

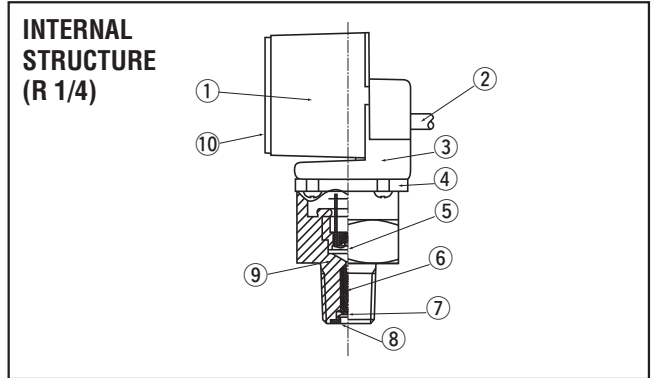
PRESSURE GAUGES

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



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-35H-104R-NR2

Series name

Pressure range

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

Pressure reference

R : Compound pressure (Negative pressure ~ Positive pressure)

Fitting

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

Switch output interface

N : NPN open collector
P : PNP open collector

LIST OF MODEL NUMBERS

Fitting	Pressure reference		Gauge	
	Switch output interface	Rated pressure range	-0.1 ~ 10 MPa	-0.1 ~ 35 MPa
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

※ Verify the above model numbers when placing orders.

Marked ➡ is manufactured upon receipt of order basis.

STANDARD SPECIFICATIONS

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

Item		Model number	PG-35H	
			104R	354R
General specifications	Pressure reference		Gauge	
	Pressure medium	R2	Corrosive hydraulic oil compatible with Iron or Nickel	
		G3	Corrosive gases/liquids compatible with SUS 316 and SUS 316L	
	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	
	Type of mounting		R 1/4, G 3/8	
	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 V AC 1 minute	
	Input voltage		10.8 ~ 30 V DC (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 %	
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 V DC 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	

ENVIRONMENTAL CHARACTERISTICS

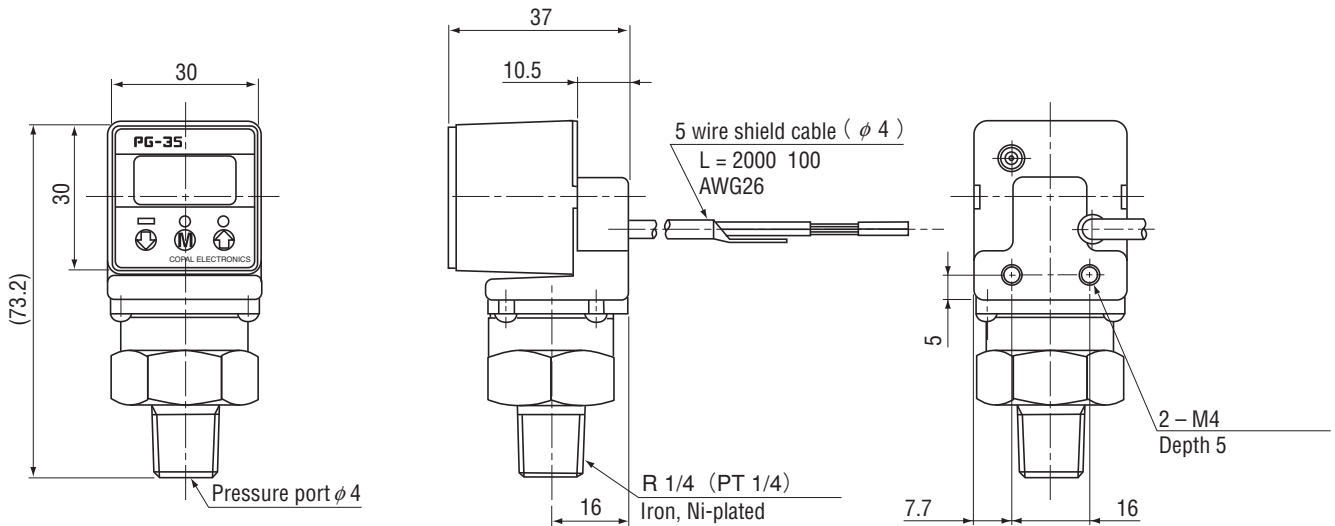
Test item	Test conditions	Permissible change
Vibration	10 ~ 500 Hz, 98.1 m/s ² or 1.5 mm P-P, 3 directions for 2 hours each	Pressure indication, switch operating points and analog output variation : ± 2 %F.S. maximum each after test
Shock	490 m/s ² , 3 directions for 3 times each	
Pressure cycling	0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

PG-35H PRESSURE GAUGES

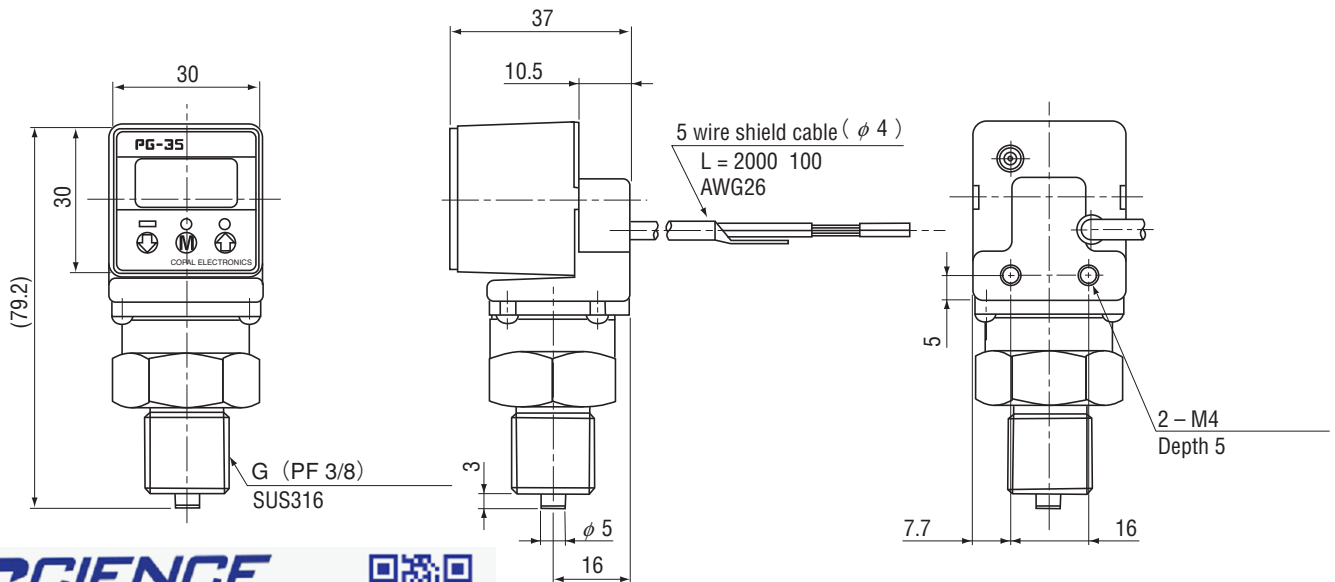
OUTLINE DIMENSIONS

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

Fitting R2 (R 1/4)



Fitting G3 (G 3/8)



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

※ Accessories (sold separately) are available for common use with PG-30, PG-35, PG-75 series. (P.173)