



SP/SH Pressure Transmitter





SP Pressure Transmitter SH Level Transmitter



Introduction

SP pressure transmitter and SH level transmitter can be used to continuously measure the pressure 'liquid level' of the process fluid (liquid, gas, steam) and convert it into 4-20mA standard signal and unit instrument or DCS system PLC. Combination, constitutes an automatic control system. Widely used in petroleum, chemical, metallurgy, electric power, food, beer, textile, pharmaceutical and other industries for process control and measurement.

Technical parameters

- Reference accuracy 0.2%FS. 0.5%FS
- Impact of installation location, no effect
- Less than 0.15% / 10°C
- Stability. Better than 0.25% FS per year
- Temperature effect (-15-50°C)
- Operating voltage. 15V -30V DC

Temperature condition

- Ambient temperature -10°C -70°C
- Storage temperature. -40°C - 110°C
- Medium temperature -40°C - 120°C
- Compensation temperature -15°C -50°C

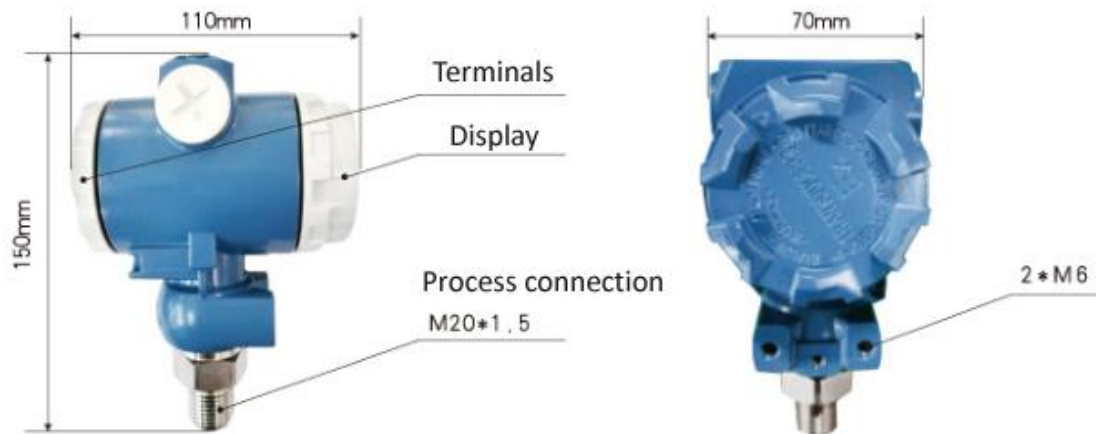
Structure and materials

1	Wetted diaphragm	SS316L
2	Process connector	Stainless steel
3	Seals	Fluororubber
4	Shell	Plastic, cast aluminum, aluminum alloy
5	Protection grade	IP65



Shape structure and process

1) SP structure drawing



2) SP Compact structure drawing



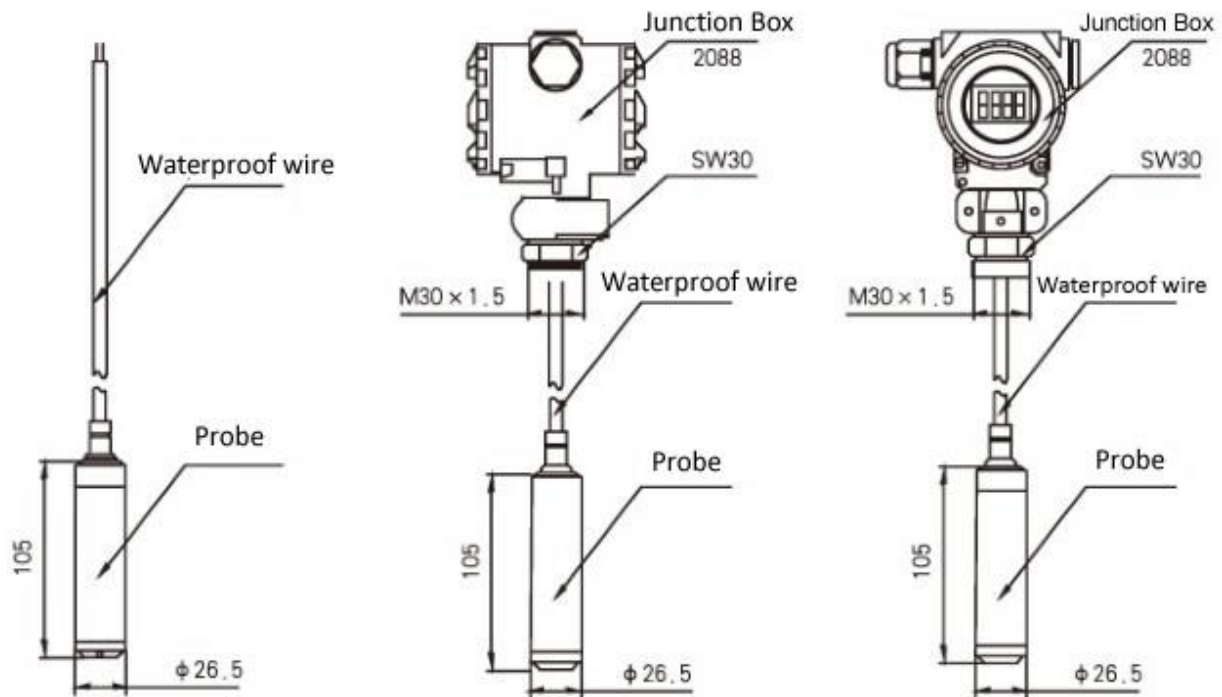
Model	H mm	Matching connector	Thread
SPH I	93	Horsman connector	customize
SPH II	110	Horsman connector	customize



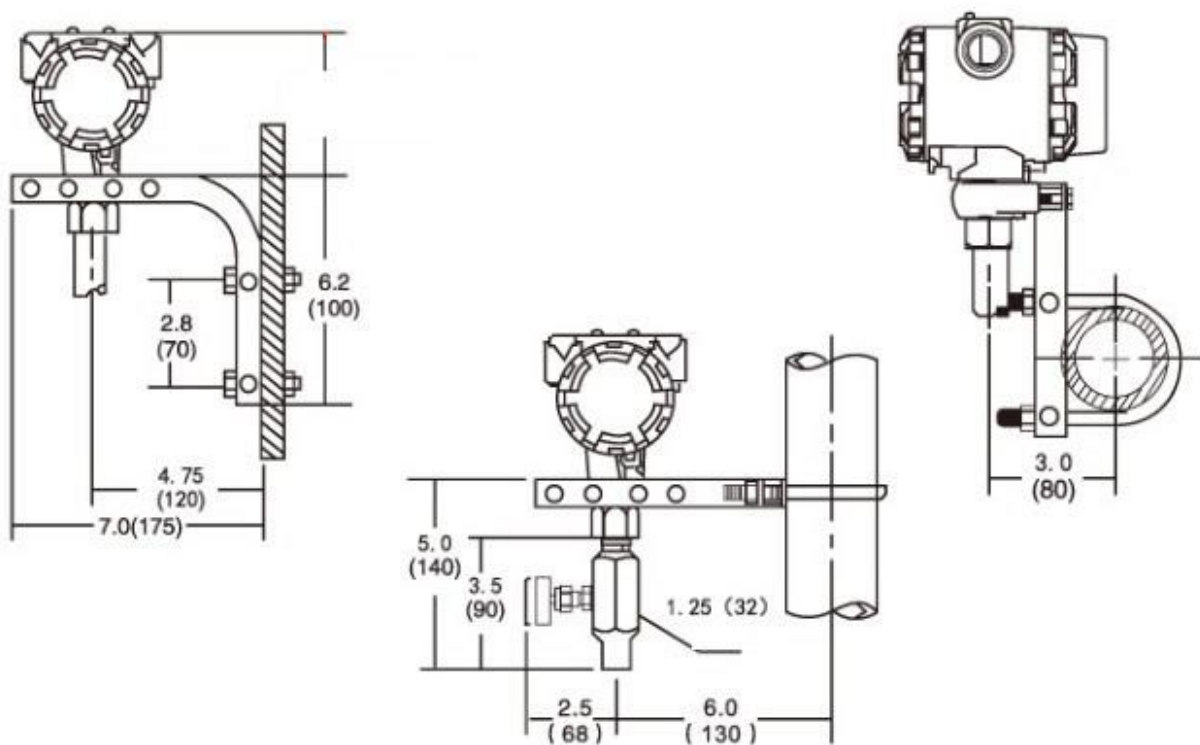
Model	H mm	Matching connector	Thread
SPH I	69	Horsman connector	customize
SPH II	80	Stainless steel connector	customize



3) SH level transmitter structure drawing



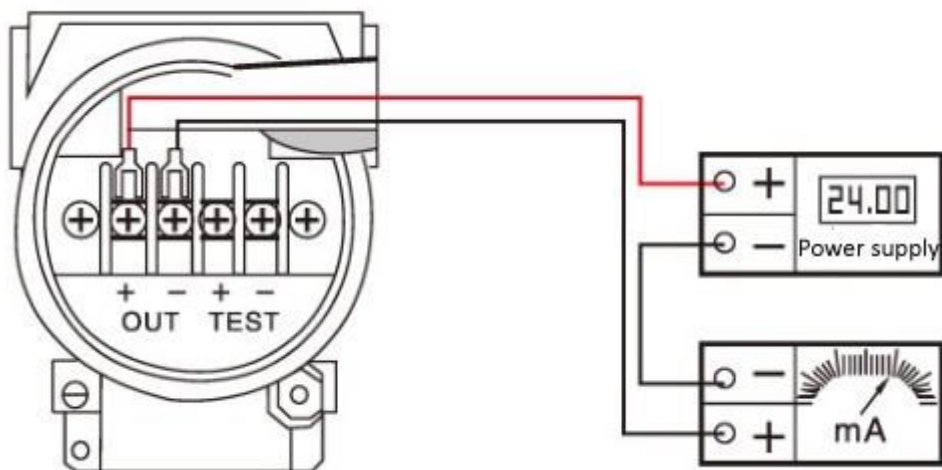
4) SP pressure transmitter installation



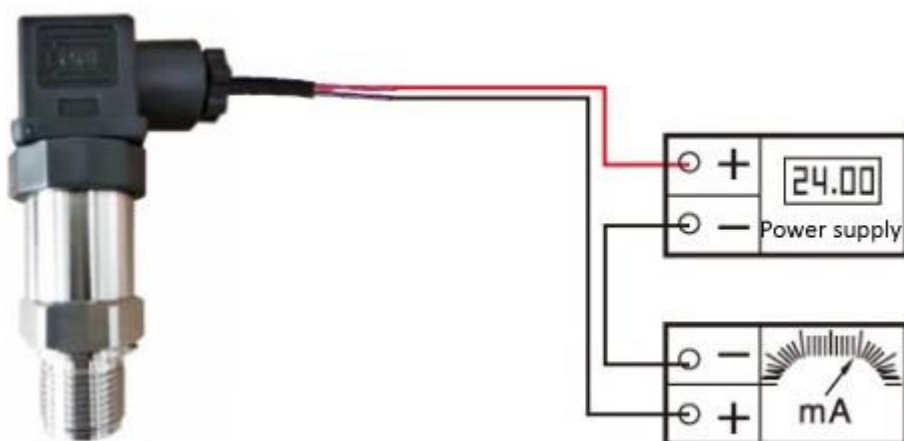


Electrical connections

1) SP Pressure transmitter wiring diagram



2) SP compact type wiring diagram





SP pressure transmitter field button calibration method

Under normal circumstances, the customer does not need to modify the parameters of the transmitter. It may be used to modify the fullness when the liquid level is used, and the zero point can be corrected for long time use. Here only the customer is given the right to modify the zero and fullness. If you want to modify other parameters, there is a certain risk. You need to ask the supplier for the factory password to modify. Automatically exits for 30 seconds without entering the menu.

Zero adjustment. Correct the zero point without pressure

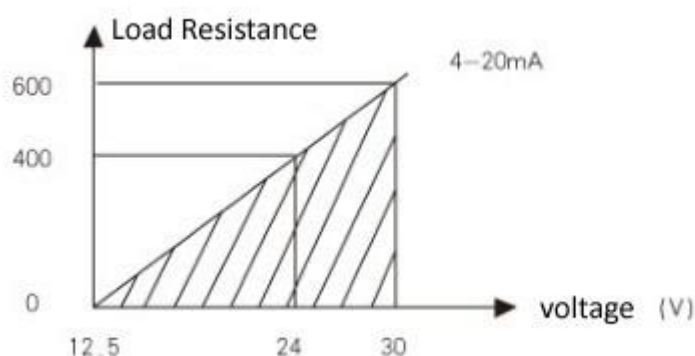
In the normal display state, press and hold the Z button for 3 seconds to automatically collect the zero point and correct the zero point.

Adjustment range

Press M key, enter password 00003, press M key to enter, display **dS-L**, press M key to display the low range data of the transmitter, the customer can modify this range, for example: low range display 0000, now need -1000, press **S key and Z key** can be modified. The modified range automatically corresponds to 4 mA current. After the correction, press M to display the high range data of the transmitter **dS-H**. The customer can modify this range. For example, the high range display 2000, now need 1600, press **S key and the Z key** to modify, the modified range automatically corresponds to 20mA current, after the correction is finished, press M to confirm the end of the end. Realize the passive modification range on site.



Load characteristics





Order sheet

SP pressure transmitter

Name	Code	Explanation
SP		Pressure Transmitter
Process Connection Material	1	Stainless Steel
Process Connection Structure	R	external thread G1/2"
	M	external thread M20×1.5
	Y	Customize
Sealing Material	IF	fluoro rubber (standard)
	IH	fluoro rubber applied to Sensors(Over 10MPa)
Electronic Components of Transmitters	2	Analog signal 4-20mA (two wire)
	3	customize
Shell material and structure	A	Aluminum shell PG16 cable sealingIP65
	B	Stainless steel shell cylinder structure
Sensor Type	0	Diffused Silicon Type
	1	Diffusion silicon anti-corrosion type
Explosion-proof Requirements	D	No Explosion-proof Required
	E	Explosion-proof type
Accuracy	2	0.2%
	5	0.5%



SH level transmitter

Model	Code	Directions
SH		
Model	1 2 3	General type(water or other light corrosive liquid) Oil resistance type(crude oil or other refined oil) Corrosion resistance type
Output	A B	4-20mA 2 wire Customized
Structure	11A 11B 31A 31V Y	Thread type Flange type Flange type with gas-guide cable Suspension type with gas-guide cable Customized
Flange standard (JB81-59)	0 1 2 3	Without flange DN=50 DN=80 Others
Explosion-proof Requirements	A B C	No Proof Required Explosion Proof Type Intrinsically Safe Type
Measurement range	1 2 3 4 5 6	0-5m 0-10m 0-20m 0-40m 0-100m 0-200m

