-NR2B
		PNP	⊕	PG-35H-104R-PR2B	PG-35H-354R-PR2B
	G3 (G 3/8)	NPN	⊕	PG-35H-104R-NG3B	PG-35H-354R-NG3B
		PNP	⊕	PG-35H-104R-PG3B	PG-35H-354R-PG3B

※ Verify the above model numbers when placing orders.
Marked ⊕ is manufactured upon receipt of order basis.

PG-35H

PRESSURE GAUGES

STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C and excitation voltage of 12 VDC.

Item	Model number	PG-35H		
		104R	354R	
General specifications	Pressure reference	Gauge		
	Pressure medium	R2	Corrosive hydraulic oil compatible with Iron and Nickel	
		G3	Corrosive gases/liquids compatible with SUS316 and SUS316L	
	Rated pressure range	MPa	- 0.1 ~ 10	- 0.1 ~ 35
	Maximum pressure	MPa	20	50
	Break-down pressure	MPa	40	50
	Operating temp. range	°C	- 10 ~ 50	
	Compensated temp. range	°C	0 ~ 50	
	Operating humidity	%RH	35 ~ 85 (No condensation)	
	Protection grade		IP65	
	Pressure Port		R 1/4, G 3/8	
	Type of mounting		Stem mount, Back mount	
	Material of pressure port attachment		SUS 316L	
	Net weight	g	Approx. 200(Including 2 m cable)	
	Thermal error		± 3 %F.S. (0 ~ 50 °C)	
	Insulation resistance		100 MΩ minimum	
	Dielectric strength		500 VAC 1 minute	
	Input voltage		10.8 ~ 30 VDC (Including ripple percentage)	
Consumption current		50 mA maximum		
Display	Display element	Full 3-digit LED		
	Rated display range	MPa	- 0.10 ~ 9.99	- 00.1 ~ 35.0
	Multiplier settings		Max. 11 settings	
	Display cycle		Approx. 4 times/s	
	Negative pressure display		“-” LED is ON	
	Display accuracy		± 2 %F.S.	
Switch output	Output status		NPN/PNP	
	Output mode		2-point output (Transistor, Open collector output)	
	Output mode		Separate mode / window comparator mode	
	Switching capacity		30 VDC 100 mA maximum	
	Residual voltage		1.2 V maximum (NPN), 2.2 V maximum (PNP)	
	State indication		Output 1 (Green LED), Output 2 (Red LED) Lighted when output is ON.	
	Switch hysteresis		0 ~ 300 counts Adjustable	
	Repeatability		± 0.2 %F.S. ± 1 count	
Response		Approx. 5, 25, 250, 2500 ms adjustable		
Analog output	Output mode		3 modes	
	Output voltage V zero : Pin=0, V span : Pin=0 ~ Pin (H)		1 ~ 5 V (R mode 104R-ZERO : 1.04 ± 0.2 V, SPAN : 3.96 ± 0.2 V, 354R-ZERO : 1.01 ± 0.2V, SPAN : 3.99 ± 0.2 V) G mode ZERO : 1 ± 0.2 V, SPAN : 4 ± 0.2 V ※ The accuracy at V mode is not guaranteed.	
	Impedance		10 kΩ	
	Resolution		1/204(Approx. 20 mV / Approx. 0.5%F.S.)	

ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions	Permissible change
Vibration	10 ~ 500 Hz, 98.1 m/s ² or 1.5 mm P-P, 3 directions for 2 hours each	Pressure indication, switch operating points and analog output variation : ± 2 %F.S. maximum each after test
Shock	490 m/s ² , 3 directions for 3 times each	
Pressure cycling	0 ~ Rated pressure, 10 ⁶ cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	

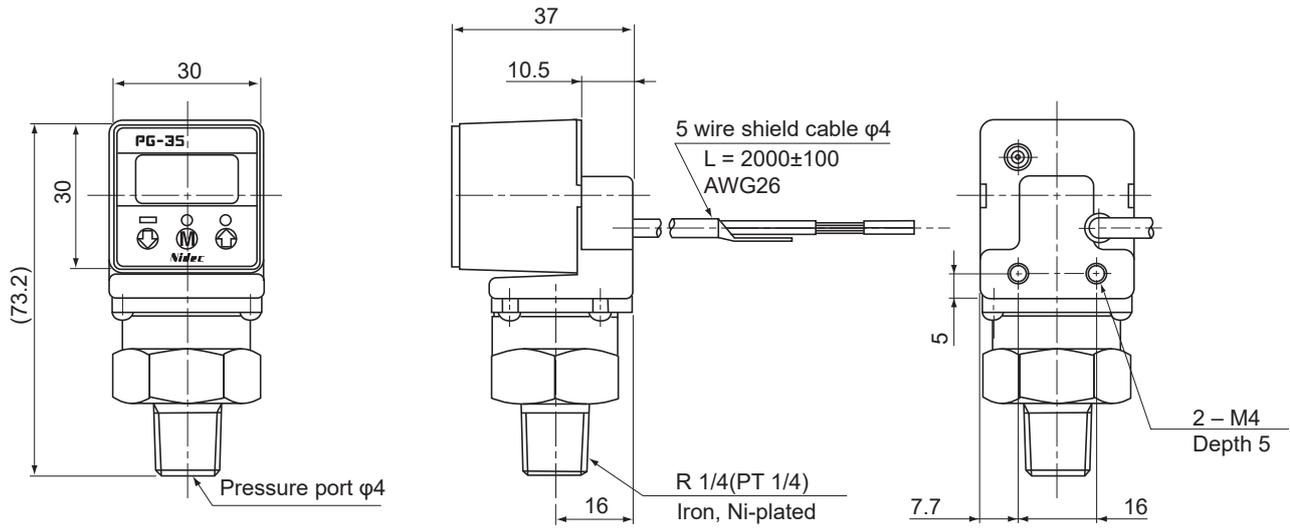
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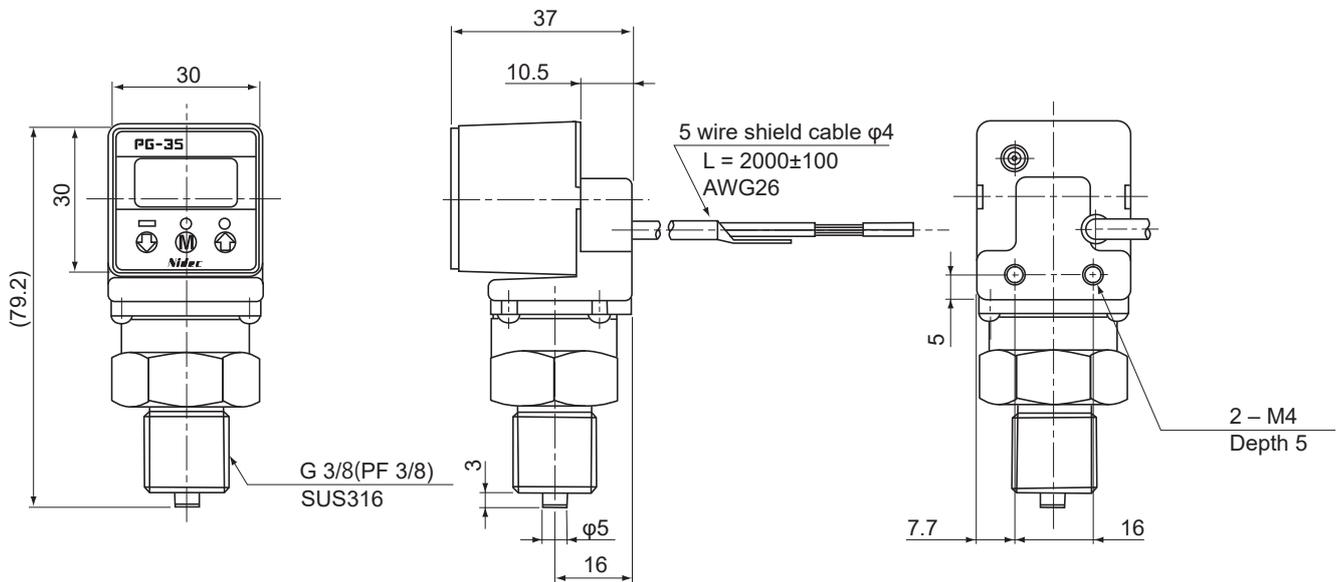
OUTLINE DIMENSIONS

Unless otherwise specified tolerance : ± 0.5 (Unit: mm)

● Fitting R2 (R 1/4)



● Fitting G3 (G 3/8)



Wire color	Connection
Brown	Power ⊕
Gray	Analog output
Black	Switch output 1
White	Switch output 2
Blue	Common
Shield	Fitting

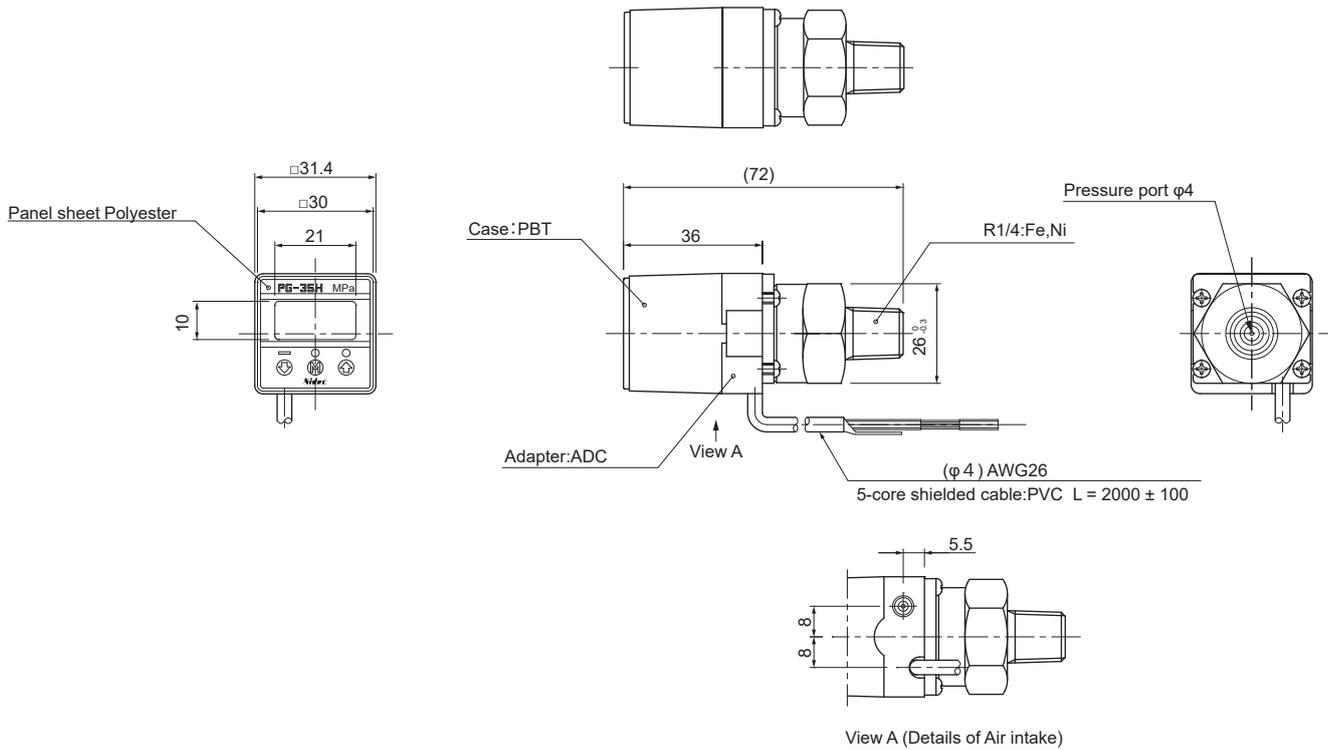
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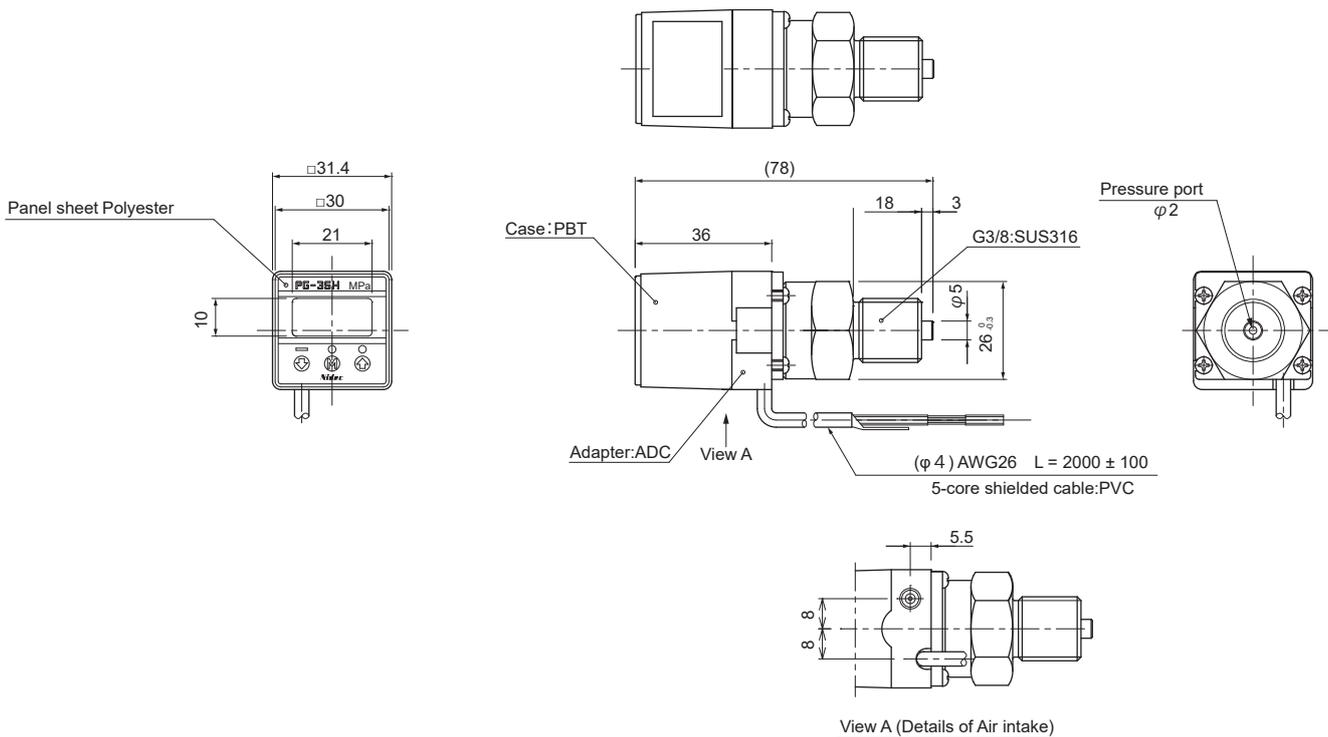
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● Fitting R2 (R 1/4) The horizontal installation type



● Fitting G3 (G 3/8) The horizontal installation type



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■ Piping

Use a wrench on the aluminum die-casting. Do not hold the plastic case when tightening.
Apply sealing tape at the male screw area(R2 type)to protect against air leaks.

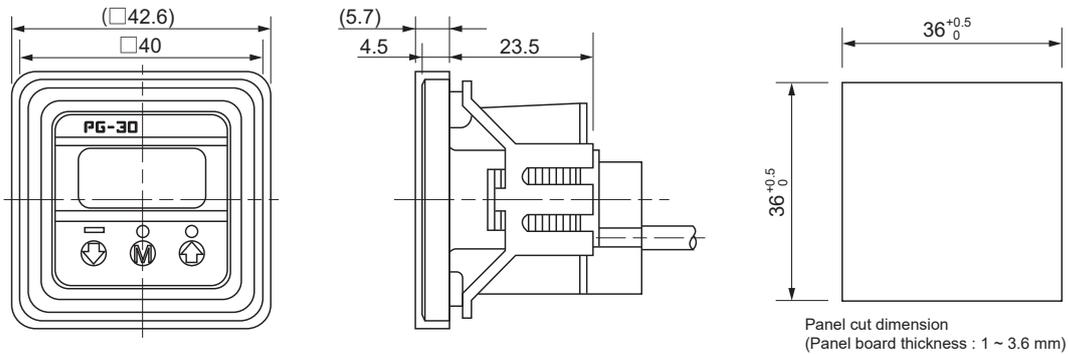
■ ACCESSORIES (Sold separately)

Name	Series name	Contents	Applicable model
Panel holder set	ACPG-003	Panel holder cover Panel holder Panel stopper (2pcs.)	PG-30 · PG-35 · PG-75 PG-35H · PG-35L · PS30
Holder cover set (For protecting gauge operating panel)	ACPG-004	Panel holder cover Panel holder	PG-30 · PG-35 · PG-75 PG-35H · PG-35L · PS30
Holder stopper set	ACPG-007	Panel holder Panel stopper (2pcs.)	PG-30 · PG-35 · PG-75 PG-35H · PG-35L · PS30

■ HOW TO MOUNT OPTIONAL ACCESSORIES (Sold separately)

(Unit: mm)

● PG-30 · PG-35 · PG-35H · PG-35L · PG-75 · PS30 Panel cut holder set & holder cover set



● Panel holder cover set

