

CY-089型抗恶劣环境专用压力传感器**CY-089 Anti Harsh Environment Special Pressure Sensor****1.工作原理**

该传感器是利用单晶硅的压阻效应原理，采用先进的半导体平面工艺、微机械加工工艺、温度补偿及固态集成工艺制造的。

2.特点

具有精度高、抗电磁干扰、稳定可靠、体积小、重量轻等特点。

3.应用范围

广泛应用于石油、冶金、化工、武器装备、航海、航空航天等领域中压力的测量。

4.外形结构尺寸

该传感器是敏感元件与信号处理电路一体化的全密封结构，其外形尺寸如图1所示。

1.Working Principle

Working Principle of sensor is monocrystalline silicon piezoresistive effect. It is fabricated with advanced semiconductor planar process machining process technology, temperature compensation and solid-state integrated technology.

2.Characteristic

It has characteristics of high precision, resistance to electromagnetic interference, stability and reliability, small volume, light weight and so on.

3.Application

It is widely used to measure pressure in fields of petroleum, metallurgy, chemical industry, navigation, aerospace, weapons and equipment, etc.

4.Outside dimension

The sensor has full sealed structure of integration of sensor and signal processing circuit, please check its outside dimension in Figure 1.

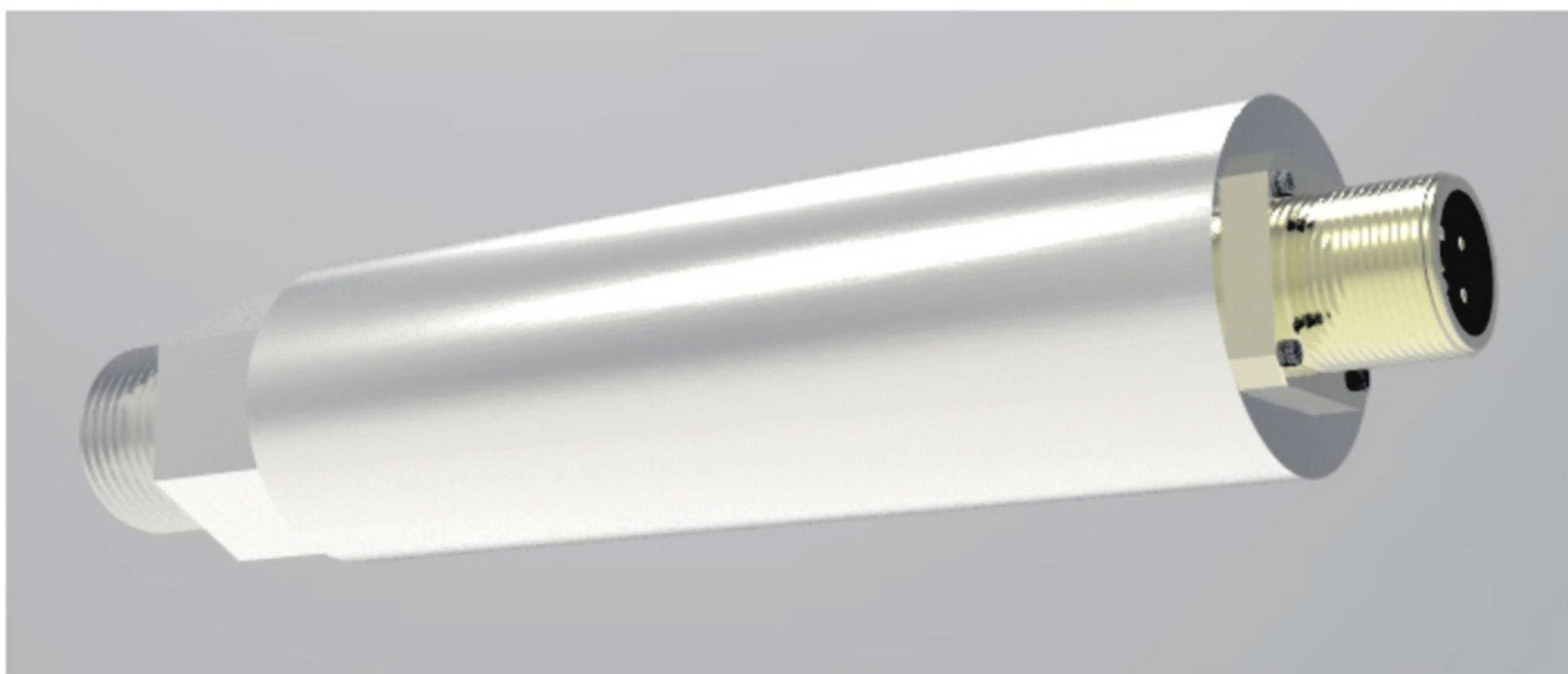
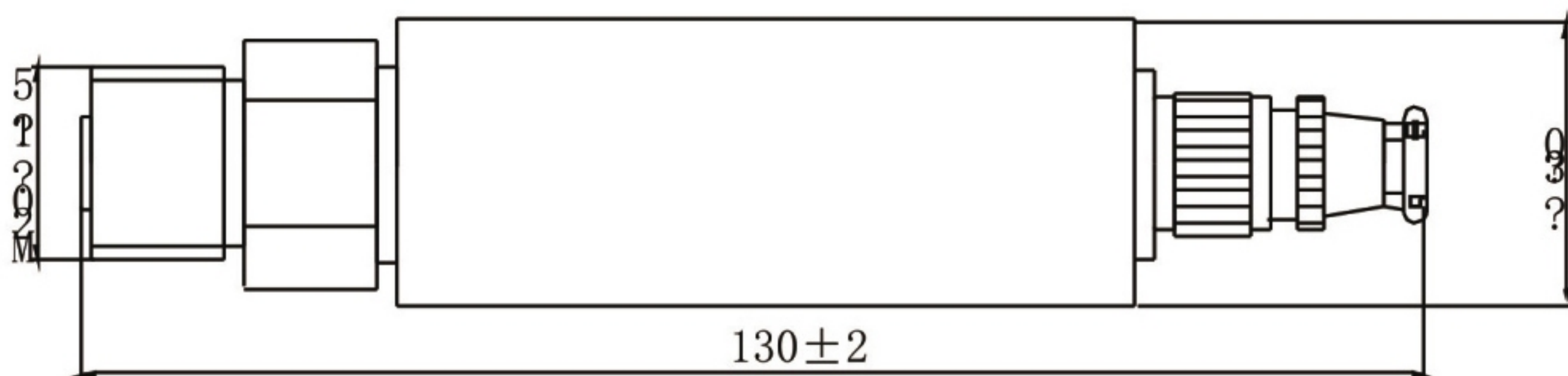
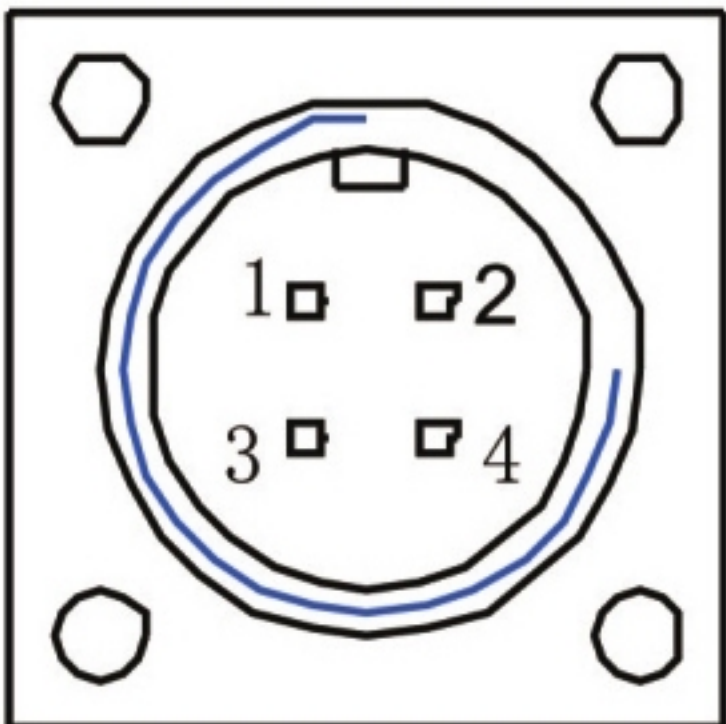


图 Picture CY-089

5.电气连接方式
传感器的电气连接方式如图所示。



1.电源正； 2.地； 3.电源负； 4.空。
1—positive power； 2—earthing； 3—negative power； 4—null；

6.主要技术指标
Main technical parameters

名称 Name		发动机压力传感器 Engine pressure sensor
型号 Model		CY-YBJ-1006型
性能特性 Performance characteristics	测量范围 Temperature Range	0MPa ~ 25MPa
	工作温度 Working Temperature	-40℃ ~ +85℃
	激励电源 Excitation power supply	± (16.5 ± 3) V
	重量 Weight	≤120g
	外形尺寸 Outline Dimension	-
电气特性 Electrical characteristics	绝缘电阻 Insulation resistance	>100MΩ
	输出阻抗 Output impedance	<3 kΩ
静态特性 Static characteristics	零位输出 Zero output	0V ~ 0.06V
	满量程输出 Full range output	4.9V ~ 5V
	非线性 Nonlinearity	-
	重复性 Repeatability	-
	迟滞 Delaying	-
	准确度 Accuracy	≤0.5%FS
	过载 Overload	-
稳定性 Stability	零点漂移 Zero drift	≤0.5%FS/8h
	热零点漂移 Thermal Zero drift	≤0.1%FS/℃