

# Intelligent Monocrystalline Pressure/Differential Pressure Transmitters

## P7 Series



### Profile

P71/P72/P76/P78 intelligent pressure/differential pressure transmitters adopt the advanced leading high-precision silicon pressure and differential pressure sensor technology.

The single crystal silicon pressure and differential pressure sensor is located at the top of the metal body, away from the contact surface of the medium. To achieve mechanical isolation and thermal isolation; The sensor lead of glass sintering unit realizes high-strength electrical insulation with the metal substrate, which improves the flexibility of electronic circuits and the ability to withstand transient voltage protection. The circuit adopts a modular design with a microprocessor as the core and assisted by advanced digital isolation technology, so that the instrument has extremely high anti-interference and stability.

It uses Hart protocol for communication, which can be remotely operated through a Hart handheld communicator or a computer installed with Hart software to complete the measurement information configuration. Meanwhile the digital compensation technology is used, and the transmitter is compensated through the built-in temperature sensor to improve the accuracy, temperature drift is reduced.

The most user-friendly design of the external one-key reset function meets the requirements of safe operation in hazardous situations. The shortcut menu is convenient for operation, and can complete all parameter settings, which comprehensively improves the performance of the transmitter.

### Features

- ◇ Innovative dual compensation technology
- ◇ 0.075% high precision
- ◇ Advanced monocrystalline silicon pressure sensor technology and packaging technology adopted
- ◇ Modularization design with microprocessor as the core and assisted by advanced digital isolation technology, which makes it with high anti-interference and stability
- ◇ 24-bit ADC achieves high precision

## Function Parameters

|                                           |                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Range limit</b>                        | Within the upper& lower limits of the measuring range, it can be adjusted arbitrarily. It is recommended to select a range code with the lowest possible turndown ratio to optimize performance                                                                                                                                             |
| <b>Output</b>                             | Two-wire system 4-20mA, in line with NAMIR NE43 specification, superimposed digital signal (Hart protocol);Linear or square root output is optional.                                                                                                                                                                                        |
| <b>Response time</b>                      | The damping constant of the amplifier component is 0.1s; the time constant of the sensor is 0.1 to 1.6s, depending on the range and the range ratio.<br>The additional adjustable time constant is: 0~100s                                                                                                                                  |
| <b>Zero point setting</b>                 | Zero point and range can be adjusted to any value within the measurement range in the table, as long as: calibration range $\geq$ minimum range                                                                                                                                                                                             |
| <b>Influence of installation location</b> | The change of the installation position perpendicular to the diaphragm surface will not cause the zero drift effect. If the installation position and the diaphragm surface change more than 90°, the zero position in the range of <0.4kPa will be affected. It can be adjusted by adjusting the zero and there is no impact on the range. |
| <b>Preheating time</b>                    | <15s                                                                                                                                                                                                                                                                                                                                        |
| <b>Output signal limit</b>                | Imin=3.9mA, Imax=21.0mA                                                                                                                                                                                                                                                                                                                     |
| <b>Fault warning</b>                      | If the sensor or circuit fails, the automatic diagnosis function will automatically output 3.9 or 21.0mA (user can pre-set)                                                                                                                                                                                                                 |
| <b>Alarm current</b>                      | Low alarm mode (minimum): 3.9mA                                                                                                                                                                                                                                                                                                             |
| <b>High report mode (maximum)</b>         | 21 mA                                                                                                                                                                                                                                                                                                                                       |
| <b>Alarm current default setting</b>      | High alarm mode                                                                                                                                                                                                                                                                                                                             |

## Performance Parameters

|                                      |                                                                                                   |
|--------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Measuring medium</b>              | Gas, steam, liquid                                                                                |
| <b>Accuracy</b>                      | $\pm 0.2\%, \pm 0.075\%, \pm 0.1\%$ ( linearity, hysteresis and repeatability from zero)          |
| <b>Stability</b>                     | $\pm 0.1\%/3$ years                                                                               |
| <b>Ambient temperature influence</b> | $\leq \pm 0.04\%/10^\circ\text{C}$                                                                |
| <b>Influence of static pressure</b>  | $\pm 0.05\%/10\text{MPa}$                                                                         |
| <b>Power supply</b>                  | 12-36 VDC(24 V DC recommended)                                                                    |
| <b>Power influence</b>               | $\pm 0.001\%/10$ , which can be negligible                                                        |
| <b>Ambient temperature</b>           | $-40^\circ\text{C} \sim 85^\circ\text{C}$                                                         |
| <b>Measuring medium temperature</b>  | $-40^\circ\text{C} \sim 120^\circ\text{C}$                                                        |
| <b>Storage temperature</b>           | $-40^\circ\text{C} \sim 105^\circ\text{C}$                                                        |
| <b>Display</b>                       | LCD, OLED                                                                                         |
| <b>Module temp. shown on display</b> | $-20^\circ\text{C} \sim 70^\circ\text{C}$ (LCD), $-40^\circ\text{C} \sim 80^\circ\text{C}$ (OLED) |
| <b>IP Rating for Housing</b>         | IP67                                                                                              |

# Smart Direct-mounted Gauge/Absolute Pressure Transmitter **P71**

## Gauge pressure range

| Range code | Measuring range(KPa) | Accuracy/Stability                                                                   |
|------------|----------------------|--------------------------------------------------------------------------------------|
| A          | -6~6                 | $\pm 0.075\%$ F.S of the range<br>The maximum error per year is $\pm 0.1\%$ of range |
| B          | -40~40               |                                                                                      |
| C          | -100~100             |                                                                                      |
| D          | -100~400             |                                                                                      |
| E          | -100~4000            |                                                                                      |
| F          | -100~16000           |                                                                                      |



## Absolute pressure range and range

| Range code | Measuring range(KPa) | Accuracy/Stability                                                                    |
|------------|----------------------|---------------------------------------------------------------------------------------|
| A          | 0~40                 | $\pm 0.075\%$ F.S of the range/<br>The maximum error per year is $\pm 0.1\%$ of range |
| B          | 0~250                |                                                                                       |
| C          | 0~2000               |                                                                                       |

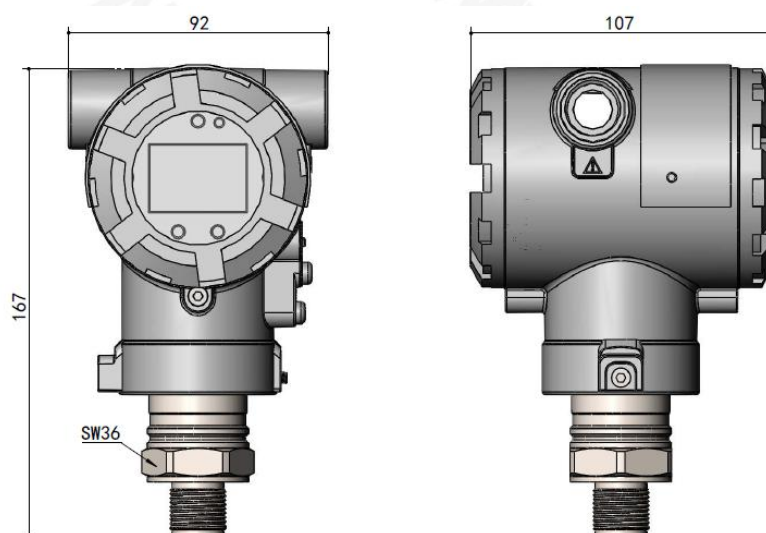
## Gauge pressure overload limit

| Range      | 1KPa<br>A | 6KPa<br>B | 40KPa<br>C | 100KPa<br>D | 400KPa<br>E | 4000KPa<br>F | 16000KPa<br>G |
|------------|-----------|-----------|------------|-------------|-------------|--------------|---------------|
| Load limit | 1MPa      | 2MPa      | 5MPa       | 7MPa        | 9MPa        | 10MPa        | 25MPa         |

## Absolute pressure overload limit

| Range      | 40KPa A | 250KPa<br>B | 2000KPa<br>C |
|------------|---------|-------------|--------------|
| Load limit | 1MPa    | 4MPa        | 10MPa        |

## Dimensions



## Model Selection

| P71  |                                     |                                        |  |
|------|-------------------------------------|----------------------------------------|--|
| Code | Type                                |                                        |  |
| GP   | Smart Pressure Transmitter          |                                        |  |
| AP   | Smart Absolute Pressure Transmitter |                                        |  |
| Code | Gauge Pressure Range (KPa)          | Absolute Pressure Range (KPa)          |  |
| A    | 0~1~6                               | 0~6~40                                 |  |
| B    | 0~6~40                              | 0~40~250                               |  |
| C    | 0~40~100                            | 0~250~2000                             |  |
| D    | 0~100~400                           |                                        |  |
| E    | 0~400~4000                          |                                        |  |
| F    | 0~4000~16000                        |                                        |  |
|      | Code                                | Output signal                          |  |
|      | H                                   | 4-20mA                                 |  |
|      | S                                   | 4-20mA+Hart                            |  |
|      | Code                                | Accuracy                               |  |
|      | J1                                  | ±0.2%                                  |  |
|      | J2                                  | ±0.1%                                  |  |
|      | J3                                  | ±0.075%                                |  |
|      | Code                                | Display                                |  |
|      | M1                                  | LCD                                    |  |
|      | M2                                  | OLED(Low temperature resistant -40°C ) |  |

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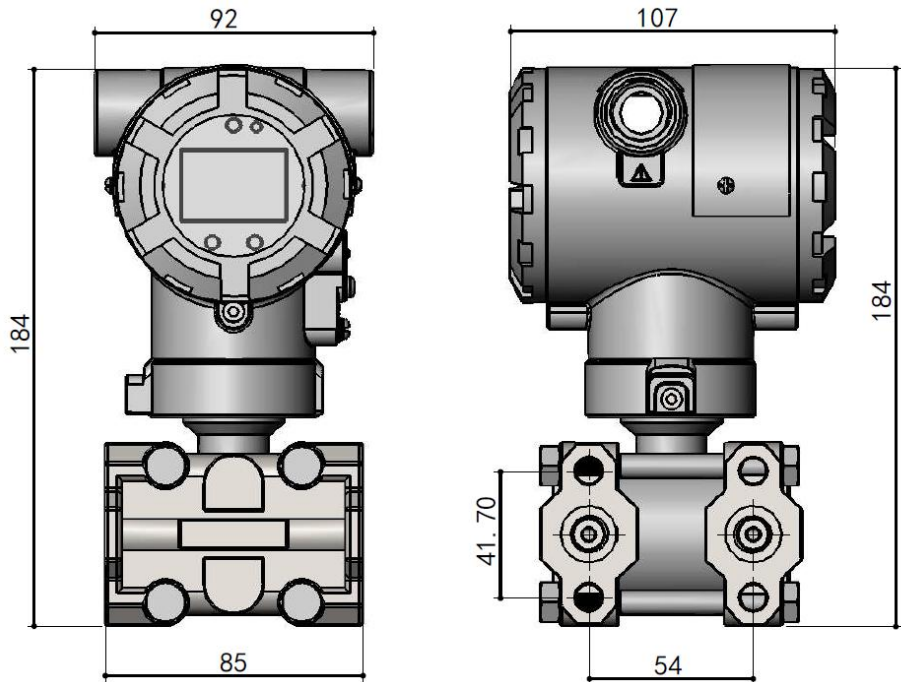
**P72** Intelligent High-precision  
Monocrystalline Differential Pressure Transmitter

Measuring Range

| Range code | Measuring range(KPa) | Accuracy/Stability                                                          |
|------------|----------------------|-----------------------------------------------------------------------------|
| A          | -1~1                 | ±0.075%F.S of the range;<br>The maximum error per<br>year is ±0.1% of range |
| B          | -6~6                 |                                                                             |
| C          | -40~40               |                                                                             |
| D          | -100~100             |                                                                             |
| E          | -100~400             |                                                                             |
| F          | -100~4000            |                                                                             |



Dimensions



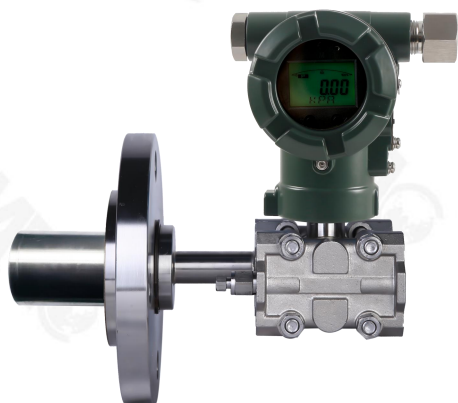
## Model Selection

| P72  |                                    |                                                                                  |                      |                   |
|------|------------------------------------|----------------------------------------------------------------------------------|----------------------|-------------------|
| Code | Type                               |                                                                                  |                      |                   |
| DP   | Smart Differential Pressure Sensor |                                                                                  |                      |                   |
|      | <b>Code</b>                        | <b>DP Range (KPa)</b>                                                            |                      |                   |
|      | A                                  | 0~0.2~1                                                                          |                      |                   |
|      | B                                  | 0~1~6                                                                            |                      |                   |
|      | C                                  | 0~6~40                                                                           |                      |                   |
|      | D                                  | 0~40~100                                                                         |                      |                   |
|      | E                                  | 0~100~400                                                                        |                      |                   |
|      | F                                  | 0~400~4000                                                                       |                      |                   |
|      | <b>Code</b>                        | <b>Output Signal</b>                                                             |                      |                   |
|      | H                                  | 4-20mA                                                                           |                      |                   |
|      | S                                  | 4-20mA+Hart                                                                      |                      |                   |
|      | <b>Code</b>                        | <b>Accuracy</b>                                                                  |                      |                   |
|      | J1                                 | ±0.2%                                                                            |                      |                   |
|      | J2                                 | ±0.1%                                                                            |                      |                   |
|      | J3                                 | ±0.075%                                                                          |                      |                   |
|      | <b>Code</b>                        | <b>Display</b>                                                                   |                      |                   |
|      | M1                                 | LCD                                                                              |                      |                   |
|      | M2                                 | OLED(Low temperature resistant -40°C)                                            |                      |                   |
|      | <b>Code</b>                        | <b>Pressure Connection</b>                                                       |                      |                   |
|      | C0                                 | NPT1/4 pressure connector & rear welded $\varnothing$ 14 pressure connector tube |                      |                   |
|      | C1                                 | NPT 1/2 tapered female flange with waist-shaped thread                           |                      |                   |
|      | C2                                 | T-shaped male connector with M20*1.5                                             |                      |                   |
|      | C3                                 | Integrated three valve group                                                     |                      |                   |
|      | <b>Code</b>                        | <b>Filling fluid</b>                                                             |                      |                   |
|      | G1                                 | Silicone oil                                                                     |                      |                   |
|      | G2                                 | Fluoro oil                                                                       |                      |                   |
|      | <b>Code</b>                        | <b>Structure material</b>                                                        |                      |                   |
|      |                                    | <b>Flange</b>                                                                    | <b>Drain/exhaust</b> | <b>Diaphragm</b>  |
|      | 21                                 | 304 SS                                                                           | 304 SS               | 316 SS            |
|      | 22                                 | 316 SS                                                                           | 316 SS               | 316 SS            |
|      | 23                                 | 316 SS                                                                           | 316 SS               | Hastelloy C alloy |
|      | 24                                 | 316 SS                                                                           | 316 SS               | Monel alloy       |
|      | 25                                 | 316 SS                                                                           | 316 SS               | Tantalum          |
|      | 26                                 | Hastelloy C alloy                                                                | Hastelloy C alloy    | Hastelloy C alloy |
|      | 27                                 | Hastelloy C alloy                                                                | Hastelloy C alloy    | Tantalum          |
|      | 28                                 | Monel alloy                                                                      | Monel alloy          | Monel alloy       |
|      | 29                                 | 304 SS                                                                           | 304 SS               | With gold plating |
|      | <b>Code</b>                        | <b>Relief valve</b>                                                              |                      |                   |
|      | X0                                 | Vent valve                                                                       |                      |                   |
|      | X1                                 | Drain valve                                                                      |                      |                   |
|      | <b>Code</b>                        | <b>Mounting bracket</b>                                                          |                      |                   |

|    |   |      |    |          |    |    |    |                               |                                         |                              |
|----|---|------|----|----------|----|----|----|-------------------------------|-----------------------------------------|------------------------------|
|    |   |      |    |          |    |    | B0 | Without mounting bracket      |                                         |                              |
|    |   |      |    |          |    |    | B1 | Tube bending bracket          |                                         |                              |
|    |   |      |    |          |    |    | B2 | Board-mounted bending bracket |                                         |                              |
|    |   |      |    |          |    |    | B3 | Tube mounted flat bracket     |                                         |                              |
|    |   |      |    |          |    |    |    | <b>Code</b>                   | <b>Hazardous location certification</b> |                              |
|    |   |      |    |          |    |    |    | E0                            | No explosion-proof                      |                              |
|    |   |      |    |          |    |    |    |                               | <b>Code</b>                             | <b>Electrical connection</b> |
|    |   |      |    |          |    |    |    |                               | D1                                      | M20×1.5                      |
|    |   |      |    |          |    |    |    |                               | D2                                      | 1/2 NPT female               |
| DP | A | H J1 | M1 | C1<br>G1 | 21 | X0 | B1 | E1                            | D1                                      | Model No. Example            |

## P76 Intelligent Monocrystalline Flat Diaphragm/Cylinder Flange Liquid Level Transmitter

### Measuring Range

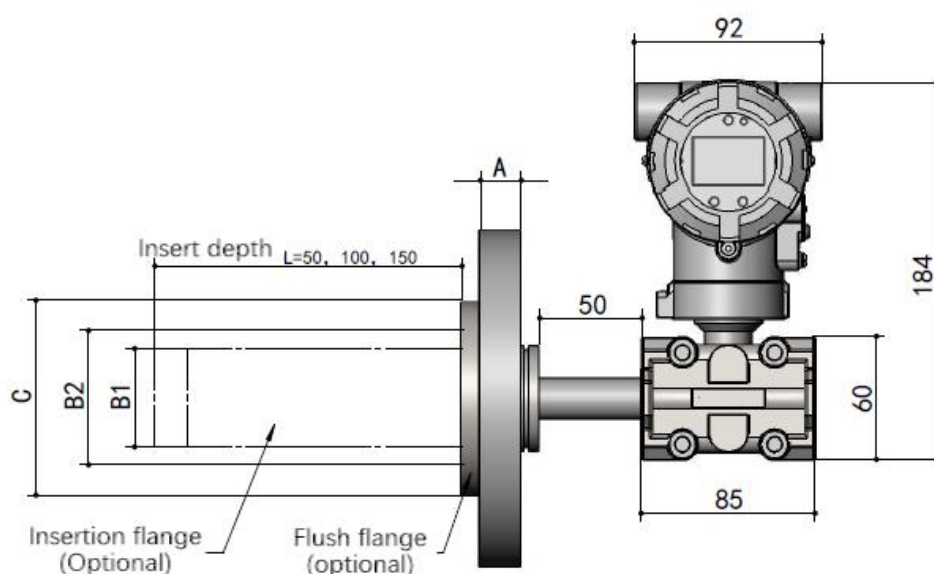


| Range code | Min Range(KPa) | Max Range(KPa) | Rated pressure (maximum)              |
|------------|----------------|----------------|---------------------------------------|
| B          | 1              | 6              | Rated pressure of liquid level flange |
| C          | 6              | 40             |                                       |
| D          | 40             | 400            |                                       |
| E          | 400            | 4000           |                                       |

### Comparison of relationship between flange and min range

| Liquid level flange | Nominal diameter | Minimum range |
|---------------------|------------------|---------------|
| Flat Diaphragm type | DN 50/2"         | 10KPa         |
|                     | DN 80/3"         | 1KPa          |
|                     | DN 100/4"        | 1KPa          |
| Cylinder            | DN 50/2"         | 16KPa         |
|                     | DN 80/2"         | 1KPa          |
|                     | DN 100/4"        | 1KPa          |

### Dimensions



## Model Selection

| P76  |                                                            |                                      |                     |                |                   |         |  |
|------|------------------------------------------------------------|--------------------------------------|---------------------|----------------|-------------------|---------|--|
| Code | Type                                                       |                                      |                     |                |                   |         |  |
| LT   | Intelligent Flat Diaphragm Flange Liquid Level Transmitter |                                      |                     |                |                   |         |  |
| CT   | Intelligent Cylinder Flange Liquid Level Transmitter       |                                      |                     |                |                   |         |  |
|      | Code                                                       | Pressure Measuring Range(KPa)        |                     |                |                   |         |  |
|      | B                                                          | 1~6                                  |                     |                |                   |         |  |
|      | C                                                          | 6~40                                 |                     |                |                   |         |  |
|      | D                                                          | 40~400                               |                     |                |                   |         |  |
|      | E                                                          | 400~4000                             |                     |                |                   |         |  |
|      | Code                                                       | Output Signal                        |                     |                |                   |         |  |
|      |                                                            | H                                    | 4-20mA              |                |                   |         |  |
|      | S                                                          | 4-20mA+Hart                          |                     |                |                   |         |  |
|      | Code                                                       | Display                              |                     |                |                   |         |  |
|      |                                                            | M1                                   | LCD                 |                |                   |         |  |
|      | M2                                                         | OLED(Low temperature resistant -40℃) |                     |                |                   |         |  |
|      | Code                                                       | Accuracy                             |                     |                |                   |         |  |
|      |                                                            | J1                                   | ±0.5%               |                |                   |         |  |
|      |                                                            | J2                                   | ±0.2%               |                |                   |         |  |
|      |                                                            | J3                                   | ±0.1%               |                |                   |         |  |
|      |                                                            | J4                                   | ±0.075%             |                |                   |         |  |
|      | Structure material                                         |                                      |                     |                |                   |         |  |
|      | Code                                                       | Flange                               | Code                | Diaphragm      | Code              | Coating |  |
|      | 22                                                         | 304SS                                | N1                  | 316L SS        | T1                | None    |  |
|      | 23                                                         | 316SS                                | N2                  | Hastelloy C    | T2                | PFA     |  |
|      |                                                            |                                      | N3                  | Monel alloy    |                   |         |  |
|      |                                                            |                                      | N4                  | Tantalum       |                   |         |  |
|      |                                                            |                                      | N5                  | Titanium       |                   |         |  |
|      | Code                                                       | Flange Dimensions                    |                     |                |                   |         |  |
|      |                                                            | C1                                   | DN50                |                |                   |         |  |
|      |                                                            | C2                                   | DN80                |                |                   |         |  |
|      |                                                            | C3                                   | DN100               |                |                   |         |  |
|      |                                                            | C4                                   | 2"                  |                |                   |         |  |
|      |                                                            | C5                                   | 3"                  |                |                   |         |  |
|      |                                                            | C6                                   | 4"                  |                |                   |         |  |
|      |                                                            | C7                                   | User specified      |                |                   |         |  |
|      |                                                            | Code                                 | Cylinder length(mm) |                |                   |         |  |
|      |                                                            |                                      | L10                 | 0(Flat flange) |                   |         |  |
|      |                                                            |                                      | L11                 | 50             |                   |         |  |
|      |                                                            |                                      | L12                 | 100            |                   |         |  |
|      |                                                            |                                      | L13                 | 150            |                   |         |  |
|      | LT                                                         |                                      | User specified      |                |                   |         |  |
|      |                                                            | Code                                 |                     |                | Cylinder material |         |  |

|    |   |   |    |                      |    |     |             |                            |                               |                                         |                              |
|----|---|---|----|----------------------|----|-----|-------------|----------------------------|-------------------------------|-----------------------------------------|------------------------------|
|    |   |   |    |                      |    |     | Z0          | None                       |                               |                                         |                              |
|    |   |   |    |                      |    |     | Z1          | 304 SS                     |                               |                                         |                              |
|    |   |   |    |                      |    |     | Z2          | 316L SS                    |                               |                                         |                              |
|    |   |   |    |                      |    |     | <b>Code</b> | <b>Capillary length(m)</b> |                               |                                         |                              |
|    |   |   |    |                      |    |     | F0          | None                       |                               |                                         |                              |
|    |   |   |    |                      |    |     | F1          | 1m                         |                               |                                         |                              |
|    |   |   |    |                      |    |     | F2          | 2m                         |                               |                                         |                              |
|    |   |   |    |                      |    |     | F3          | 3m                         |                               |                                         |                              |
|    |   |   |    |                      |    |     | F4          | User specified             |                               |                                         |                              |
|    |   |   |    |                      |    |     |             | <b>Code</b>                | <b>Mounting bracket</b>       |                                         |                              |
|    |   |   |    |                      |    |     |             | A1                         | Without mounting bracket      |                                         |                              |
|    |   |   |    |                      |    |     |             | A2                         | Tube bending bracket          |                                         |                              |
|    |   |   |    |                      |    |     |             | A3                         | Board-mounted bending bracket |                                         |                              |
|    |   |   |    |                      |    |     |             | A4                         | Tube mounted flat bracket     |                                         |                              |
|    |   |   |    |                      |    |     |             | <b>Code</b>                | <b>Filling fluid</b>          |                                         |                              |
|    |   |   |    |                      |    |     |             | G1                         | Silicone oil                  |                                         |                              |
|    |   |   |    |                      |    |     |             | G2                         | Fluoro oil                    |                                         |                              |
|    |   |   |    |                      |    |     |             |                            | <b>Code</b>                   | <b>Hazardous location certification</b> |                              |
|    |   |   |    |                      |    |     |             |                            | E0                            | No explosion-proof                      |                              |
|    |   |   |    |                      |    |     |             |                            |                               | <b>Code</b>                             | <b>Electrical connection</b> |
|    |   |   |    |                      |    |     |             |                            |                               | D1                                      | M20×1.5                      |
|    |   |   |    |                      |    |     |             |                            |                               | D2                                      | 1/2 NPT female               |
| LT | B | H | M1 | J1<br>22<br>N1<br>T1 | C1 | L10 | Z0 F1       | A1 G1                      | E0                            | D1                                      | Model No. Example            |

## P78 Intelligent Monocrystalline Dual-remote Flat Diaphragm/Cylinder Flange Liquid Level Transmitter



### Measuring Range

| Range code | Min Range(KPa) | Max Range(KPa) | Rated pressure (max)                  |
|------------|----------------|----------------|---------------------------------------|
| B          | 1KPa           | 6KPa           | Rated pressure of liquid level flange |
| C          | 6KPa           | 40KPa          |                                       |
| D          | 40KPa          | 400KPa         |                                       |
| E          | 400KPa         | 4MPa           |                                       |

### Comparison of relationship between flange and min range

| Flange         | DN       | Min range                      |                               |
|----------------|----------|--------------------------------|-------------------------------|
|                |          | Unilateral remote transmission | Bilateral remote transmission |
| Flat Diaphragm | DN 50/2" | 10KPa                          | 10KPa                         |
|                | DN 80/3" | 6KPa                           | 1KPa                          |
|                | DN 4"    | 6KPa                           | 1KPa                          |
| Cylinder       | DN 50/2" | 10KPa                          | 10KPa                         |
|                | DN 80/2" | 6KPa                           | 1KPa                          |
|                | DN 4"    | 6KPa                           | 1KPa                          |



|  |  |  |                    |                                       |                                  |                   |      |         |  |
|--|--|--|--------------------|---------------------------------------|----------------------------------|-------------------|------|---------|--|
|  |  |  | M2                 | OLED(Low temperature resistant -40°C) |                                  |                   |      |         |  |
|  |  |  | Structure material |                                       |                                  |                   |      |         |  |
|  |  |  | Code               | Flange                                | Code                             | Diaphragm         | Code | Coating |  |
|  |  |  | 22                 | 304 SS                                | N1                               | 316L SS           | T1   | None    |  |
|  |  |  | 23                 | 316 SS                                | N2                               | Hastelloy C alloy | T2   | PFA     |  |
|  |  |  |                    |                                       | N3                               | Monel alloy       |      |         |  |
|  |  |  |                    |                                       | N4                               | Tantalum          |      |         |  |
|  |  |  |                    |                                       | N5                               | Titanium          |      |         |  |
|  |  |  | Code               | Flange Dimensions                     |                                  |                   |      |         |  |
|  |  |  | C1                 | DN50                                  | C5                               | 3"                |      |         |  |
|  |  |  | C2                 | DN80                                  | C6                               | 4"                |      |         |  |
|  |  |  | C3                 | DN100                                 | C7                               | User specified    |      |         |  |
|  |  |  | C4                 | 2"                                    |                                  |                   |      |         |  |
|  |  |  | Code               | Remote transmission device            |                                  |                   |      |         |  |
|  |  |  | Y0                 | Single flat flange type               |                                  |                   |      |         |  |
|  |  |  | Y1                 | Double flat flange type               |                                  |                   |      |         |  |
|  |  |  | Y2                 | Single cylinder flange type           |                                  |                   |      |         |  |
|  |  |  | Y3                 | Double- cylinder flange type          |                                  |                   |      |         |  |
|  |  |  | Y4                 | One flat one cylinder flange type     |                                  |                   |      |         |  |
|  |  |  | Code               | Capillary length                      |                                  |                   |      |         |  |
|  |  |  |                    | High pressure side                    |                                  | Low pressure side |      |         |  |
|  |  |  | XN                 | None                                  | L0                               | 1m                |      |         |  |
|  |  |  | X0                 | 1m                                    | L1                               | 2m                |      |         |  |
|  |  |  | X1                 | 2m                                    | L2                               | 3m                |      |         |  |
|  |  |  | X2                 | 3m                                    | LX                               | User specified    |      |         |  |
|  |  |  | X3                 | User specified                        |                                  |                   |      |         |  |
|  |  |  | Code               | Filling fluid                         |                                  |                   |      |         |  |
|  |  |  | G1                 | Silicone oil                          |                                  |                   |      |         |  |
|  |  |  | G2                 | Fluoro oil                            |                                  |                   |      |         |  |
|  |  |  | Code               | Cylinder length(mm)                   |                                  |                   |      |         |  |
|  |  |  | 10                 | 0(Flat flange)                        |                                  |                   |      |         |  |
|  |  |  | 11                 | 50                                    |                                  |                   |      |         |  |
|  |  |  | 12                 | 100                                   |                                  |                   |      |         |  |
|  |  |  | 13                 | 150                                   |                                  |                   |      |         |  |
|  |  |  | T                  | User specified                        |                                  |                   |      |         |  |
|  |  |  | Code               | Mounting bracket                      |                                  |                   |      |         |  |
|  |  |  | B0                 | Without mounting bracket              |                                  |                   |      |         |  |
|  |  |  | B1                 | Tube bending bracket                  |                                  |                   |      |         |  |
|  |  |  | B2                 | Board-mounted bending bracket         |                                  |                   |      |         |  |
|  |  |  | B3                 | Tube mounted flat bracket             |                                  |                   |      |         |  |
|  |  |  |                    | Code                                  | Hazardous location certification |                   |      |         |  |

|    |   |   |    |                |    |    |                |    |    |    | E0 | Non-explosion proof |                       |
|----|---|---|----|----------------|----|----|----------------|----|----|----|----|---------------------|-----------------------|
|    |   |   |    |                |    |    |                |    |    |    |    | Code                | Electrical connection |
|    |   |   |    |                |    |    |                |    |    |    |    | D1                  | M20×1.5               |
|    |   |   |    |                |    |    |                |    |    |    |    | D2                  | 1/2 NPT female        |
| DY | B | H | M1 | 22<br>N1<br>T1 | C1 | Y0 | X0<br>L0<br>G1 | 10 | B0 | E0 | D1 | Model No. Example   |                       |