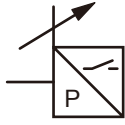


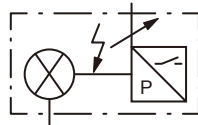
DIGITAL PRESSURE SWITCH OPERATION INSTRUCTION

JC-DPS-N : Digital Pressure Switch

JC-DPS-NS : Digital Pressure Switch with Pressure Transducer



JC-DPS-N



JC-DPS-NS



Accessories : Digital pressure switch x1. Cable x1. Manual x1

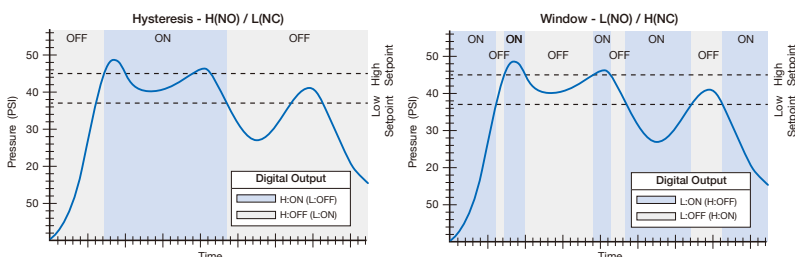
MODEL SPEC.

Model	JC-DPS-N / JC-DPS-NS
Pressure Range (bar)	150, 250, 350, 420
Burst Pressure	Min. 10000 psi
Accuracy	±1% F.S. @ 25±3°C
Supply Voltage	10 to 30 VDC
Current Consumption	<20 mA (not including switch output)
Protection	Power reverse protection, over load protection
Output	NPN or PNP mode, with 100 mA, 30 VDC (max.)
Analog Current Output *	4~20mA, 0~20mA, 0~24mA option selected by panel operation
Analog Voltage Output *	0~5V, 0.5~4.5V, 1~5V, 0~10V, 1~10V, option selected by panel operation
Power Connector	M12 (JC-DPS-N : 4 pin, JC-DPS-NS : 6 pin)
Working Temperature	-10~60°C (14~140°F), non-frozen state
Storage Temperature	-40~85°C (40~185°F), non-frozen state
Chemical Compatibilities	gas / liquid compatible with 304L & 316L
Material	Front & rear cover: ABS, port: SUS304L/SUS316L
Waterproof	IP65
Weight (kg)	0.15

* Applicable Model: JC-DPS-NS

SWITCH CONTROL TYPE PARAMETER

The real output is depends on the output type and control type. For example, if the high threshold setting is 45.00 psi and low threshold setting is 37.00 psi, the switch output will be shown as below figure. The switch output is turned on when it is active.



Analog Output Format Option (applicable model:JC-DPS-NS)

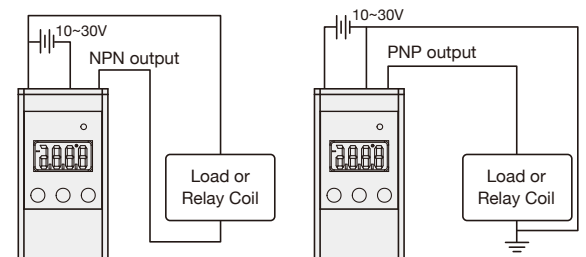
Analog Current Output	
4~20mA	Zero pressure: 4mA, Full pressure: 20mA
0~20mA	Zero pressure: 0mA, Full pressure: 20mA
0~24mA	Zero pressure: 0mA, Full pressure: 24mA

Analog Voltage Output	
0~5V	Zero pressure: 0V, Full pressure: 5V
0.5V~4.5V	Zero pressure: 0.5V, Full pressure: 4.5V
1~5V	Zero pressure: 1V, Full pressure: 5V
0~10V	Zero pressure: 0V, Full pressure: 10V
1~10V	Zero pressure: 1V, Full pressure: 10V

WIRING INSTRUCTION

Pin Assignment			
1	V+, Power positive	brown	<p>JC-DPS-N</p>
2	E case, earth	green	
3	V-, Power negative	blue	
4	Switch output	white	<p>JC-DPS-NS</p>
5	Voltage output	black	
6	Current output	yellow	

The application circuit for NPN or PNP output.





INITIAL OPERATION

Once power is applied, the display will show the current pressure.

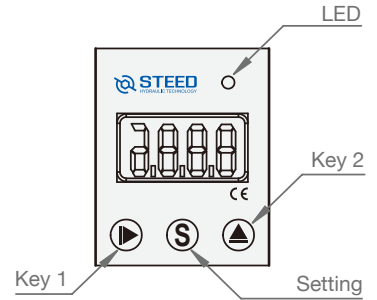
OPERATION INSTRUCTION

• Setting the Zero Pressure


Press and hold  and  key for more than 3 seconds to set current pressure as zero pressure. This captures the pressure and resets the display to read zero at this pressure.

• Warning:

Beware to reset the zero pressure when current is at atmosphere. If resident pressure is not zero, the pressure reading after reset may be wrong.



SETTING THE PARAMETERS


To enter the parameter setting mode, press and hold  for more than 3 seconds when in pressure display mode.


Note: Must be in normal pressure display for this keystroke to perform this function.

1. Pressure unit parameter



The table below shows the value for each pressure unit.

Setting	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Unit	psi	bar		MPa			kg/cm ²



To set the pressure unit, scroll through the options by pressing  until the setting matching the desired unit is displayed.

Once the desired setting is displayed, press . The displayed setting will show the next parameter setting.



2. Switch control type parameter

The control type parameter setting is the type of pressure monitor. Hysteresis or window type may be switched by press . Press  may switch to next parameter setting. String "HYS" is shown on the LCD display for hysteresis type. String "Win" is shown on the LCD display for window type. The output in hysteresis or window type is described in switch control type parameter.




3. Switch polarity parameter

NPN or PNP may be switched by pressing . Press  may switch to next parameter setting. String "nPN" is shown on the LCD display for NPN polarity. String "PnP" is shown on the LCD display for PNP polarity.




4. Switch output type parameter

Normal open or normal close may be switched by pressing . Press  may switch to next parameter setting. String "nC" is shown on the LCD display for normal close type. String "nO" is shown on the LCD display for normal open type. State "close" means the output is enable or the power from the output wire is turned on. The output LED will be bright when output is enable.


5. Switch output high threshold

The parameter 5 is the high threshold pressure setting. String "-Hi-" will be shown on display then the value of the high threshold pressure. Press  may switch to next parameter setting. Press  to select the digit to be changed, and the selected digit will flash. The selected digit may be changed from "0" to "9" by pressing .

6. Switch output low threshold



The parameter 6 is the low threshold pressure setting. String "-Lo-" will be shown on display then the value of the low threshold pressure. Press  may switch to next parameter setting. Press  key to select the digit to be changed, and the selected digit will flash. The selected digit may be changed from "0" to "9" by pressing .

7. Display color of output enable parameter


The display color can be programmed to change based on Output enable. Using the table on the next page, set the desired screen color based on the "bHX" number by using the adjustment key. Once completed, press  to go to the next parameter.

Setting	bH01	bH02
	bL01	bL02
Display color	Red	Green


8. Display color of output disable parameter

The display color can be programmed to change based on Output disable. Using the table above, set the desired screen color based on the "bLX" number by using . Once completed, press  to go to the next parameter.

9. Display update rate

The parameter 7 is the display update rate setting. Press  to switch the display update rate once according to the sequence of 0.1, 0.3s, 0.5s, 1.0s, 2.0s, and 3.0s, and restart from 0.1s again. The display shows the string "L-XX" where XX is the update rate.

10. Analog output (applicable model:JC-DPS-NS)

The parameter is the analog output format setting. Press  to switch the analog output format once according to the sequence as shown in table. The LCD shows the string "Vo-X" to indicate the voltage output and "Io-X" for current output.

The table for analog output format

Setting	Vo-1	Vo-2	Vo-3	Vo-4	Vo-5	Io- 1	Io-2	Io-3
Output format	0~5V	0.5~4.5V	1~5V	0~10V	1~10V	4~20mA	0~20mA	0~24mA