

## DFP20 Small Volume Pressure Transmitter



### Features

- Small structure, easy to install
- Pressure Type: gauge pressure, absolute pressure, positive/negative pressure type
- Measurement Range: -100...0kPa ~ 0.025...25MPa
- Electrical connection: Hirschmann connector  
Round aviation plug M12×1  
Cable outlet
- Accuracy:  $\pm 0.25\%FS$ ,  $\pm 0.5\%FS$
- Structural characteristics: The sensor is fully welded

### Overview

The DFP20 pressure transmitter has a small structure, easy installation, precise design, high electrical structure integration, full digital temperature compensation and calibration, exquisite composition materials, good electromagnetic compatibility design, reliable performance and high cost performance. High reliability and long service life ensure low maintenance and replacement costs.

The DFP20 type pressure transmitter is compact and suitable for a variety of pressure monitoring and measurement in general industrial applications, including water treatment, mechanical manufacturing, hydraulic and start-up, pumps and compressors, refrigeration systems, marine manufacturing, etc.

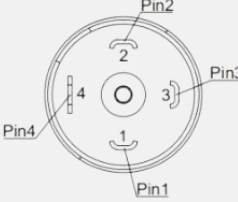
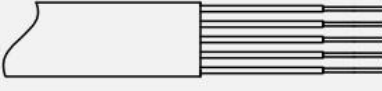
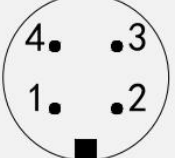
### Performance Specifications

| Pressure Parameters       |                                                          |                               |
|---------------------------|----------------------------------------------------------|-------------------------------|
| Measurement Range         | -100kPa...0kPa~0.025MPa...25MPa                          |                               |
| Overload                  | 2x full scale pressure or 110MPa (min)                   |                               |
| Pressure Type             | Gauge pressure, absolute pressure, sealed gauge pressure |                               |
| Electrical Specifications |                                                          |                               |
| Output Type               | Current type                                             | Voltage type                  |
| Power Supply              | 9~36V DC                                                 | 10~30V DC                     |
| Output Signal             | 4mA ~ 20mA DC (2-wire                                    | 0... 1V ~ 5... 10V DC (3-wire |

|                       |                        |            |
|-----------------------|------------------------|------------|
|                       | system)                | system)    |
| Load Resistance       | $\leq (U-9) / 0.02$    | $\geq 10k$ |
| Insulation Resistance | 100M $\Omega$ @100V DC |            |

| Structural parameters        |                                                                         |                   |
|------------------------------|-------------------------------------------------------------------------|-------------------|
| CASE                         | Stainless steel                                                         |                   |
| sensor                       | 316L stainless steel                                                    |                   |
| sealing ring                 | Fluorine rubber                                                         |                   |
| Cable                        | Cable for Φ7.5mm polyethylene                                           |                   |
| IP Grade                     | IP65 (plug-in type)                                                     | IP68 (cable type) |
| environmental parameter      |                                                                         |                   |
| Media suitability            | Various fluids without corrosion to 316L stainless steel and fluorubber |                   |
| Compensation Temperature     | -10℃～+80℃                                                               |                   |
| Operating Temperature        | -30℃～+80℃                                                               |                   |
| Storage Temperature          | -40℃～+125℃                                                              |                   |
| Performance                  |                                                                         |                   |
| Accuracy                     | ± 0.25% FS (typical)                                                    | ± 0.5% FS (max)   |
| Zero Temperature Coefficient | 0.03%FS/℃ (≤100kPa) ； 0.02%FS/℃ (>100kPa)                               |                   |
| Full temperature coefficient | 0.03%FS/℃ (≤100kPa) ； 0.02%FS/℃ (>100kPa)                               |                   |
| LONG-TERM STABILITY STUDIES  | ± 0.3% FS/yr (max)                                                      |                   |

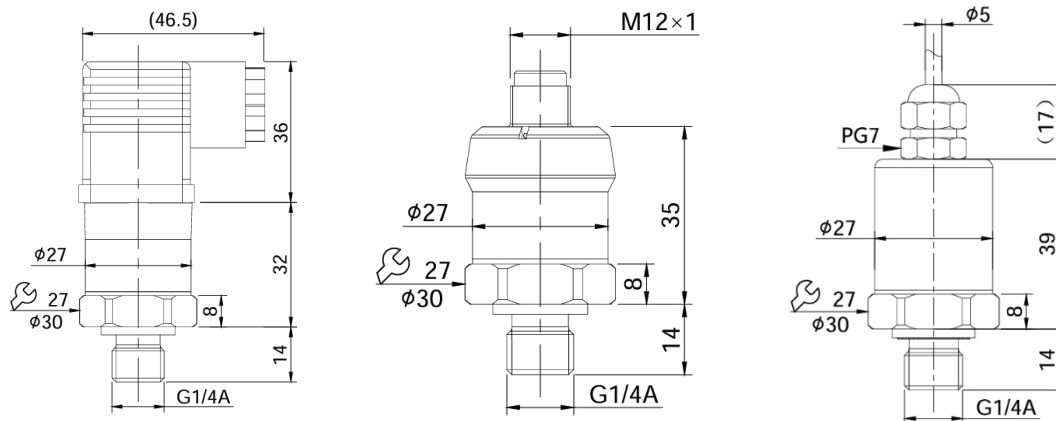
## Electrical connection

| Function definition | Hirschmann Type                                                                     |                   | Cable type                                                                           |                   | M12 $\times$ 1 plug-in type                                                           |                   |
|---------------------|-------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------|-------------------|
|                     |  |                   |  |                   |  |                   |
|                     | Two-Wire System                                                                     | Three-Wire System | Two-Wire System                                                                      | Three-Wire System | Two-Wire System                                                                       | Three-Wire System |



|                             |       |     |        |        |       |   |
|-----------------------------|-------|-----|--------|--------|-------|---|
| Power Supply positive (+ V) | 1     | 1   | Red    | Red    | 1     | 1 |
| Output positive (+ out)     | 2     | 3   | Black  | Blue   | 2     | 3 |
| Public (GND)                | Empty | 2   | Empty  | Black  | Empty | 2 |
| earth                       | GND   | GND | Yellow | Yellow | 4     | 4 |

## Form Factor



Hirschmann plug-in type A M12 × 1 plug-in type cable outlet type

## Selection Guide

| DFP20 | Small Volume Pressure Transmitter |                                                        |
|-------|-----------------------------------|--------------------------------------------------------|
|       | Measurement Range                 | Measurement range: -0.1MPa... 0MPa ~ 0.01 MPa... 25MPa |
|       | [0-X] kPa or MPa                  | X: Actual Measurement Range                            |
|       |                                   | code    Output Signal                                  |
|       |                                   | E    4~20mA DC                                         |
|       |                                   | F    1V~5V DC                                          |
|       |                                   | J    0V~5V DC                                          |
|       |                                   | V    0V~10V DC                                         |
|       |                                   | code    Outgoing Line Format                           |
|       |                                   | B1    Type A Hirschmann Plugin                         |
|       |                                   | B1C    Type C Hirschmann Plugin                        |
|       |                                   | B2    M12 × 1 four-core plug-in                        |
|       |                                   | B5    Waterproof connector                             |

|                                                      |  |  |  |  |      |                                                              |
|------------------------------------------------------|--|--|--|--|------|--------------------------------------------------------------|
|                                                      |  |  |  |  | code | Process connection                                           |
|                                                      |  |  |  |  | C1   | M20 × 1.5 male thread pressure interface, end face seal      |
|                                                      |  |  |  |  | C2   | G1/4 External Threaded Pressure Interface                    |
|                                                      |  |  |  |  | C3   | G1/2 male thread pressure interface                          |
|                                                      |  |  |  |  | C5   | M20 × 1.5 male thread pressure interface, water line sealing |
|                                                      |  |  |  |  | code | Pressure Type                                                |
|                                                      |  |  |  |  | G    | Gauge type                                                   |
|                                                      |  |  |  |  | A    | Absolute pressure type                                       |
|                                                      |  |  |  |  | S    | Sealing gauge pressure                                       |
| DFP20 [0-100] kPa E B1 C5 G Full Specification Model |  |  |  |  |      |                                                              |