

# PRODUCT OVERVIEW

# PRESSURE MEASUREMENT

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## P3051 Pressure Transmitter



### Characteristics

- ☆0.075%F.S high accuracy
- ☆IP67 high protection class
- ☆Easy installation and quick commissioning
- ☆Common protocols supported, for easy integration into multiple hosts in various industries
- ☆Low temperature drift, small measurement error
- ☆Good long-term stability
- ☆Able to actively monitor the integrity of electrical circuits

### Applications

- ☆Oil
- ☆Electricity
- ☆Chemical industry
- ☆Metallurgy
- ☆Aerospace
- ☆Environmental friendly
- ☆Light industry
- ☆Process control

### Profiles

P3051 pressure transmitter is generally used in various industrial production fields such as petroleum, electric power, chemical industry, metallurgy, aerospace, environmental protection, light industry...where pressure parameters need to be directly detected and controlled, such as boiler gas bag pressure, furnace chamber pressure, flue pressure, reactor pressure in chemical production. In addition, there are some parameters that are not easy to measure directly, such as liquid level, flow and other parameters, which often need to be obtained indirectly through the detection of pressure or differential pressure.

It uses a microprocessor to increase flexibility, enhance functionality, and has strong self-diagnosis capabilities. The zero point and span adjustments do not affect each other, and both remote and local ranges and zero points are adjustable.

P3051 can provide reliable pressure readings in harsh environments, and can be directly installed into a variety of measurement applications, with 10-year stability and 150:1 range ratio. It can provide reliable measurement and a wide range of application flexibility. The local operator display (LOI) enables quick commissioning and easy access to process and equipment information. And loop integrity diagnostics can detect electrical loop problems, reducing downtime.

## Specifications

| Parameter             | P3051  |
|-----------------------|--|
| Measuring range       | 0.1mH <sub>2</sub> O to 10000PSI, the range ratio is 100:1   |
| Accuracy              | 0.075%FS   |
| Output                | 4~20mA, 0~5V optional  |
| Power supply          | 12~45VDC   |
| Process interface     | Flange connection, 1/4-18NPT (taper pipe thread)<br>Joint connection, 1/2-14NPT (taper pipe thread) or M20×1.5 |
| Electrical Interface  | 1/2-14NPT threaded end conduit with terminal blocks and associated test pieces                                 |
| Isolation diaphragm   | 316L Stainless Steel, Hastelloy, Monel, Tantalum   |
| O-ring                | Teflon, nitrile rubber, ethylene-propylene   |
| Operating temperature | -40℃~85℃   |
| Stability             | 0.1/5URL/10 years  |
| IP rating             | IP67   |
| Relative humidity     | 100%RH   |

## Order Information

| Item                  | P3051<br>(Model)   | A | A | 1 | A1 | 10 | 5 | 1 | 2 |
|-----------------------|--|---|---|---|----|----|---|---|---|
| Electrical Connection | A=1/2-14NPT  |   |   |   |    |    |   |   |   |
| Output                | A=4-20mA    D=0-5V   |   |   |   |    |    |   |   |   |
| Power Supply          | 1=12-45Vdc   |   |   |   |    |    |   |   |   |
| Process connection    | M6=M20X1.5<br>A1=1/4-18NPT (taper pipe thread)<br>A2=1/2-14NPT (taper pipe thread) |   |   |   |    |    |   |   |   |
| Pressure Measurement  | 01=0.1mH <sub>2</sub> O<br>....<br>10=10000PSI<br>X=By customized                  |   |   |   |    |    |   |   |   |
| Accuracy              | 5=0.075%F.S  |   |   |   |    |    |   |   |   |
| Isolation diaphragm   | 1=316L Stainless Steel    2=Hastelloy    3=Monel    4=Tantalum                     |   |   |   |    |    |   |   |   |
| O-ring                | 1=Teflon    2=Nitrile rubber    3=Ethylene-propylene                               |   |   |   |    |    |   |   |   |