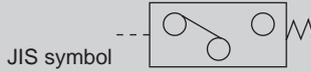


Digital pressure sensor PPX Series



Specifications

Item	Standard		High-function	
	For low pressure PPX-R01□	For high pressure PPX-R10□	For low pressure PPX-R01□H	For high pressure PPX-R10□H
Type of pressure	Gauge pressure			
Rated pressure	-100.0 to +100.0 kPa	-0.100 to +1.000 MPa	-100.0 to +100.0 kPa	-0.100 to +1.000 MPa
Set pressure	-101.0 to +101.0 kPa	-0.101 to +1.010 MPa	-101.0 to +101.0 kPa	-0.101 to +1.010 MPa
Proof pressure	500 kPa	1.5 MPa	500 kPa	1.5 MPa
Applicable fluid	Air/non-corrosive gas			
Power supply voltage	12 to 24 VDC±10% ripple P-P10% or less			
Power consumption	At normal: 720mW or less (Current consumption 30mA or less at 24 V power supply voltage) ECO mode: 480mW or less at STD (Current consumption 20mA or less at 24 V power supply voltage) 360mW or less at FULL (Current consumption 15mA or less at 24 V power supply voltage)			
Comparison output (Comparison output 1, comparison output 2)	[NPN output] NPN Transistor/open collector • Max. inrush current: 100 mA • Applied voltage: 30 VDC or less (comparison output-between 0 V) • Residual voltage: 2 V or less (at inrush current 100 mA)		[PNP output] PNP transistor/open collector • Max. output current: 100 mA • Applied voltage: 30 VDC or less (comparison output - +V interval) • Residual voltage: 2 V or less (at outflow current 100 mA)	
Output operation	Select NO/NC with key operation			
Output motor/Drain discharge	EASY mode/Hysteresis mode/window comparator mode			
Hysteresis (Hysteresis)	Min. 1 digit (variable)			
Repeatability	±0.1% F.S. (within ±2 digits)	±0.2% F.S. (within ±2 digits)	±0.1% F.S. (within ±2 digits)	±0.2% F.S. (within ±2 digits)
Response time	2.5 ms, 5 ms, 10 ms, 25 ms, 50 ms, 100 ms, 250 ms, 500 ms, 1000 ms, 5000 ms select by key operation			
Short-circuit protection	Equipped			
External input (Auto-referenceFunction/ Remote zero adjustmentFunction)	_____		[NPN output] ON voltage: 0.4 VDC or less OFF voltage: 5 to 30 VDC or release Input impedance: 10 kΩ Input time: 1 ms and over	[PNP output] ON voltage: 5V up+VDC OFF voltage: 0.6 VDC or less or release Input impedance: 10 kΩ Input time: 1 ms and over
Anarog VoltageOutput	_____		Output voltage: 1 to 5 V Zero point: 3 V±5% F.S. or less Span: 4 V±5% F.S. or less Linearity:±1% F.S. or less Output impedance: 1 kΩ	Output voltage: 0.6 to 5 V Zero point: 1 V±5% F.S. or less Span: 4.4V±5% F.S. or less Linearity:±1% F.S. or less Output impedance: 1 kΩ
Anarog currentOutput	_____		Output current: 4 to 20 mA Zero point: Within 12 mA±5% F.S. Span: Within 16 mA±5% F.S. Linearity: Within ±1% F.S. Load resistance: 250 Ω (max.)	Output voltage: 2.4 to 20 mA Zero point: 4 mA±5% F.S. or less Span: 17.6mA±5% F.S. or less Linearity:±1% F.S. or less Load resistance: 250 Ω (max.)
Display	4-digit + 4-digit 3-color LCD display (display updating cycle: 250 ms, 500 ms, 1000 ms select by key operation)			
Display pressure range	-101.0 to +101.0 kPa	-0.101 to +1.010 MPa	-101.0 to +101.0 kPa	-0.101 to +1.010 MPa
Display lamp	Orange LED (comparison output 1 operation indicator lamp, comparison output 2 operation indicator lamp: Lit when comparison output is ON)		Orange LED (comparison output 1 operation indicator lamp: Lit when comparison output is ON, analog voltage output operation indicator lamp: Lit at setup)	
Environment conditions	Degree of protection	IP40 (IEC)		
	Ambient temperature	-10 to +50°C, in storage: -10 to +60°C		
	Ambient humidity	35 to 85%RH (whereand, condensationandfreezingnot to) at storage: 35 to 85%RH		
	Withstand voltage	1000 VAC for 1 minute applied to all charged sections/between cases		
	Insulation resistance	500 VDC meggerand50 MΩ and over all charged sections/between cases		
	Vibration resistance	Durability 10 to 500 Hz compound amplitude 3 mm 2 hours each in XYZ directions (when mounted on panel: durability 10 to 150 Hz compound amplitude 0.75 mm 2 hours each in XYZ directions)		
Shock resistance	Durability 100m/S ² (approx. 10 G) 3 times each in XYZ directions			
Temperature characteristics (characteristics at +20°C are taken as standard)	Within ±0.5% F.S.	Within ±1% F.S.	Within ±0.5% F.S.	Within ±1% F.S.
Port size	*1 M5 female thread + R (PT) 1/8 male thread			
Material	Case: PBT (glass fiber included), LCD display part: acrylic resin, pressure port: SUS 303, mounting screw part: copper alloy (nickeling), switch part: silicone rubber			
Connection	Connector connection			
Wire length	When wire is extended, up to 100 m permissible with 0.3 mm ² and over cable (less than 30 m when CE Mark-compliant)			
Unit change function	Overseas (-KA) only (MPa, kPa.kgf/cm ² , bar, psi, mmHg, inchHg)			
Weight	Body weight: Approx. 40g, Weight of package: Approx. 130g			
Accessory	*2 PPX-C2 (2 m cable with connector): 1 pc. Unit seal label (With unit change function -KA): MPa, kPa.kgf/cm ² , bar, psi, mmHg, inchHg			

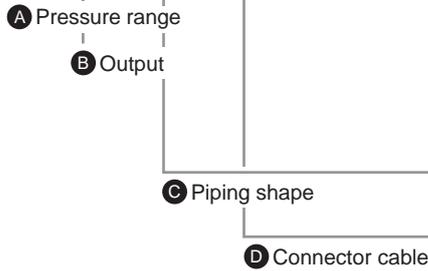
*1: Refer to Table 1 on the next page for export use.

*2: For (- J), connector cable is not attached.

How to order

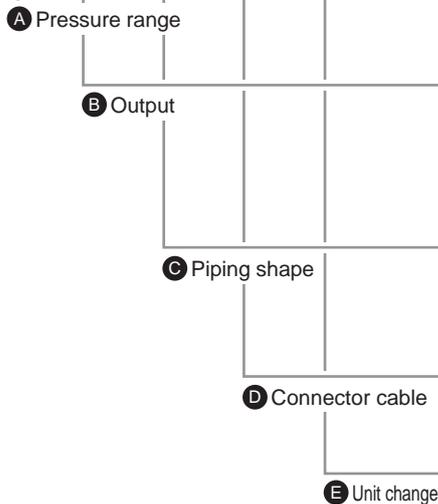
[How to order for domestic market]

PPX - **R01** - **N** - **6M** -



[How to order for overseas markets]

PPX - **R01** - **N** - **6M** - **KA**



Compatibility table by variation

	PPX
Port size	Rc1/8 M5 female thread
P4	Supports P4 specifications as standard
P40	● The product is*2Limited to listed model No.

*1: Bracket mounting is not possible for P40.

*2: P40 is compatible only with PPX-R10P-6M-J-P40/PPX-R10N-6M-J-P40.

*3: P40 Connector must be ordered separately. PPX-C2-FL401967-P40

●: Applicable models ○: Semi-applicable models ▲: Contact CKD for details. □: Not applicable

[Table 1]

Type	Model No.	Port size	Output	Remarks
Standard	PPX-R01N-6M-(J)-KA	M5 female thread + R (PT) 1/8 male thread	NPN transistor/Open collector	For Asia
	PPX-R10N-6M-(J)-KA			
High-function	PPX-R01NH-6M-KA	M5 female thread + G1/8 male thread	PNP transistor/Open collector	For Europe
	PPX-R10NH-6M-KA			
Standard	PPX-R01P-6G-(J)-KA	M5 female thread + NPT1/8 male thread	NPN transistor/Open collector	For North America
	PPX-R10P-6G-(J)-KA			
High-function	PPX-R01PH-6G-KA	M5 female thread + NPT1/8 male thread	PNP transistor/Open collector	For North America
	PPX-R10PH-6G-KA			
Standard	PPX-R01N-6N-(J)-KA	M5 female thread + R (PT) 1/8 male thread	NPN transistor/Open collector	For Asia
	PPX-R01P-6N-(J)-KA		PNP transistor/Open collector	
	PPX-R10N-6N-(J)-KA		NPN transistor/Open collector	
	PPX-R10P-6N-(J)-KA		PNP transistor/Open collector	
High-function	PPX-R01NH-6N-KA	M5 female thread + G1/8 male thread	NPN transistor/Open collector	For Europe
	PPX-R01PH-6N-KA		PNP transistor/Open collector	
	PPX-R10NH-6N-KA		NPN transistor/Open collector	
	PPX-R10PH-6N-KA		PNP transistor/Open collector	

Code	Description
A Pressure range	
R 01	-100.0 to 100.0 kPa
R 10	-0.100 to 1.000 MPa
B Output	
N	NPN transistor 2 output points (Standard)
P	PNP transistor output 2 points (Standard)
NH	NPN transistor output 1 point + analog voltage output or external input (high-function)
PH	PNP transistor output 1 point + analog voltage output or external input (high-function)
C Piping shape	
6M	R 1/8, M5 female thread
D Connector cable	
Blank	2 m connector cable attached
J *1	Without connector cable

*1: B Selectable only when "N" or "P" is selected for Output.

In compliance with new Measurement Laws, export models with unit select function cannot be used in Japan.

Code	Description
A Pressure range	
R01	-100.0 to 100.0 kPa
R10	-0.100 to 1.000 MPa
B Output	
N	NPN transistor output 2 point (Standard)
P	PNP transistor output 2 points (Standard)
NH	NPN transistor output 1 point + analog voltage output or external input (high-function)
PH	PNP transistor output 1 point + analog voltage output or external input (high-function)
C Piping shape	
6M *1	R1/8, M5 female thread
6N	NPT1/8, M5 female thread
6G *2	G1/8, M5 female thread
D Connector cable	
Blank	2 m connector cable attached
J *3	Connector cableNo
E Unit change	
KA	With unit change function

*1: Only "N" or "NH" can be selected for B Output.

*2: Selectable only when "P" or "PH" is selected for B Output.

*3: Selectable only when "N" or "P" is selected for B Output.

Destination	Switch output		Unit	Unit change function	Unit seal label included *1	Piping port
	NPN	PNP				
Domestic	○	○	kPa/MPa	-	-	R1/8 (M5)
Asia	○	-	kPa/MPa	○	○	R1/8 (M5)
Europe	-	○	kPa/MPa	○	○	G1/8 (M5)
North America	○	○	kPa/MPa	○	○	NPT1/8 (M5)

*1: Refer to the attached unit sealant, "Pneumatic, Vacuum and Auxiliary Components (catalog No. CB-024SA).

P4 Series
Pneumatic cylinders
Pneumatic actuator
Hand/Chuck
Related products
Cylinder Switch
Vacuum components
Pneumatic valves
Clean air components
Speed controller
Fitting
Auxiliary valve
Silencer
Tube
Gas generator
Fluid control components
Motor specification
Motorless specifications

Precautions for use

⚠ WARNING

- Applications outside the specifications, Load current, Voltage, Temperature, Shock, Otherwise, damage and/or misoperations may occur. Therefore, the dimensions are within the specified range for vacuum piping.
- Never use this product in an explosive gas atmosphere. Never use in an explosive gas atmosphere as explosions or fires could result.
- Static
 - Do not use this product where electrostatic discharge could occur.
 - Failure to do so may result in Breakdown or malfunction of the system.

Pneumatic actuator

Pneumatic cylinders

Hand/Chuck

Related products

Cylinder Switch

Vacuum components

Pneumatic valves

Pneumatic auxiliary components

Clean air components

Speed controller

Fitting

Auxiliary valve

Silencer

Tube

Gas generator

Fluid control components

Electric actuator

Motor specifications
Motor specification