

PRESSURE TRANSDUCERS WITH AMP.

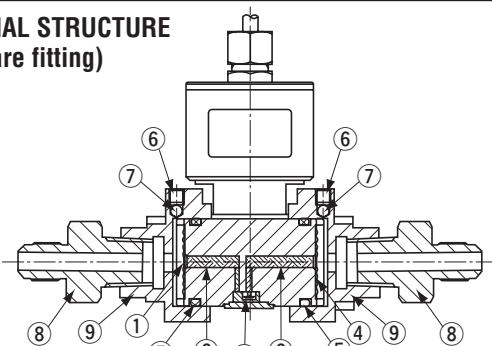
PA-838-D



■ FEATURES

- High corrosion resistance and drip-proof construction
Pressure port attachment made of SUS 316L
- Proven IP-65 grade gauge body (IP65 in accordance with IEC)
- For differential pressure
- Two types of joint are provided
Rc 1/4, 1/4 Flare fitting (7/16 - 20 UNF)

INTERNAL STRUCTURE (1/4 Flare fitting)



Part name	Material
① Stainless steel diaphragm	SUS 316L
② Sealed liquid	Silicone oil
③ Sensor chip	Silicone
④ Stainless steel diaphragm	SUS 316L
⑤ "O" ring	Fluoro-rubber
⑥ Ari-bleeding screw	SUS 304
⑦ Ceramic ball	Alumina
⑧ Flare fitting	SUS 304
⑨ Flange	

■ MODEL NUMBER DESIGNATION

PA-838 - 101 D - F2

Series name

Rated pressure range

101 : 0 ~ 10 kPa
501 : 0 ~ 50 kPa
102 : 0 ~ 100 kPa

Fitting

Blank : Rc 1/4
F2 : 1/4 Flare fitting (7/16 - 20 UNF)

Pressure reference

D : Differential

■ LIST OF MODEL NUMBERS

Fitting	Pressure reference	Differential			
		[kPa] Rated pressure range	0 ~ 10	0 ~ 50	0 ~ 100
Rc 1/4			PA-838-101D	PA-838-501D	PA-838-102D
1/4 Flare fitting (7/16 - 20 UNF)			PA-838-101D-F2	PA-838-501D-F2	PA-838-102D-F2

※ Verify the above model numbers when placing orders.

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■ STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of $25 \pm 5^\circ\text{C}$, excitation voltage of 24 V DC, load resistance of $250\ \Omega$ and line pressure of 0 MPa.

Item	Model number	PA-838					
		101D	501D	102D			
General specifications	Pressure reference	Differential					
	Rated pressure range ※ 1 kPa	10	50	100			
	Maximum pressure ※ 2 kPa	200	300	500			
	Line pressure MPa		2				
	Operating temp. range °C		– 20 ~ 70				
	Compensated temp. range °C		0 ~ 50				
	Operating humidity %RH	35 ~ 85 (No condensation)					
	Storage temp. °C	– 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)					
	Pressure medium	Corrosive gases/liquids compatible with SUS304					
	Insulation resistance MΩ minimum	100 (500 V DC)					
	Dielectric strength	500 V AC, 60 s (Leakage current 1 mA maximum)					
	Sealed liquid	Silicone oil					
	Pressure port	Rc 1/4、1/4 Flare fitting (7/16 - 20 UNF)					
Power	Net weight g	Rc 1/4 : Approx. 500, 1/4 Flare fitting : Approx. 590					
	Drip-proof structure	IP65					
Analog output	Supply voltage V DC	24 ± 10 % (Including ripple voltage)					
	Output current mA DC	4 ~ 20					
	Zero current mA (at 25 °C)	4 ± 0.2					
	Span current mA (at 25 °C)	16 ± 0.2					
	Load resistance Ω	0 ~ 500					
	Linearity/Hysteresis %F.S.	± 0.5					
	Thermal error	ZERO %F.S./°C	± 0.10	± 0.05			
		SPAN %F.S./°C	± 0.10	± 0.05			
	Response ms maximum	Approx. 2					
	Gravitational effect (From horizontal position to vertical position) %F.S.	± 5	± 3	± 1			

※ 1 : Pressure range Hi side port — Lo side port : 0 ~ rated pressure

※ 2 : Please adjust load resistance at $500\ \Omega$ when exceeding rated pressure.

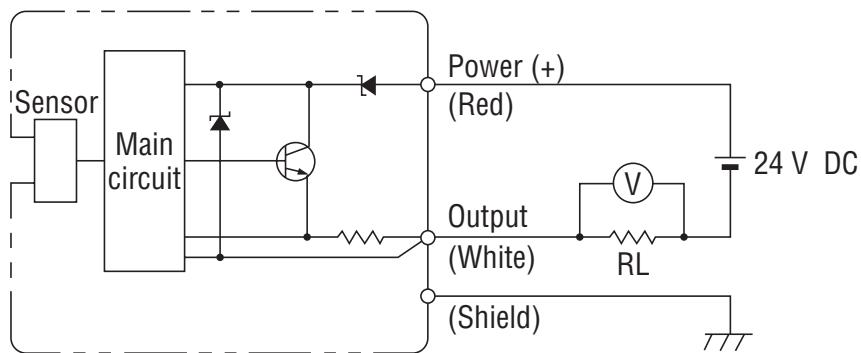
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■ ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions (At 25 ± 5 °C)	Permissible change
Vibration	10 ~ 500 Hz, 1.5 mm maximum/98.1 m/s ² , 3 directions for 2 hours each	Zero current, Span current: ± 1 %F.S. maximum each
Shock	490 m/s ² , 3 directions for 3 times each	
Pressure cycling	0 ~ Rated pressure/Rated pressure range, 10 ⁶ cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	

■ RECOMMENDED EXTERNAL SCHEMATICS

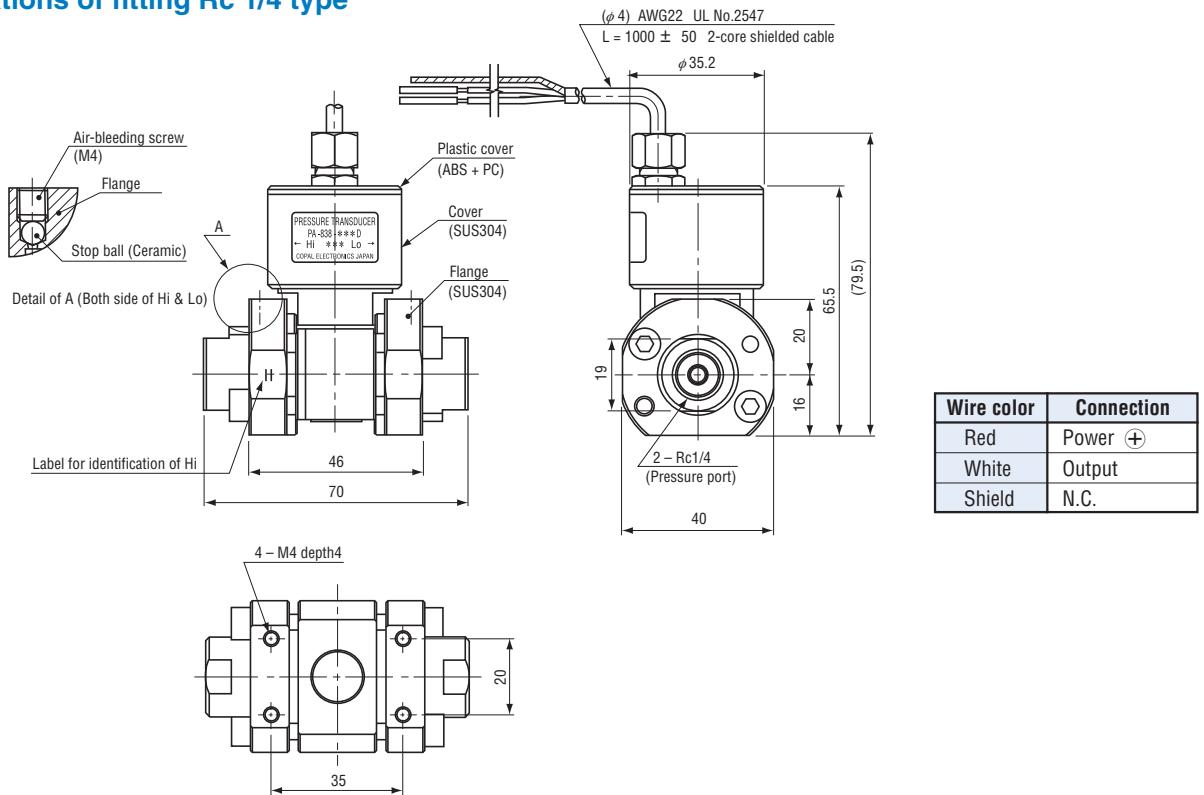


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■ OUTLINE DIMENSIONS

● Configurations of fitting Rc 1/4 type



● Configurations of 1/4 flare fitting (7/16 - 20 UNF) type

