

铂电阻空间(空气)或容器(管道)温度传感器

Platinum resistance space (air) or containers (pipe) temperature sensor CY-010系列

本系列传感器系采用铂电阻作为敏感元件,对空间(空气)或容器(管道)内介质的温度进行测量,铂电阻是一种高精度的测温元件,其电阻随温度成正比变化,它的标定,测试以及试验方法国内外均已有标准,因此归一性好,易于保证互换性和可靠性。它在空间运载工具上遥测使用,可与YA8-15X系列变换器配套使用。

性能指标

测量范围: 对空间(空气)介质温度-100~ +400℃(CW2-75、CW2-89),对容器(管道) 介质温度-253~+100℃(CW2-90、CW2-91、 CW2-92),13~273K(CW2-93-1/10)

精度: 对于测空间温度为ZBY300-85 Ⅱ级, 对于测容器及管道介质温度为±0.5K或±0.5℃

结构特点:对于测空间温度视具体情况采用法兰安装(CW2-75)或螺纹安装(CW2-89),对于测容器及管道介质温度,视具体情况采用法兰安装(CW2-90、CW2-91)或螺纹安装(CW2-92)或球头安装插入深度可变(CW2-93-1/10)

敏感元件: Pt100陶瓷铂热电阻

加速度: 15g 两向

运输: 1500Km 车速: 40Km/h 三级公路

CW2-75 外形图 Outline drawing

This series of sensor used platinum resistance as the sensitive element to measure the medium temperature in space (air) or container (pipe), platinum resistance is a kind of high precision temperature measuring element, its resistance is proportional with the temperature change, its calibration, testing and test methods at home and abroad all established standards, so it has good normalization, it is easy to ensure interchangeability and reliability. Application in telemetering on the space vehicle, which is dedicated to supporting the use of YA8–15X series convertor.

Performance Index

Measurement range: medium temperature for space (air)-100 \sim +400 $^{\circ}$ C (CW2-75, CW2-89),

medium temperature for container (pipe) $-253 \sim +100 \, \text{C} \, \text{CW2} - 90 \, \text{CW2} - 91 \, \text{CW2} - 92), \, 13 \sim 273 \, \text{K} \, \text{CW2} - 93 - 1/10)$

Accuracy: ZBY300-85 IIclass for measuring space temperature, medium temperature of measuring container and pipe is $\pm\,0.5$ K or $\pm\,0.5$ °C

Structural features: For measuring space temperature according to specific situation adopt installed flange (CW2–75), or thread (CW2–89), for the containers and pipes medium temperature measurement, using flange installation according to specific situation (, CW2 CW2–90–90), or thread installation (CW2–92) or ball head insert depth variable (CW2–93–1/

Sensitive element: Ceramic platinum thermal resistance

Accelerated speed: 15g two-dimension

Transportation: 1500Km Travel speed: 40Km/h tertiary highways

figure 1

