Product information

Cwdz00 platinum resistance temperature sensor

Cwdz00 platinum resistance temperature sensor is applicable to the measurement of equipment surface temperature, liquid temperature and gas temperature.

Output: Pt100

Measuring element: Class 1 / 3B

Measuring range: - 50 ~ 200 ℃

In addition, we can provide customized products to meet the application needs of customers in a short time according to their applications.

Typical application

▲Applicable to general industry.

Instructions

Temperature transmitter cwdz00 is applicable to the measurement of equipment surface temperature, liquid temperature and gas temperature. The operator is responsible for checking whether the equipment is suitable for the working conditions of the application. If you have any questions, please contact our sales department to ensure the correct application of the transmitter. The company does not assume any responsibility for the impact caused by improper model selection.

Product features

a) Small volume
b) Light weight
c) Easy installation
d) High measurement accuracy

Icon description

⚠ Danger! - A dangerous situation that could result in death or serious injury.

⚠ Warning! - A potentially hazardous situation that could result in death or serious injury.

! Be careful! - A potentially hazardous situation that may result in minor injury.

☞ Reminder! - A potentially hazardous situation that may cause personal injury.

⚠ Tips! - Tips and information to ensure trouble free operation of the equipment.

User

⚠ Warning! This information is applicable to technicians.

Working principle

Temperature measurement is carried out based on the thermal effect of resistance, that is, the resistance value of resistance body changes with the change of temperature. PT100 temperature sensor is a resistance temperature detector made of platinum (PT), which belongs to positive resistance coefficient. The relationship between resistance and temperature change is as follows: r = ro (1+ α T) Among them α = 0.00392, RO is 100 Ω (resistance value at 0 ℃), t is Celsius temperature < br > therefore, the resistance temperature detector made of platinum is also called PT100.

Technical parameter

Measuring medium: solid, liquid or gas (compatible with contact material)

Measuring range: - 50 ~ 200 ℃

Measuring element: 1 * PT100 (Level 1 / 3b)

Response time: ≤ 18S (in accordance with iec60751, 0.4m/s water flow, 10 ℃ step)

Stability: ± 0.1% FS / year

Protection grade: IP68

Insulation resistance: ≥ 100m Ω, 500VDC

Insulation strength: 500VAC

Environment condition

Ambient temperature: - 40 ~ 85 ℃

Ambient humidity: 0% ~ 95% RH (no condensation and condensation)

Overall material

Shell: 304 stainless steel

Cable: tetrafluoro shielded compensation cable (Φ 3.2mm) temperature resistance - 50 ~ 200 ℃

Polyurethane shielded compensation cable (Φ4.7mm) temperature resistance - 50 ~ 100 ℃

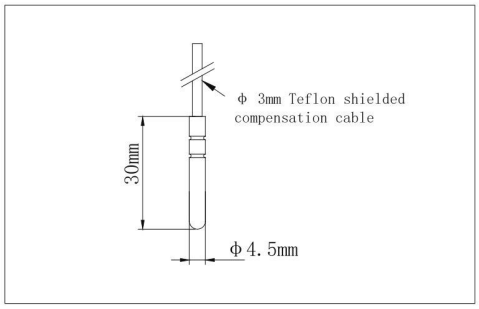
Mechanical stability

Seismic performance: 10g (20... 2000Hz) in accordance with iec60068-2-6 standard

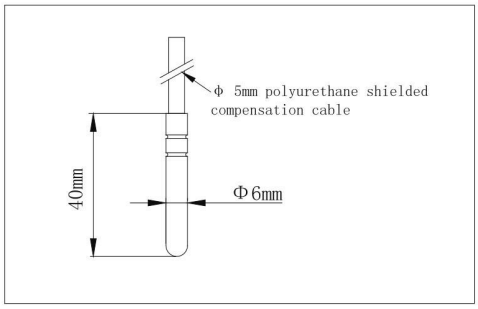
Impact resistance: 500g / MS, conforming to iec60068-2-27 standard

Outline and dimensions

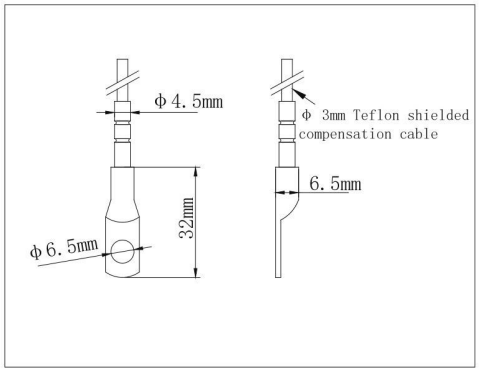
Protective tube type (H)



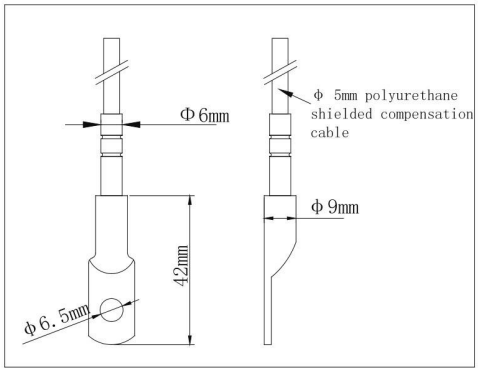
Protective tube type (H1)



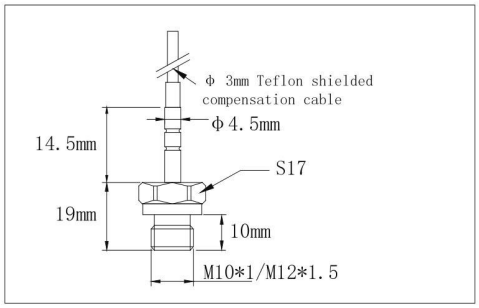
Nose pressing (Y)



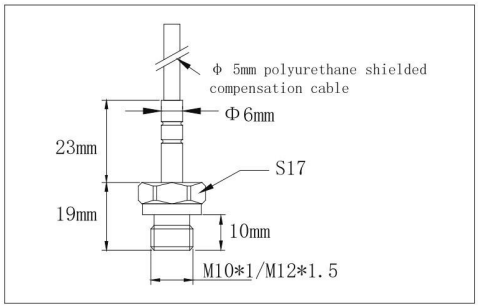
Nose pressing (Y1)



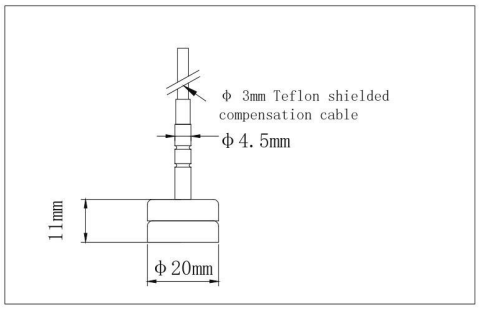
Screw in (x / z)



Screw in type (x1 / z1)

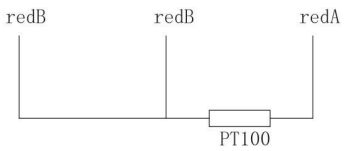


Magnetic suction (c)



Wiring diagram

PT100 resistance signal output wiring diagram (three wire system)



Parameter selection

CWDZ	Temperature sensor					
	Code	Sensor type				
	00	Pt-Resistance				
		Code	Measuring element			
		No	PT100 platinum resistance (Class 1 / 3b)			
		DZ	customized			
			Code	Probe style		
			H	Protective tube type (Teflon cable)		
			H1	Protective tube type (polyurethane cable)		
			C	Magnetic suction (Teflon cable)		
			Y	Nose pressing type (Teflon cable)		
			Y1	Nose pressing type (polyurethane cable)		
			X	Screw in type (thread M10 * 1 Teflon cable)		
			X1	Screw in type (thread M10 * 1 polyurethane cable)		
			Z	Screw in type (thread M12 * 1.5 Teflon cable)		
			Z1	Screw in type (thread M12 * 1.5 polyurethane cable)		
			DZ	customized		
				Code	Cable length	
				L1	1m	
				L2	2m	
				L3	3m	
				L5	5m	
				L10	10m	
				LX	Custom (X: cable length)	
					Code	customized
					D	Other customization requirements
					No	routine
CWDZ	00		H1	L1		Selection example

For example: cwdz00-h1-l1 (PT100 platinum resistance temperature sensor, protective tube type) Φ 6mm, wire length 1m)

Ordering instructions

⚠ Warning!

When ordering, users should pay attention to selecting appropriate specifications according to medium temperature, environment and installation conditions.

Ordering information

Model / probe style / cable length / Customization

Please scan the code for more information

Go to the official website to get