

热敏电阻温度传感器

Thermistor Temperature Sensor

CY-0012系列

本系列传感器采用热敏电阻作为敏感元件，实施对被测物体的表面温度或空间（空气）、容器（管道）内介质的温度进行测量，热敏电阻具有响应快，结构简单可靠，不需外配变换器可直接应用电阻分压原理实现数据采集的优点，它适用高精度下窄测量范围的测量。

性能指标

测量范围及结构特点：

- (1) 对表面温度 $-80 \sim +40^{\circ}\text{C}$, $-40 \sim +80^{\circ}\text{C}$, $-30 \sim +150^{\circ}\text{C}$, $-10 \sim +180^{\circ}\text{C}$, $100 \sim 210^{\circ}\text{C}$ (不带壳体 CW6-45-1/10 带壳体 CW6-46-1/10)
- (2) 对空间（空气）温度 $-80 \sim +20^{\circ}\text{C}$, $-50 \sim +60^{\circ}\text{C}$, $-30 \sim +80^{\circ}\text{C}$, $-30 \sim 150^{\circ}\text{C}$ (螺纹安装 CW6-47-1/10、法兰安装 CW6-48-1/10)
- (3) 对容器（管道）介质温度 213 ~ 313 K, 90 ~ 140K, 20 ~ 120 K, 20 ~ 50K, 80 ~ 110K (球头但插入深度不同 CW6-49-1/10) 19 ~ 30K, 20 ~ 50K (法兰安装但插入深度不同 CW6-20-1/2), 82 K ~ 140 K, 20 ~ 50K (法兰螺纹安装 CW6-36-1/2)

精度： $\pm 0.5^{\circ}\text{C}$, $\pm 0.25\text{K}$

敏感元件：金属氧化物半导体电阻与温度呈指数关系的元件或低温特种热敏电阻元件

接插件：Y4-4ZJLM 或 Y8C-4ZJL 或不带接插件的直接引出线输出

加速度：63g, 3min/每方向 $\pm$ 轴向、 $\pm$ 径向

运输：(1) 不带包装：2 ~ 7Hz 振幅 12.7mm, 7 ~ 200Hz 1.5g 二方向

(2) 带包装颠簸试验：振幅：12.7mm 转速：

285 $\pm$ 5r/min 二方向

湿热：40 $^{\circ}\text{C}$, 92 ~ 98%

This sensor use thermistor as sensing element to measure surface temperature of objects or medium temperature in space (air), container (pipe), with advantage of quick response, simple structure and reliable, data collection in application of resistance partial pressure principle without converter, it can measure in narrow measuring range with high precision.

Performance Index

Measurement range and structural features:

- (1) surface temperature $-80 \sim +40^{\circ}\text{C}$, $-40 \sim +80^{\circ}\text{C}$, $-30 \sim +150^{\circ}\text{C}$, $-10 \sim +180^{\circ}\text{C}$, $100 \sim 210^{\circ}\text{C}$ (without case CW6-45-1/10 with case CW6-46-1/10)
- (2) temperature of space (air) $-80 \sim +20^{\circ}\text{C}$, $-50 \sim +60^{\circ}\text{C}$, $-30 \sim +80^{\circ}\text{C}$, $-30 \sim 150^{\circ}\text{C}$ (Screw installation CW6-47-1/10, flange CW6-48-1/10)
- (3) medium temperature in container (pipe) 213 ~ 313K, 90 ~ 140K, 20 ~ 120K, 20 ~ 50K, 80 ~ 110K (bulb but different insert length) CW6-49-1/10 19 ~ 30K, 20 ~ 50K (flange installation but different insert length) CW6-20-1/2, 82 K ~ 140K 20 ~ 50K (screw and flange installation CW6-36-1/2)

Accuracy: $\pm 0.5^{\circ}\text{C}$, $\pm 0.25\text{K}$

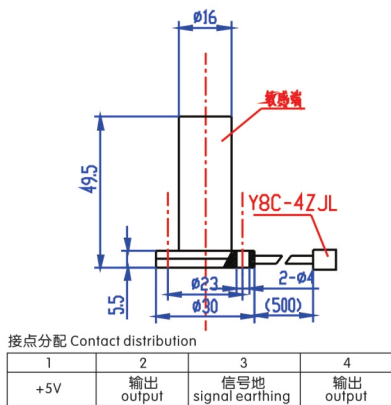
Sensitive element: metal oxide semiconductor and special thermal resistance element at low temperature or element that has exponential relationship with temperature.

Connector assembly: Y4-4ZJLM or Y8C-4ZJL or lead wire without connector assembly

Accelerated speed: 63g, 3min/ Each direction and the axial and radial

Transportation: (1) without package: 2 ~ 7Hz amplitude 12.7mm, 7 ~ 200Hz 1.5g two-dimension (2) Turbulence tests with package: amplitude: 12.7mm rotate speed: 285 $\pm$ 5r/min two-dimension

Humidity: 40 $^{\circ}\text{C}$, 92 ~ 98%



CW6-48 外形图 Outline drawing



热电偶温度变换器

Thermocouple Temperature Converter

CY-0013系列

本系列变换器是专门与热电偶式温度传感器配套的信号调节器，它由输入电路，放大电路，二次电源电路，限幅电路，电压基准电路等部分组成。它用于将传感器输出的微弱信号进行放大，调节到相对应的0~5V电压输出（有限幅功能）并且还自动的对冷端温度进行补偿。

性能指标

测量范围：YA8-160子系列：-50~-+200、+400、+600、+800、+1000、+1200℃

YA8-161子系列：-200、-150、-100~-+50℃；-50~-+50、+200、+400、+600、+800、+900℃

YA8-162子系列：-200、-150、-100~-+50℃，-50~-+200、+300、+400℃

YA8-163子系列：0~-+1000、+1200、+1400、+1600、+1800℃；+500~-+1000、+1200、+1400、+1600、+1800℃

YA8-164子系列：0~-+1500、+1700、+1900、+2100、+2300、+2500℃

环境温度：-40~+85℃

精度：±1.5% (包括重复性，非线性，温度误差)

结构特点：壳体采用可积板式安装的结构，便于实现多路组合安装

接插件：J14A-9ZJ

This series transformer is a signal conditioner fitted with special thermocouple temperature sensor, it is composed of input circuit, amplifying circuit and the secondary power supply circuit, limiter circuit, voltage reference circuit and other parts. It is used to amplify the weak output signal of the sensor, adjust the corresponding 0 to 5 v voltage output (Limited amplitude) and automatic compensate of the cold end temperature.

Performance Index

Measurement range: YA8-160: -50~-+200、+400、+600、+800、+1000、+1200℃

YA8-161: -200、-150、-100~-+50℃；-50~-+50、+200、+400、+600、+800、+900℃

YA8-162: -200、-150、-100~-+50℃，-50~-+200、+300、+400℃

YA8-163: 0~-+1000、+1200、+1400、+1600、+1800℃；+500~-+1000、+1200、+1400、+1600、+1800℃

YA8-164: 0~-+1500、+1700、+1900、+2100、+2300、+2500℃

Environmental temperature: -40~+85℃

Accuracy: ±1.5% (Including repeatability, nonlinear and temperature error)

Structural features: case adopts modular structure to realize multiple combination installation.

(VLD is temperature compensation output)