

CY-94型、CY-95型 压力敏感芯体

CY-94、CY-95 The pressure sensitive core

压力敏感芯体的敏感元件采用SOI结构压力敏感芯片，彻底消除PN结本征漏电问题，具有温度范围宽、灵敏度高、抗振性能好、体积小、工作可靠等特点。

敏感芯体在结构上将压力敏感芯片粘贴并密封在316L不锈钢壳体内，采用316L不锈钢膜片与被测介质隔离，内充硅油传递压力。当压力作用到波纹膜片上时，通过硅油使压力敏感芯片感受压力，利用压阻效应原理产生电信号。

Sensitive element of pressure sensitive core is pressure sensitive chips with structure of SOI, which eliminate p-n junction intrinsic leakage problem, has a wide temperature range, high sensitivity, good ant-vibration performance, small volume, reliable operation, etc.

In structure sensitive core makes pressure sensitive chip paste and sealed inside 316 L shell, 316 L SS diaphragm is adopted to isolate the measured dielectric, pressure is transferred by inside silicon oil. When the pressure acts on the corrugated diaphragm, sensitive chip is pressured by make silicone oil, and produce electrical signals because of piezoresistive effect principle.

外形尺寸 Dimention

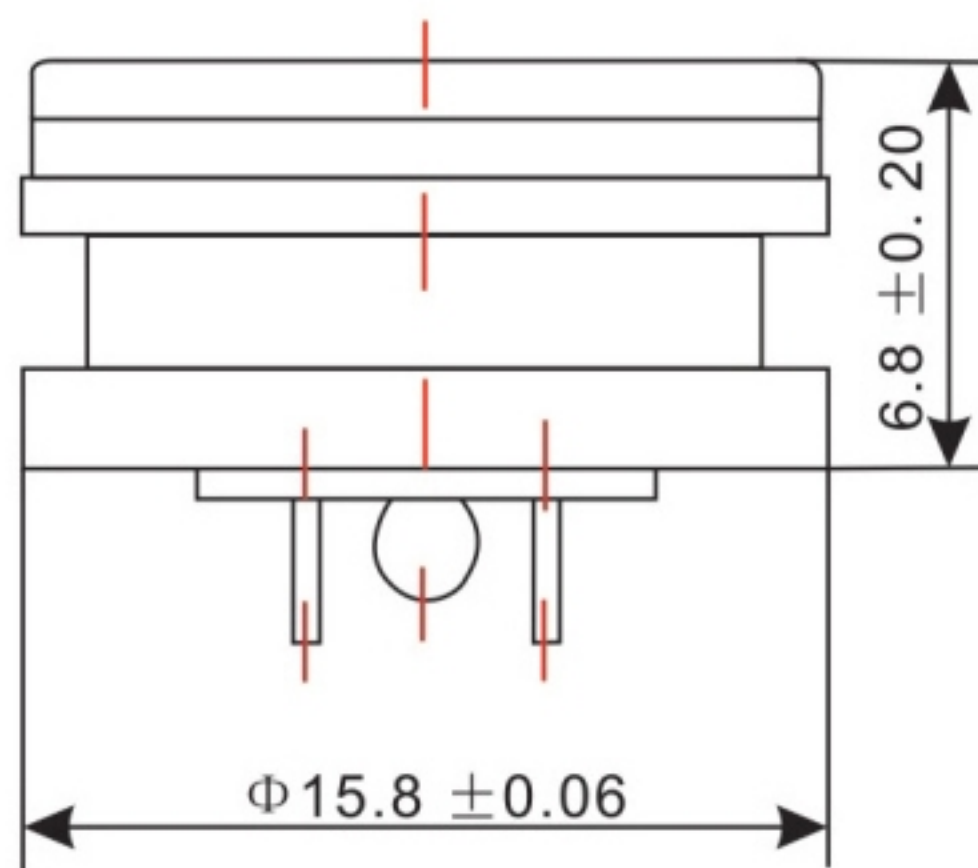


图1 MY86型压力敏感芯体

Figure 1 MY86 type pressure sensitive core

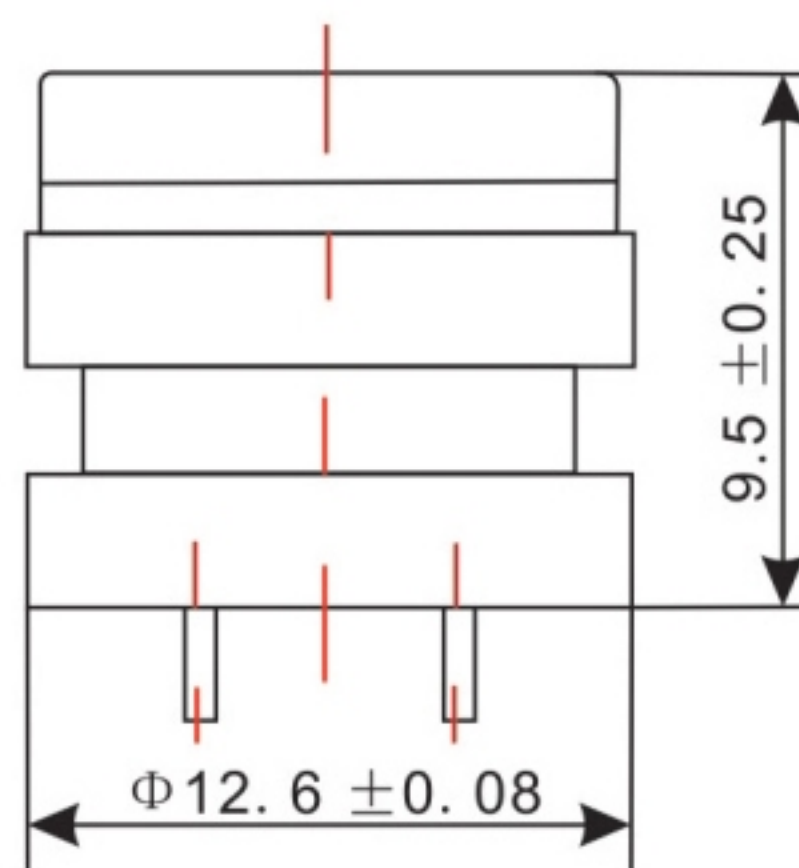


图2 ML34型压力敏感芯体

Figure 2 ML34 type pressure sensitive core



性能指标 Technical Index

测量范围：（A-绝压G-表压S-表压>
0~0.1MPa、0~0.2MPa、0~0.4MPa、0~0.7MPa'
0~1.0MPa, 0~2MPa、0~3.5MPa、0~7MPa、
0~10MPa、0~ 20MPa、0~30MPa、0~40MPao 非
线性(%FS): ± 0.2%FS。
迟滞(%FS): ± 0.08%FS。
重复性(%FS): ± 0.08%FS。
输入阻抗(KQ): 2~60 输出阻抗(KQ): 2~250
零点长期稳定性(%FS/年): 0.1。
工作温度 (t): -40~125。
过载压力(%FS): 200%FS。
绝缘电阻(MC3): 100 (100VDC)。

Measuring Range : (A- absolute pressure G- gage pressure S- gage pressure >
0~0.1MPa、0~0.2MPa、0~0.4MPa、0~0.7MPa'
0~1.0MPa, 0~2MPa、0~3.5MPa、0~7MPa、0~10MPa、
0~ 20MPa、0~30MPa、0~40MPao nonlinearity (%FS):
± 0.2%FS。
LAG (%FS): ± 0.08%FS。
Repeatability (%FS): ± 0.08%FS。
Input impedance (KQ): 2~60 Output impedance (KQ):
2~250
Zero point stability for a long time (%FS/年): 0.1。
Working temperature (t): -40~125。
over load pressure (%FS): 200%FS。
insulation resistance (Mc3): 100 (100VDC)。

电气连接 Electrical Connection

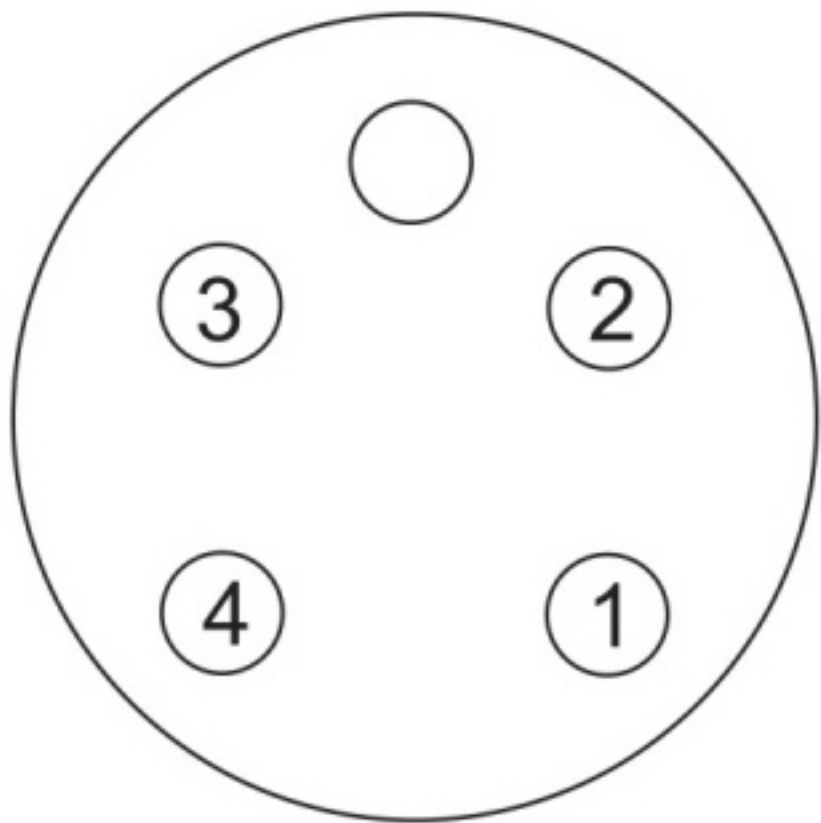


图3 节点定义图
Figure 3 node definition

端子1: 输入正 端子2: 输出正
Terminal 1: Vin Terminal 2: Vo
端子3: 输入正 端子4: 输出正
Terminal 3: Vin Terminal 4: Vo