

Products description and application



This FA132 wind speed sensor is specially designed for industrial application. Product has built-in anti radio frequency, anti-EMI and lightning surge protection circuit. Product also has built-in sensitive temperature sensor, automatic heating in freezing environment. Wind cup and housing adopts maze structure connection design. Product uses high grade bearing, stainless steel wind cup and aluminum alloy housing with polyester coating. Internal PCB uses conformal coating and glue to seal, protect from water, salt fog and sand-dust. It is easy to mount, maintenance free, has various signal output for option.

Application: wind monitoring and wind data collection for engineering machinery, container cranes, Meteorological , power plants, traffic and so on.

CMC License for Manufacturing Measuring Instruments has been approved.

Features

- Adopt non-contact magnetic measuring technology.
- High accuracy, high reliability
- Wide wind measuring range, low starting threshold.
- Metal housing, excellent corrosion resistant design carbon fibre wind vane, high anti-wind level.
- Wind cups use stainless steel, suit for harsh environment application.
- Compact design, include wind speed measuring and heating, ease to mount and maintain on site.
- Fault tolerant design, product not damage in wrong wiring connection.
- Multistage lightning surge design.
- Wide voltage design.
- Various signal output for option

General Specifications

Electrical		Mechanical	
Rated voltage	DC12V~30V ¹	Housing material	Aluminum alloy+Polyester coating
Operating current	Max. 50mA ²	Wind vane	Carbon fibre +SS304
Heating voltage	DC12V~30V ³	Bearing	SS440C
Heating power	≤50W	Humidity	0%~100%RH
Heating type	PTC auto-heating	Operating temperature	Ta-40 °C ~ +70 °C
Lightning surge	IEC61000-4-5 4kV /2kA	IP rate	IEC60529 IP65
Electrostatic discharge	IEC61000-4-2 air discharge 16kV	Wiring	Aviation socket ⁴
	IEC61000-4-2 contact discharge 8kV	Housing color	Black RAL9005
		Weight	0.6 kg
Meteorological			
Starting threshold	≤0.5m/s Vu=20 °C		
Anti-wind level	>70m/s		
Range	0° ~360°		
Accuracy	±2°		
Resolution	0.35°		

1. Rated voltage, see How to Order.

2. Current at signal end.

3. Heating voltage, see How to Order.

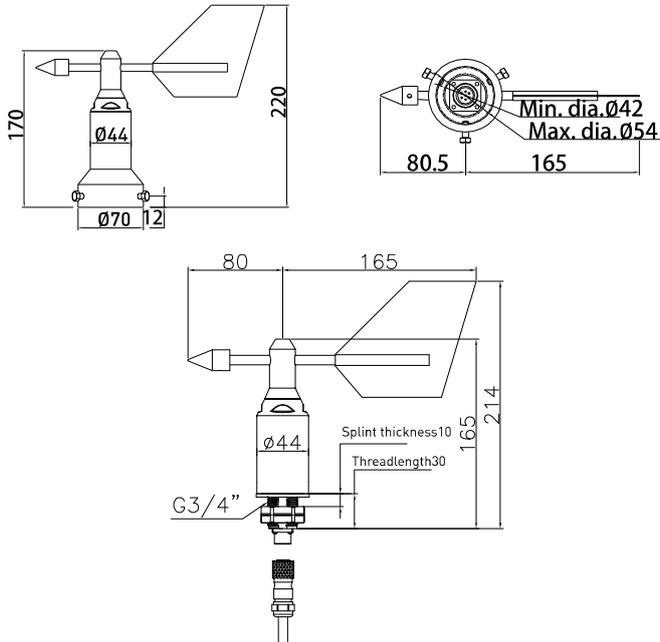
4. Default lead cable length is 3 meters.

FA132 Wind Direction Sensor



Mounting dimensions

Unit: mm



Mast tube mount

1. Connect and fix the aviation plug and socket.
2. Mount product on the top of equipment with 3 nos. M6 screws.
3. Align the north pointing mark of product with Geographic pole (calibrating with compass) .

G3/4" thread mount

1. Connect and fix the aviation plug and socket.
2. Fix product with 2 nos. G3/4" thread
3. Align the north pointing mark of product with Geographic pole (calibrating with compass) .

Wiring diagram

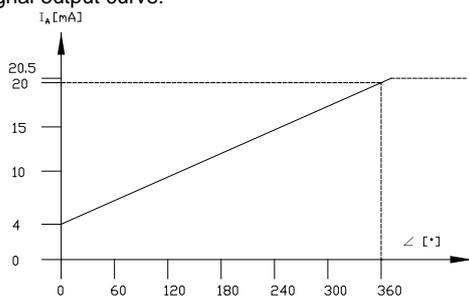


It is recommended to use RVVP/0.5mm/copper core/low temperature resistant shielding cable, maximum communication distance is 1000m.

Caution:

1. Ensure cable connection is correct before power on.
2. Cable shield layer and housing must be well grounded.
3. Its suggested to return product to factory for calibrating every 18 months.

Current signal output curve:



North point



Compass

How to Order

P/N	Model	Rated voltage	Signal output	Heating (heating power $\leq 50W$)	Mount
1000059-001	FA132	DC12V-DC30V	4-20mAcurrent, 0-360°	Yes	$\varnothing 54$ mast tube mount, 7-pin aviation socket
1000059-003	FA132	DC12V-DC30V	4-20mAcurrent, 0-360°	Yes	$\varnothing 54$ mast tube mount, 7-pin aviation socket
1000059-004	FA132	DC12V-DC30V	4-20mAcurrent, 0-360°	Yes	G3/4" threadmount, 7-pin aviation socket

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