

Product Overview

■ Compact, Digital Display Pressure Sensor [PSAN Series]

Pressure type		Gauge pressure (In case of fluid type, negative pressure, compound pressure, 1,000kPa/standard pressure are sealed gauge pressure※4)				
		Negative pressure	Standard pressure	Compound pressure		
Model※1	Voltage output	Connector	PSAN-(L)V01C(P)V-□	PSAN-(L)01C(P)V-□	PSAN-(L)1C(P)V-□	PSAN-(L)C01C(P)V-□
		Cable	—	—	PSAN-B1(P)V-□	PSAN-BC01(P)V-□
	Current output	Connector	PSAN-(L)V01C(P)A-□	PSAN-(L)01C(P)A-□	PSAN-(L)1C(P)A-□	PSAN-(L)C01C(P)A-□
		Cable	PSAN-(L)V01C(P)H-□	PSAN-(L)01C(P)H-□	PSAN-(L)1C(P)H-□	PSAN-(L)C01C(P)H-□
Hold/Auto shift input		Connector	—	—	PSAN-B1(P)H-□	PSAN-BC01(P)H-□
Appearances & Dimensions						
Rated pressure range		0.0 to -101.3kPa	0.0 to 100.0kPa	0 to 1,000kPa	-101.3 to 100.0kPa	
Display and set pressure range		5.0 to -101.3kPa	-5.0 to 110.0kPa	-101.3 to 1,100kPa	-101.3 to 110.0kPa	
Min. display unit		0.1kPa	0.1kPa	1kPa	0.1kPa	
Max. pressure range		2 times of rated pressure		1.5 times of rated pressure	2 times of rated pressure	
Applied vapor		Pneumatic type - Air, Non-corrosive gas				
Applied fluid		Fluid type - Air, Non-corrosive gas and fluid that do not corrode stainless steel 316L				
Power supply		12V-24VDC ±10% (ripple P-P: Max. 10%)				
Current consumption		Max. 50mA (analog current output type: Max. 75mA)				
Control output		NPN or PNP open collector output • Load voltage: Max. 30VDC • Load current: Max. 100mA • Residual voltage - NPN: Max. 1V, PNP: Max. 2V				
Hysteresis※2		Min. display interval				
Repeat error		±0.2% F.S. ± Min. display interval				
Response time		Selectable 2.5ms, 5ms, 100ms, 500ms, 1000ms				
Short circuit protection		Built-in				
Analog output※3	Voltage output	<ul style="list-style-type: none"> Output voltage: 1-5VDC ±2% F.S. Zero point: Max. 1VDC ±2% F.S. Resolution: Automatically changed to 1/1000 or 1/2000 by display unit 				
	Current output	<ul style="list-style-type: none"> Output current: DC4-20mA ±2% F.S. Response time: 70ms Resolution: Automatically changed to 1/1000 or 1/2000 by display unit 				
Display digit		4½ -digit				
Display method		7 segment LED display				
Reference		E-04 to 16				

※1: For ' (L)', ' (P)', ' □ ' of model name, please refer to '■ Ordering Information'.

※2: In hysteresis output mode, detection difference is variable.

※3: It is allowed to select one analog output type only.

※4: The unit is sealed structure. It is based on atmospheric pressure 101.3kPa.

※F.S. : Rated pressure.

■ Compact, Digital Display Pressure Sensor [PSA/PSB Series]

Pressure type		Gauge pressure							
		Negative pressure		Standard pressure		Compound pressure			
Model ^{※1}	NPN open collector output	PSA-V01-□ PSB-V01-□ PSB-V01C-□	PSA-01-□ PSB-01-□ PSB-01C-□	PSA-1-□ PSB-1-□ PSB-1C-□	PSA-C01-□ PSB-C01-□ PSB-C01C-□				
	PNP open collector output	PSA-V01P-□ PSB-V01P-□ PSB-V01CP-□	PSA-01P-□ PSB-01P-□ PSB-01CP-□	PSA-1P-□ PSB-1P-□ PSB-1CP-□	PSA-C01P-□ PSB-C01P-□ PSB-C01CP-□				
Appearances & Dimensions		<p>CE</p> <p>PSA Series (Cable type) [W30×H30×L38.5mm]</p> <p>PSB Series (Connector type) [W54.2×H10.4×L25mm] and [W52×H10×L25.5mm]</p>							
Rated pressure range		0.0 to -101.3kPa		0.0 to 100.0kPa		0.0 to 1,000kPa		-100.0 to 100.0kPa	
Display and set pressure range		5.0 to -101.3kPa		-5.0 to 110.0kPa		-50 to 1,100kPa		-101.2 to 110.0kPa	
Max. pressure range		2 times of rated pressure				1.5 times of rated pressure		2 times of rated pressure	
Applied fluid		Air, Non-corrosive gas							
Power supply		12-24VDC ±10% (ripple P-P: Max. 10%)							
Current consumption		Max. 50mA							
Control output		NPN or PNP open collector output • Load voltage: Max. 30VDC • Load current: Max. 100mA • Residual voltage - NPN: Max. 1V, PNP: Max. 2V							
Hysteresis ^{※2}		1-digit fixed (2-digit for psi unit)				2-digit fixed			
Repeat error		±0.2% F.S. ±1-digit				±0.2% F.S. ±2-digit			
Response time		Selectable 2.5ms, 5ms, 100ms, 500ms							
Short circuit protection		Built-in							
Analog output		• Output voltage: 1-5VDC ±2% F.S. • Zero-point: Within 1VDC ±2% F.S. • Span: Within 4VDC ±2% F.S. • Linear: Within ±2% F.S. • Resolution: Approx. 1/200 • Output impedance: 1kΩ							
Display digit		3½ -digit							
Display method		7 segment LED display							
Reference		E-17 to 25							

※1: '□' is pressure port type. Please refer to 'Ordering Information'.

※2: In hysteresis output mode, detection difference is variable.

※F.S.: Rated pressure.

■ Compact, Non-indicating Pressure Sensor [PSS Series]

Pressure type		Gauge pressure							
		Negative pressure		Standard pressure		Compound pressure			
Model	Voltage output	PSS-V01V-R1/8	PSS-01V-R1/8	PSS-1V-R1/8	PSS-C01V-R1/8				
	Current output	PSS-V01A-R1/8	PSS-01A-R1/8	PSS-1A-R1/8	PSS-C01A-R1/8				
Appearances & Dimensions		<p>CE</p> <p>[W11.8×H29.3×L24.8mm]</p>							
Rated pressure range		0.0 to -101.3kPa		0.0 to 100.0kPa		0 to 1,000kPa		-101.3 to 100.0kPa	
Analog output range		5.0 to -101.3kPa		-5.0 to 110.0kPa		-50 to 1,100kPa		-101.3 to 110.0kPa	
Max. pressure range		2 times of rated pressure				1.5 times of rated pressure		2 times of rated pressure	
Applied fluid		Air, non-corrosive gas							
Power supply		12-24VDC ±10% (ripple P-P: Max. 10%)							
Current consumption		Voltage output type: Max. 15mA, Current output type: —							
Effect by power supply		Max. ±0.3% F.S.							
Protection circuit		Reverse polarity protection circuit							
Analog output	Voltage output	•Output voltage: 1-5VDC ±2% F.S.		•Linear: Max. ±1% F.S.		•Output impedance: 1kΩ			
	Current output	•Output current: DC4-20mA ±2% F.S.		•Linear: Max. ±1% F.S.					
Reference		E-26 to 27							

※F.S.: Rated pressure.

- (A) Photoelectric Sensors
- (B) Fiber Optic Sensors
- (C) Door/Area Sensors
- (D) Proximity Sensors
- (E) Pressure Sensors
- (F) Rotary Encoders
- (G) Connectors/ Connector Cables/ Sensor Distribution Boxes/Sockets
- (H) Temperature Controllers
- (I) SSRs / Power Controllers
- (J) Counters
- (K) Timers
- (L) Panel Meters
- (M) Tacho / Speed / Pulse Meters
- (N) Display Units
- (O) Sensor Controllers
- (P) Switching Mode Power Supplies
- (Q) Stepper Motors & Drivers & Controllers
- (R) Graphic/ Logic Panels
- (S) Field Network Devices
- (T) Software