

Wind speed sensor

Use instructions

FST200-201 (V1.0)

FS-Y-001

1、 Product introduction

Wind speed sensor, the main structure parts by alloy material produced and surface treatment, the product has a good waterproof, corrosion resistance, and rotating parts are used seal design, can effectively prevent water, salt spray and dust of the invasion. Wind speed sensor of the circuit of the speed of the wind speed of the output and the level of the ambient air speed into a linear relationship of the electrical signal, suitable for high-altitude operations, engineering machinery, port machinery, etc..

2、 Performance features

- (1) The accuracy of the data acquisition is high, the reliability is strong;
- (2) The wind speed measuring range is wide, and the starting wind speed is low;
- (3) Metal housing, corrosion resistance, strong wind resistance;
- (4) Against lightning, surge, strong anti RF and electromagnetic interference, polarity protection, etc..

Important statement

This manual is wind speed sensor using method described. Operational mistake will affect the product service life, reduce its performance, serious may cause accident. Please before use must be carefully cooked reading instructions. This manual is delivered to the end user. Please keep the instruction manual for the time needed.

3、 Pay attention to matters

- (1) After opening the product packaging, please check whether the appearance of the product is in good condition, to verify the relevant content of the product and product certification and product conformity.
- (2) Strictly according to the product line connection mode, can not live wiring, then the line inspection without error rear can power, and in the product allows the excitation voltage, don't over voltage use;
- (3) Do not pull the cable output line to avoid damage to the internal structure of the product;
- (4) Transport, installation, wind speed sensor with do not twist, pull, pressure sensor of wind cup and windmill arm, so as not to undermine the product dynamic balance lead to the products can not be normal use;

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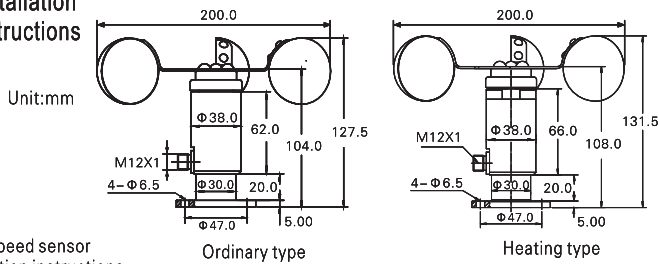
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4、 Technical parameters

Power Supply	DC 12~30V	Measuring Range	0.5~50m/s	Heating type wind speed sensor 1. Heating mode PTC automatic heating 2. Heating voltage 24VDC 3. Heating power <50W
Starting wind speed	≤ 0.5m/s	Limit Wind Velocity	> 70m/s	
Accuracy	± 0.5m/s (< 5m/s) ± 3% FS (≥5m/s)	Operating Humidity	0%~95% RH	
Surge protection	EMC III	Electrostatic protection	15KV	
Operating Temperature	-20°C~+85°C	Protection grade	IP65	
Body Material	Aluminum alloy	Wind Cup Material	Stainless steel 304	
Output Signal	4~20mA (Typical load resistance: 250Ω) 0~5V;0~10V; Pulse output.			

5、 Installation instructions



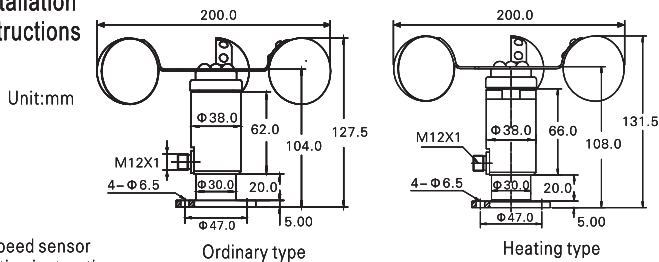
Wind speed sensor installation instructions

1. Please install the sensor level, as shown above, the installation base and the horizontal plane angle with no more than 5 degrees is appropriate, in order to ensure that the sensor can accurately measure the wind speed at low wind speed;
2. As shown above, the wind cup and windmill arm position and shape directly affects the sensor accuracy, installation process do not grasp the wind cup and windmill arm, so as to avoid damage to the sensor structure, impact measurement accuracy.

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6、 Electrical interface and connection method

M12 Connector	Output line	Output Signal	Serial number	Wiring Method	
 Heating type	5-Wire	Current / voltage / pulse (optional)	1	+Vcc	Brown
			2	+Signal out	White
			3	GND	Blue
			4	Heat24V+	Black
			5	Heat24V-	Grey

 Ordinary type	3-Wire	Current Type	1	+Vcc	Brown
			2	+Iout	White
			3	GND	Blue
			4	PE	Black
	3-Wire	Voltage Type	1	+Vcc	Brown
			2	+Vout	White
			3	GND	Blue
			4	PE	Black
	3-Wire	Pulse Type	1	+Vcc	Brown
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