

小型电感式压差压力传感器

Small inductance type differential pressure sensor

CY-004系列

CY-004系列用于各种气体,液体和腐蚀性介质的压差,压力测量。采用电感式原理,把感受压力的金属膜片置于二电感线圈之间,并留有一定间隙、电感线圈和电阻构成平衡电桥,由变换放大器供电。在压差或压力作用下,膜片变形改变原有间隙,即改变两电感的电感量,电桥输出与压差成正比的电信号。传感器与YA12-9系列信号调节器配套使用可输出0~5V或0~6V的直流信号。

性能指标

测量范围(Mpa): 0~0.1、0.2、0.5、1,2、4,8、10、15、18、20、25

工作温度范围: -40℃~+100℃(最高可达150℃)

总精度: 0.2~1.1%(根据测量范围而定)

温度性能: -40~+80℃(提供温度校准数据)

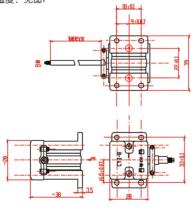
过载能力: 1.5倍满测量范围

加速度: 15g 三向

运输: 三级公路 1500Km 40Km/h

低气压: 5X10-5~1.3X10Pa

湿度: 见图1



引线分配 Lead distribution

红或绿	蓝	⊟
Red or green	blue	white
输入	地	输出
input	earthing	output

CY-004 series are used in measurement of pressure difference and pressure in gas, liquid and corrosive medium. Using inductive principle, we put pressured metal diaphragm between the two inductance coil with a certain gap, so that balance bridge is made between inductance coil and resistance, by power supply of Transform amplifier. In the effect of differential pressure or pressure, the deformation of diaphragm to change original clearance, namely change the inductance of the two inductance, bridge output is proportional to the pressure difference of the electrical signals. Sensor and YA12-9 series signal regulator can output 0 ~ 5 v or 0 ~ 6 v dc signal

Performance Index

Measurement range(Mpa): $0 \sim 0.1$, 0.2, 0.5, 1.2, 4.8,

10、15、18、20、25

Working temperature range: $-40\,^{\circ}\text{C} \sim +100\,^{\circ}\text{C}$ (MAX

150℃)

Overall accuracy: 0.2~1.1%(depends on measurement

range)

Temperature performance : -40~+80 ℃ (Provide

temperature calibration data)

Overload capacity:: 1.5 times of full scale measurement

Accelerated speed: 15g three–dimension
Transportation: tertiary highways 1500Km 40Km/h

Low air pressure: 5X10-5 ~ 1.3X10Pa

Humidity: check figure 1

