



Strong structure with IP67 degree of protection

PA-840 / PA-848

SERIES

Pressure transducer

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

Pressure transducer



PA-840/PA-848 SERIES

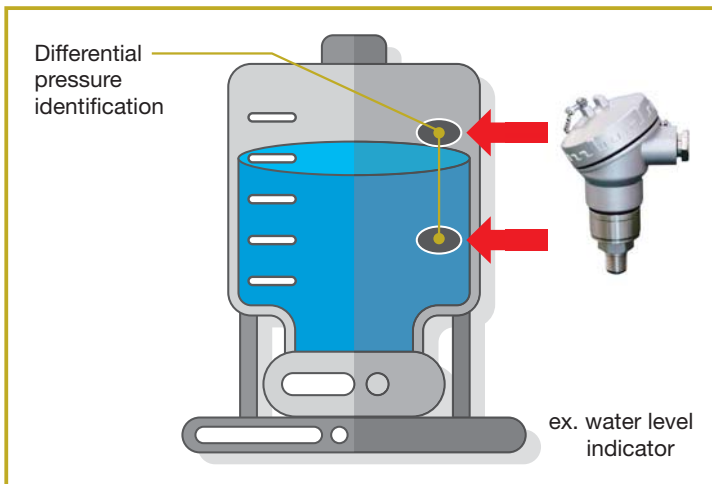
Features

- 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				
	102R	352R	103G	353G	102A
Pressure range					
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	Ta (No freezing) : -20~80°C / Pressure port : -20~100°C			
Compensated temp. range	PA-848	Ta (No freezing) : -20~70°C / Pressure port : -20~100°C			
Operating humidity	0~50°C				
Storage temp. range	35~85%RH (No condensation)				
Media	-20~80°C				
Pressure port	Gas and liquid which does not corrode SUS316L Gas and liquid which does not corrode O-ring (Fluoro rubber) G2 Fitting				
IP protection	R 1/4, G 1/4				
Weight	IP67				
	Approx. 250g				

● Analog output

PA-840

Item	Specification				
	102R	352R	103G	353G	102A
Pressure range					
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

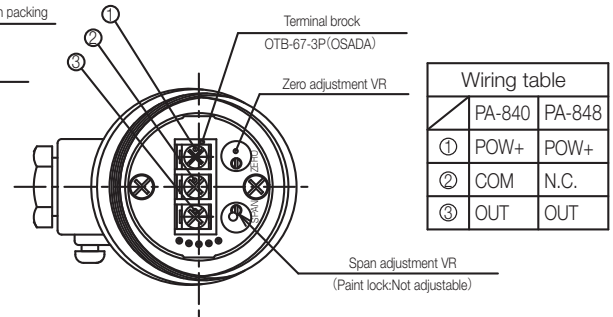
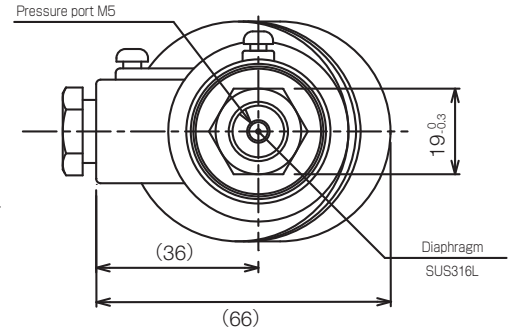
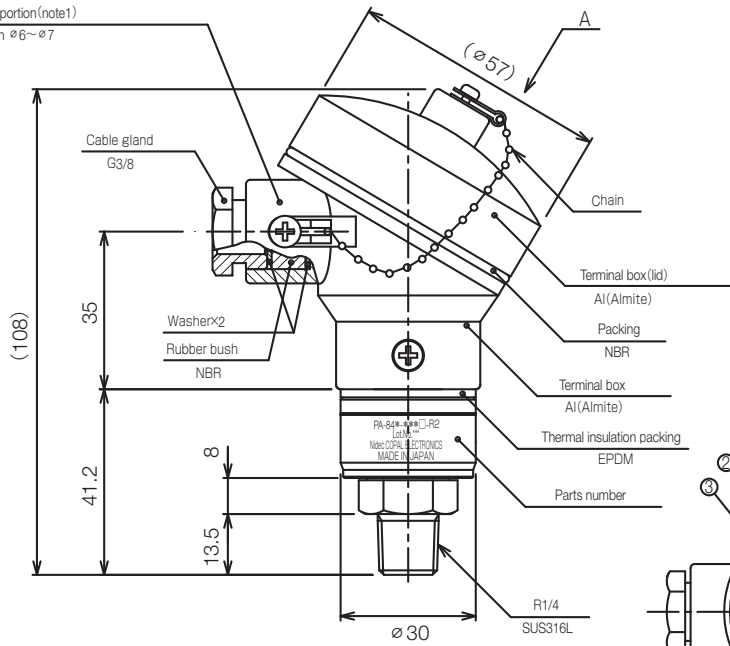
Item	Specification				
	102R	352R	103G	353G	102A
Rated pressure					
Output current			4~20mA		
Zero current	12±0.2mA	7.56±0.2mA	4±0.2mA	4±0.2mA	4±0.2mA
Span current			16±0.4mA		
Linearity / Hysteresis	±0.5%FS				
Thermal error	Zero	±0.06%FS/°C			
	Span	±0.06%FS/°C			
Load resistance	500Ω maximum				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

● Outline dimensions

● R 1/4 type

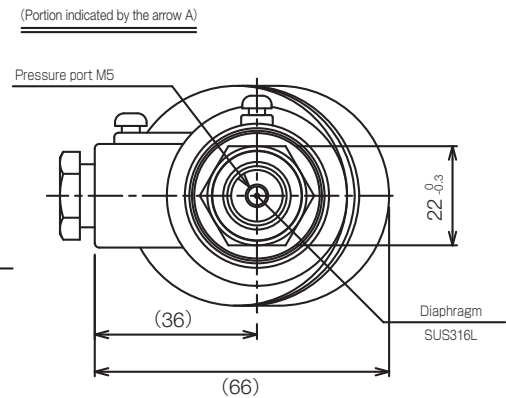
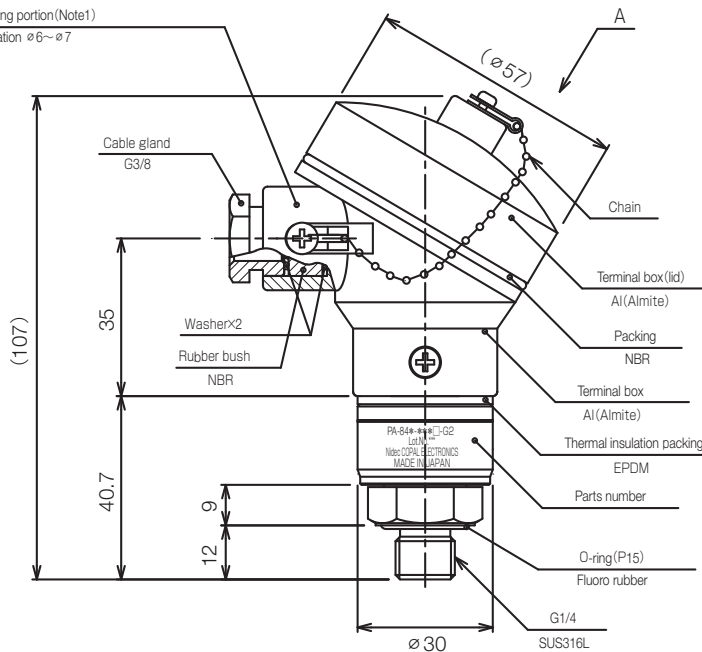
Unless otherwise specified, tolerance : ±0.5 (Unit: mm)

Cable attaching portion(note1)
Adaptation $\phi 6-\phi 7$



● G 1/4 type

Cable attaching portion(Note1)
Adaptation $\phi 6-\phi 7$



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.

A **Nidec** Group Company

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● Specifications are subject to change without notice.

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