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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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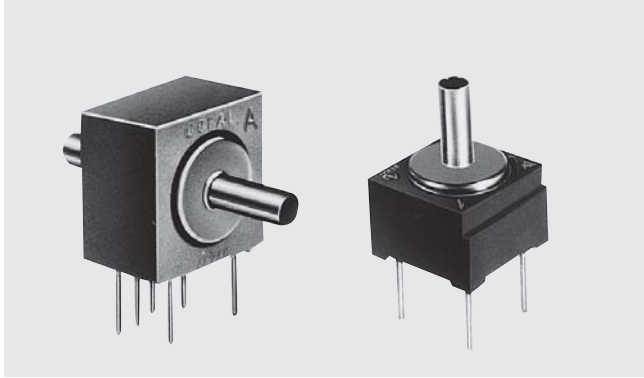
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PRESSURE TRANSDUCERS

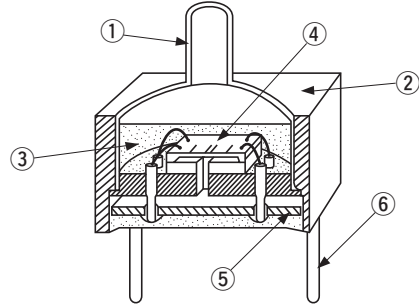
P-3000S



FEATURES

- For non-corrosive gases
- Built-in temp. compensation function (0 ~ 50 °C)
- Three pressure reference to choose from (Gauge, Differential and Absolute pressure)
- Compact and light weight
- PC board mountable

INTERNAL STRUCTURE (Gauge type)



Part name	Material
① Pressure port	Iron/Nickel alloy + Nickel-plated
② Housing	PBT (Polybutyleneterephthalate)
③ Resin compound	Silicone gel
④ Sensor chip	Silicone
⑤ Resistor board for temp. compensation	Ceramic
⑥ Terminal pin	Copper + solder-plated

MODEL NUMBER DESIGNATION

P-3000S - 501 G - 02

Series name

Rated pressure range

500 : 0 ~ 4.9 kPa (0 ~ 0.05 kgf/cm²) 102 : 0 ~ 98.1 kPa (0 ~ 1 kgf/cm²)
 101 : 0 ~ 9.81 kPa (0 ~ 0.1 kgf/cm²) 502 : 0 ~ 490 kPa (0 ~ 5.0 kgf/cm²)
 351 : 0 ~ 34.3 kPa (0 ~ 0.35 kgf/cm²) 702 : 0 ~ 686 kPa (0 ~ 7.0 kgf/cm²)
 501 : 0 ~ 49.0 kPa (0 ~ 0.5 kgf/cm²)

Thermal error

02 : ± 0.02 % F.S./°C 10 : ± 0.10 % F.S./°C
 04 : ± 0.04 % F.S./°C

Pressure reference

G : Gauge
 D : Differential
 A : Absolute

LIST OF MODEL NUMBERS

Pressure reference	Gauge						Differential			Absolute	
Thermal error \ Rated pressure range	0 ~ 4.9 {0 ~ 0.05}	0 ~ 9.81 {0 ~ 0.1}	0 ~ 49.0 {0 ~ 0.5}	0 ~ 98.1 {0 ~ 1}	0 ~ 490 {0 ~ 5.0}	0 ~ 686 {0 ~ 7.0}	0 ~ ± 9.81 {0 ~ ± 0.1}	0 ~ ± 49.0 {0 ~ ± 0.5}	0 ~ ± 98.1 {0 ~ ± 1}	0 ~ 34.3 {0 ~ 0.35}	0 ~ 98.1 {0 ~ 1}
± 0.02 % F.S./°C			P-3000S -501G-02	P-3000S -102G-02				P-3000S -501D-02	P-3000S -102D-02		
± 0.04 % F.S./°C	P-3000S -500G-04	P-3000S -101G-04	P-3000S -501G-04	P-3000S -102G-04	P-3000S -502G-04	P-3000S -702G-04	P-3000S -101D-04	P-3000S -501D-04	P-3000S -102D-04	P-3000S -351A-04	P-3000S -102A-04
± 0.1 % F.S./°C		P-3000S -101G-10	P-3000S -501G-10	P-3000S -102G-10			P-3000S -101D-10	P-3000S -501D-10	P-3000S -102D-10	P-3000S -351A-10	P-3000S -102A-10

☐ : Not available

※Verify the above model numbers when placing orders.

P-3000S

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-3000S										
			500G	101G	501G	102G	502G	702G	101D	501D	102D	351A	102A
General specifications	Pressure reference		Gauge					Differential			Absolute		
	Rated pressure range	kPa {kgf/cm ² }	4.9 {0.05}	9.81 {0.1}	49.0 {0.5}	98.1 {1.0}	490 {5.0}	686 {7.0}	± 9.81 {± 0.1}	± 49.0 {± 0.5}	± 98.1 {± 1.0}	34.3 (abs) {0.35}	98.1 (abs) {1.0}
	Maximum pressure	kPa {kgf/cm ² }	9.8 {0.1}	19.6 {0.2}	98.1 {1.0}	196 {2.0}	981 {10}	1372 {14}	19.6 {0.2}	98.1 {1.0}	196 {2.0}	103 (abs) {1.05}	196 (abs) {2.0}
	Break-down pressure	kPa {kgf/cm ² }	24.5 {0.25}	49.0 {0.5}	245 {2.5}	490 {5.0}	1471 {15}	2058 {21}	49.0 {0.5}	245 {2.5}	490 {5.0}	147 (abs) {1.5}	490 (abs) {5.0}
	Operating temp. range	°C	- 20 ~ 100										
	Compensated temp. range	°C	0 ~ 50										
	Operating humidity	%RH	35 ~ 85 (No condensation)										
	Storage temp.	°C	- 40 ~ 120 (Atmospheric pressure, humidity 65 %RH maximum)										
	Bridge resistance	Ω	4700 ± 30 %										
	Pressure medium		Non-corrosive gases										
	Insulation resistance	MΩ minimum	100 (50 V DC)										
	Dielectric strength		50 V AC, 60 s (Leakage current 1 mA maximum)										
	Pressure port	mm	φ 3.5										
	Net weight	g	Approx. 5					Approx. 7			Approx. 5		
Power	Excitation current	mA DC	1.5 (Constant current)										
Analog output	Offset voltage	mV	± 3								± 5		
	Span voltage	mV	70 ± 30	50 ± 20	100 ± 30			50 ± 20	100 ± 30		80 ± 40		
	Linearity/Hysteresis	%F.S.	± 0.5	± 0.3	± 0.25		± 0.5	± 0.3		± 0.5			
	Thermal error (Reference temp.: 25 °C)	ZERO %F.S./°C	± 0.04	± 0.04/0.1	± 0.02/0.04/0.1		± 0.04	± 0.04/0.1	± 0.02/0.04/0.1		± 0.04/0.1		
		SPAN %F.S./°C	± 0.04	± 0.04/0.1	± 0.02/0.04/0.1		± 0.04	± 0.04/0.1	± 0.02/0.04/0.1		± 0.04/0.1		
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 ² , 3 directions for 2 hours each	Offset 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.	

※P-3000S series can be operated at the vacuum pressure.

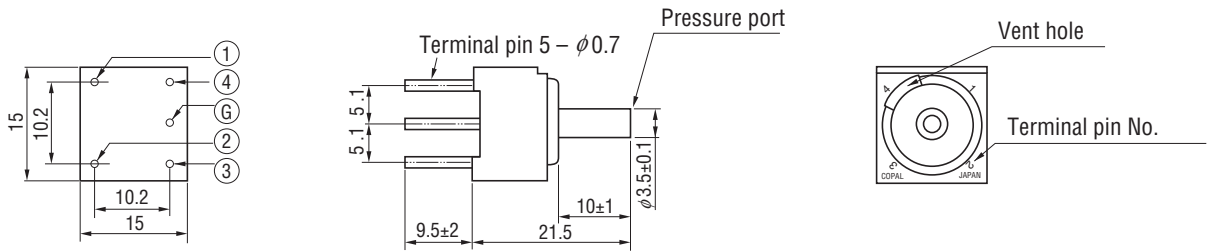
P-3000S

PRESSURE TRANSDUCERS

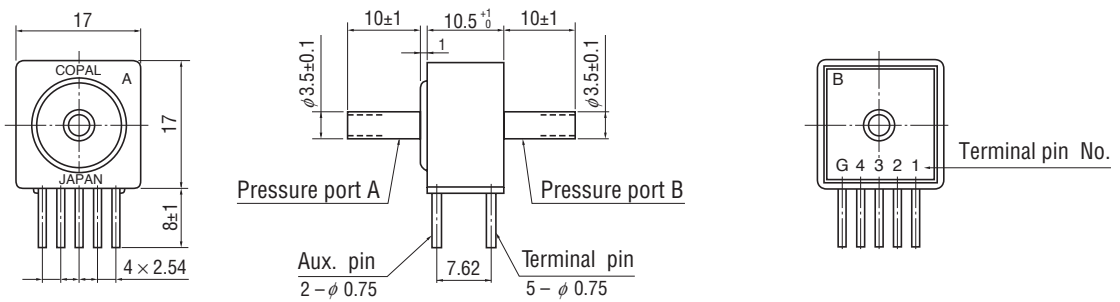
OUTLINE DIMENSIONS

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

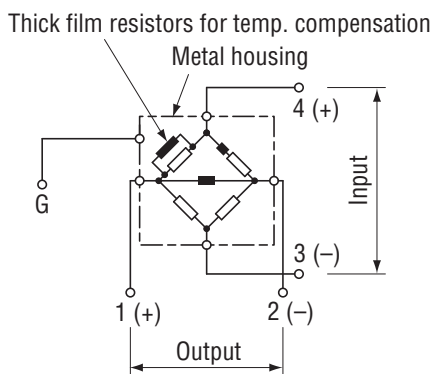
- Gauge Absolute type



- Differential type



INTERNAL ELECTRICAL SCHEMATICS ■ TERMINAL NUMBER



Pin	Connection
1	Output ⊕
2	Output ⊖
3	Input ⊖
4	Input ⊕
G	Housing