

Pressure Transmitter Series SUP-P400

Usage Manual

The sensitive core unit of the series SUP-P400 Pressure Transmitter is based on the high-performance piezoresistive pressure sensor, which the inside specialized circuit can transform milli-voltage signal into the standard current signal for long-distance transmission., therefore it can facilitate to join with computer joint clip, controlling instrument, intelligent instrument ,PLC and so on. Thanks to the small size, light weight, fully-welded and corrosion-proof structure, it can be applied in wide fields, such as process controlling, petroleum, automobile, metallurgy etc.

1. Technical Parameter

(1)Operation Temperature:-20℃～80℃：

(2)The precision of transmitter is divided into:

0.1%, basic error is $\pm 0.1\%$

0.3%, basic error is $\pm 0.3\%$

0.5%, basic error is $\pm 0.5\%$

(3)Hot zero offset drift

When the environmental temperature deviates the operation condition temperature, the zero offset drift should not be more than 0.03%FS/℃

(4) Hot sensitivity offset drift

When the environmental temperature deviates from the operation temperature, the full scale offset drift should not more than 0.03%FS/℃.

(5)Insulation Resistance

The insulation resistance between each terminal and the earth should not be lower than 50M Ω /250V, which is compared with operation temperature.

2. Shape and Dimension

Refer to the figure 1

The pressure transmitter is composed of housing, amplifier, terminal panel. LCD Display and pointer meter are available according to customers' requests.

3. Mounting

- (1) Choosing the suitable mounting location that can facilitate to maintain and operate.
- (2). Choosing the right mounting location that be free from shock and vibration.
- (3). Be away from heat sources.
- (4) Connecting firmly by tightening six-side housing.

4. Electrical Connection

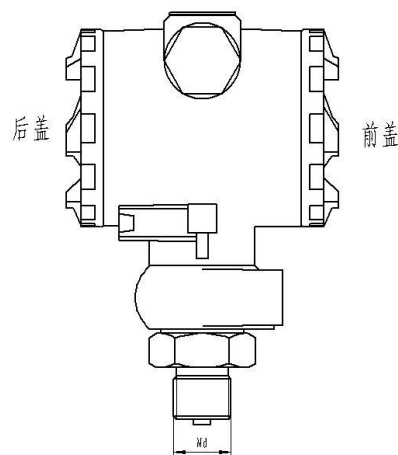


figure 1

Refer to the figure 2

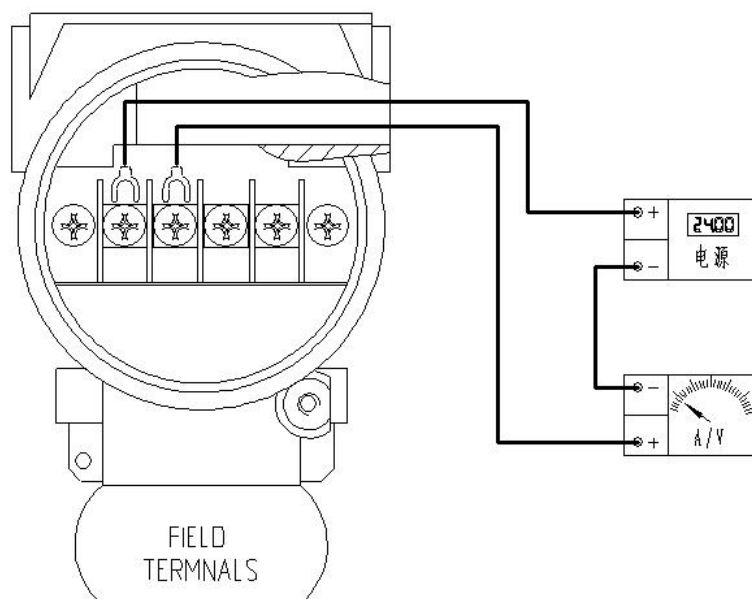


figure 2

5. Adjustment of Zero and Gain

Way of adjusting the Zero and Gain Value:

The pressure meter doesn't need to be adjusted again, because it has been calibrated before sold. If it brings the deviations of zero and full scale in operation, it can be calibrated at a more precise pressure sources

Specific methods below:

Repeating the following steps several times that is to turn the "Z" potentiometer to 4 mA output under the circumstance of no pressure and to turn the "S" potentiometer to 20 mA output, the Zero and full scale of the pressure meter can achieve standard value

6. Safety Notice.

- (1). Be cautious of handling the unit to avoid its component from impact that will cause circuit malfunction. The
- (2) Do not touch the sensitive membrane in the housing.
- (3) Pay attention to sealing of housing screw, or it lead to measurement instability and imprecision
- (4) The safety bar must be certificated and mounted by requirements of the manual strictly.
- (5) Please be free of contacting with us when there is something troublesome in using and mounting. Do not try to disassemble the unit to be repaired when malfunction.