

## SPT21 General Type Pressure Transmitter

### Features

- Reliable performance, easy application
- Short protection and reverse polarity protection
- Gauge, absolute and sealed gauge optional
- Offset and full scale adjustable



### Introduction

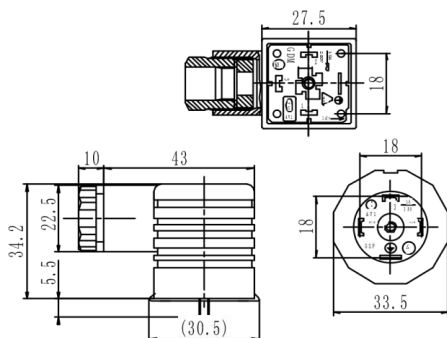
SPT21 is piezo-resistive pressure transmitter, uses high stable and reliable pressure sensor and special circuit board to produce transmitter. This product is used for measure and control of water system, petroleum, chemi-industry, electric power, hydrology and flow pressure measure, etc.

### Specification

| Item                  | Specification                                 |
|-----------------------|-----------------------------------------------|
| Pressure range        | -1...0~0.1...1000bar                          |
| Over pressure         | 1.5 times FS or 1000bar (min. value is valid) |
| Pressure type         | Gauge/absolute/sealed gauge optional          |
| Process connection    | G1/4 male thread (customized)                 |
| Accuracy              | ±0.1%FS. ±0.25%FS. ±0.5%FS                    |
| Long term stability   | ≤±0.3%FS/year                                 |
| Offset thermal drift  | 0.1%FS/°C (≤1bar); 0.05%FS/°C (> 1bar)        |
| Span thermal drift    | 0.1%FS/°C (≤1bar); 0.05%FS/°C (> 1bar)        |
| Compensated temp.     | 0~50°C                                        |
| Application temp.     | -30~80°C                                      |
| Storage temp.         | -40~120°C                                     |
| Power supply          | 12~28VDC                                      |
| Output signal         | 4-20mA. 0-5V. RS485. etc.                     |
| Load resistance       | ≤ (U-12) /0.02Ω (2-wire) , ≥10k (3-wire)      |
| Housing protection    | IP65                                          |
| Electrical connection | DIN43650 plug/M12 connector                   |

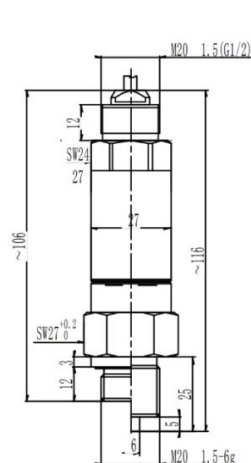
**Construction material (Default version)**

|                |         |
|----------------|---------|
| Housing        | SS304   |
| Pressure port  | SS304   |
| Diaphragm      | SS316L  |
| Sealing gasket | Viton   |
| Plug housing   | Plastic |

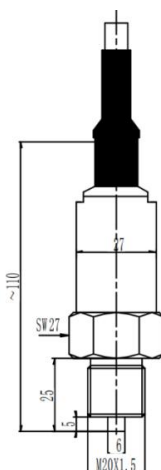
**Wiring**

| Pin | 2-wire | 3-wire |
|-----|--------|--------|
| 1   | +V     | +V     |
| 2   | +OUT   | GND    |
| 3   | Null   | +OUT   |

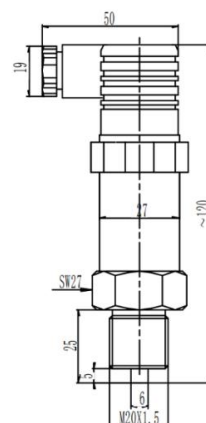
| Wire color | 2-wire | 3-wire |
|------------|--------|--------|
| Red        | +V     | +V     |
| Green      | +OUT   | +OUT   |
| Black      | Null   | GND    |

**Outline dimension: (Output E/J/V/V1) (Unit:mm)**

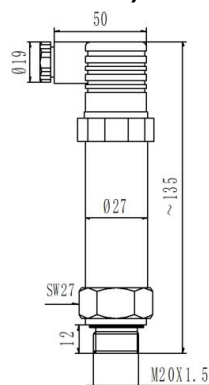
Explosion proof version



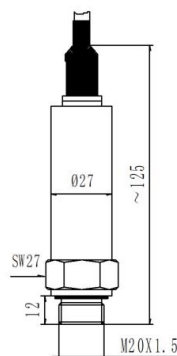
Cable version (IP68)



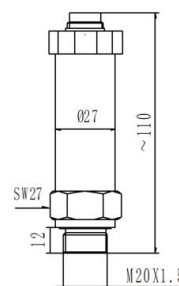
DIN43650 plug version

**Outline dimension: (Output R/R4/H)**

DIN43650 plug version



Cable version (IP68)



M12 connector version

## Order Information

|       |                     |                                   |                                 |                            |                                     |                |        |
|-------|---------------------|-----------------------------------|---------------------------------|----------------------------|-------------------------------------|----------------|--------|
| SPT21 |                     | General Type Pressure Transmitter |                                 |                            |                                     |                |        |
|       |                     | Range                             | -1...0~0.1...1000bar            |                            |                                     |                |        |
|       |                     | [0~X] bar                         | X: the actual measured pressure |                            |                                     |                |        |
|       |                     |                                   | Code                            | Output signal              |                                     |                |        |
|       |                     |                                   | E                               | 4~20 mADC                  |                                     |                |        |
|       |                     |                                   | J                               | 0~5 VDC                    |                                     |                |        |
|       |                     |                                   | V                               | 0~10 VDC                   |                                     |                |        |
|       |                     |                                   | V1                              | 0.5~4.5VDC                 |                                     |                |        |
|       |                     |                                   | R                               | RS485 4-wire               |                                     |                |        |
|       |                     |                                   | R4                              | RS485 & 4-20mA 4-wire      |                                     |                |        |
|       |                     |                                   | H                               | 4 ~ 20mADC & HART 7 2-wire |                                     |                |        |
|       |                     |                                   | Code                            | Construction material      |                                     |                |        |
|       |                     |                                   |                                 | Diaphragm                  | Pressure port                       | Housing        |        |
|       |                     |                                   |                                 | 22                         | SS316L                              | SS304          | SS304  |
|       |                     |                                   |                                 | 24                         | SS316L                              | SS316L         | SS316L |
|       |                     |                                   | 26                              | Titanium                   | Titanium                            | Titanium       |        |
|       |                     |                                   |                                 | Code                       | Others                              |                |        |
|       |                     |                                   |                                 | 1                          | Accuracy ±0.5%FS (Default accuracy) |                |        |
|       |                     |                                   |                                 | 2                          | Accuracy ±0.25%FS                   |                |        |
|       |                     |                                   |                                 | 3                          | Accuracy ±0.1%FS                    |                |        |
| B1    | DIN43650 connector  |                                   |                                 |                            |                                     |                |        |
| B2    | Cable Exit          |                                   |                                 |                            |                                     |                |        |
| B3    | M12 connector       |                                   |                                 |                            |                                     |                |        |
| C1    | M20*1.5 male thread |                                   |                                 |                            |                                     |                |        |
| C2    | G1/4 male thread    |                                   |                                 |                            |                                     |                |        |
| C3    | G1/2 male thread    |                                   |                                 |                            |                                     |                |        |
| PC3   | G1/2 flush membrane |                                   |                                 |                            |                                     |                |        |
| G     | Gauge               |                                   |                                 |                            |                                     |                |        |
| S     | Sealed gauge        |                                   |                                 |                            |                                     |                |        |
| A     | Absolute            |                                   |                                 |                            |                                     |                |        |
| SPT21 |                     | [0~1bar]                          | E                               | 22                         | 1 B1C1G                             | the whole spec |        |

**Note:** Please contact with us if there is any special requirements on function or specification.