VPS801 Series Thermocouple Transducer

Operational Principle

The VPS801 series thermistors incorporate imported, high-precision, and highly stable thin-film resistors. They measure temperature by detecting changes in the resistance of temperature-sensitive elements, such as conductors or semiconductors, as temperature varies. As the resistance changes, the measuring instrument converts this variation into a corresponding temperature reading.

A typical thermistor temperature measurement system consists of a thermistor, connecting wires, and a display instrument.

Product Application

- Power
- Oil, Chemicals
- Agriculture, Food, and Grain
- Medical treatment
- Water conservancy
- Detection device

Product features

The product features imported thin-film resistor components that deliver reliable and stable performance. Its compact design offers excellent cost-effectiveness, along with high stability and sensitivity.

It is equipped with an all-stainless-steel protective welded tube for enhanced durability. The small diameter design allows for flexible installation, and the length can be customized without limitation.

The device supports long-distance transmission of telecommunication signals. In addition, key product parameters are laser-marked with unique serial numbers to ensure full traceability.

Technology Information

Product performance standard	IEC751 JB/T8622-1997		JB/T8623-1997	JB/T5518-1991	GB3836	
Room temperature insulation resistance	Under ambient temperature of 15-25°C, relative humidity not exceeding 80%, and test voltage of 10-100V (DC), the electrode and outer jacket The insulation resistance between the pipes is ≥100 MΩ·m.					
Specification and Material of the Fused Thread	Single branch: Casing diameter (Φ3, Φ4, Φ5, Φ6, Φ8, Φ10, Φ12, Φ16) | Double branch: Casing diameter (Φ4, Φ5, Φ6, Φ8) Casing material: 1Cr18Ni9Ti					
Measurement range and tolerance	Pt100: Temperature range: -200 to +500°C Model: PS8000-WZPK, PS8000-WZP A-level error: ±(0.15 + 0.002|t|), B-level error: ±(0.30 + 0.005|t|) Cu50、Cu100: Temperature range: -50 to +100°C Model: PS8000-WZC Error: ±(0.30 + 0.005|t|) Note: t is the actual temperature measured by the temperature-sensing element					
Thermal response time	Protective casing diameter	Φ3	Φ4	Φ5	Φ6	Φ8
	Thermal response time (s)	≤3	≤4	≤8	≤12	≤15

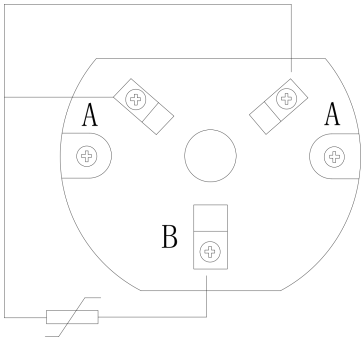
Model and Naming Method

Product line					
VPS801-W	Temperature meter				
Class					
Z	Heat resistance				
Thermistor material					
P	Platinum PT100	C	Copper Cu50		
P2	Platinum PT1000	C2	Copper Cu100		
Assembly form					
K	Armored	None	Fabricated		
logarithm of the common thread					
None	Single branch	2	Two branches		
Fixed installation type (specifications for threads or flanges must be specified in the contract)					
1	No fixed device	2	Fixed thread	3A (Default)	Thread of movable baffle
4	fixed flange	5	loose type flange	3B	Thread of the card cover
Type of junction box					
3	Waterproof junction box	4	Explosion-proof junction box	6	Stainless steel junction box
7	Flat splice	8	Circular plug-in	9	Compensated wire type
Protective tube diameter (The insertion length below the thread or flange must be stated in the contract)					
0	Φ16	3	Φ3	6	Φ6
1	Φ12	4	Φ4	8	Φ8
2	Φ10	5	Φ5		
Connection method for pipelines (if threaded connections are used with on-site pipelines, the contract must specify the thread specifications)					
TH01	Protective Sleeve	TH02A	Install the base	TH03	Flange Sleeve
		TH02B	Welded pipe installation base		
Protective casing diameter (length below the bevel must be specified in the contract)					
0	Φ16	1	Φ12	2	Φ10
Other requirements					

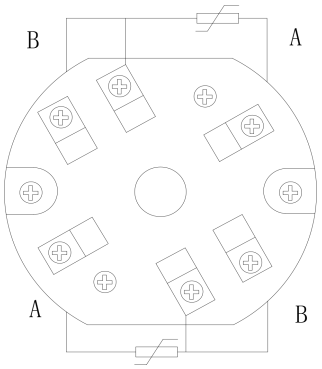
QT Other Requirements

Mode of connection

1. Armored thermistor, assembly thermistor

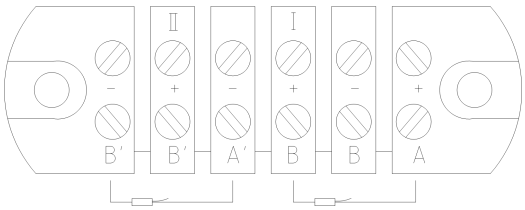


Single branch wiring method Double branch wiring method

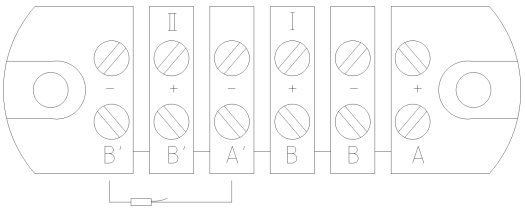


Single branch wiring method Double branch wiring method

2. Explosion-proof thermal resistor



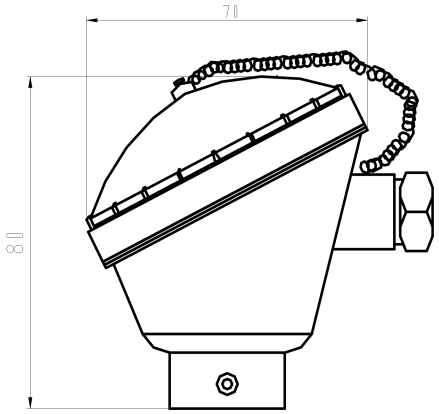
Single branch wiring method Double branch wiring method



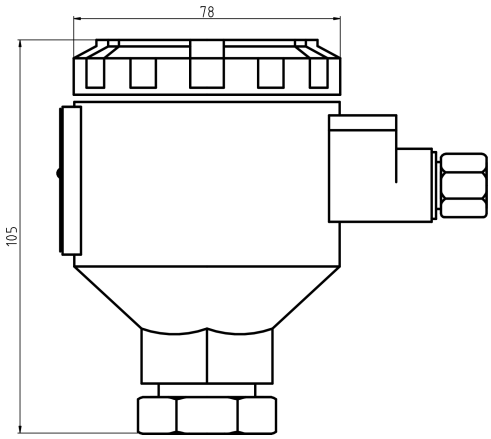
Single branch wiring method Double branch wiring method

Type of junction box

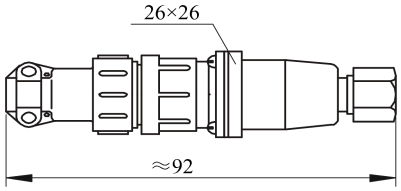
Waterproof, Explosion-proof



Waterproof, Explosion-proof



Round type flat type



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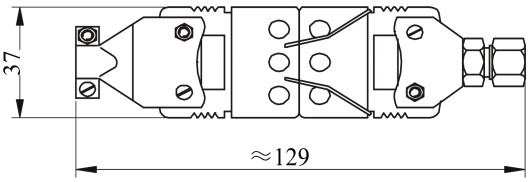

Compensated wire type