

PREMIER QUALITY
GLOBAL REPUTATION

DIGITAL PRESSURE SWITCH DPS Series

Ultra-low power
consumption

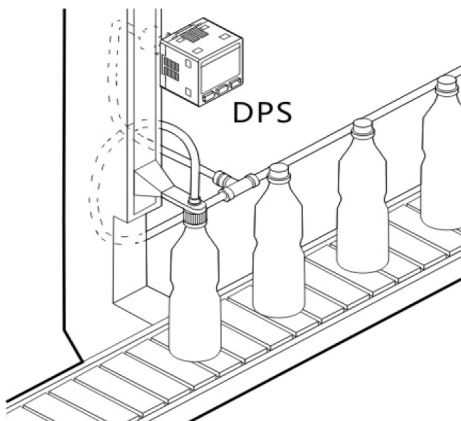
High performance
LCD display



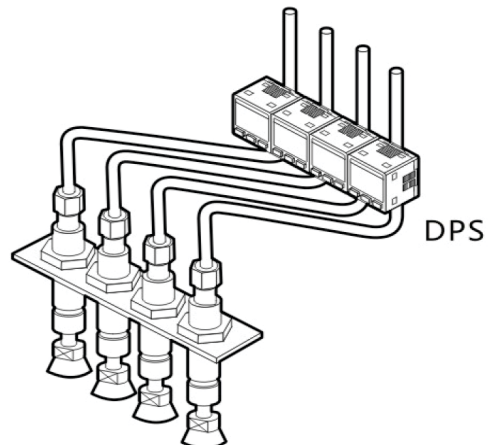
Multiple measurement
unit for option

Use high quality
imported parts

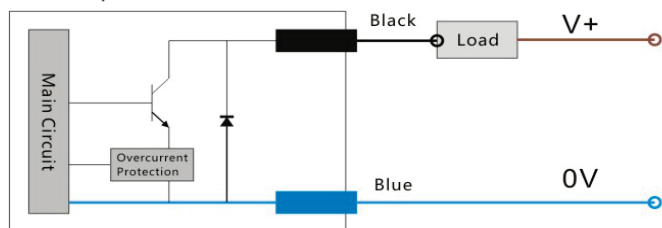
Positive Pressure Application



Vacuum Application



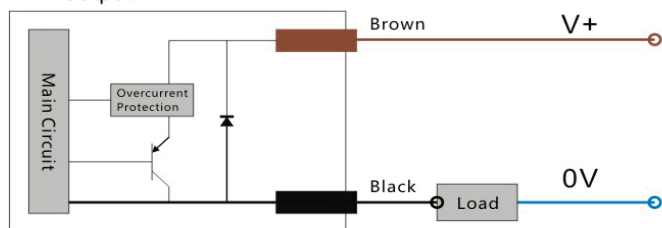
NPN output



NPN OC circuit:

Low level output When The Switch is On:
High resistance when the switch is off:

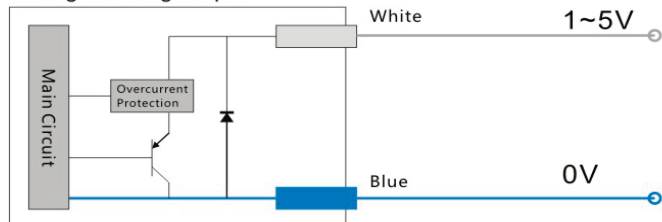
PNP output



PNP OC circuit:

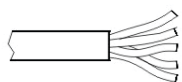
High level output when the switch is on
High resistance when the switch is off:

Voltage analog output

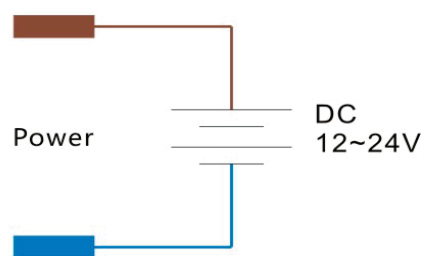


Analog voltage output

Full scale proportional output
Reference level 0V

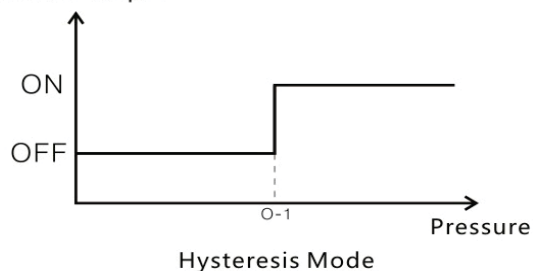


- Brown: VCC (POWER SUPPLY)
- Black: output 1
- White: output 2/analog output
- Orange: special function
- Blue: VSS (COMMON)

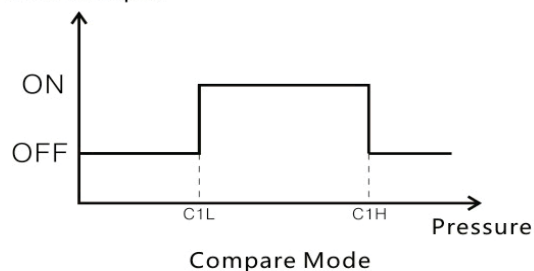


Output function diagram

Switch Output



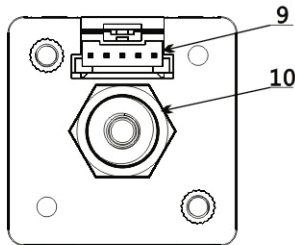
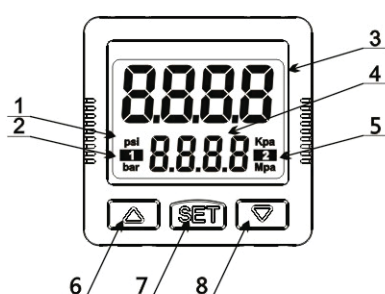
Switch Output



DIGITAL PRESSURE SWITCH

DPS Series

Panel



NO.	Name
1	Pressure Unit
2	Output 1 indicator
3	Main Display section
4	Sub-display section
5	Output 2 indicator
6	▲Button
7	Setting Button
8	▼Button
9	Electric Interface
10	Pressure port

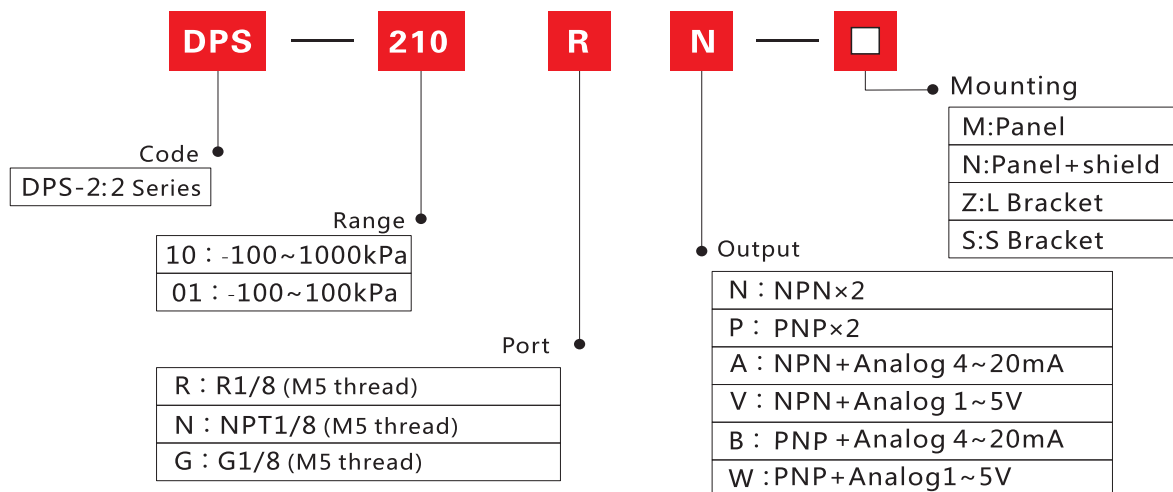
Specification

Model		DPS-201 Compound	DPS-210 pasitive
Pressure Measure	Range of measure	-100kPa~100kPa	-0.100MPa~1.000MPa
	Setting range	-100kPa~100kPa	0.000MPa~1.000MPa
	Withstand pressure	500kPa	1.500MPa
	Pressure type	Non-flammable,non-corrosive gas,gauge pressure measurement	
	Measure accuracy	$\leq \pm 2\%$ F.S.(Ambient temperature 25°C)	
	Temperature error	$\leq \pm 3\%$ F.S. (Temperature range 0~50°C)	
	Measure pattern	Hysteresis mode Compare mode of upper and lower bounds	
Port size		External R1/8,NPT1/8,G1/8 option,internal thread M5	
Display	Brief description	Double LCD display	
	Status display	4- digital measurement value,unit display,output status display	
	Display model	Adjustable backlight, 4 groups of display models	
Input power	Voltage range	12 ~ 24VDC $\pm 10\%$	
	Power consumption	40mA Max (non-load)	
Output signal	Transistor output	NPN open-collector output Output current:80mA MAX Voltage drop: $\leq 1V$	PNP open-collector output Output current:80mA MAX Voltage drop: $\leq 1V$
	Analog output	Voltage output Singal ampliude:1~5V Load resistace: $\geq 1K\Omega$	Current output Singal ampliude:4~20mA Load resistace: $\leq 400\Omega$
		Adjustable:2.5ms,20ms,100ms,500ms,1000ms,2000ms	
		Yes	
Environmetal resistance		IP40	
		Operating temperature 0~50°C,storage temperature -20~60°C	
		Operating humidity35~80%RH	
		1000VAC 1min	
		$\geq 50M\Omega(500VDC)$	
		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	

DIGITAL PRESSURE SWITCH

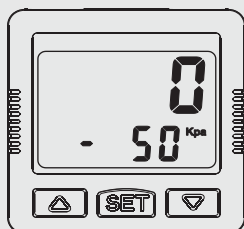
DPS Series

Ordering code



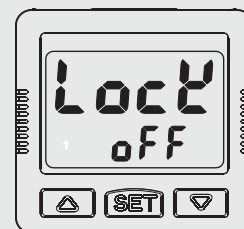
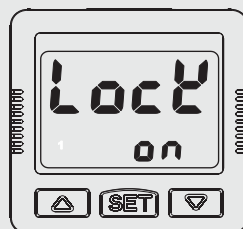
Quick setting

● Zero point setting



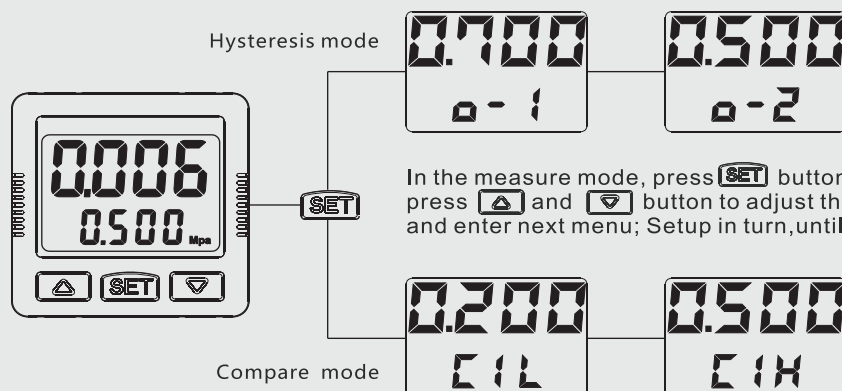
In the measure mode, press + button at the same time, until display "0", release the button;
 PS: reset range: +/-10%F.S.

● 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.

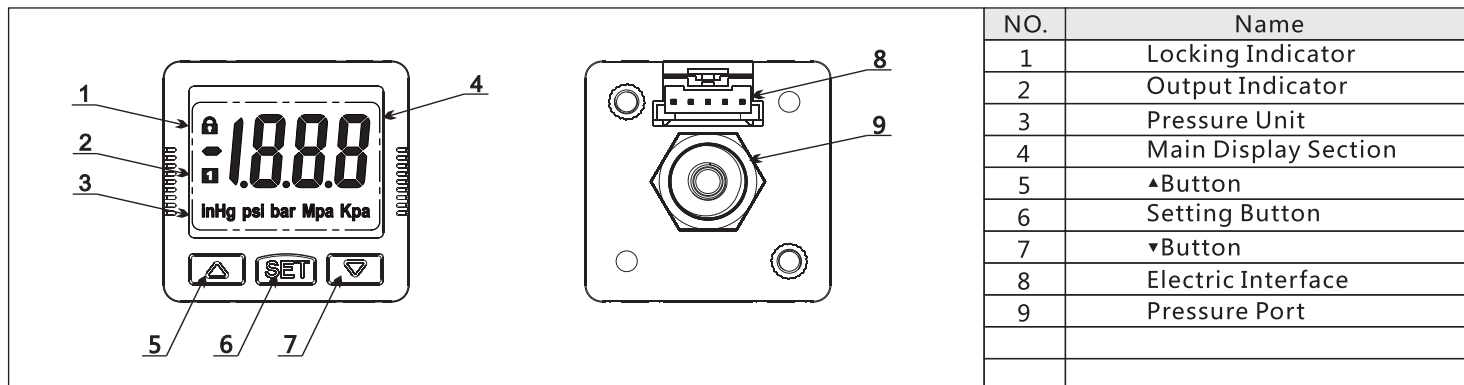
● Easy setting function



DIGITAL PRESSURE SWITCH

DPS Seriescs

Panel



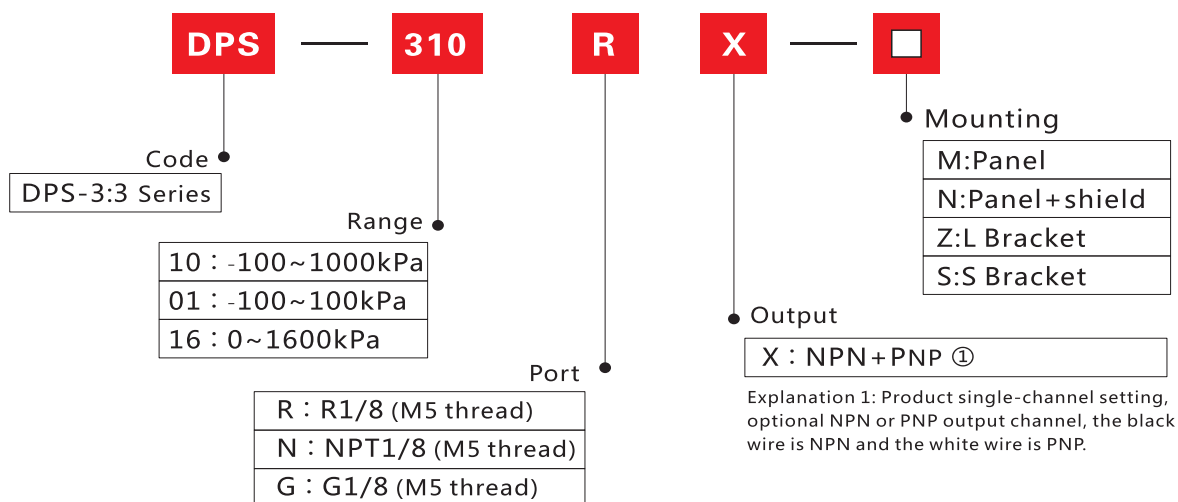
Specification

Model		DPS-301 Compound	DPS-310 pasitive
Pressure Measure	Range of measure	-100kPa~100kPa	-0.100MPa~1.000MPa
	Setting range	-100kPa~100kPa	0.000MPa~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		Single point mode	
Display	Brief description	Window mode	
	Status display	External R1/8,NPT1/8,G1/8 option,internal thread M5	
	Display model	LCD display, 4-digital measurement value,unit display,output status display	
Input power	Voltage range	Adjustable backlight, 4 groups of display models	
	Power consumption	12 ~ 24VDC ±10%	
Output signal	Transistor output	40mA Max (non-load)	
		NPN open-collector output Output current:80mA MAX Voltage drop:≤1V	PNP open-collector output Output current:80mA MAX Voltage drop:≤1V
	Analog output	Adjustable:2.5ms,20ms,100ms,500ms,1000ms,2000ms	
		Yes	
	Shoet-circuit protection	IP40	
	IP level	Operating temperature 0~50°C,storage temperature-20~60°C	
Environmetal resistance	Ambient temperature	Operating humidity35~80%RH	
	Ambient humidity	1000VAC 1min	
	Insukation voltage	≥50MΩ(500VDC)	
	Insukation resistance	Max 100m/s ² ,3 times each in6 directions of X.Y and Z	
	Shock	Amplitude 1.5mm.10HZ~500HZ,2 hours each direction of X.Y and Z	
	vibration		

DIGITAL PRESSURE SWITCH

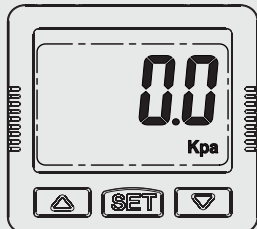
DPS Seriescs

Ordering code



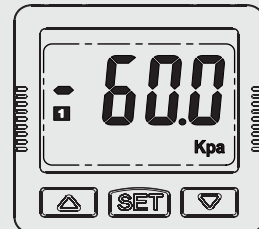
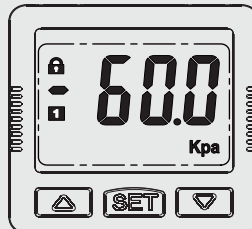
Quick setting

● Zero point setting



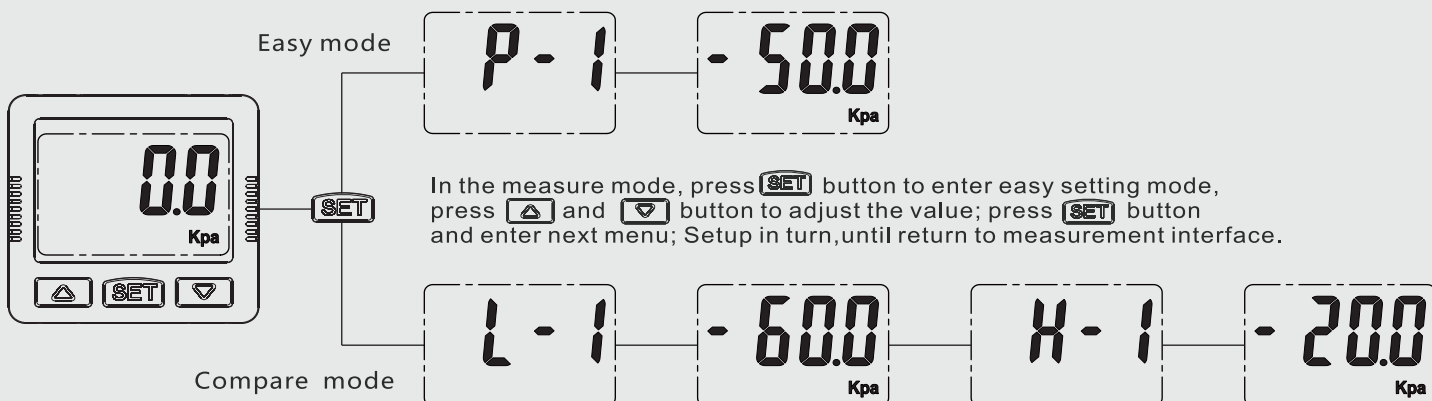
In the measure mode, press + button at the same time, until display "0", release the button;
 PS: reset range: +/-10%F.S.

● Key lock and unlock



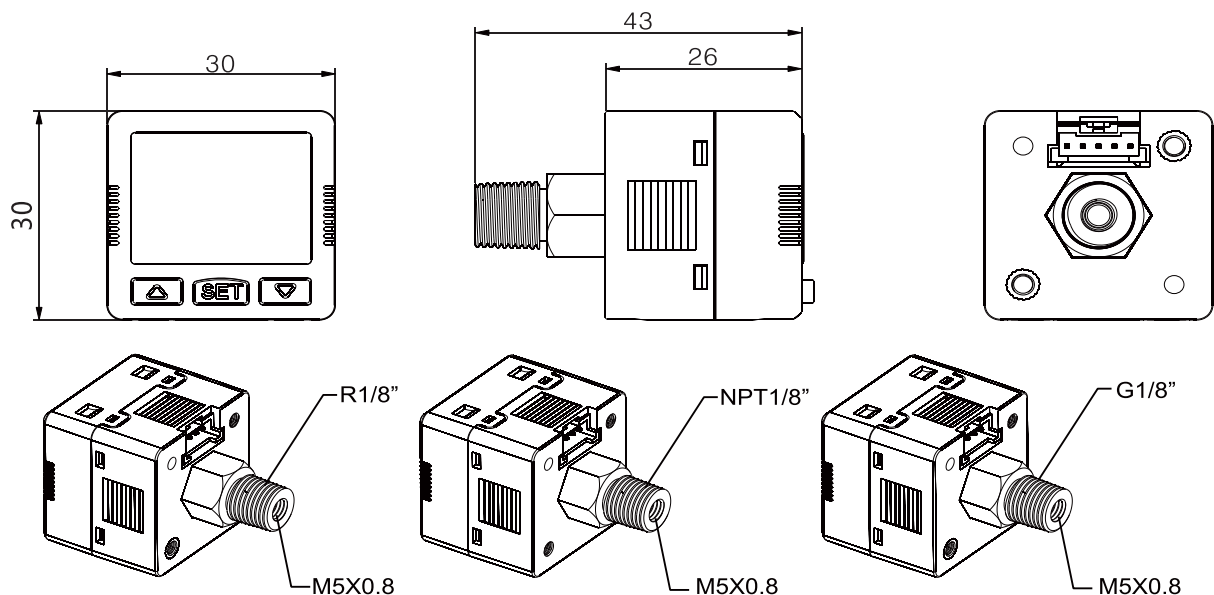
Lock: in the measure mode, press + + button at the same time until "LOCK ON" shown, release the buttons;
 Unlock: in the measure mode, press + + button at the same time until "LOCK OFF" shown, release the buttons.

● Easy setting function



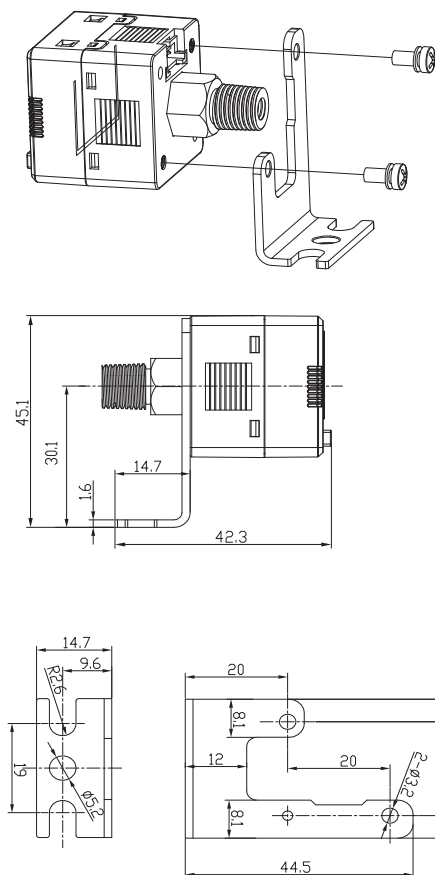
Mounting dimensions (mm)

Overall dimensions & connection port

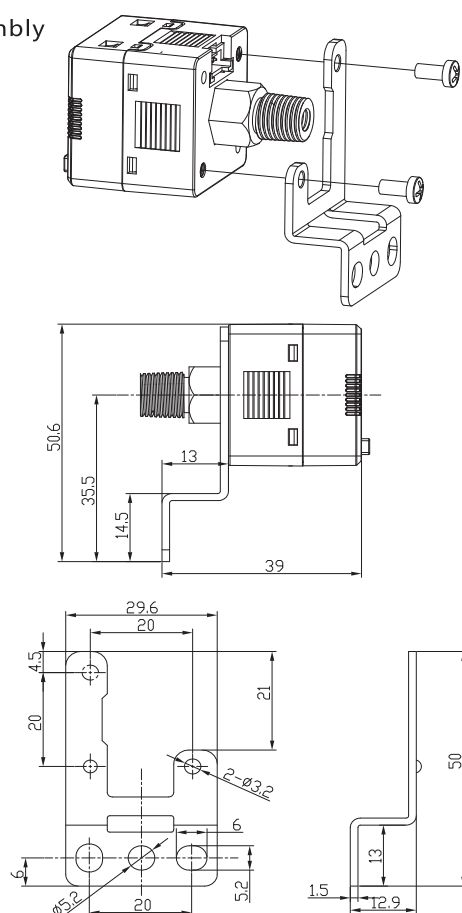


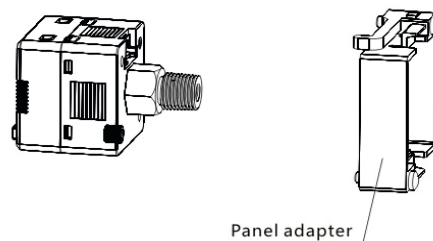
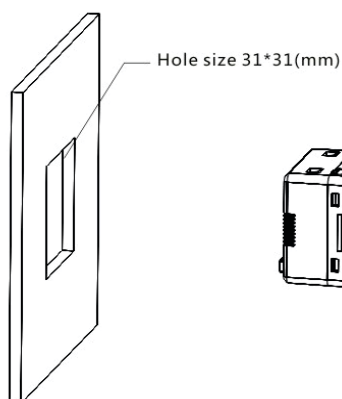
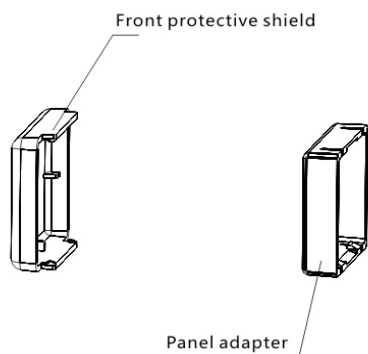
Mounting bracket

L bracket assembly

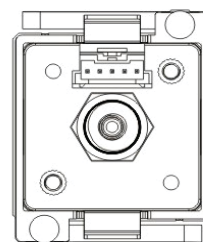
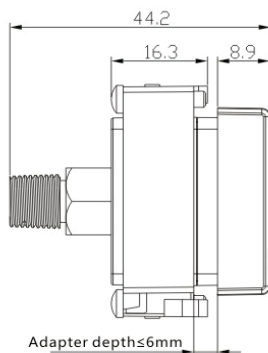
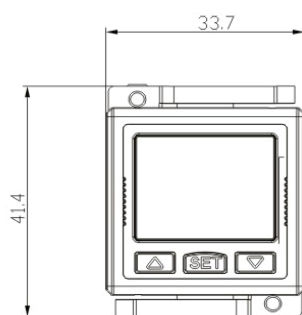


S bracket assembly

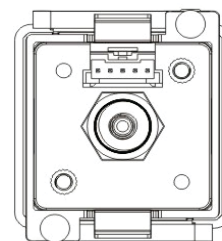
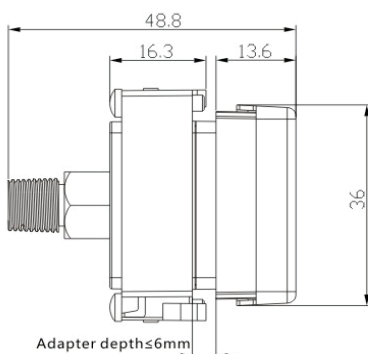
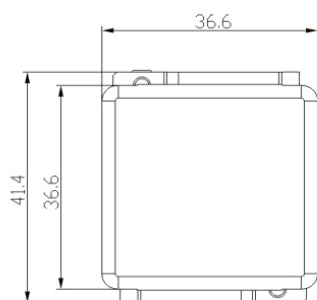




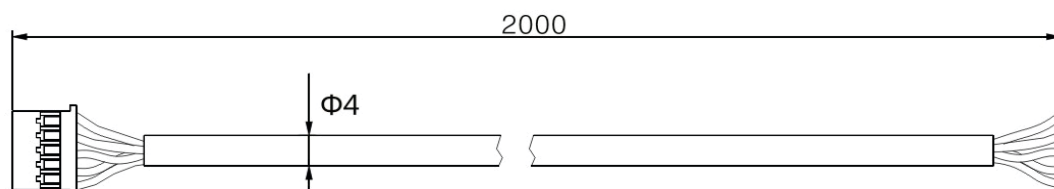
Panel mount



Add Dust Cover Installation



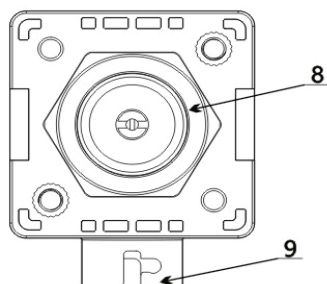
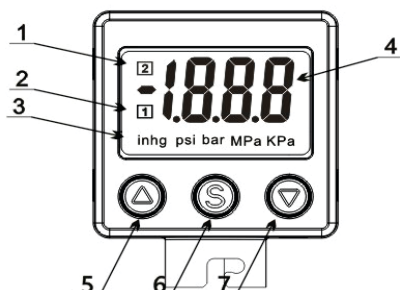
Wire dimensions



DIGITAL PRESSURE SWITCH

DPS Series

Panel



NO.	Name
1	Output indicator
2	Output indicator
3	Pressure Unit
4	Main Display Section
5	▲Button
6	Section Button
7	▼Button
8	Pressure Port
9	Electric interface

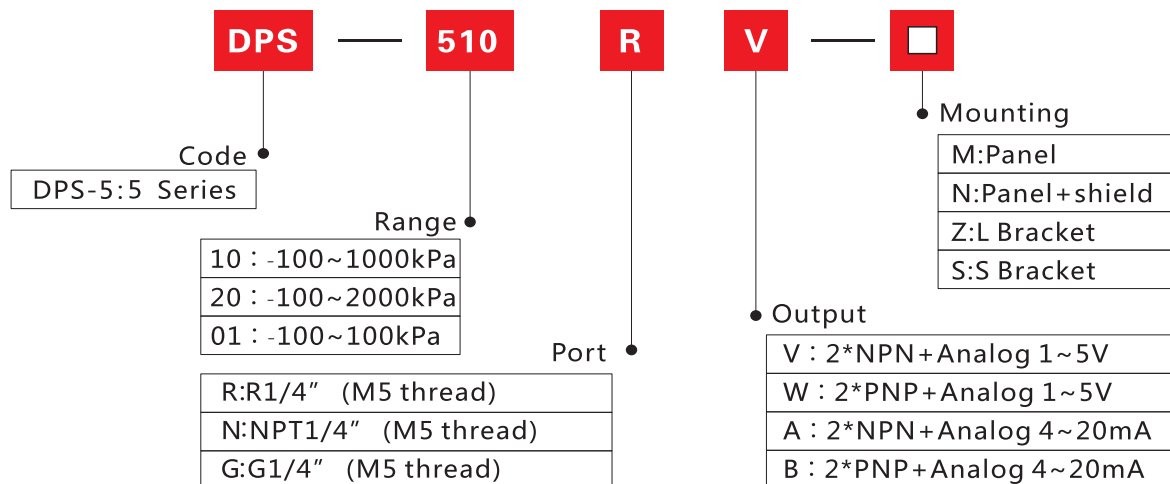
Specification

Model		DPS-501	DPS-510	DPS-520
Pressure Measure	Range of measure	-100KPa~+100KPa	-0.1MPa~1MPa	-0.1MPa~2MPa
	Setting range	-100KPa~+100KPa	-0.1MPa~1MPa	-0.1MPa~2MPa
	Withstand pressure	300KPa	3MPa	
	Pressure type	The product is not suitable for media which corrodes SUS316L		
	Measure accuracy	≤±2%F.S.(Ambient temperature 25℃)		
	Temperature error	≤±3%F.S.(Temperature range 0~50℃)		
	Measure pattern	Easy mode		
		Hysteresis mode		
Port size		Compare mode of upper and lower bounds		
Display	Brief description	External R1/4,NPT1/4,G1/4 option,internal thread M5		
	Status display	4-digital measurement value,unit display,output status display		
	Display model	Adjustable backlight, 4 groups of display models		
Input power	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 Singal ampliude:1~5V Load resistace:≥1KΩ	Current output Singal ampliude:4~20mA Load resistace:≤400Ω	
	Response time	Adjustable:2.5ms,20ms,100ms,500ms,1000ms,2000ms		
	Shoet-circuit protection	Yes		
Environmetal resistance	IP level	IP65		
	Ambient temperature	Operating temperature 0~50℃,storage temperature-20~60℃		
	Ambient humidity	Operating humidity35~80%RH		
	Insukation voltage	1000VAC 1min		
	Insukation 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		

DIGITAL PRESSURE SWITCH

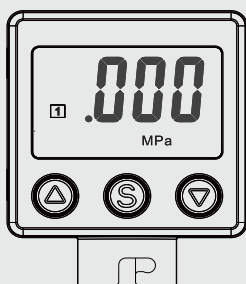
DPS Seriescs

Ordering code



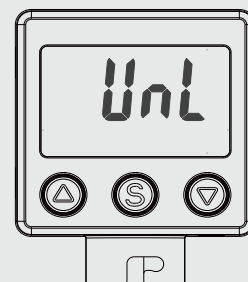
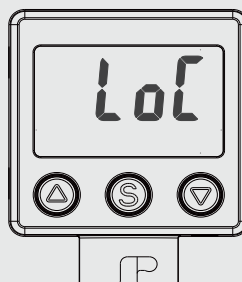
Quick setting

● Zero point setting



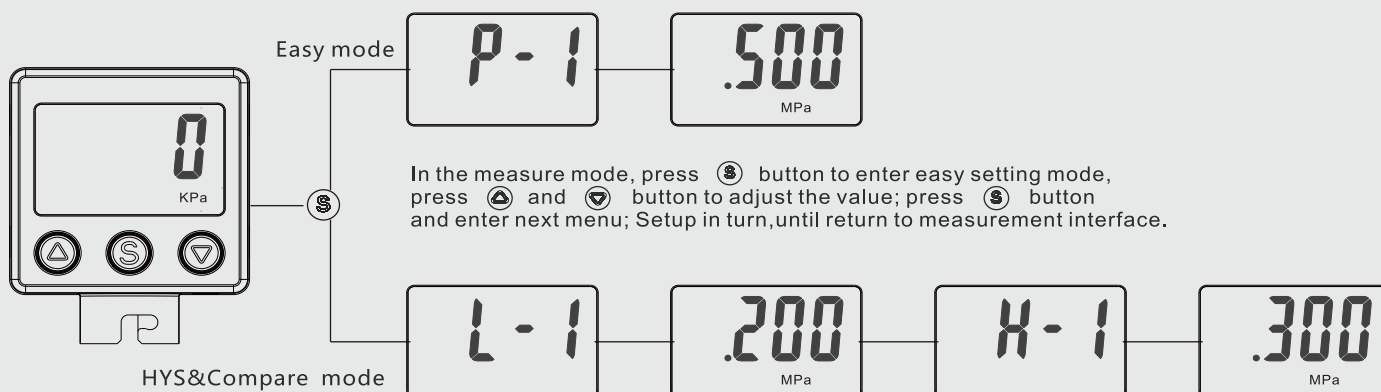
In the measure mode, press $\triangle$ + ∇ button at the same time, until display "0", release the button;
 PS: reset range: +/-10%F.S.

● Key lock and unlock



Lock: in the measure mode, press $\triangle$ + $\square$ + ∇ button at the same time until "LOCK ON" shown, release the buttons;
 Unlock: in the measure mode, press $\triangle$ + $\square$ + ∇ button at the same time until "LOCK OFF" shown, release the buttons.

● Easy setting function

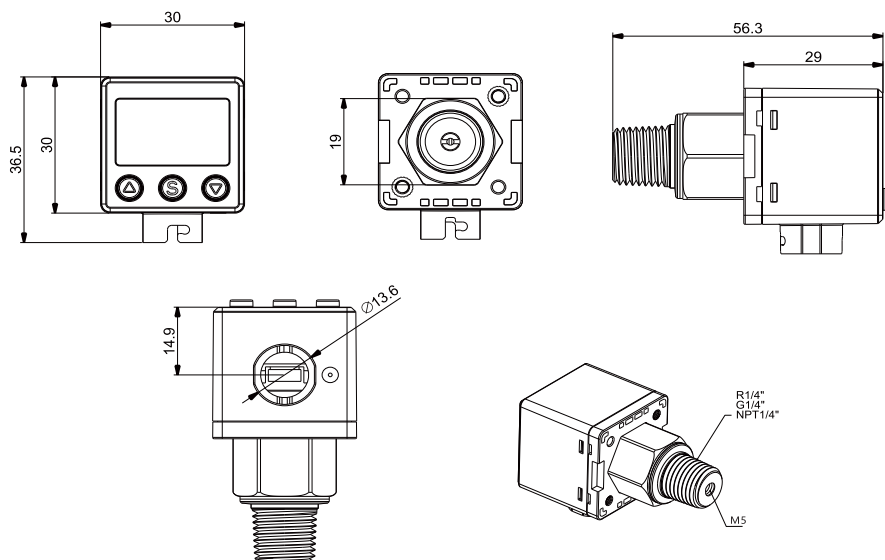


DIGITAL PRESSURE SWITCH

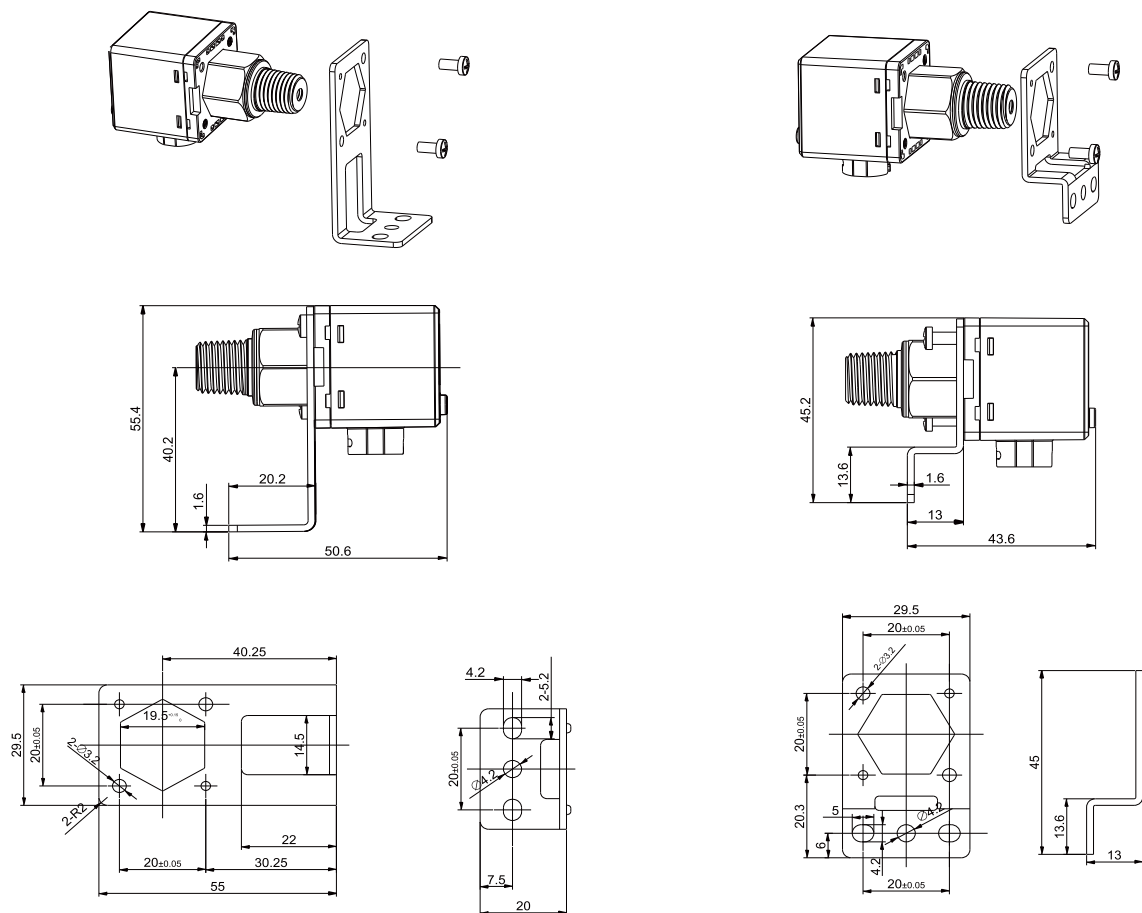
DPS Seriescs

Mounting dimensions (mm)

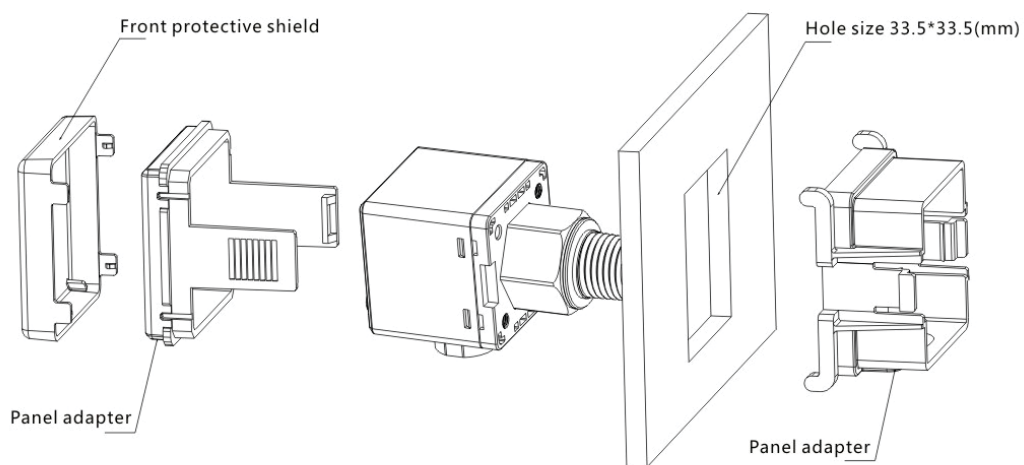
Overall dimensions & connection port



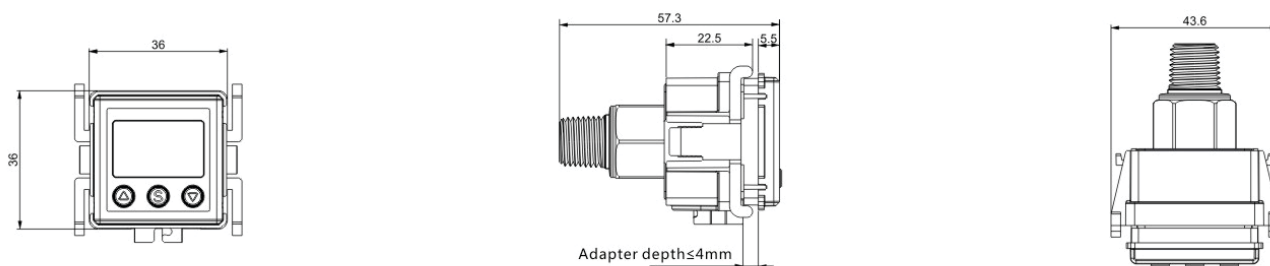
Mounting bracket



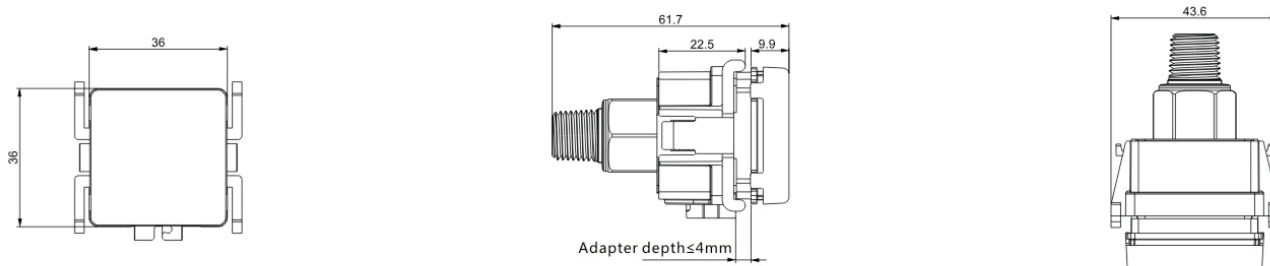
DIGITAL PRESSURE SWITCH DPS Series



Panel mount



Add Dust Cover Installation



Wire dimensions

