Technical Data

Bimetal Thermometer

Accuracy:

Bimetal Thermometer: Class 1.5, if special required, class 1.0 available

Indicate & control accuracy of bimetal thermometer with electro- switch upper or lower settings: class 1.5.

The first upper or lower setting of dual upper or lower setting: class 1.5

The second upper or lower setting of dual upper or lower setting: class 2.5

Oil filled bimetal thermometer: Class 1.5

Sheathed platinum thermal resistance degree B: +/- (0.30+0.005 | t |)

K & E type sheathed thermocouple degree I: +/- 1.5 °C or +/- 0.004 | t |

degree II: +/- 2.5 °C or +/- 0.0075 | t |

Allowable working pressure: 6.6 MPa, special requirements are available upon request.

Time Constant:

For the protective thermowell, the time constant will vary with the diameter of bimetal thermometer.

ϕ6x0.5, ϕ8x1, ϕ10x1mm ≤ 40 Sec.

ϕ12x2mm ≤ 60 Sec.

For the sheathed platinum thermal resistance protective thermowell ϕ14x2mm: < 90 Sec.

For the sheathed thermal couple protective thermowell ϕ14x2mm: < 90 Sec.

Application Environment: incompliance with IP65

Electrical Data:

For gear style core-extractible protective type bimetal thermometer with electrical switch, explosion-proof electrical switch, it has rated power ≤ 10VA, and a working current < 1A. When working voltage is 220VAC, the current is 0.045A. The recommended power supply is 24V, 36V.

For core-extractable bimetal thermometer with explosion-proof electric induction switch, it should be used with barrier of isolation amplifier relay output, thus it could be used in intrinsically safe loop. The technical data of the electric inductance switches and barriers of isolation amplifier rely output are as follows:

Electric Inductance switch:

Its power is supplied by barrier of isolation amplifier relay output and becomes an intrinsically safe loop.

Working Voltage: 8 ~ 13.5 VDC.

Working Current: 3 mA ≤ open ≤ 8 mA, close ≤ 1 mA.

Barrier of isolation amplifier relay output should be equipped with two ways:

Power Supply: 220 V (-10%, +15%), 45~65 Hz, Power 3.5 VA

Switch Load: AC: 220 V / 4 A / 500 VA / COSϕ = 0.7.

DC: 220 V / 0.1 A; 60 V / 0.6 A; 24 V / 4 A

Mechanical Life: 10^7

Activated / Released delay time: about 10 mS/20 mS

Transmitter's Basic Accuracy: ±0.5% FS

transfer: 2 wires style, working voltage is 24 VDC, rated load is 250 Ω.

RTD

Accuracy:

Sheathed platinum thermal resistance class B: ± (0.30+0.005| t |).

Allowable working pressure: 6.6 MPa, special requirements are available upon request.

Time Constant: ϕ14x2mm: ≤ 90s

Application Environment: incompliance with IP65

Transmitter's Basic Accuracy: ±0.5% FS

transfer: 2 wires style, working voltage is 24 VDC, rated load is 250 Ω.

Technical Data

Sheathed Thermocouple

Accuracy:

K&E type sheathed thermocouple degree I: ± 1.5°C or ± 0.004 | t |

K&E type sheathed thermocouple degree II: ± 1.5°C or ± 0.004 | t |

Allowable working pressure: 6.6 MPa, special requirements are available upon request.

Time Constant: ϕ14x2mm: ≤ 90s

Application Environment: incompliance with IP65

Transmitter's Basic Accuracy: ±0.5% FS

transfer: 2 wires style, working voltage is 24 VDC, rated load is 250 Ω.