

SPT2X Union Pressure Transmitter Fracturing Truck Application

Features

- Anti-interference circuit, multiple signal outputs
- Stainless steel monolithic package, spherical seal
- Compact structure, corrosion resistance, and good stability
- All stainless steel material, anti-clogging structure design
- Good shock resistance, strong impact resistance, good abrasion resistance



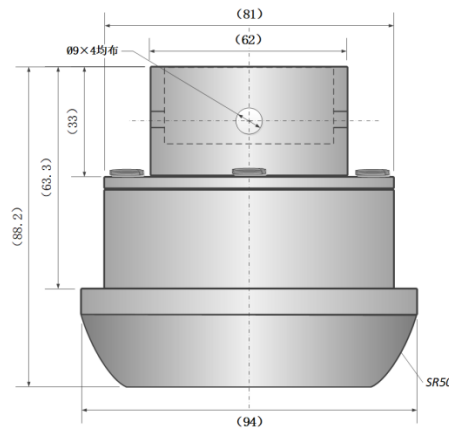
Introduction

SPT2X union pressure transmitter for fracturing truck application is a new product integrating foreign advanced technology and domestic sensor manufacturing technology, which is another crystallization of our company's introduction of foreign product technology. The sensor adopts imported high-precision large resistance strain gauge and domestic unique diaphragm technology, its measuring range can reach 200MPa, and has the characteristics of fast dynamic response, high precision, sturdy structure, corrosion resistance, anti-vibration, high performance-price ratio, corrosion resistance and so on. It is widely used in drilling equipment in the petroleum industry, especially for high-pressure measurement of imported fracturing trucks and cementing trucks. It is the preferred sensor (transmitter) to replace imported products.

Specification

Item	Specification
Range	0~10...2000bar
Output signal	4~20mA or customized
Nonlinear	±0.1%FS
Long term stability	≤ ±0.1%FS/year
Compensated temp.	-20~70℃
Operating temp.	-20~80℃
Power supply	10~32VDC
Comprehensive Accuracy	0.5%FS
Repeatability	0.05%FS
Insulation resistance	≥500MΩ/100VDC
Response time	≤1ms
Safety pressure	200%
Protection class	IP67

Outline Dimension (Unit:mm)



Electrical connection

- 1.Four-core plug-in : PIN A-power supply (red), PIN B -signal (blue)
- 2.Six-core plug-in : PIN A-power supply (red), PIN B-signal (blue), C / D-null, E / F-RESET(if necessary, please specify when placing an order)
- 3.Airline connection definition : red-power supply, black-signal, yellow / green-RESET
- 4.Two-core connector : PIN 1 : power supply, PIN 2 : signal

Product installation and precautions

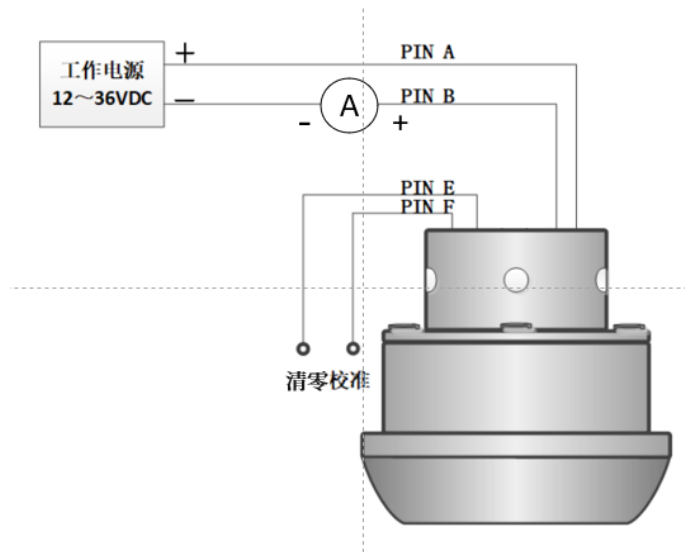
- 1.Select a site that is easy to operate and maintain for installation.
2. Install as far away as possible from vibration sources and heat sources.
3. In order to comply with CE requirements for electromagnetic compatibility, the transmitter must be grounded by the grounding connector.
- 4.When installing the transmitter, prevent the output cable from being twisted and pulled to damage the transmitter.
- 5.Regular cleaning of the transmitter pressure chamber, electrical connection port debris, can increase the service life of the product.
6. After the product is installed, please check whether the leakage, and adjust if necessary.
7. User does not need to make any adjustments to the transmitter can run, before running, be sure to strictly check the installation, electrical connection is correct, and then turn on the power supply, put into operation.
- 8.The transmitter can work when it is connected to the power supply, but the output signal is more stable and reliable after warming up for 30 minutes.

Wiring Diagram :

The SPT2X union pressure transmitter fracturing truck (oil) application has the function of on-site calibration, which should be performed by electronically simulating the pressure under which the powered calibration terminals or connected (shorted) calibration terminals produce a signal output of approximately 100% of full scale pressure. This can be used to adjust the gain on the user's meter or data acquisition equipment.

The transmitter is connected as follows :

Reset operation : In the case of power, the yellow (PIN E) and green(PIN F) lines are connected for 3-5 seconds, and the reset can be achieved.



Maintenance

The SPT2X union pressure transmitter fracturing truck (oil) application is designed to be maintenance-free, and routine maintenance only requires simple cleaning of the electrical connector and pressure chamber, but in the process of using it, please pay attention to the following matters:

1. When handling and installing the transmitter, you should be careful to avoid damage to the components by impact and affecting the circuit performance.
2. The transmitter pressure porting has an isolation diaphragm, do not touch with sharp foreign objects, if the pilot hole scaling or clogging, please use solvents to clean, not allowed to poke the pilot hole.
3. The power supply can not exceed 36VDC, if the wiring or voltage is too high and cause damage to the transmitter, the responsibility is borne by the user.
4. The working pressure can not be higher than the overload pressure, so as not to cause non-maintainable damage.
5. Frequently check that the cable rubber sheath is not cracked and that no water ingress occurs.
6. For strong electromagnetic interference environment, please ground the cable shielding layer of the transmitter reliably.