

Hydraulic bracket pressure transmitter



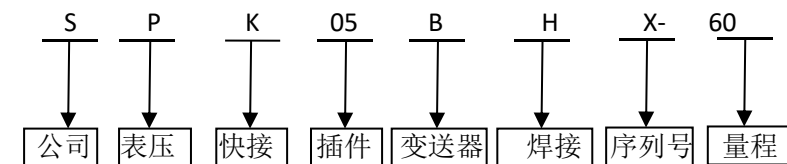
Application

It is mainly used for pressure testing of oil pressure of hydraulic support in coal mine roadway, detection of air pressure.

Features

It adopts high-precision strain measurement technology and has the function of measuring the pressure of liquid medium. The product adopts intrinsically safe circuit and can be used in underground areas containing gas and other explosive dangerous gases.

Part numbering system:



其中： X:1:DN10;2KJ10.

Application environment

- 1、 Environment temperature: 0~70°C;
- 2、 Environment relative humidity: $\leq 95\%$ (25°C)
- 3、 Atmospheric pressure: 80~106KPa;
- 4、 Can be used in coal dust, gas and other combustible and explosive gas environment;
- 5、 No strong vibration and shock;
- 6、 Corrosive gases that non-destructive to metals and insulating materials;
- 7、 No leaking place。

Structure and working principle

Hydraulic bracket pressure transmitter adopts the structure of elastic body and shell welding, which improves overload safety. DN10/KJ10 two interfaces and mining U-shaped bolt connection make it easy loading and unloading. The liquid measuring medium is pressurized onto the diaphragm through a pressure-guide hole, and an electrical signal is induced by the strain gauge; the strain gages are protected by multilayer adhesive, which is waterproof and corrosion resistant; adopt high reliability and high precision transmission board to convert signals into standard output signals; the electrical interface adopts mine standard plug-in to facilitate connection.

Technical parameters

- 1、 Operating voltage: 8~24VDC;
- 2、 Impedance: $1000 \pm 100 \Omega$; $2200 \pm 100 \Omega$
- 3、 Isolation resistance: $200M \Omega / 100VDC$;
- 4、 Rated load: 60MPa;
- 5、 Output: 0.5~4.5VDC; 1~5VDC; 4~20mA;
- 6、 Comprehensive accuracy: 0.25; 0.5; 1.0; 1.5; 2.0;
- 7、 Safety overload: 150%FS;
- 8、 Ultimate overload: 200%FS;
- 9、 Explosion-proof form: Exib I Mb;
- 10、 Enclosure rating: IP54.

Installation and debugging

1、 Installation

Mechanical interface: Mining U-shaped bolt connected to DN10/KJ10 connector.

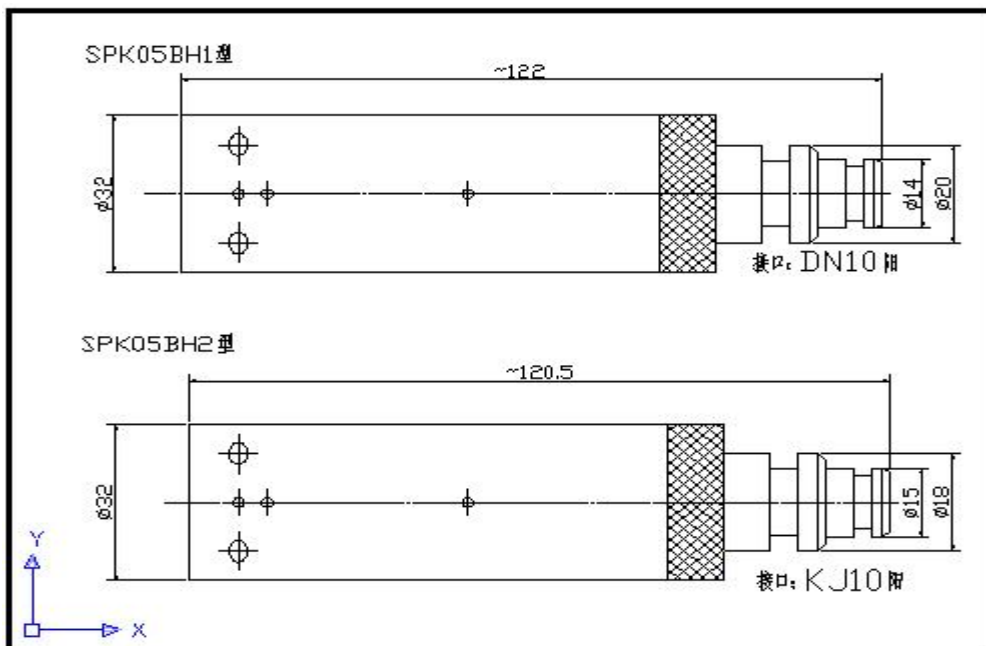
Electrical interface: Mining four-core plug.

2、 Debugging

Electrical plug-in outlet definition:

Connecters serial number	Two-wire current type	Three-wire current type	Pinhole defination
1	Signal (+OUT)	Signal (+OUT)	Pin
2	Power supply (Vcc)	Power supply (Vcc)	Pin
3	Null	GND	Hole
4	Null	Null	Hole

Outline dimensions



Storage:

Ambient temperature $-10 \sim +40 \text{ }^{\circ}\text{C}$, relative humidity $\leq 95\%$ ($25 \text{ }^{\circ}\text{C}$) can be stored for more than 12 months.