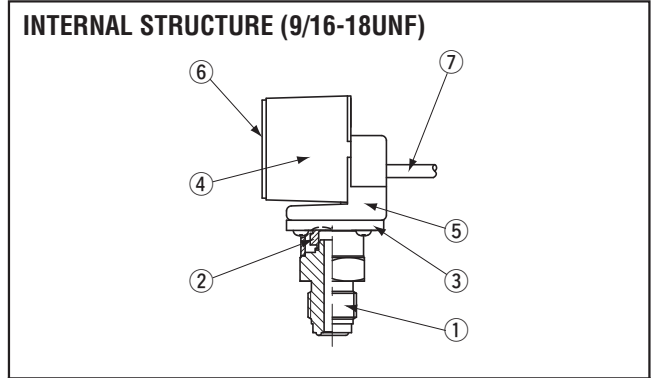


PRESSURE GAUGES

PG-35L



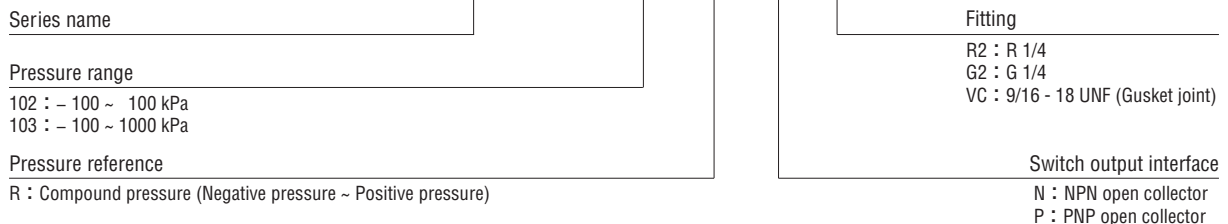
FEATURES

- For high vacuum pressure
- For corrosive gases and liquids compatible with SUS316L stainless steel diaphragm
- Compact • Light weight • Drip-proof structure (30 mm • 200 g • IP-65)
- Low consumption by nondisplay mode
- Set data protection by panel lock function

Part name		Material
①	Fitting	SUS316L
②	Sensor module (oil less)	
③	Sensor holder	
④	Housing (Aluminum coating)	PBT (UL-94-HB)
⑤	Adapter	ADC 10, 12
⑥	Panel sheet	Polyester (UL746)
⑦	Shielded cable	Vinyl chlorid resin (UL2844)

MODEL NUMBER DESIGNATION

PG-35L-102R-NVC



LIST OF MODEL NUMBERS

Fitting	Pressure reference		Gauge	
	Switch output interface	Rated pressure range	-100 ~ 100 kPa	-100 ~ 1000 kPa
R2 (R 1/4)	NPN		PG-35L-102R-NR2	PG-35L-103R-NR2
	PNP		☞ PG-35L-102R-PR2	☞ PG-35L-103R-PR2
G2 (G 1/4)	NPN		PG-35L-102R-NG2	PG-35L-103R-NG2
	PNP		☞ PG-35L-102R-PG2	☞ PG-35L-103R-PG2
VC (9/16-18 UNF)	NPN		PG-35L-102R-NVC	PG-35L-103R-NVC
	PNP		☞ PG-35L-102R-PVC	☞ PG-35L-103R-PVC

※Verify the above model numbers when placing orders.

Marked ☞ is manufactured upon receipt of order basis.

PG-35L

PRESSURE GAUGES

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-35L		
		102R	103R	
General specifications	Pressure reference	Gauge		
	Pressure medium	Corrosive gases/liquids compatible with SUS 316L		
	Rated pressure range	kPa	-100 ~ 100	-100 ~ 1000
	Maximum pressure	kPa	200	1500
	Break-down pressure	kPa	300	2000
	Operating temp. range	°C	-10 ~ 50	
	Compensated temp. range	°C	0 ~ 50	
	Operating humidity	%RH	35 ~ 85 (No condensation)	
	Protection grade		IP-65	
	Type of mounting		R 1/4, G 1/4, VC (9/16 - 18 UNF)	
	Material of pressure port attachment		SUS 316L	
	Net weight	g	Approx. 150 (Including 2 m cable)	
	Thermal error		± 3 %F.S. (0 ~ 50 °C)	
	Insulation resistance		50 MΩ minimum	
	Dielectric strength		125 V DC 1 minute	
	Vacuum working pressure		1.4 × 10 ⁻⁴ Pa abs minimum	
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	kPa	-99.9 ~ 99.9	-100 ~ 999
	Multiplier settings		Max. 11 settings	
	Display cycle		Approx. 4 times/s	
	Negative pressure display		“-” LED is ON	
Display accuracy		± 1 % (Without sensor's error)		
Switch output	Output status	NPN/PNP		
	Output mode	2-point output (Transistor, Open collector output)		
	Switching capacity	Separate mode / window comparator mode		
	Residual voltage	30 V DC 100 mA maximum		
	State indication	1.2 V maximum (NPN), 2.2 V maximum (PNP)		
	Switch hysteresis	Output 1 (Green LED), Output 2 (Red LED) Lighted when output is ON.		
	Repeatability	0 ~ 300 counts Adjustable		
	Response	±0.2 %F.S. ±1 count		
Analog output	Output mode	Approx. 5, 25, 250, 2500 ms adjustable		
	Output mode	3 modes		
	Output voltage V zero : Pin=0, V span : Pin=0~Pin (H)	1~5 V (G/V mode ZERO : 1 ± 0.2 V, SPAN : 4 ± 0.2 V) R mode ZERO : 3 ± 0.2 V, SPAN : 2 ± 0.2 V)	103 R (R mode)	ZERO : 1.36 ± 0.2 V SPAN : 3.64 ± 0.2 V
	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	※1 ± 2 %F.S. maximum after test [Amount of analog output fluctuation is permitted by adding conversion error of 20 mV.]
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.	
EMC	EMI : EN 55011 Group 1, class B (1998) EMS : EN61326-1 (1997) / A1 : 1998, EN61000-6-2 (1999)	※1 ± 5 %F.S. maximum during test

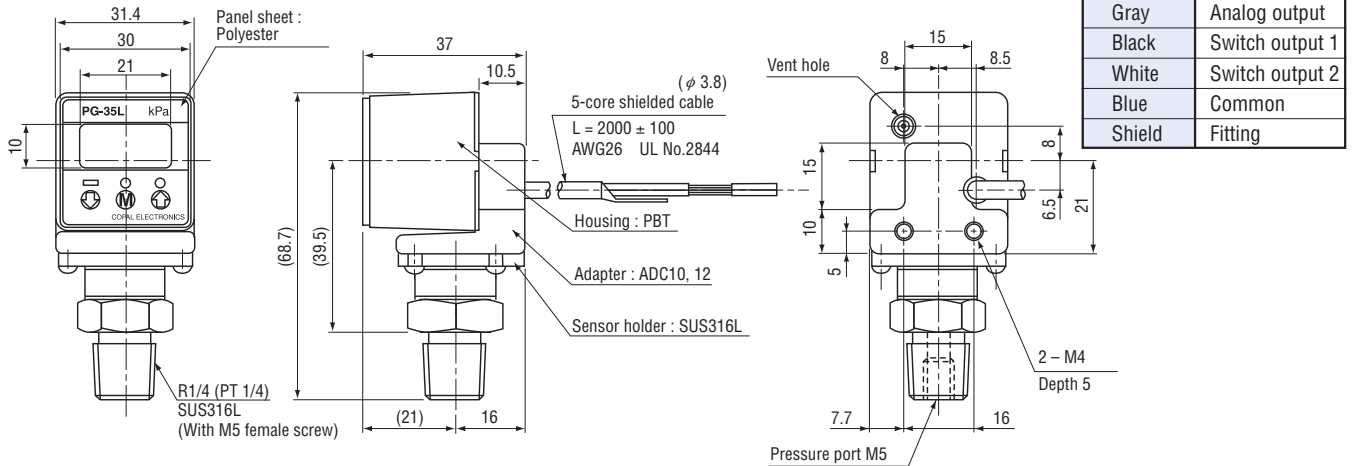
※ 1 Change in the pressure indication, switch operating points and analog output.

PG-35L PRESSURE GAUGES

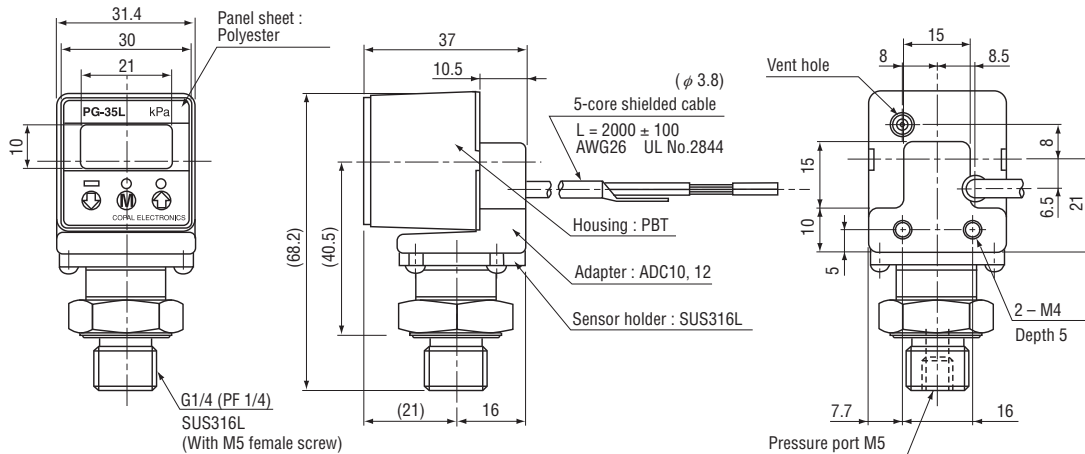
OUTLINE DIMENSIONS

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

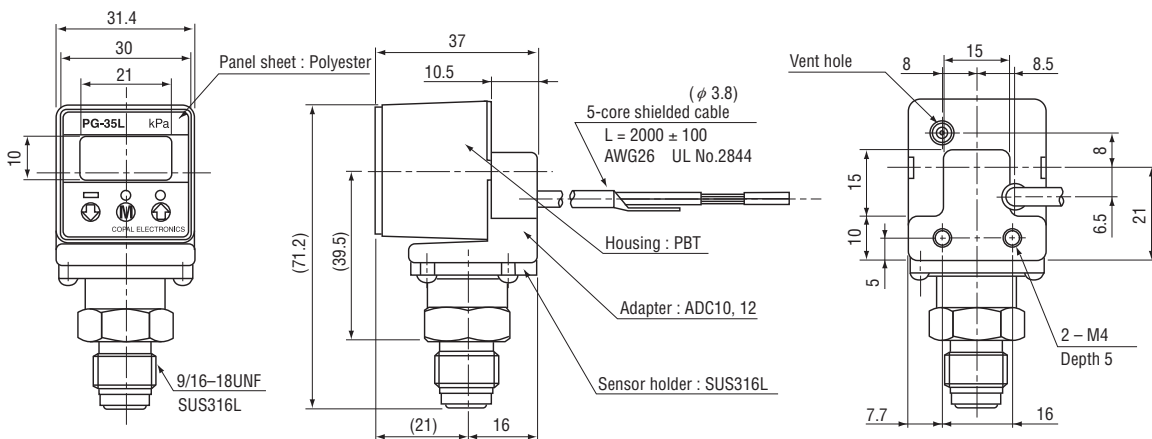
● Fitting R2 (R 1/4)



● Fitting G2 (G 1/4)



● Fitting VC (9/16 - 18 UNF)



※ Accessories (sold separately) are available for common use with PG-30, PG-35 series. (P. B-172)