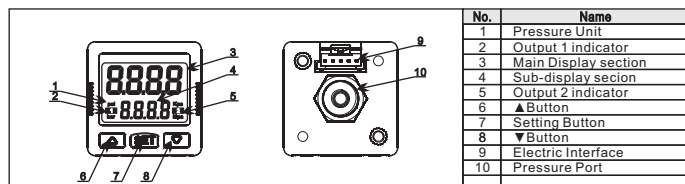


DIGITAL PRESSURE SWITCH

DPS-2 Series



Panel



Technical specifications

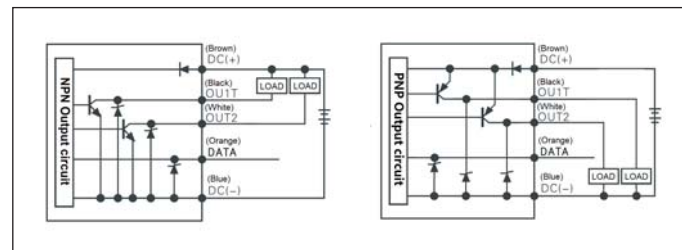
Model	DPS-201 (Compound)	DPS-210 (Positive)
Pressure Measure		
Range of measure	-100kPa~100kPa	-0.100MPa~1.000MPa
Setting range	-100kPa~100kPa	-0.100MPa~1.000MPa
Withstand pressure	500kPa	1.500MPa
Pressure type	Non-flammable, non-corrosive gas, gauge pressure measurement	
Measure accuracy	±2%F.S. (Ambient temperature 25°C)	
Temperature error	±3%F.S. (Temperature range 0~50°C)	
Measure pattern	Hysteresis mode	
Port size	External R1/8, NPT1/8, G1/8 option, internal thread M5	
Display		
Brief description	Double LCD display	
Status display	4-digit measurement value, unit display, output status display	
Display model	Adjustable backlight, 4 groups of display models	
Voltage range	12~24VDC ±10%	
power consumption	40mA Max(non-load)	
Output signal		
Transistor output	NPN open-collector output Output current:80mA MAX Voltage drop:≤1V	PNP open-collector output Output current:80mA MAX Voltage drop:≤1V
Analog output	Voltage output Signal amplitude:1~5V Load resistance:≥1KΩ	Current output Signal amplitude:4~20mA Load resistance:≤400Ω
Response time	Adjustable:2.5ms,20ms,100ms,500ms,1000ms,2000ms	
Short-circuit protection	Yes	
IP level	IP40	
Ambient temperature	Operating temperature 0~50°C, storage temperature -20~60°C	
Ambient humidity	Operating humidity35~80%RH	
Insulation voltage	1000VAC 1min	
Insulation resistance	≥50MΩ(500VDC)	
Shock	Max 100m/s ² , 3 times each in6 directions of X.Y and Z	
vibration	Amplitude 1.5mm.10HZ~500HZ, 2 hours each direction of X.Y and Z	

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DIGITAL PRESSURE SWITCH

DPS-2 Series

Output circuit wiring diagrams



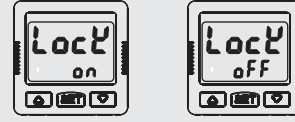
Quick setting

Zero point setting



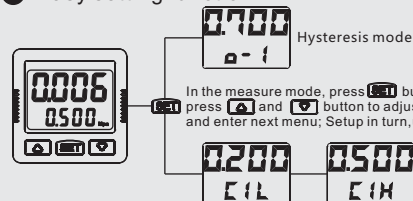
In the measure mode, press ▲ + ▼ button at the same time until display "0", release the button;
PS: reset range: ±10%F.S.

Key lock and unlock



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

Easy setting function



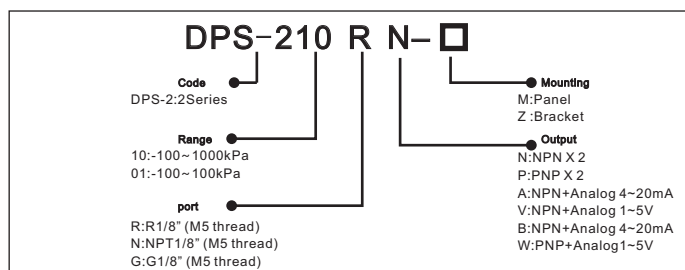
In the measure mode, press ▲ button to enter easy setting mode, press ▲ and ▼ button to adjust the value; press ▲ button and enter next menu; Setup in turn, until return to measurement interface.

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DIGITAL PRESSURE SWITCH

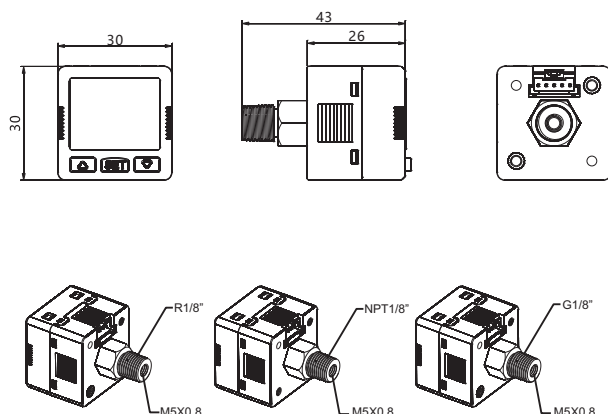
DPS-2 Series

Ordering code



Mounting dimensions (unit:mm)

Overall dimensions & connection port



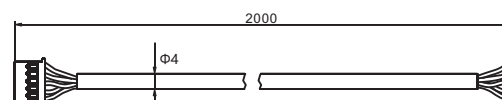
3

DIGITAL PRESSURE SWITCH

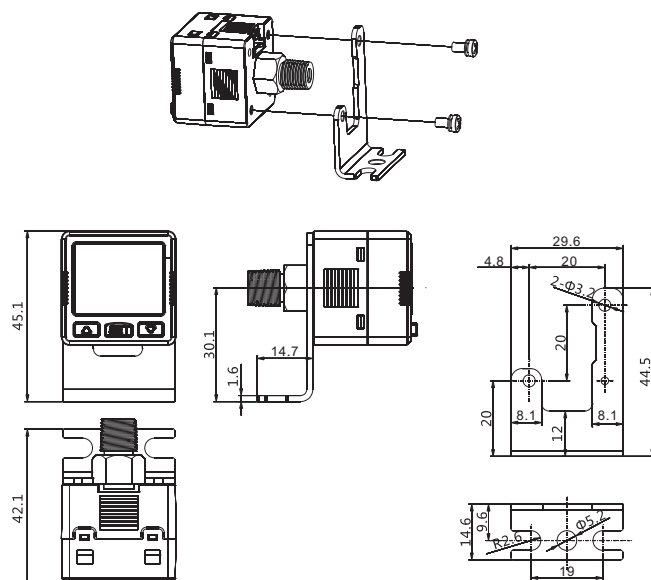
DPS-2 Series

Mounting dimensions (unit:mm)

Wire dimensions



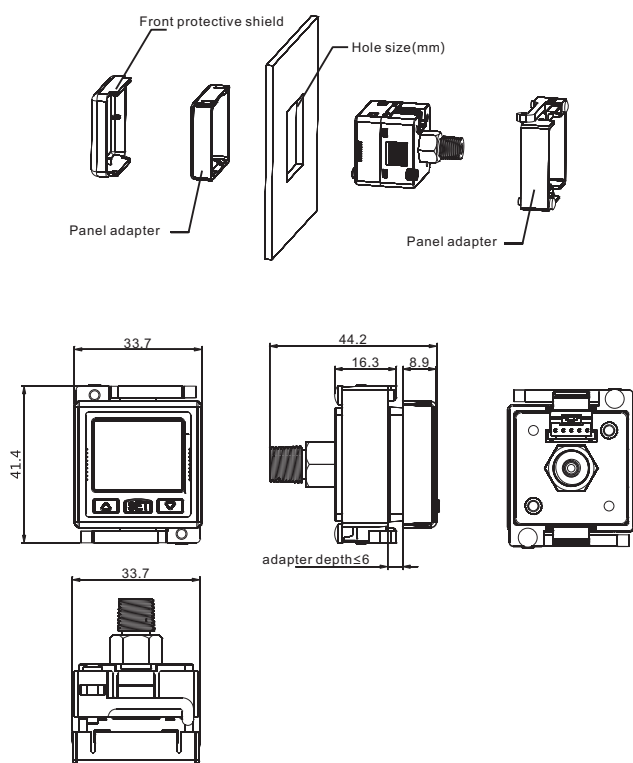
Mounting bracket:Z



4

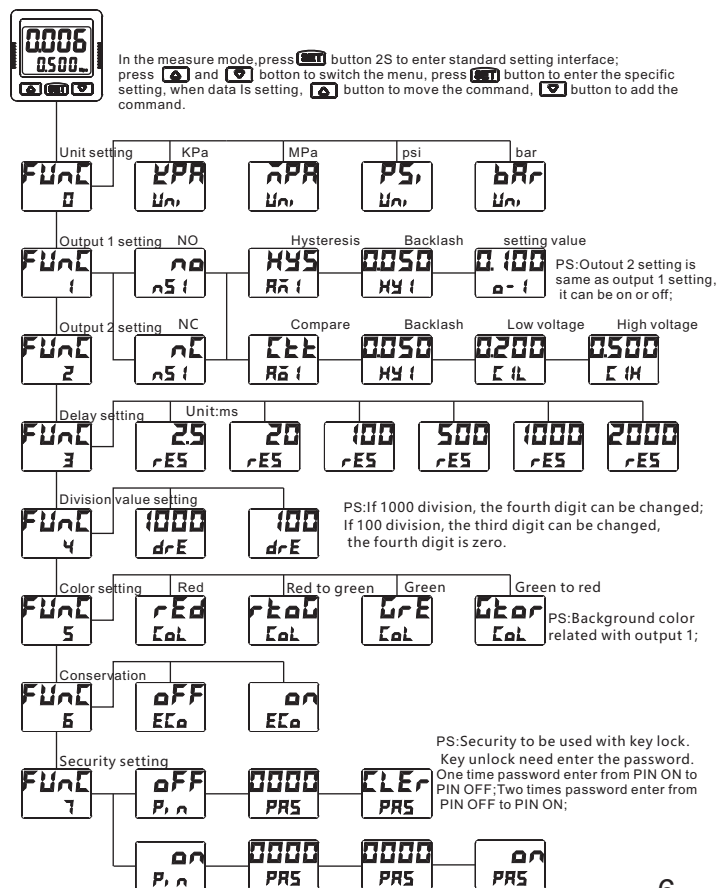
Mounting dimensions (unit:mm)

● Panel mounting:M



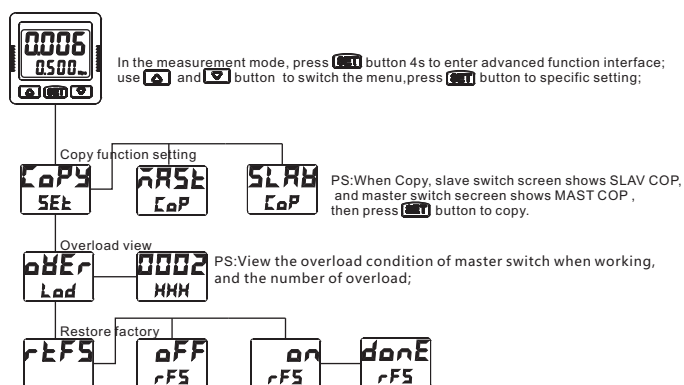
5

Operation instruction (Standard setting)



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Advanced setting mode

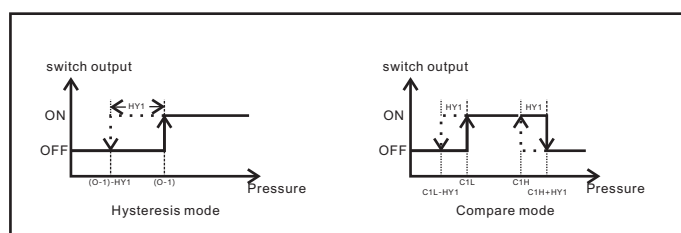


Error code description

Error code	Problem	Solution
Err1	Exceed zero point reset range	Zero point reset range: +/-10%F.S do not over value setting
Err2	Large output current	Please check the output wire short circuit, over load or others
Err4	Incorrect pressure setting	Heysteresis mode: HYS<0-1 Compare mode: HYS<1L<C1H
Err5	Storage data error	Chip error need maintain
Err6	Wrong password	enter the correct password
Err7	Copy data Error	Data check error, please re-copy
HHHH	Exceed pressure measure	adjust the pressure to the range

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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	0.098066	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	6.985	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 safety.
4. When installation please use the part that meet the pressure connection port and sealling 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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