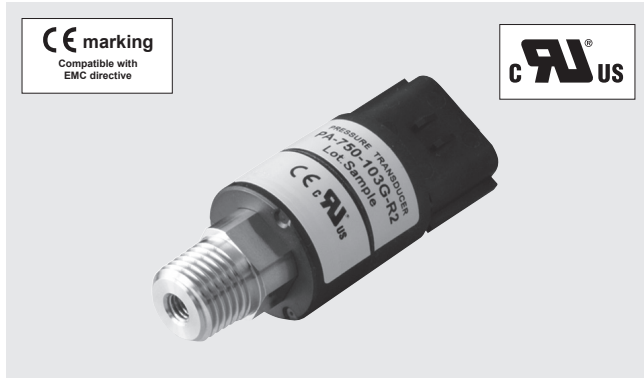


# PRESSURE TRANSDUCERS WITH AMP. PA-750



**INTERNAL STRUCTURE**  
PA-750 (R 1/4)

Part name		Material
①	Fitting	SUS 304
②	Housing	PPS
③	Stainless steel diaphragm	SUS 316L

## FEATURES

- High corrosion resistance and drip-proof construction  
Pressure port attachment made of SUS 316L  
Proven IP65 grade gauge body (IP65 in accordance with IEC)
- Cable connector connection
- Built-in temperature compensation function (0 ~ 50°C)
- Absolute pressure type and compound pressure type which can control negative to positive pressure with only a single pressure gauge are all in line
- Voltage output mode

## MODEL NUMBER DESIGNATION

**PA-750 - 102 R - R2 - 1**

<p>Series name</p> <p>Pressure reference</p> <p>G : Gauge</p> <p>V : Gauge(Vacuum)</p> <p>R : Compound</p> <p>A : Absolute</p>	<p>Rated pressure range</p> <p>102 : 0 ~ 100 kPa 352 : 0 ~ 350 kPa 103 : 0 ~ 1 MPa 353 : 0 ~ 3.5 MPa</p> <p>102 : 0 ~ - 100 kPa</p> <p>102 : - 100 ~ 100 kPa 302 : - 100 ~ 300 kPa</p> <p>102 : 0 ~ 100 kPa abs</p>	<p>Fitting</p> <p>R1 : R 1/8 with M 5 female screw R2 : R 1/4 with M 5 female screw</p>	<p>Cable</p> <p>Blank : 1.5m cable 1 : Not attached</p>
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※ Please refer to the LIST OF MODEL NUMBERS when placing orders.

# PA-750

## PRESSURE TRANSDUCERS WITH AMP.

### LIST OF MODEL NUMBERS

Fitting	Pressure reference		Gauge						Absolute
	Cable	Rated pressure range kPa	0 ~ 100	0 ~ 350	0 ~ 1000	0 ~ 3500	0 ~ - 100	- 100 ~ 100	- 100 ~ 300
R1	Attached	PA-750- ⑤ 102G-R1	PA-750- ⑤ 352G-R1	PA-750- 103G-R1	PA-750- 353G-R1	PA-750- ⑤ 102V-R1	PA-750- 102R-R1	PA-750- 302R-R1	PA-750- 102A-R1
	Not attached	PA-750- ⑤ 102G-R1-1	PA-750- ⑤ 352G-R1-1	PA-750- 103G-R1-1	PA-750- 353G-R1-1	PA-750- ⑤ 102V-R1-1	PA-750- 102R-R1-1	PA-750- 302R-R1-1	PA-750- 102A-R1-1
R2	Attached	PA-750- ⑤ 102G-R2	PA-750- ⑤ 352G-R2	PA-750- 103G-R2	PA-750- 353G-R2	PA-750- ⑤ 102V-R2	PA-750- 102R-R2	PA-750- 302R-R2	PA-750- 102A-R2
	Not attached	PA-750- ⑤ 102G-R2-1	PA-750- ⑤ 352G-R2-1	PA-750- 103G-R2-1	PA-750- 353G-R2-1	PA-750- ⑤ 102V-R2-1	PA-750- 102R-R2-1	PA-750- 302R-R2-1	PA-750- 102A-R2-1

※ Verify the above model numbers when placing orders.  
The products marked ⑤ are manufactured upon receipt of order basis.

### STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25±5 °C and excitation voltage of 12 VDC.

Item	Model number	PA-750								
		102G	352G	103G	353G	102V	102R	302R	102A	
General specifications	Pressure reference	Gauge							Absolute	
	Rated pressure range	kPa	100	350	1000	3500	- 100	- 100 ~ 100	- 100 ~ 300	100 (abs)
	Maximum pressure	kPa	200	700	2000	5000	200	200	600	200 (abs)
	Break-down pressure	kPa	300	1050	3000	7000	300	300	900	300 (abs)
	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		Corrosive gases/liquids compatible with SUS316L and SUS304							
	Insulation resistance	MΩ minimum	100 (500 VDC)							
	Dielectric strength		500 VAC, 60 s (Leakage current 1 mA maximum)							
	Sealed liquid		Silicone oil							
	Pressure port		R 1/8、R 1/4							
	Net weight	g	R2 : Approx. 50							
Drip-proof structure		IP65								

# PA-750

## PRESSURE TRANSDUCERS WITH AMP.

Item		Model number	PA-750						
			102G	352G	103G	353G	102V	102R	302R
Power	Supply voltage ※	VDC	10.8 ~ 30						
	Consumption current maximum		10 mA						
Analog output	Output voltage ※	V	1 ~ 5						
	Zero voltage	V	1 ± 0.04				3 ± 0.04	2 ± 0.04	1 ± 0.04
	Span voltage	V	4 ± 0.04						
	Output current	mA maximum	1 (Load resistance 5 kΩ minimum)						
	Linearity/Hysteresis	%F.S.	± 0.3						
	Thermal error	ZERO %F.S./°C	± 0.05						
		SPAN %F.S./°C	± 0.05						
	Response	ms	Approx. 2						
	resolving power		Approx. 0.004V(Approx. 0.1%F.S.)						
	Gravitational effect (From horizontal position to vertical position)	%F.S.	± 0.3	± 0.1	± 0.05		± 0.3		± 0.1

※ The type of drive voltage of 5V and output voltage of 0.5 to 4.5V (ratiometric output) are also available.

## ENVIRONMENTAL CHARACTERISTICS

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

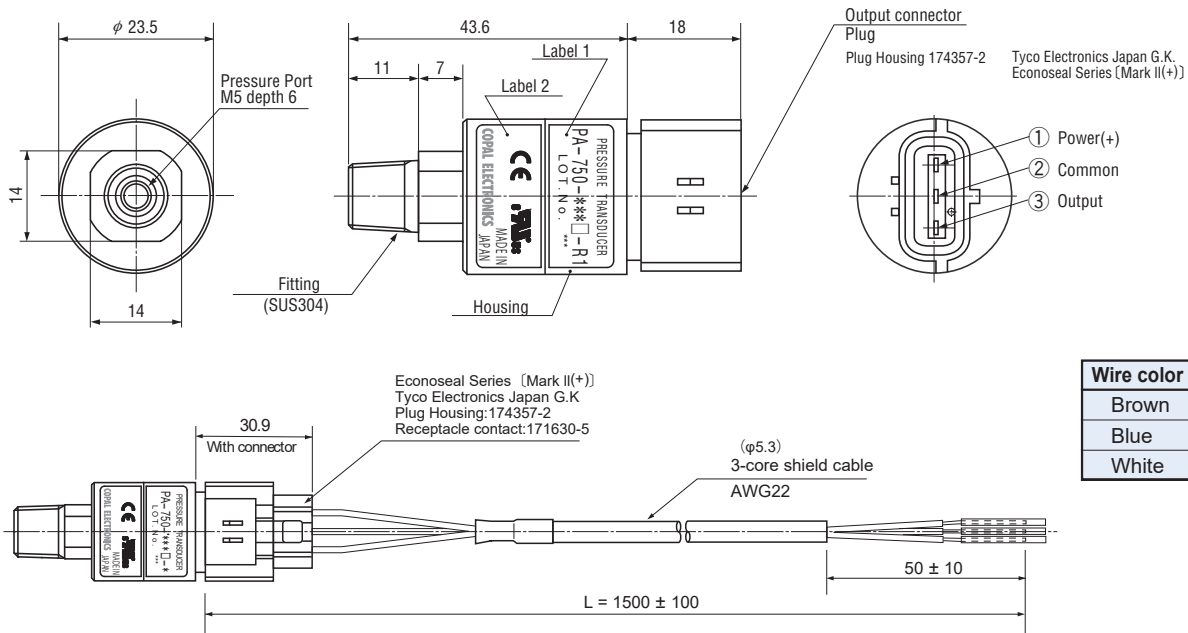
# PA-750

## PRESSURE TRANSDUCERS WITH AMP.

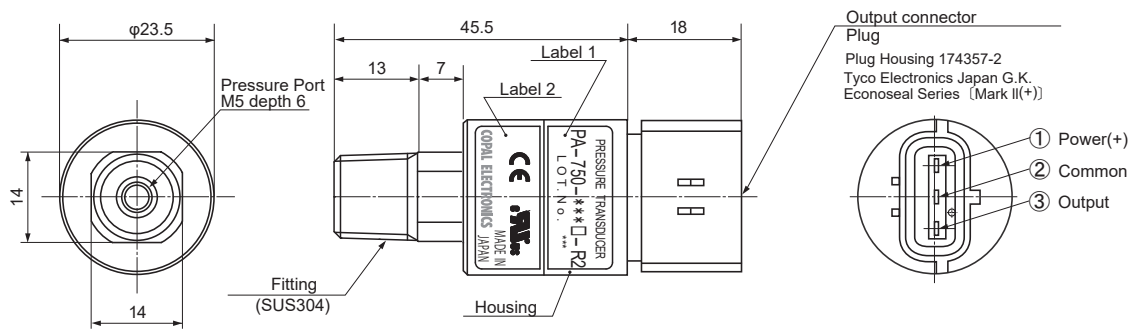
### OUTLINE DIMENSIONS

Unless otherwise specified, tolerance :  $\pm 0.5$ (Unit: mm)

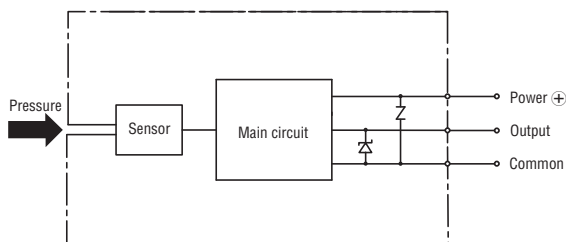
#### Configurations of joint R1 (R1/8) type



#### Configurations of joint R2 (R1/4) type



### INTERNAL ELECTRICAL SCHEMATICS



# PA-750

## PRESSURE TRANSDUCERS WITH AMP.

### CUSTOMIZATION

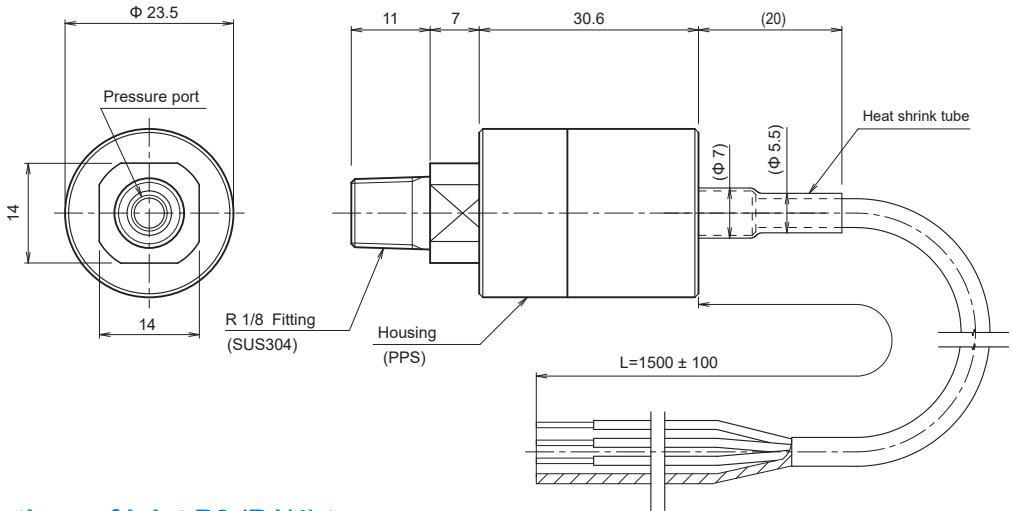
We also offer customized solutions. Please contact your local sales office for details.

Example of customizations
Available with cable assembly (standard length:1.5m)
Customized pressure range 402A(0~400kPa abs)*for sterilizer use
5V operation
Customized joint (7/16-20UNF Male/Female screw etc.)

### AVAILABLE WITH CABLE ASSEMBLY : REFERENCE DRAWING

Unless otherwise specified, tolerance :  $\pm 0.5$  (Unit: mm)

#### Configurations of joint R1 (R1/8) type



#### Configurations of joint R2 (R1/4) type

