

# Wind direction sensor

## Use instructions

FST200-202 (V1.0)

FX-Y-001

### 1、 Product introduction

Wind direction 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. Sensor can be stable and accurate acquisition of environmental wind direction 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) Use all metal shell, corrosive, strong wind resistance;
- (3) Circuit with polarity protection design;
- (4) With the EMC CE standard, multi-level lightning surge protection design.

### Important statement

This manual is wind direction 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, handling, installation direction transmitter when the wind direction, do not twist, pull rod pressure sensor and a tail fin, so as not to damage the transmitter.

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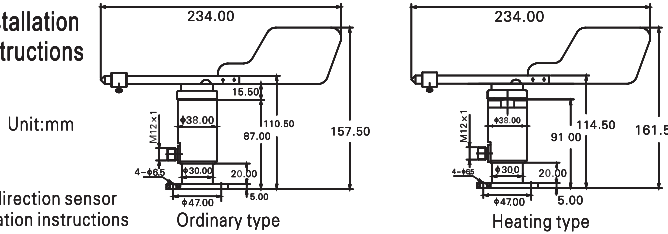
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#### 4. Technical parameters

Power Supply	DC 12~30V	Measuring Range	0° ~ 360°	Heating type wind direction 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	
Direction	16 Direction	Resolution	22.5°	
Accuracy	± 3°	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	Vane Material	Aluminum alloy	
Output Signal	4~20mA ( Typical load resistance : 250Ω ) 0~5V;0~10V;			

#### 5. Installation instructions

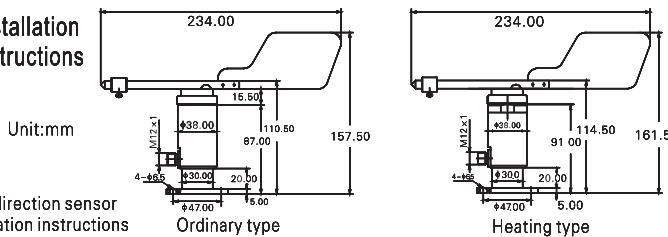


1. Please install the electrical interface is aligned with the direction of the north; level sensor installation, the installation base and the horizontal plane angle of not more than 5 degrees is appropriate, to ensure the sensor in low wind speed can accurately measuring wind direction.
2. As shown above, the wind and the caudal fin shape position directly affects the sensor accuracy, installation process do not grasp the direction rod and a tail fin, so as to avoid damage to the sensor.

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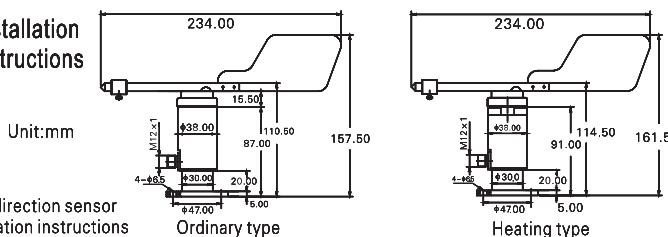


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#### 6. Electrical interface and connection method

M12 Connector	Output line	Output Signal	Serial number	Wiring Method	
 Heating type	5-Wire	Current / voltage / (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
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