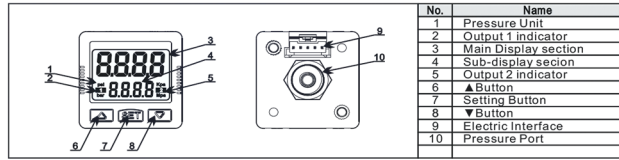


DIGITAL PRESSURE SWITCH

DPS-2 Series

Panel



Technical specifications

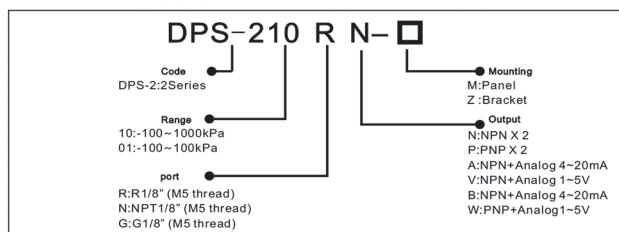
Model	DPS-201 (Compound)	DPS-210 (Positive)
Range of measure	-100kPa~100kPa	-0.100MPa~1.000MPa
Setting range	-100kPa~100kPa	-0.100MPa~1.000MPa
Withstand pressure	500kPa	1.500MPa
Pressure type	Non-flammable, non-corrosive gas, gauge pressure measurement	
Measure accuracy	±2%F.S. (Ambient temperature 25°C)	
Temperature error	±3%F.S. (Temperature range 0~50°C)	
Measure pattern	Hysteresis mode	
Port size	Compare mode of upper and lower bounds	
Brief description	External R1/8, NPT1/8, G1/8 option, internal thread M5	
Status display	Double LCD display	
Display model	4-digit measurement value, unit display, output status display	
Voltage range	Adjustable backlight, 4 groups of display models	
power consumption	12~24VDC ±10%	
Output signal	Transistor output	NPN open-collector output Output current:80mA MAX Voltage drop:≤1V
	Analog output	PNP open-collector output Output current:80mA MAX Voltage drop:≤1V
Response time	Voltage output	Current output
	Singal amplitude:1~5V Load resistance:≥1KΩ	Singal amplitude:4~20mA Load resistance:≤400Ω
Short-circuit protection	Adjustable:2.5ms, 20ms, 100ms, 500ms, 1000ms, 2000ms	
IP level	Yes	
Ambient temperature	IP40	
Ambient humidity	Operating temperature 0~50°C, storage temperature -20~60°C	
Insulation voltage	Operating humidity 35~80%RH	
Insulation resistance	1000VAC 1min	
Shock	≥50MΩ(500VDC)	
vibration	Max 100m/s ² , 3 times each in6 directions of X, Y and Z	
	Amplitude 1.5mm. 10HZ~500HZ, 2 hours each direction of X, Y and Z	

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DIGITAL PRESSURE SWITCH

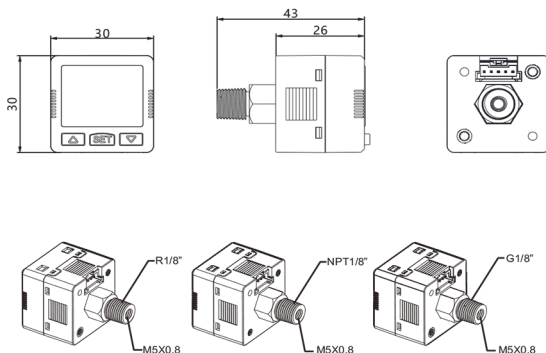
DPS-2 Series

Ordering code



Mounting dimensions (unit:mm)

Overall dimensions & connection port

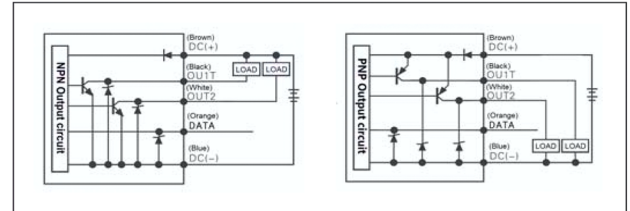


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DIGITAL PRESSURE SWITCH

DPS-2 Series

Output circuit wiring diagrams



Quick setting

Zero point setting



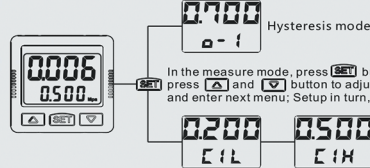
In the measure mode, press [▲] + [▼] button at the same time, until display "0", release the button; PS: reset range: +/-10%F.S.

Key lock and unlock



Lock: in the measure mode, press [▲] + [SET] + [▼] button at the same time until "LOCK ON" shown, release the buttons; Unlock: in the measure mode, press [▲] + [SET] + [▼] button at the same time until "LOCK OFF" shown, release the buttons.

Easy setting function



In the measure mode, press [SET] button to enter easy setting mode, press [▲] and [▼] button to adjust the value; press [SET] button and enter next menu; Setup in turn, until return to measurement interface.

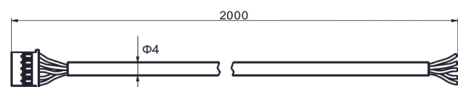
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DIGITAL PRESSURE SWITCH

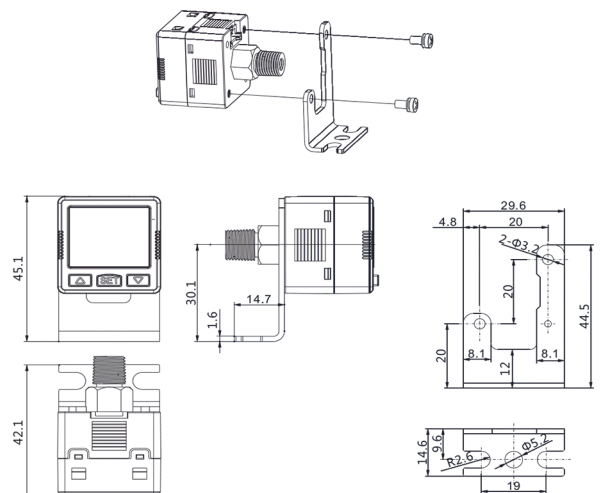
DPS-2 Series

Mounting dimensions (unit:mm)

Wire dimensions



Mounting bracket: Z

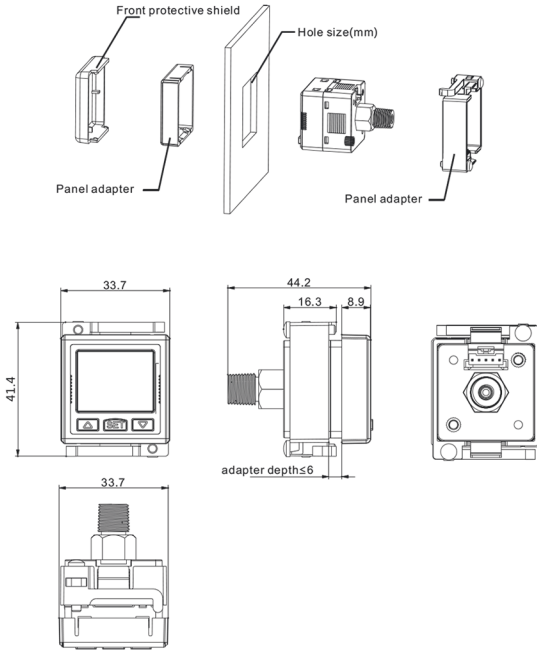


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DIGITAL PRESSURE SWITCH DPS-2 Series

Mounting dimensions (unit:mm)

● Panel mounting:M



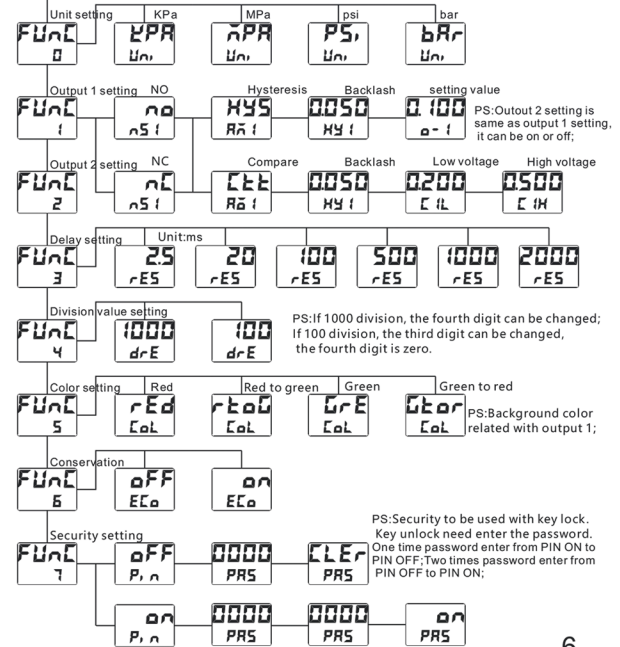
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DIGITAL PRESSURE SWITCH DPS-2 Series

Operation instruction (Standard setting)



In the measure mode, press **SET** button 2S to enter standard setting interface; press **▲** and **▼** button to switch the menu, press **SET** button to enter the specific setting, when data is setting, **▲** button to move the command, **▼** button to add the command.



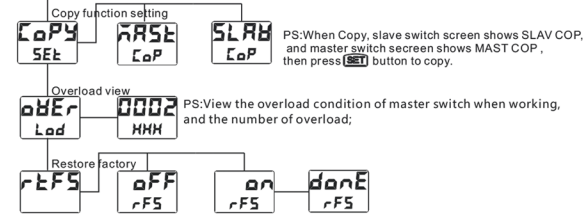
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DIGITAL PRESSURE SWITCH DPS-2 Series

Advanced setting mode



In the measurement mode, press **SET** button 4s to enter advanced function interface; use **▲** and **▼** button to switch the menu, press **SET** button to specific setting;



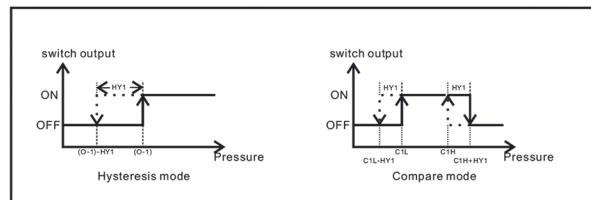
Error code description

Error code	Problem	Solution
Err 1	Exceed zero point reset range	Zero point reset range: +/-10%F.S do not over value setting
Err 2	Large output current	Please check the output wire short circuit, over load or others
Err 4	Incorrect pressure setting	Hysteresis mode: HYS<0.1 Compare mode: HYS<1L<C1H
Err 5	Storage data error	Chip error need maintain
Err 6	Wrong password	enter the correct password
Err 7	Copy data Error	Data check error, please re-copy
HHHH	Exceed pressure measure	adjust the pressure to the range

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DIGITAL PRESSURE SWITCH DPS-2 Series

Output function diagram



Pressure unit conversion table

From	To	Pa	kPa	MPa	kgf/cm ²	mmHg	psi	bar	inHg
1Pa	1	0.001	0.000001						
1kPa	1000	1	0.001	0.010197	7.500616	0.145038	0.01	0.2953	
1MPa	1000000	1000	1	10.197	7500.616	145.038	10	295.2998	
1kgf/cm ²	98066.5	98.0665	0.0980665	1	735.559	14.2233	0.980665	28.95979	
1mmHg	133.32	0.13332	0.000133	0.001359	1	0.019336	0.001333	0.03937	
1psi	6895	6.895	0.006895	0.07031	51.7157	1	0.06895	2.036074	
1bar	100000	100	0.1	1.01972	750.062	14.5038	1	29.52998	
1inHg	3386.388	3.386388	0.003386	0.034530	25.4	0.491141	0.033863	1	

⚠ Caution

1. Only used for air pressure measurement, do not use corrosive or flammable gas.
2. Avoid to be used in high temperature and high humidity.
3. Before installation or removal, please make sure pressure source has been stopped, the output wire is disconnected with controller, to ensure safe.
4. When installation please use the part that meet the pressure connection port and sealing is good, to avoid measure error or gas leakage and other issues.
5. Before connecting to the power, make sure the wiring is correct, higher voltage input will damage the pressure switch

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