

## DFP4100 Pressure Transmitter



### Features

- Integrated structure, no external adjustment required
- Reliable performance, safe and convenient to use
- Short circuit protection and reverse polarity protection
- Can measure gauge pressure, absolute pressure, and sealed gauge pressure
- Intrinsically safe product meets the requirements of GB/T 3836.1, GB/T 3836.4, and GB3836.20 standards.  
Explosion-proof marking is Ex ia IIC T6 Ga.

### Overview

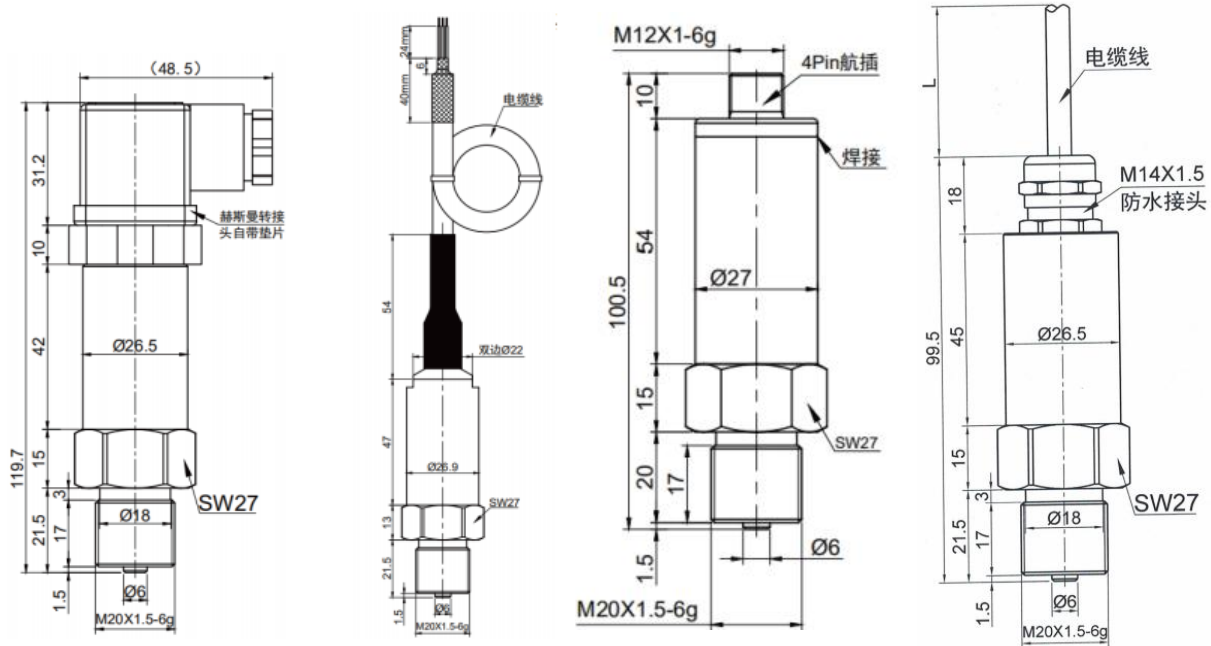
The DFP4100 pressure transmitter is a general-purpose industrial pressure transmitter developed and manufactured by our company. It utilizes a highly stable and reliable pressure sensor and a high-performance dedicated transmitter circuit, ensuring stable and reliable overall performance. Its integrated structure, standardized output method, multiple threaded interfaces, and electrical connection options provide an ideal solution for automated control applications. It is widely applicable to fluid pressure detection and control in industries such as petroleum, chemical, power, hydrology, and geology.

Technical parameters

| Pressure parameters       |  |                         |
|---------------------------|--|-------------------------|
| Measurement range         | -0.1MPa...0MPa~0.01MPa...100MPa                            |                         |
| Overload                  | 2 times full-scale pressure or 110MPa (whichever is lower) |                         |
| Pressure Type             | Gauge pressure, absolute pressure, sealed gauge pressure   |                         |
| Electrical Specifications |  |                         |
| Output Type               | Current Output   | Voltage Output          |
| Power Supply              | 9~36V DC   | 10~30V DC               |
| Output Signal             | 4mA~20mA DC (两线制)  | 0...1V~5...10V DC (三线制) |
| Load Resistance           | $\leq (U-9) / 0.02$  | $\geq 10k$              |
| Insulation Resistance     | 100M $\Omega$ @100V DC                                     |                         |
| Mechanical Specifications |  |                         |
| Housing                   | Stainless steel  |                         |
| Sensor                    | 316L stainless steel                                       |                         |
| Sealing ring              | Fluororubber   |                         |
| Cable                     | Phi 7.5 mm special polyethylene cable                      |                         |

|                                    |   |                   |
|------------------------------------|---|-------------------|
| Ingress Protection                 | IP65 (plug-in type)   | IP68 (cable type) |
| Environmental Specifications       |   |                   |
| Media Compatibility                | Various fluids non-corrosive to 316L stainless steel and fluororubber |                   |
| Compensation Temperature           | -10° C to +80° C  |                   |
| Operating Temperature              | -30° C to +80° C  |                   |
| Storage Temperature                | -40° C to +125° C   |                   |
| Performance Specifications         |   |                   |
| Accuracy                           | ±0.25%FS (typ.)   | ±0.5%FS (max.)    |
| Zero Temperature Coefficient       | 0.03%FS/° C (≤100 kPa); 0.02%FS/° C (>100 kPa)                        |                   |
| Full-Scale Temperature Coefficient | 0.03%FS/° C (≤100 kPa); 0.02%FS/° C (>100 kPa)                        |                   |
| Long-Term Stability                | ±0.3%FS/year (max.)   |                   |

### Appearance / Connection Styles



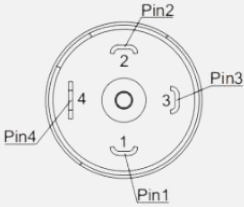

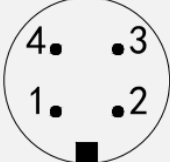
Hirschmann type

cable type

M12x1 plug type

waterproof connector type

## Electrical Connection

| Pin Assignment | Hirschmann Type   |               | Cable type   |               | M12×1 plug-in type  |               |
|----------------|---|---------------|--|---------------|---|---------------|
|                |  |               |  |               |  |               |
|                | 2-wire system   | 3-wire system | 2-wire system  | 3-wire system | 2-wire system   | 3-wire system |
| Power (+V)     | 1   | 1             | Red  | Red           | 1   | 1             |
| Output (+OUT)  | 2   | 3             | Black  | Blue          | 2   | 3             |
| Common (GND)   | N/A   | 2             | N/A  | Black         | N/A   | 2             |
| Ground         | GND   | GND           | Yellow   | Yellow        | 4   | 4             |

## Selection Tips

1. When selecting a transmitter, please ensure that the measured medium is compatible with the parts of the product that come into contact with the medium.
2. The measurement range of flush diaphragm pressure transmitters is 0 kPa to 100 kPa...35 MPa.
3. If the ordered product requires a metrological verification certificate or other special requirements, please consult with our company and specify them in the order.
4. When ordering transmitters with M6 or M7 gauges, the power supply to the transmitter should be no less than 20VDC.

## Selection Guide

|         |                      |   |   |                      |                      |
|---------|----------------------|---|---|----------------------|----------------------|
| DFP4100 | Pressure Transmitter |   |   |                      |                      |
|         | Range                | Measurement range: -0.1 MPa...0 MPa to 0.01 MPa...100 MPa |   |                      |                      |
|         | [0-X] kPa or MPa     | X: actual measuring range                                 |   |                      |                      |
|         |                      | Code  | Output Signal   |                      |                      |
|         |                      | E   | 4-20 mA DC  |                      |                      |
|         |                      | F   | 1-5 V DC  |                      |                      |
|         |                      | J   | 0-5 V DC  |                      |                      |
|         |                      | V   | 0-10 V DC   |                      |                      |
|         |                      | Structural Materials                                      |   |                      |                      |
|         |                      | Code  | Diaphragm   | Interface            | Housing              |
|         |                      | 22  | Stainless steel 316L                                      | Stainless steel      | Stainless steel      |
|         |                      | 24  | Stainless steel 316L                                      | Stainless steel 316L | Stainless steel 316L |
|         |                      | Code  | Wiring Type   |                      |                      |
|         |                      | B1  | Hirschmann plug connection                                |                      |                      |
|         |                      | B2  | M12×1 four-core plug connection                           |                      |                      |
|         |                      | B3  | Cable connection  |                      |                      |
|         |                      | B5  | Waterproof connector                                      |                      |                      |
|         |                      | Code  | Process Connection  |                      |                      |
|         |                      | PC3   | G1/2 male threaded pressure port, flush diaphragm type    |                      |                      |
|         |                      | PD5   | M20×1.5 male threaded pressure port, flush diaphragm type |                      |                      |
|         |                      | C1  | M20×1.5 male threaded pressure port, face seal            |                      |                      |
|         |                      | C2  | G1/4 male threaded pressure port                          |                      |                      |
|         |                      | C3  | G1/2 male threaded pressure port                          |                      |                      |
|         |                      | C5  | M20×1.5 male threaded pressure port, water-sealed type    |                      |                      |
|         |                      | Code  | Accessories   |                      |                      |
|         |                      | Default   | No accessories required                                   |                      |                      |
|         |                      | M6  | 4-digit LED digital display head (Hirschmann)             |                      |                      |
|         |                      | M7  | 4-digit LCD digital display head (Hirschmann)             |                      |                      |
|         |                      | Code  | Certification   |                      |                      |

