

热电偶温度传感器

Thermocouple Temperature Sensor

CY-0011系列

本系列传感器采用热电偶作为敏感元件，实施对被测物体的表面温度或容器（管道）内介质的温度进行测量。热电偶是一种应用广泛的测温材料，其产生的热电势与温差的大小成比例，它测量范围广，结构较简单，可以测量点温。它在空间运载工具上遥测使用，可与YA8-16X系列变换器配套使用。

性能指标

测量范围：对表面温度 $0 \sim 1000^{\circ}\text{C}$ ， $-200 \sim +200^{\circ}\text{C}$ ， $0 \sim 900^{\circ}\text{C}$ (CW3-59-1/10)；对容器管道内介质温度 $0 \sim 2300^{\circ}\text{C}$ (CW3-49)， $0 \sim 1000^{\circ}\text{C}$ (CW3-57-1/10、CW3-58-1/10)

精度：ZBY301-85 II级或 $\pm 1\%$ ， $\pm 0.75\%$

结构特点：测量表面温度可采用点焊或螺钉或胶粘贴安装，测量容器（管道）内介质温度可采用螺纹结构

敏感元件：依据不同导体之间存在温差时产生热电势原理而组成的K、T、E等类型热电偶

接插件：Y4-4ZJLM或不带接插件而用热电偶补偿电缆引出

加速度：150m/s² 三向

运输：（1）不带包装箱：三向 $2 \sim 7\text{Hz}$ 12.7mm ； $7 \sim 200\text{Hz}$ 1.5g，每方向循环2h

（2）带包装箱：三向 $2 \sim 5.5\text{Hz}$ 12.7mm ； $5.5 \sim 200\text{Hz}$ 1.5g 每方向循环90min

（2）运输颠簸：振幅： 12.7mm 转速： $285 \pm 5\text{r/min}$ 三向

湿热： $40 \pm 3^{\circ}\text{C}$ $95 \pm 3\%$ 48h

This series of thermocouple sensor used thermocouple as the sensitive element to measure the surface temperature of the object or medium temperature in container (pipe). Thermocouple is a kind of popular temperature measurement material, its thermoelectric potential is proportion to temperature difference, it has wide measuring range, simple the structure. It is dedicated to supporting the use of YA8-16X series convertor.

Performance Index

Measurement range: surface temperature $0 \sim 1000^{\circ}\text{C}$ ， $-200 \sim +200^{\circ}\text{C}$ ， $0 \sim 900^{\circ}\text{C}$ (CW3-59-1/10); medium temperature in container and pipe $0 \sim 2300^{\circ}\text{C}$ (CW3-49)， $0 \sim 1000^{\circ}\text{C}$ (CW3-57-1/10、CW3-58-1/10)

Accuracy: ZBY301-85 II class or $\pm 1\%$ ， $\pm 0.75\%$

Structural features: spot welding or screws or glue stick installation is applied in surface temperature measurement, thread structure is used in measuring medium temperature in containers (pipe).

Sensitive element: according to thermoelectric potential principle produced by temperature difference between different conductors, they are divided into K, T, E, etc. type thermocouple.

Connector assembly: ZJL ZJLM or lead output of thermocouple compensating cable without connector assembly

Accelerated speed: 150m/s² three-dimension

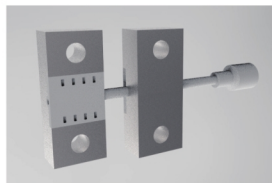
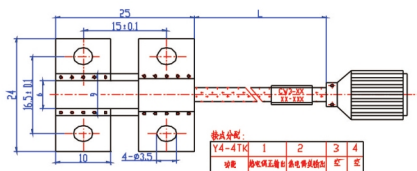
Transportation:

(1) without package: three-dimension $2 \sim 7\text{Hz}$ 12.7mm ； $7 \sim 200\text{Hz}$ 1.5g，circulation in all directions 2h

(2) with package: three-dimension $2 \sim 5.5\text{Hz}$ 12.7mm ； $5.5 \sim 200\text{Hz}$ 1.5g circulation in all directions 90min

(3) Transportation jolt: amplitude: 12.7mm rotate speed: $285 \pm 5\text{r/min}$ three-dimension

Humidity: $40 \pm 3^{\circ}\text{C}$ $95 \pm 3\%$ 48h



CW3-59 外形图 Outline drawing