

# ESS202 Intelligent Pressure Switch

- ✓ Whole stainless steel housing, IP67 protection
- ✓ LED, pressure and switch state display
- ✓ Compact, body rotate 320degree
- ✓ Protections for over-voltage, over-current and reversed polarity
- ✓ Anti-electromagnetic design under complex electromagnetic environment
- ✓ Analog output (4mA ~ 20mA DC) +2-way PNP,
- ✓ 2-way PNP, 2-way NPN, 1 relay output for options.
- ✓ 24V DC, 220V AC power supply for options
- ✓ Restore factory settings, manually cleared
- ✓ Support unit switchover among MPa, kPa, psi, bar and mbar
- ✓ AC/DC output



## Product Introduction

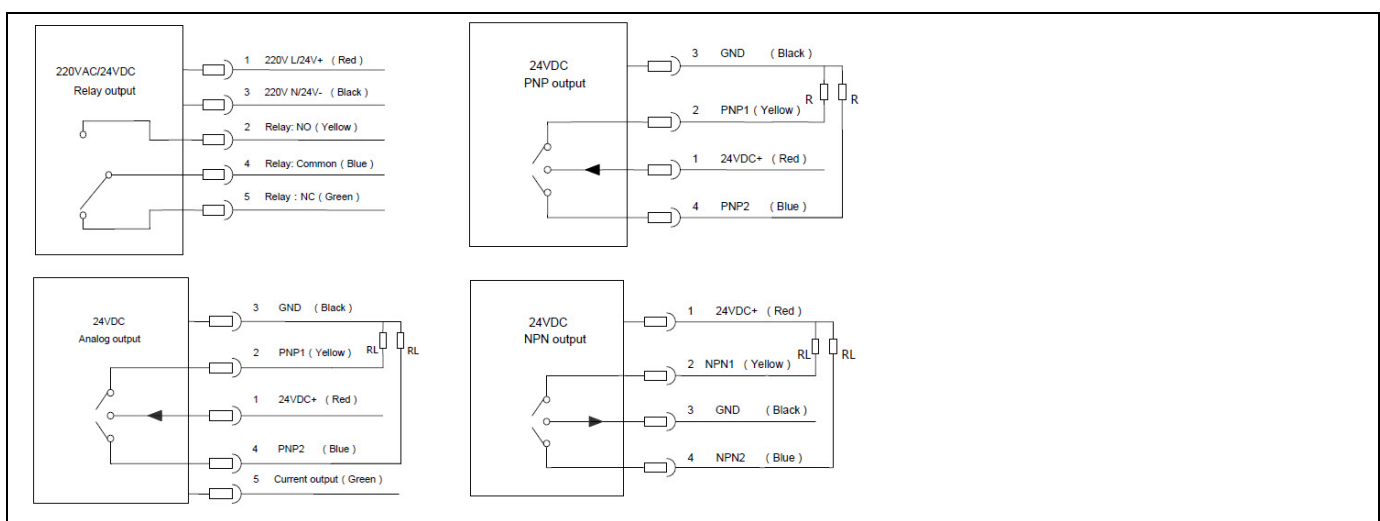
ESS202 pressure switch is an intelligent pressure controller combining pressure measurement, display and control together. The sensor output signal is amplified, noise reduced and conditioning through a highly integrated microprocessor to realize accurate pressure measurement, display and control of the switching output.

ESS202 adopts whole stainless steel housing, the protection is IP67. The indicator can be freely rotated within 320°. The product's amplifier circuit has over-voltage, over current and reversed polarity protection. It can be used in complex electromagnetic environment of industrial sites.

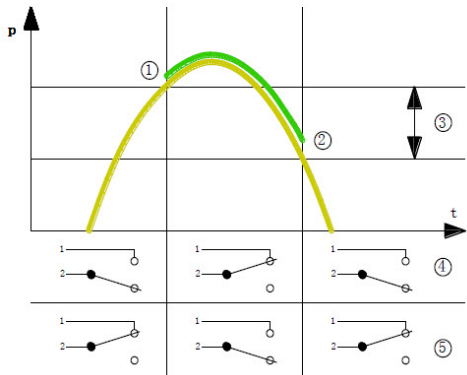
ESS202 supports 24V DC or 220V AC power supply. It has diversified output options including analog output (4mA ~ 20mA DC) +2 way PNP, 2-way PNP, 2-way or one-way relay. Also ESS202 supports manually cleared and switchover of the measuring unit. OLED screen displays real-time pressure value and switch status. It is with flexible installation, easy operation and simple menu.

ESS202 is safe and stable, and it be widely used in industries such as water utilities, petrochemical, metallurgy, transport, electricity, machinery manufacturing etc.

## Electric Connection

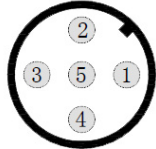


## Switch Action--Hysteresis type

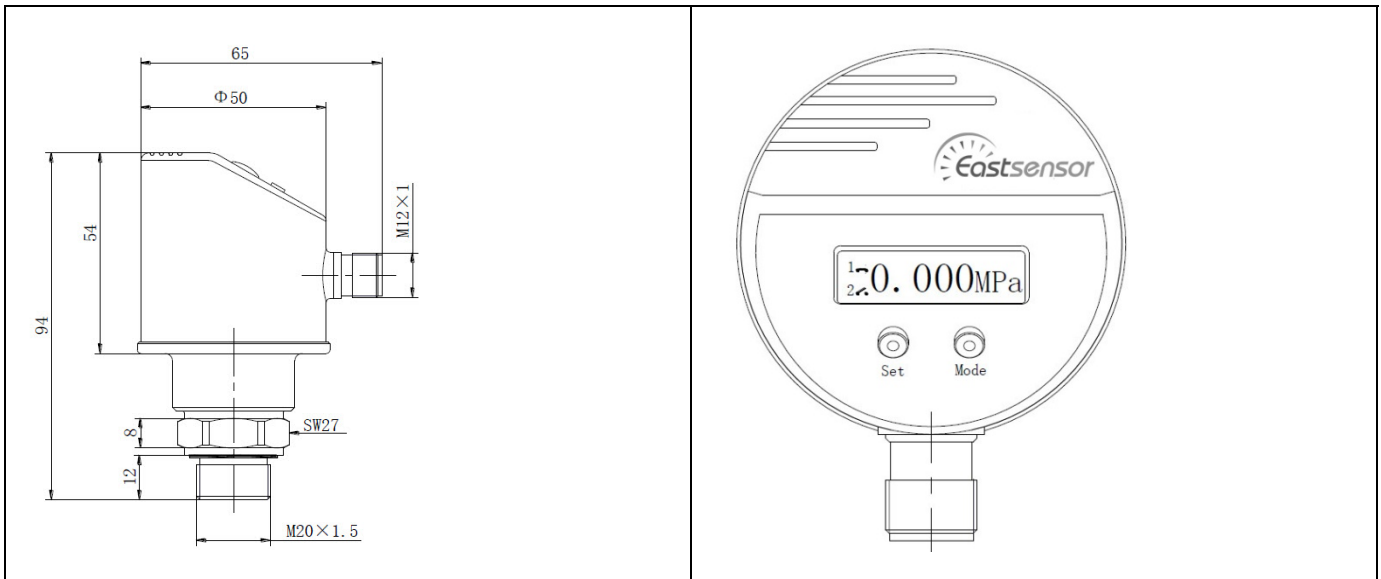


① Action Value
② Release Value
③ Difference between ① and ②/hysteresis
④ Output status of NO
⑤ Output status of NC

## Electric Definition

 <p>M12 x 1</p>	Wire color	Pin No.	220V AC power supply	24V DC power supply
	Red	1	Power L	Power +
	Black	3	Power N	Power -
	Yellow	4	Relay NO	Relay NO, NPN1, PNP1
	Green	5	Relay NC	Relay NC, current output
	Blue	4	Relay common	Relay common, NPN2, PNP2

## Dimension and drawing



## Specifications

Switch voltage	≤250VAC/30VDC	Transistor output	2-way PNP or 2-way NPN
Overpressure	1.5 time FS	Switch current	≤0.4A
Range	-100kPa...0kPa~10kPa...60Mpa	Analog output	4Ma~20mA DC
Pressure type	Gauge, Absolute	Load resistance	≤560 Ω
Accuracy	±0.25%FS/±0.5%FS	Relay output	one-way (SPDT)
Screen display	OLED with resolution 128*32 white reading in black ground solution	Power supply	(220±44)V AC/12V~36V DC (recommend 24V DC for relay)
Display refresh time	1s, 0.5s,0.2s (default), 0.1s	Switch current	≤3A
Media temperature	-20℃~80℃	Relay life	10,000,000times/min.load, 100,000 times/max load.
Repeatability	≤±0.1%FS	Response time	≤30ms
Thermal drift	≤±0.02%FS/℃	Gross weight	280g
Switch setting	0.5%FS~99.5%FS	Storage temperature	-40℃~80℃
Switch time-delay	0.0s~99.9s	Working temperature	-20℃~80℃
Media compatibility	The gas or liquid which is compatible with stainless steel and viton.	Electromagnetism compatibility	GB/T 17626.2/3-2006, GB/T 17626.4-2008
Vibration	≤20g/10Hz...500Hz (GB/T 2423.10-2008)	Impact	≤50g/11ms (GB/T 2423.5-1995)

## Ordering Procedure

ESS	202 Intelligent Pressure Switch	
	Code	Model
	202	Intelligent Pressure Switch
	Cod	Span
	1	-100kPa...0kPa~10kPa... 60MPa
	Code	Power supply type
	AC	220V AC(Relay only)
	DC	12V~36V DC (recommend 24VDC for relay output)
	Code	Output signal
	P	2×PNP output
	N	2×NPN output
	J	1×relay output
	E	Analog output (4mA~20mA DC) + 2×PNP
	Code	Pressure port
	C1	M20x1.5 male, face type seal
	C2	G1/4 male
	C3	G1/2 male
	C5	M20x1.5 male, waterline seal
	PC1	Flush diaphragm M20x1.5 male
	PC3	Flush diaphragm G1/2 male
	PD1	DN25 clamp connection
	Cod	Pressure type
	G	Gauge
	A	Absolute
ESS	202	1 AC P C3 G