

PRESSURE TRANSDUCERS WITH AMP.

PA-838-D



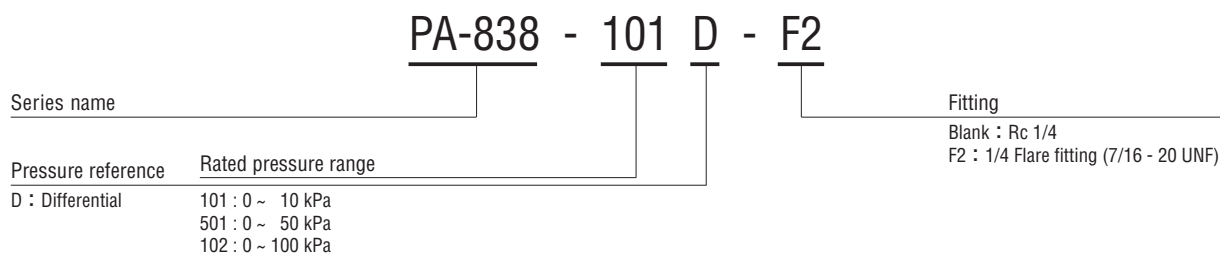
INTERNAL STRUCTURE (1/4 Flare fitting)

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	

FEATURES

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

MODEL NUMBER DESIGNATION



LIST OF MODEL NUMBERS

Pressure reference	Fitting	Differential		
		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 ± 5 °C, excitation voltage of 24 V DC, load resistance of 250 Ω 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	M Ω 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)		
	Net weight	g	Rc 1/4 : Approx. 500, 1/4 Flare fitting : Approx. 590		
	Drip-proof structure		IP-65		
Power	Supply voltage	V DC	24 \pm 10 % (Including ripple voltage)		
Analog output	Output current	mA DC	4 ~ 20		
	Zero current	mA (at 25 °C)	4 \pm 0.2		
	Span current	mA (at 25 °C)	16 \pm 0.2		
	Load resistance	Ω	0 ~ 500		
	Linearity/Hysteresis	%F.S.	\pm 0.5		
	Thermal error	ZERO %F.S./°C	\pm 0.10	\pm 0.05	
		SPAN %F.S./°C	\pm 0.10	\pm 0.05	
	Response	ms maximum	Approx. 2		
Gravitational effect (From horizontal position to vertical position)	%F.S.	\pm 5	\pm 3	\pm 1	

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

※2 : Please adjust load resistance at 500 Ω when exceeding rated pressure.

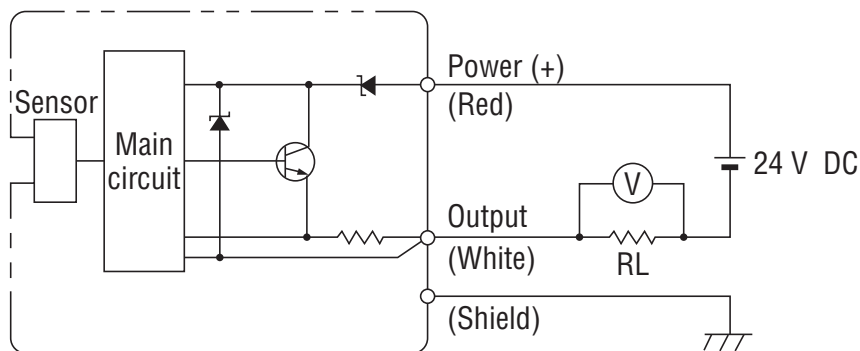
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ENVIRONMENTAL CHARACTERISTICS

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 %FS. 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



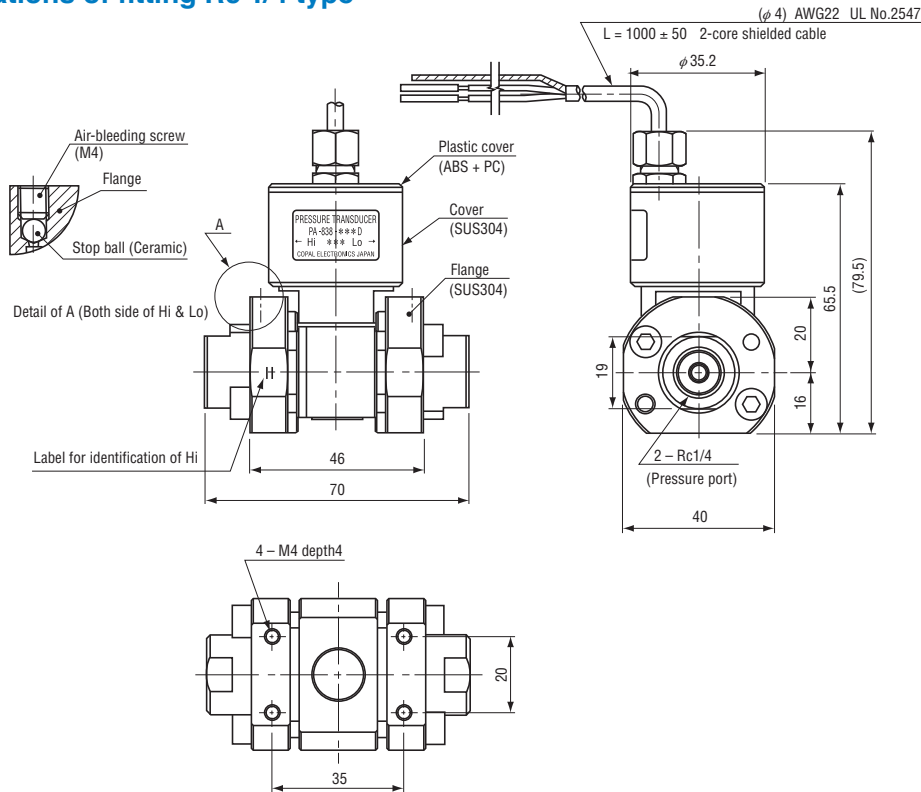
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OUTLINE DIMENSIONS

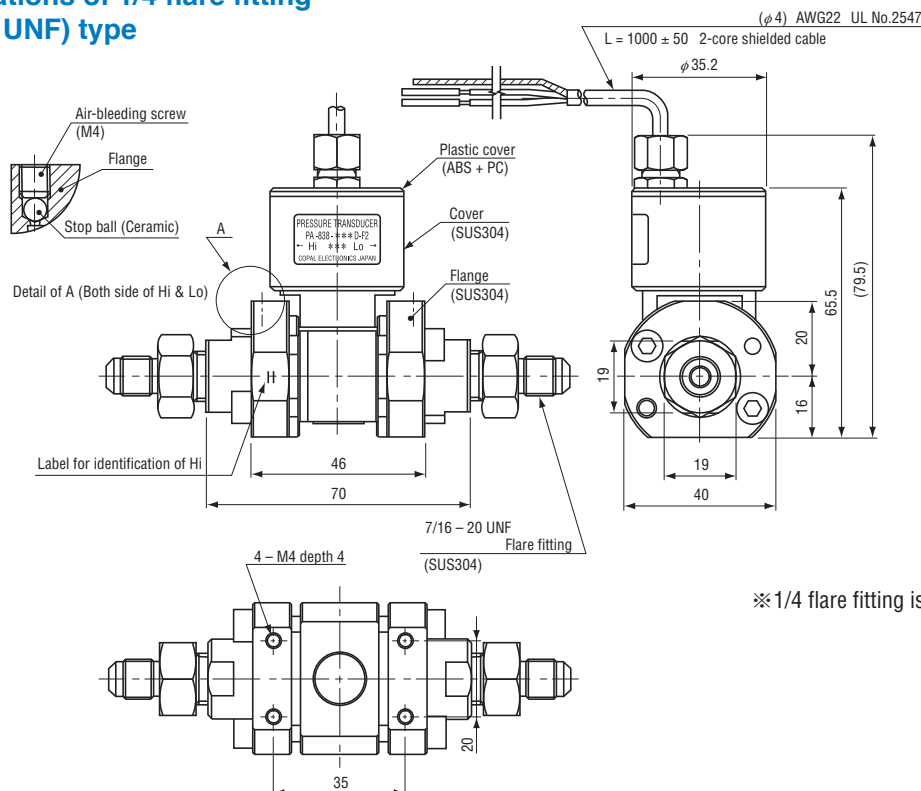
Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)

Configurations of fitting Rc 1/4 type



Wire color	Connection
Red	Power ⊕
White	Output
Shield	N.C.

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



※ 1/4 flare fitting is packed separately.