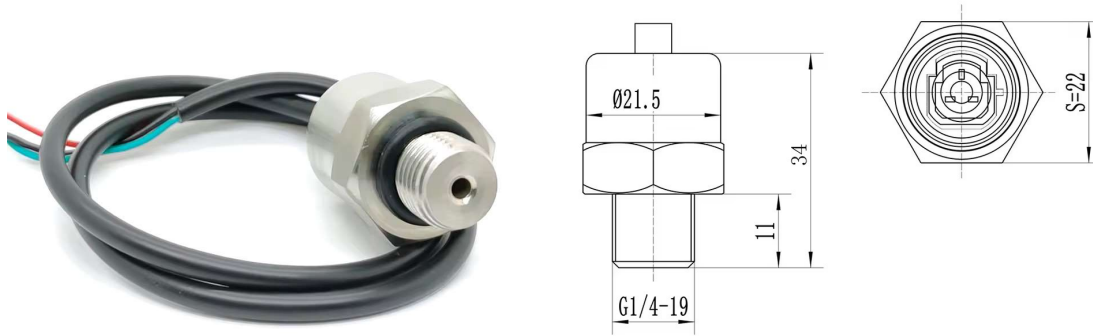


XDB401 Stainless Steel Pressure Transducer



0-0.5Mpa

Robust, monolithic stainless-steel measuring body;

Corrosion-resistant, even in a chemical-exposed and humid environment;

Integrated function test through “live zero”;

Withstands loads of up to 1.5 times its nominal (rated) pressure;

Resistant to permanent humidity and dirt owing to its IP65 protection;

Shock-proof for applications with vibrations (in compliance with DIN IEC68);

Reliable and resistant thanks to its stainless stainless-steel measuring body and convenient function test.

Description

XDB401 series of pressure transmitters adopts ceramic pressure sensor core, all stainless steel package, suitable for most media, with good long-term stability, it can be used in various environments and climates, so it is widely used in various fields.

Features

- ◆ CE conformity
- ◆ Low cost and high quality
- ◆ All stainless steel integrated structure

- ◆ Small size, convenient to install and operate
- ◆ 0.5-4.5V, 0-5V, 1-5V, various voltage output
- ◆ Complete surge voltage protection function
- ◆ For applications such as air, water, oil
- ◆ Provide OEM, flexible customization

Applications

- ◆ Intelligent IoT constant pressure water supply
- ◆ Engineering machinery, industrial process control and monitoring
- ◆ Energy and water treatment systems
- ◆ Steel, light industry, environmental protection
- ◆ Medical, agricultural machinery, testing equipment
- ◆ Flow measurement equipment
- ◆ Hydraulic and pneumatic control systems
- ◆ Air-conditioning unit and refrigeration equipment
- ◆ Water pump, air compressor pressure monitoring

Parameters

Measuring range: 0-60Mpa gauge pressure

Accuracy: $\pm 1.0\%FS$

Output signal: 0.5-4.5V, or other please tell us

Supply voltage: 5VDC or 12VDC

Operating temperature: $-40\sim 105^{\circ}C$

Compensation temperature: $-20\sim 80^{\circ}C$

Operating current: $\leq 3mA$

Temperature drift (zero&sensitivity): $\leq \pm 0.03\%FS/^{\circ}C$

Long-term stability: $\leq \pm 0.2\%FS/year$

Response time: $\leq 3ms$

Overload pressure: 150%FS

Burst pressure: 300%FS

Cycle life: 500,000 times

Sensor core: Al₂O₃-96% ceramic sensor

Pressure medium: Non-corrosive liquid or gas

Pressure connection: G1/4, Other pressure connection is on request

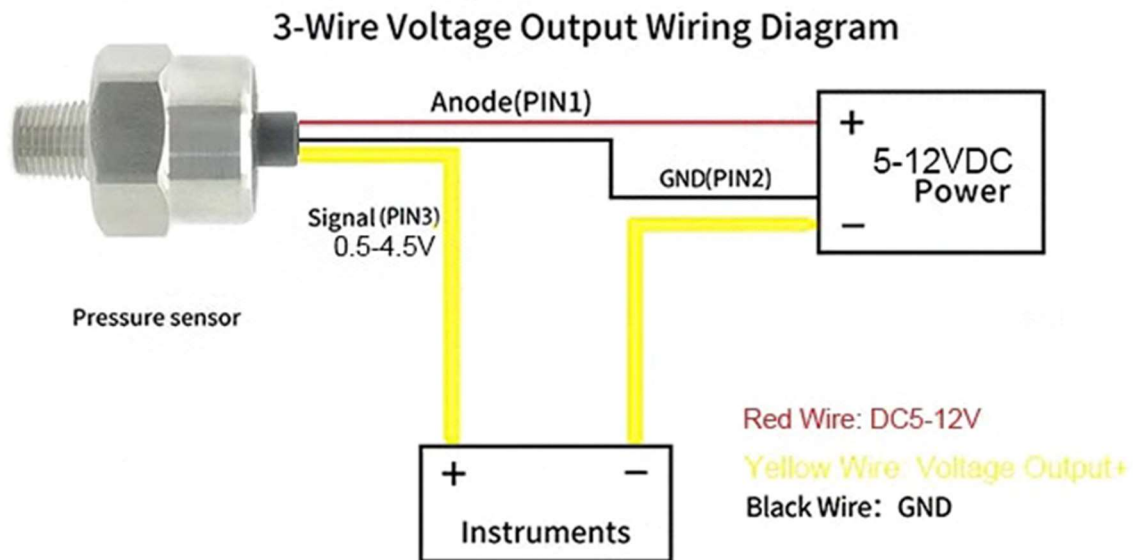
Electrical connection: Direct cable

Housing material: 304 Stainless Steel

Protection class: IP65

Explosion-proof class: Exia II CT6

Weight: $\approx 0.080\text{kg}$



1. Prevent the sensor from contacting with corrosive or overheated media, and prevent dross from depositing in the conduit;
2. When measuring liquid pressure, the pressure tap should be opened on the side of the process pipeline to avoid sedimentation and accumulation of slag;
3. When measuring gas pressure, the pressure tap should be opened at the top of the process pipeline, and the transmitter should also be installed on the upper part of the process pipeline, so that the accumulated liquid can be easily injected into the process pipeline;
4. The pressure guiding pipe should be installed in a place with small temperature fluctuations;
5. When measuring steam or other high-temperature media, it is necessary to connect a condenser such as a buffer pipe (coil), and the working temperature of the sensor should not exceed the limit;
6. When freezing occurs in winter, anti-freezing measures must be taken for the transmitter installed outdoors to prevent the liquid in the pressure port from expanding due to freezing and causing damage to the sensor;

7. When measuring the liquid pressure, the installation position of the transmitter should avoid the impact of the liquid (water hammer phenomenon), so as to avoid the sensor from being damaged by over pressure;
8. Do not touch the diaphragm with hard objects on the sensor probe, as it will damage the diaphragm;
9. When wiring, ensure that the pins are defined, and no short circuit occurs, which may easily lead to circuit damage;
10. Do not use a voltage higher than 36V on the sensor, which may easily cause damage. (The 5-12V specification cannot have an instantaneous voltage higher than 16V)
11. Make sure that the electrical plug is installed in place. Pass the cable through the waterproof joint or flexible tube and tighten the sealing nut to prevent rainwater from leaking into the transmitter housing through the cable.
12. When measuring steam or other high-temperature media, in order to connect the transmitter and the pipe together, a heat dissipation pipe should be used, and the pressure on the pipe should be used to transmit to the sensor. When the measured medium is water vapor, an appropriate amount of water should be injected into the cooling pipe to prevent the superheated steam from directly contacting the transmitter and causing damage to the sensor.
13. In the process of pressure transmission, some points should be paid attention to: there should be no air leakage at the connection between the transmitter and the cooling pipe; be careful when opening the valve, so as not to directly impact the measured medium and damage the sensor diaphragm; the pipeline must be kept unblocked, Prevent deposits in the pipe from popping out and damaging the sensor diaphragm.