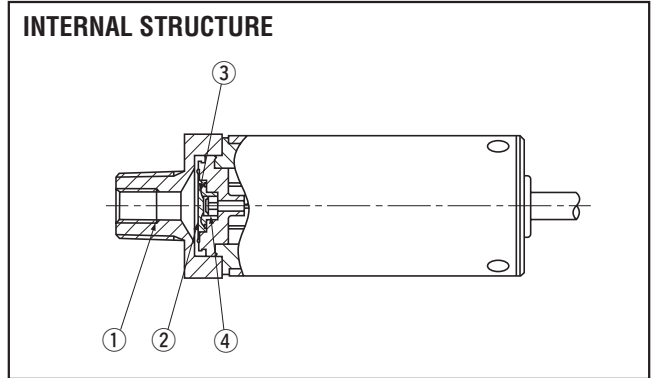
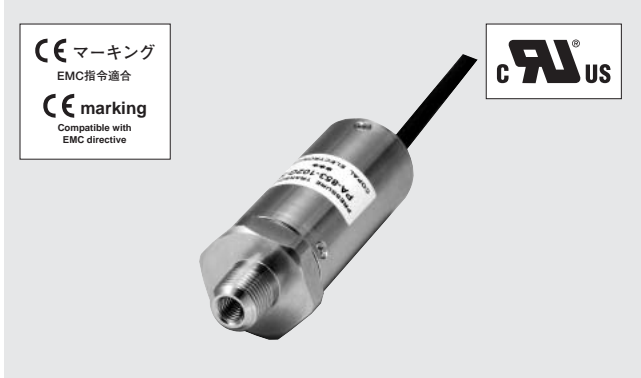


PA-853

PRESSURE TRANSDUCERS WITH AMP.

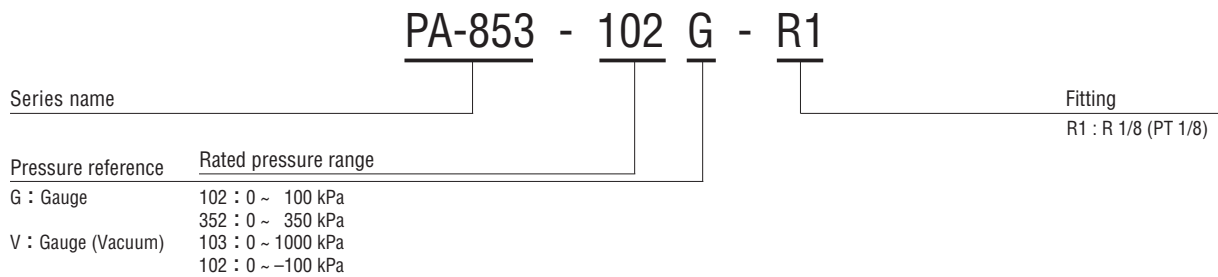


FEATURES

- Compact ϕ 20, double diaphragm structure
- All stainless (Housing and fitting)
- Built-in amplifier circuit
- Voltage output mode

	Part name	Material
①	Pressure port	SUS 316L
②	Stainless steel diaphragm	SUS 316L
③	Sealed liquid	Silicone oil
④	Sensor chip	Silicone

MODEL NUMBER DESIGNATION



LIST OF MODEL NUMBERS

Pressure reference		Gauge			
Fitting	Rated pressure range kPa	0 ~ 100	0 ~ 350	0 ~ 1000	0 ~ -100
R1 (R 1/8)		PA-853-102G-R1	PA-853-352G-R1	PA-853-103G-R1	PA-853-102V-R1

※ Verify the above model numbers when placing orders.

PA-853
PRESSURE TRANSDUCERS WITH AMP.

STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C and excitation voltage of 24 V DC.

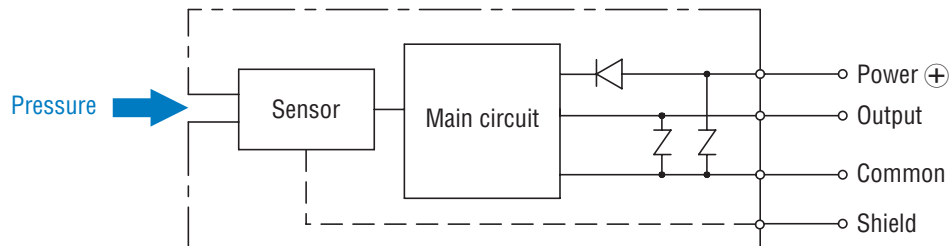
Item	Model number	PA-853				
		102G	352G	103G	102V	
General specifications	Pressure reference	Gauge				
	Rated pressure range	kPa	100	350	1000	-100
	Maximum pressure	kPa	200	700	2000	200
	Break-down pressure	kPa	300	1050	3000	300
	Operating temp. range	°C	- 20 ~ 70			
	Compensated temp. range	°C	0 ~ 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 SUS 316L			
	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		R 1/8 (PT 1/8)			
	Net weight	g	Approx. 100			
Power	Supply voltage	V DC	12 ~ 24 \pm 10 % (Including ripple percentage)			
	Consumption current maximum	mA	20			
Analog output	Output voltage	V DC	1 ~ 5			
	Zero voltage	V	1 \pm 0.04 (at 25 °C)			
	Span voltage	V	4 \pm 0.04 (at 25 °C)			
	Output current maximum	mA	1 (Load resistance 5 kΩ minimum)			
	Linearity/Hysteresis	%F.S.	\pm 0.5			
	Thermal error	ZERO %F.S./°C	\pm 0.06			
		SPAN %F.S./°C	\pm 0.06			
	Response	ms	Approx. 2			
Gravitational effect (From horizontal position to vertical position)	%F.S.	\pm 0.3	\pm 0.1	\pm 0.05	\pm 0.3	

PA-853 PRESSURE TRANSDUCERS WITH AMP.

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 voltage, Span voltage: ± 2 %F.S. maximum each after test
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.	
EMC	EMI : EN55011: 2007, A2 : 2007 Group 1, class B EMS : EN61326-1 : 2006/EN61326-2-3 : 2006 Table 2	Analog output : ± 5 %F.S. maximum each during test

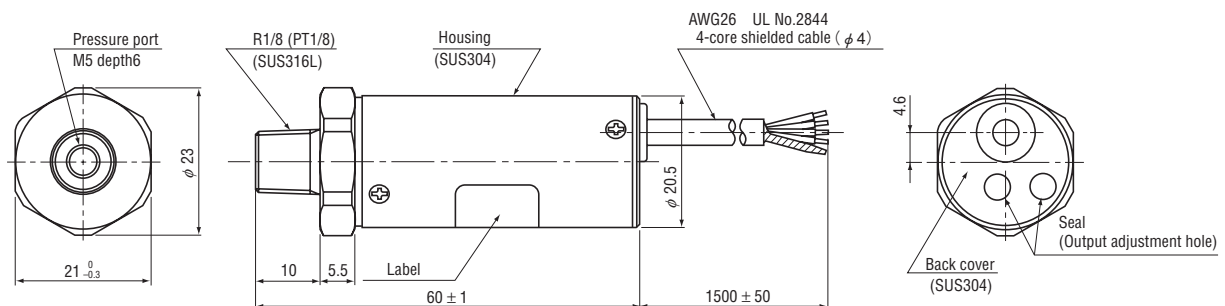
INTERNAL ELECTRICAL SCHEMATICS



OUTLINE DIMENSIONS

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

Configurations of joint R1 (R1/8) type



Wire color	Connection
Red	Power ⊕
White	Output
Black	Common
Green	N.C.
Shield	Fitting