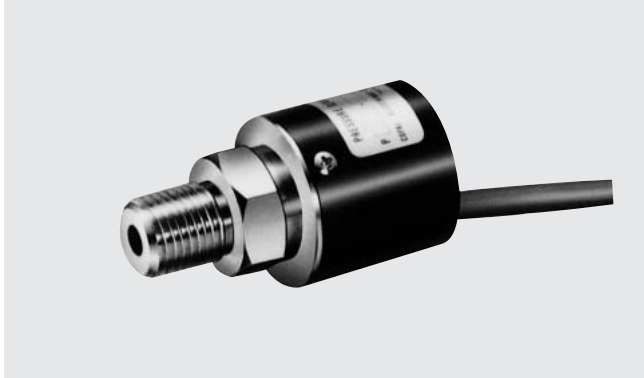


PRESSURE TRANSDUCERS WITH AMP.

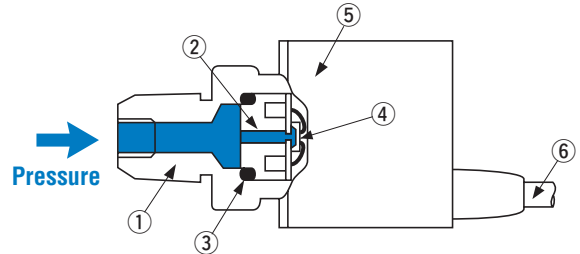
PA-500



FEATURES

- High output gain by built-in hybrid electronic amp.
- Built-in temperature compensation function (0 ~ 50 °C)
- Pressure medium compatible with both liquid and gas pressures (Gauge)

INTERNAL STRUCTURE (Gauge type)



Part name	Material
① Fitting	Brass + Nickel-plated ※1
② Glass stand seat	Borosilicated glass
③ "O" ring	Fluoro-rubber
④ Sensor chip	Silicone
⑤ Housing	Aluminum
⑥ Cable	Vinyl chloride resin

※1 SUS 304 for 102V

MODEL NUMBER DESIGNATION

PA-500 - 501 G - 06

Series name

Rated pressure range

- 101 : 0 ~ 9.81 kPa {0 ~ 0.1 kgf/cm²}
- 501 : 0 ~ 49.0 kPa {0 ~ 0.5 kgf/cm²}
- 102 : 0 ~ 98.1 kPa {0 ~ 1 kgf/cm²}
- 352 : 0 ~ 343 kPa {0 ~ 3.5 kgf/cm²}
- 502 : 0 ~ 490 kPa {0 ~ 5 kgf/cm²}
- 103 : 0 ~ 981 kPa {0 ~ 10 kgf/cm²}

Thermal error

06: ± 0.06 % F.S./°C 10 : ± 0.1 % F.S./°C

Pressure reference

G : Gauge
V : Gauge (Vacuum)

LIST OF MODEL NUMBERS

Pressure reference		Gauge						
Thermal error	Rated pressure range kPa (kgf/cm ²)	0 ~ 9.81 {0 ~ 0.1}	0 ~ 49.0 {0 ~ 0.5}	0 ~ 98.1 {0 ~ 1}	0 ~ 343 {0 ~ 3.5}	0 ~ 490 {0 ~ 5}	0 ~ 981 {0 ~ 10}	0 ~ 981 {0 ~ 10}
± 0.06 % F.S./°C			PA-500 -501G-06	PA-500 -102G-06	PA-500 -352G-06	PA-500 -502G-06	PA-500 -103G-06	PA-500 -102V-06
± 0.1 % F.S./°C		PA-500 -101G-10	PA-500 -501G-10	PA-500 -102G-10	PA-500 -352G-10	PA-500 -502G-10	PA-500 -103G-10	PA-500 -102V-10

☐ : Not available

※Verify the above model numbers when placing orders.

PA-500

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 12 V DC.

Item		Model number	PA-500						
			101G	501G	102G	352G	502G	103G	102V
General specifications	Pressure reference		Gauge						
	Rated pressure range	kPa {kgf/cm ² }	9.81 {0.1}	49.0 {0.5}	98.1 {1}	343 {3.5}	490 {5}	981 {10}	- 98.1 {-1}
	Maximum pressure	kPa {kgf/cm ² }	19.6 {0.2}	98.1 {1}	196 {2}	686 {7}	981 {10}	1961 {20}	196 {2}
	Break-down pressure	kPa {kgf/cm ² }	49.0 {0.5}	245 {2.5}	490 {5}	1030 {10.5}	1471 {15}	2941 {30}	490 {5}
	Operating temp. range	°C	- 20 ~ 80						
	Compensated temp. range	°C	0 ~ 50						
	Operating humidity	%RH	35 ~ 85 (No condensation)						
	Storage temp.	°C	- 20 ~ 80 (Atmospheric pressure, humidity 65 %RH maximum)						
	Pressure medium		Non-corrosive gases / Non-corrosive liquids						
	Insulation resistance	MΩ minimum	100 (500 V DC)						
	Dielectric strength		500 V AC, 60 s (Leakage current 1 mA maximum)						
	Pressure port		R 1/4 (PT 1/4)					G 1/4 (PF 1/4)	
	Net weight	g	Approx. 85						
Power	Supply voltage	V DC	12 ~ 24 ± 10 %						
	Ripple content	maximum	10 % (P-P)						
	Consumption current	maximum	20 mA						
Analog output	Output voltage	V	1 ~ 5						
	Zero voltage	V	1 ± 0.04 (at 25 °C)						
	Span voltage	V	4 ± 0.04 (at 25 °C)						
	Output current	mA maximum	1 (Load resistance: 5 kΩ minimum)						
	Linearity/Hysteresis	%F.S.	± 0.5	± 0.3		± 0.5			
	Thermal error 0 ~ 50 °C (Reference temp.: 25 °C)	ZERO %F.S./°C	± 0.1	± 0.06/0.1					
		SPAN %F.S./°C	± 0.1	± 0.06/0.1					
	Supply voltage effect	V maximum	± 0.1						
Response	ms	Approx. 1							

PA-500 PRESSURE TRANSDUCERS WITH AMP.

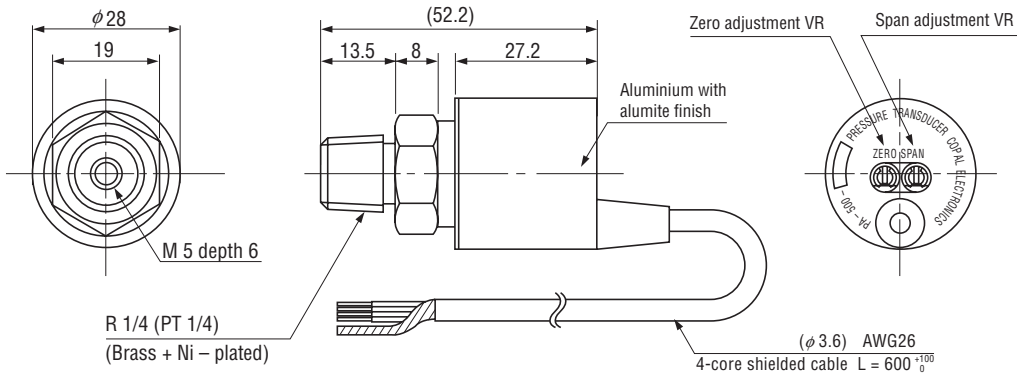
ENVIRONMENTAL CHARACTERISTICS

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: ± 1 %F.S. maximum each
Shock	981 m/s ² , 3 directions for 3 times each	
Pressure cycling	0 ~ Rated pressure, 10 ⁶ cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	

OUTLINE DIMENSIONS

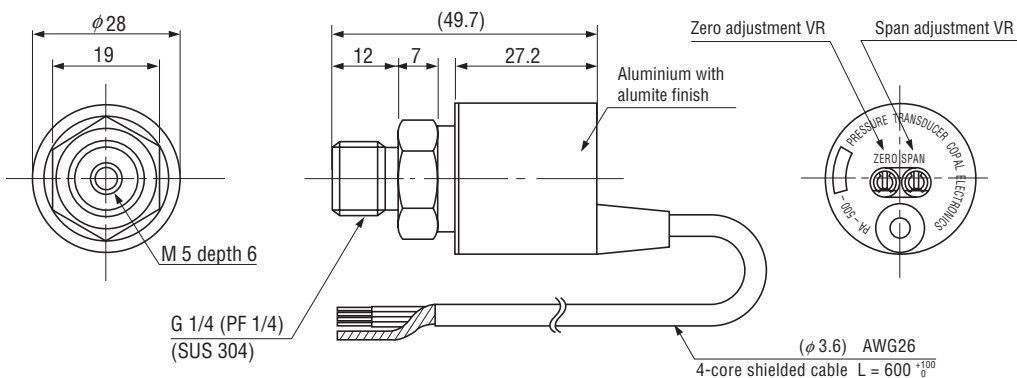
Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)

PA-500-XXXG



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

PA-500-XXXV



INTERNAL ELECTRICAL SCHEMATICS

