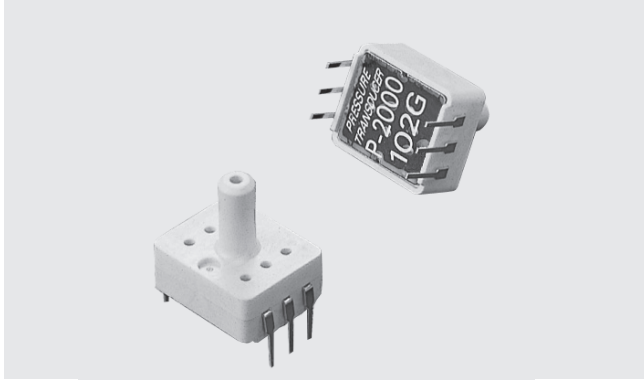


# PRESSURE TRANSDUCERS

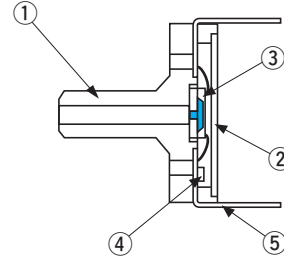
# P-2000



## FEATURES

- Compact and light weight
- For non-corrosive gases
- Dual in line package
- Pressure range ~9.81, ~981 kPa {~0.1, ~10 kgf/cm<sup>2</sup>}

## INTERNAL STRUCTURE (BN type)



Part name	Material
① Housing	LCP (Liquid crystal polymer)
② Cover	Aluminum
③ Sensor chip	Silicone
④ Chip resistor (compensatory resistor)	Ceramic
⑤ Terminal pin	Phosphor bronze + Au-plated

## MODEL NUMBER DESIGNATION

**P-2000 - 501 G - 15 - BN**

Series name

Rated pressure range

101 : 0 ~ 9.81 kPa {0 ~ 0.1 kgf/cm<sup>2</sup>}  
 501 : 0 ~ 49.0 kPa {0 ~ 0.5 kgf/cm<sup>2</sup>}  
 102 : 0 ~ 98.1 kPa {0 ~ 1 kgf/cm<sup>2</sup>}  
 352 : 0 ~ 343 kPa {0 ~ 3.5 kgf/cm<sup>2</sup>}  
 502 : 0 ~ 490 kPa {0 ~ 5 kgf/cm<sup>2</sup>}  
 702 : 0 ~ 686 kPa {0 ~ 7 kgf/cm<sup>2</sup>}  
 103 : 0 ~ 981 kPa {0 ~ 10 kgf/cm<sup>2</sup>}

Terminal direction

AN : Same direction as the pressure port  
 BN : Opposite direction to the pressure port

Thermal error

15 : ± 0.15 % (± 0.12 %) F.S./°C

Pressure reference

G : Gauge

## LIST OF MODEL NUMBERS

Terminal direction	Rated pressure range kPa {kgf/cm <sup>2</sup> }	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 ~ 686 {0 ~ 7}	0 ~ 981 {0 ~ 10}
<b>AN</b>		⊕ P-2000-101G-15-AN	⊕ P-2000-501G-15-AN	⊕ P-2000-102G-15-AN	⊕ P-2000-352G-15-AN	⊕ P-2000-502G-15-AN	⊕ P-2000-702G-15-AN	⊕ P-2000-103G-15-AN
<b>BN</b>		P-2000-101G-15-BN	P-2000-501G-15-BN	P-2000-102G-15-BN	P-2000-352G-15-BN	P-2000-502G-15-BN	P-2000-702G-15-BN	P-2000-103G-15-BN

※ Verify the above model numbers when placing orders.  
 The AN version, marked ⊕ is manufactured upon receipt of order basis.

# P-2000

## PRESSURE TRANSDUCERS

### STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25±5 °C and excitation current of 1.5 mA DC.

Item	Model number	P-2000							
		101G	501G	102G	352G	502G	702G	103G	
General specifications	Pressure reference	Gauge							
	Rated pressure range kPa {kgf/cm <sup>2</sup> }	9.81 {0.1}	49.0 {0.5}	98.1 {1.0}	343 {3.5}	490 {5}	686 {7}	981 {10.0}	
	Maximum pressure kPa {kgf/cm <sup>2</sup> }	19.6 {0.2}	98.1 {1.0}	196 {2.0}	686 {7.0}	981 {10}	1373 {14}	1471 {15.0}	
	Break-down pressure kPa {kgf/cm <sup>2</sup> }	49.0 {0.5}	245 {2.5}	490 {5}	1030 {10.5}	1471 {15}	1961 {20}	1961 {20}	
	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)							
	Bridge resistance Ω	3300 ± 30 %							
	Pressure medium	Non-corrosive gases							
	Insulation resistance MΩ minimum	100 (500 VDC)							
	Dielectric strength	500 V AC, 60 s(Leakage current 1 mA maximum)							
	Pressure port mm	φ 3.2							
	Net weight g	Approx. 1							
	Power	Excitation current mA DC	1.5 (Constant current)						
Analog output	Offset voltage mV	± 20						± 15	
	Span voltage mV	50 ± 20						90 ± 30	
	Linearity/Hysteresis %F.S.							± 0.3	
	Thermal error (Reference temp.: 25 °C)	ZERO %F.S./°C	± 0.15						± 0.12
		SPAN %F.S./°C	± 0.05						± 0.04
Response ms	Approx. 1								

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

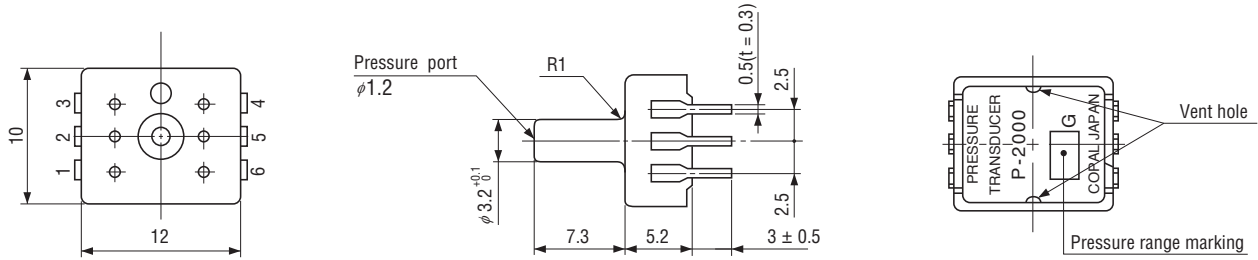
※ P-2000 series can be operated at the vacuum pressure.

# P-2000

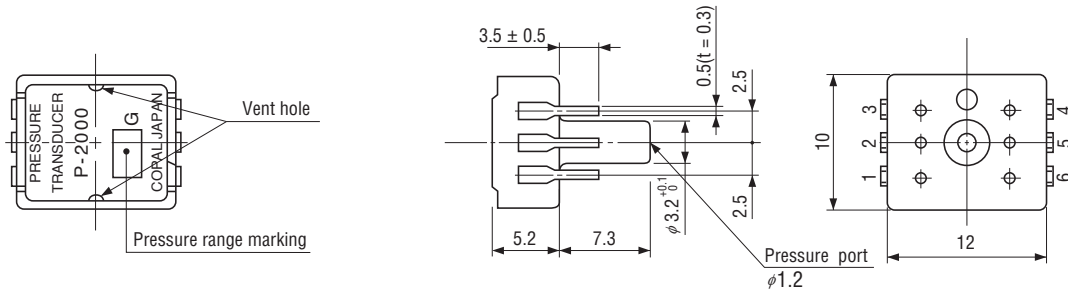
## PRESSURE TRANSDUCERS

### OUTLINE DIMENSIONS

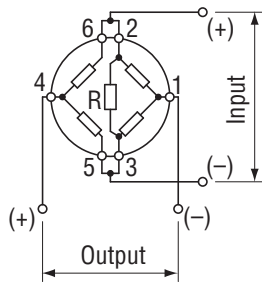
#### BN type



#### AN type



### INTERNAL ELECTRICAL SCHEMATICS ■ TERMINAL NUMBER



R : Built-in chip resistor for temp. compensation

Pin	Connection
1	Output ⊖
2	Input ⊕
3	Input ⊖
4	Output ⊕
5	Input ⊖
6	Input ⊕