



Strong structure with IP67 degree of protection

PA-840/PA-848

SERIES

Pressure transducer

A **Nidec** Group Company
COPAL ELECTRONICS
—All for dreams

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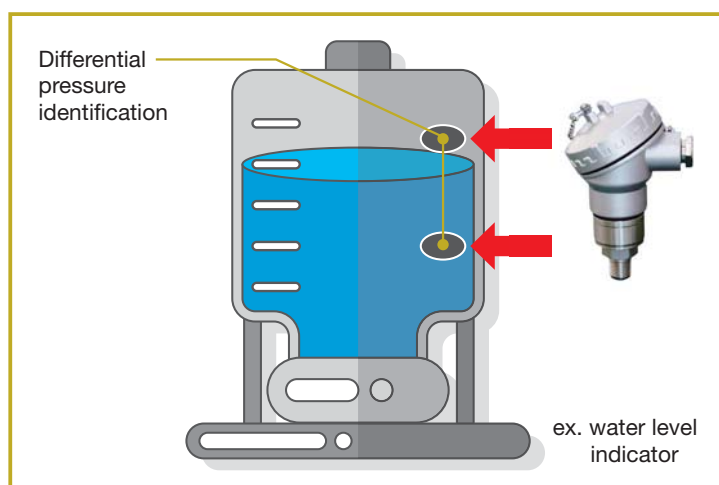
Features

- Pressure sensors with IP67 degree of protection for outside-house applicants.
- Operation temperature up to 100°C~ for pressure diaphragm.
- Voltage Output of 1~5V DC with built-in amplifier (PA-840), Current output of 4~20mA DC (PA-848).
- High reliability (SUS316L diaphragm, oil-filled) by using double diaphragm structure.
- The most miniaturized terminal-assembly-type pressure sensor for outside-house applicants.



It is with a tough structure, and the terminal base's top cover can be replaced by cable, which is suitable for outdoors under harsh environment.

Applications



Application as require for waterproof, it is suitable for outdoors equipment plant and water treatment device.

● Model number designation

PA - 840 - 102R - R2

Series name	Rated pressure range	Pressure reference	Fitting
PA-840 : Output voltage (1~5V)	102R : -0.1~0.1 MPa 352R : -0.1~0.35 MPa	G : Gauge pressure R : Gauge pressure (Compound) A : Absolute pressure	R2 : R 1/4 G2 : G 1/4
PA-848 : Output current (4~20mA)	103G : 0~1.0 MPa 353G : 0~3.5 MPa 102A : 0~0.1 MPa abs.		

● List of model numbers

Series name (Reference)	Rated pressure	Fitting	
		R 1/4	G 1/4
PA-840 (Output voltage)	-0.1~0.1MPa	PA-840-102R-R2	PA-840-102R-G2
	-0.1~0.35MPa	PA-840-352R-R2	PA-840-352R-G2
	0~1.0MPa	PA-840-103G-R2	PA-840-103G-G2
	0~3.5MPa	PA-840-353G-R2	PA-840-353G-G2
	0~0.1MPa abs.	PA-840-102A-R2	PA-840-102A-G2
PA-848 (Output current)	-0.1~0.1MPa	PA-848-102R-R2	PA-848-102R-G2
	-0.1~0.35MPa	PA-848-352R-R2	PA-848-352R-G2
	0~1.0MPa	PA-848-103G-R2	PA-848-103G-G2
	0~3.5MPa	PA-848-353G-R2	PA-848-353G-G2
	0~0.1MPa abs.	PA-848-102A-R2	PA-848-102A-G2

● Standard specifications

Item		Specification				
Pressure range		102R	352R	103G	353G	102A
Pressure reference		Gauge	Gauge	Gauge	Gauge	Absolute
Rated pressure range		-0.1~0.1MPa	-0.1~0.35MPa	0~1.0MPa	0~3.5MPa	0~0.1MPa abs.
Maximum pressure		0.2MPa	0.7MPa	2MPa	4MPa	0.2MPa abs.
Burst pressure		0.3MPa	1.05MPa	3MPa	4.5MPa	0.3MPa abs.
Operating temp. range	PA-840 PA-848	Ta (No freezing) : -20~80°C / Pressure port : -20~100°C Ta (No freezing) : -20~70°C / Pressure port : -20~100°C				
Compensated temp. range		0~50°C				
Operating humidity		35~85%RH (No condensation)				
Storage temp. range		-20~80°C				
Media		Gas and liquid which does not corrode SUS316L Gas and liquid which does not corrode O-ring (Fluoro rubber) G2 Fitting				
Pressure port		R 1/4, G 1/4				
IP protection		IP67				
Weight		Approx. 250g				

● Analog output

PA-840

Item		Specification				
Pressure range		102R	352R	103G	353G	102A
Output voltage				1~5V		
Zero voltage		3±0.05V	1.89±0.05V	1±0.05V	1±0.05V	1±0.05V
Span voltage				4±0.1V		
Linearity / Hysteresis				±0.5% FS		
Thermal error	Zero			±0.06% FS/°C		
	Span			±0.06% FS/°C		
Operating Voltage		10.8~26.4V DC (including ripple)				
Consumption Current		20mA maximum				

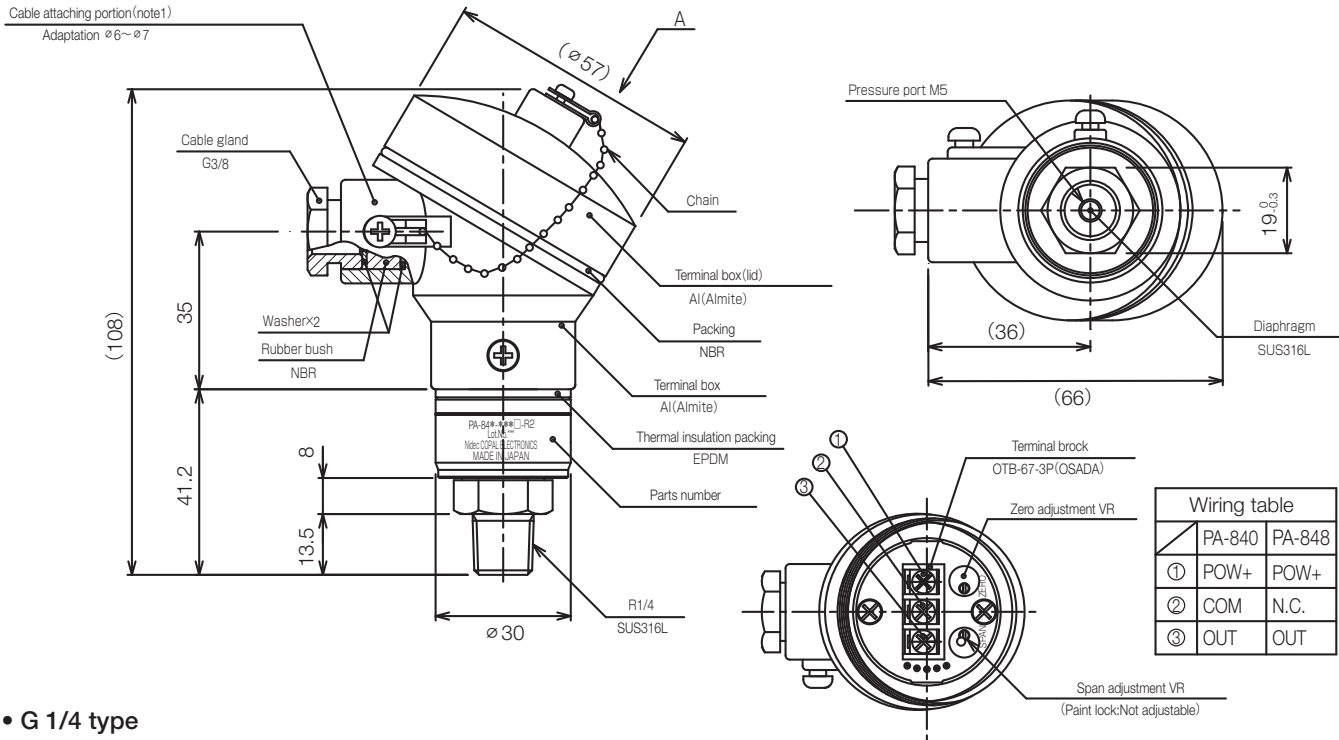
PA-848

Item		Specification				
Rated pressure		102R	352R	103G	353G	102A
Output current				4~20mA		
Zero current		12±0.2mA	7.56±0.2mA	4±0.2mA	4±0.2mA	4±0.2mA
Span current				16±0.4mA		
Linearity / Hysteresis				±0.5%FS		
Thermal error	Zero			±0.06%FS/°C		
	Span			±0.06%FS/°C		
Load resistance		500Ω maximum				
Operating Voltage		21.6~26.4V DC (including ripple)				

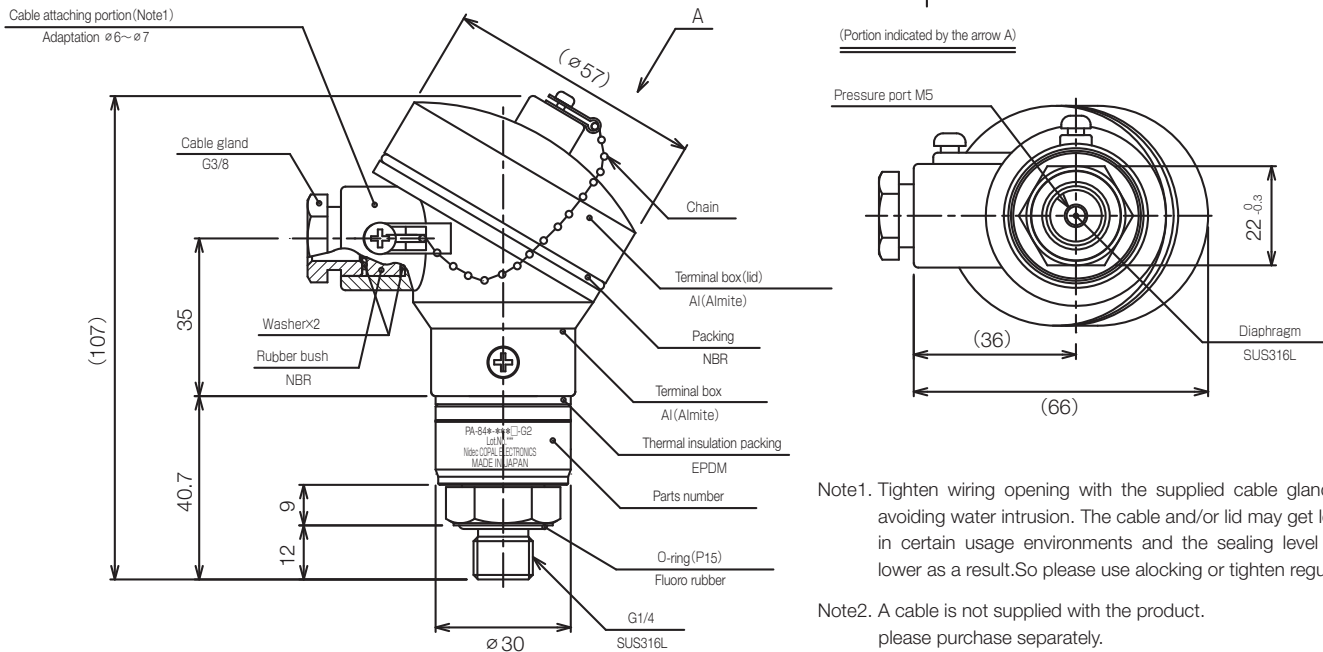
● Outline dimensions

• R 1/4 type

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



• G 1/4 type



Note1. Tighten wiring opening with the supplied cable gland for avoiding water intrusion. The cable and/or lid may get loose in certain usage environments and the sealing level may lower as a result. So please use a locking or tighten regularly.

Note2. A cable is not supplied with the product. please purchase separately.

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• Specifications are subject to change without notice.

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