



The Manual of Pressure Sensor HPT-2

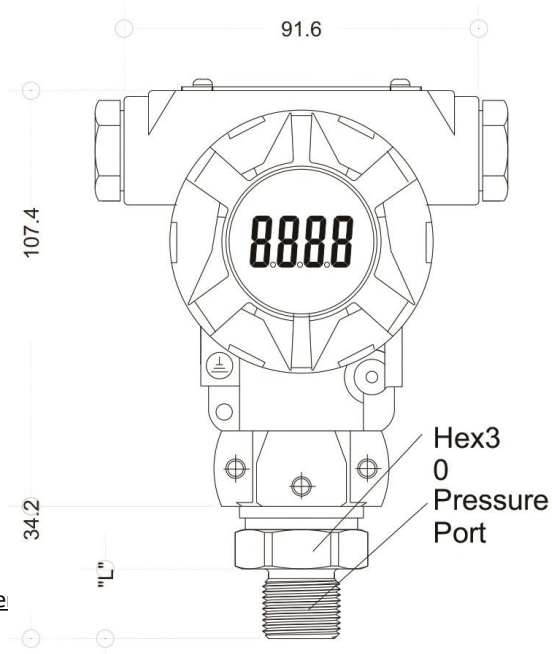


I. Description

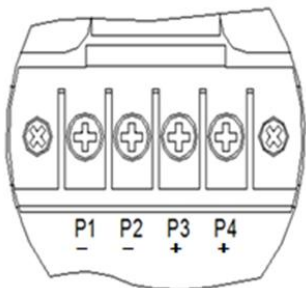
The explosion-proof pressure transmitter adopts high-precision, high-sensitivity pressure sensitive components, and converts the pressure signal of the measured medium into a standard analog signal or digital signal through a stable, reliable and strong anti-interference amplifier circuit, and has a superb package Technology and perfect testing technology ensure the excellent performance of this product, and it is widely used in industrial automation fields such as petroleum, chemical industry, metallurgy, environmental protection, metering, automation control engineering and production process testing.

II. Parameters

- Test medium: liquid or gas compatible with the material
- Measuring range: any interval within -0.1~250MPa
- Accuracy: 0.1%FS、 0.25%FS、 0.5%FS
- Stability: $\pm 0.25\%FS/\text{year}$ 、 $\pm 0.5\%FS/\text{year}$
- Output: 4~20mA、 0~10V、 RS485
- Work voltage: 12~36V DC (Standard: $24V \pm 5\%$, ripple $< 1\%$)
- Power influence: less than 0.01%/V of output range
- Work temperature: -20~80℃
- Compensation temperature: -20~80℃



- Temperature influence: $\pm 1.55\%FS/Year$, $\pm 3.0\%FS/year$
- Overload: 300%
- Connector threads: M20*1.5、G1/2、1/2NPT, etc.
- Explosion-proof grade: Ex ia IIC T6 Ga
- Protection class: IP66



Warning: It is strictly forbidden to

disassemble the transmitter without authorization!

It is strictly forbidden to press the

diaphragm of the measuring element with your fingers!

It is strictly forbidden to insert any sharp

objects into the pressure hole!

III. Wire definition

| Output \ Pins | P1 | P2 | P3 | P4 |
|------------------|------|------|------|------|
| 4-20mA | \ | OUT | 24V+ | \ |
| 0-10V | \ | OUT | 24V- | 24V+ |
| Switch (NPN/PNP) | OUT2 | OUT1 | 24V- | 24V+ |
| RS485 | B | A | 24V- | 24V+ |

IV. Buttons and menu

S (left) key: shift the cursor or select the previous menu; M (up) key: enter and confirm the menu; Z (right) key: modify the number or select the next menu:

- When the measured value status is displayed, press the S key to display the high alarm value, and press the Z key to display the low alarm value;
- When the measured value status is displayed, press the M key to enter the password setting, the S/Z key can be switched to modify the password, and press the M key again to enter the menu selection;
- After entering the menu, the S/Z key switches to select the menu, the M key enters to modify the content of the menu, after the modification is completed, press the M key to return to the menu selection;
- After each parameter is modified, confirm and save the setting at the end of the group of parameters; otherwise, the parameter modification will be invalid;
- After the parameters are confirmed and saved, switch to the END option, press the M key to return to the display of the measured value;

Menu of customer mode (password: 0006)

| No, | Symbol | Menu name | Value range | Menu description |
|-----|-------------|----------------------------------|----------------------------------|----------------------------------------------------------|
| 1 | UNIT | Unit selection | MPa; PSI; °C; mH ₂ O; | Unit indicator switch |
| 2 | dot | Decimal point | 0~3 point | Decimal point position switch |
| 3 | ZERO | Lower limit of measuring range | -19999~99999 | Factory setting, please do not modify* |
| 4 | FULL | Upper limit of measurement range | -19999~99999 | Factory setting, please do not modify* |
| 5 | OFF | Zero point correction | 00.00~99.99 | Zero offset compensation, default 0 note1 |
| 6 | AL1 | OUT1 alarm value | -19999~99999 | Arbitrarily set within the range note2 |
| 7 | AL2 | OUT2 alarm value | -19999~99999 | Arbitrarily set within the range note2 |
| 8 | ADDR | Communication address | 0~255 | Communication function is optional, default 0 |
| 9 | BPS | Communication baud rate | 1200~9600 | default 9600 |
| 10 | CUT | Zero cut range | 0~1000 (indicate 0~100.0%) | Default 20 (indicate 2.0%) note3 |
| 11 | FLT | Digital filter time constant | 0~250 | Default 005 note4 |
| 12 | SAVE | Save Settings | YES or NO | Select YES, press the confirm button to save the setting |
| 13 | End | Exit | | Exit settings |

Note 1: This parameter can compensate the deviation between the displayed value and the actual value. For example, the display value is 10.05, and the zero point correction is set to -0.05, then the display value after compensation is 10.00;

Note 2: The first parameter of alarm setting: HH stands for upper limit alarm, LL stands for lower limit alarm;

The second parameter of the alarm setting: 20% represents the alarm value, which is calculated as a percentage of the full scale. The alarm value can be modified;

The third parameter of the alarm setting: 05% represents the alarm sensitivity, which is calculated as a percentage of the full scale. Sensitivity can be modified;

Note 3: This parameter can cut off the small signal displayed at the zero point. For example, 0 pressure is displayed as 0.05, and it can be reset to zero by increasing the setting value of the cutting range;

Note 4: This parameter can improve the stability of the display value, the larger the set value, the slower the display refresh;

V. After-sale

- All products can enjoy a one-year warranty;
- If the product fails during the warranty period, it is a quality problem detected by our company, and our company bears all maintenance costs;
- Failure to follow the specifications in this manual or disassembling the product without authorization has caused damage to the components or damage to the pressure diaphragm, which is not covered by the product warranty.
- After the product fails, please contact our company. Please attach the following information to confirm the repair:
 1. 1. Product failure phenomenon;
 2. 2. Description of the environment where the product is used;
 3. 3. Receiving address and contact information