



Visual Indicator, Reliable and Durable Wind Direction Sensor

Overview

The **BS110-01 Wind Direction Sensor** is a high-precision instrument designed for accurate and reliable wind direction measurement. It features a highly sensitive vane and a built-in digital circuit that ensures excellent resistance to radio frequency interference (RFI) and electromagnetic interference (EMI), along with automatic temperature compensation for stable performance in varying environmental conditions.

Constructed to meet the highest standards of durability and performance, the sensor is made from premium corrosion-resistant materials such as high-strength aluminum and stainless steel.

Its robust design ensures excellent resistance to sand, dust, salt spray, and fungal growth, making it suitable for harsh and coastal environments.

The **BS110-01** is ideal for wind resource assessment, meteorological research, environmental monitoring, and other applications demanding high accuracy, long-term stability, and minimal maintenance.

Features

- ✓ Low Starting Threshold
- ✓ Massive All-Metal Construction
- ✓ Strong Corrosion Resistant Ability
- ✓ Various Output Signals Optional
- ✓ Surge Protection Design
- ✓ Double Bearing Design
- ✓ Easy Installation

Applications

- ✓ Weather Monitoring Stations
- ✓ Ports
- ✓ Solar and Wind Power Generation
- ✓ Mobile Weather Monitoring Vehicles
- ✓ Remote Airports and Helipads

Technical Specifications

Output	4-20mA	RS485	0~2V/0~5V/0~10V
Supply Voltage	12 ~ 24VDC	12 ~ 24VDC	12 ~ 24VDC
Load Capacity	<500Ω (typ 250Ω)		>2kΩ
Range	0 ~ 360°		
Accuracy	±3°	±3°	±3°
Resolution	1° or 22.5°	1° or 22.5°	1° or 22.5°
Starting Threshold	<0.5m/s		
Limit Wind Speed	70m/s		
Ingress Protection	IP65		
Operating Condition	-40°C ~ 70°C@ ≤100%RH		
Weight (Unpacked)	410g		
Main Material	Vane: 304 Stainless Steel, Main Body: Aluminum Alloy		
Finish	Polyester Powder Electrostatic Spraying (Black)		
Storage Condition	10°C ~ 60°C@20% ~ 90%RH		

Output Characteristics

- **Current (Resolution = 1°)**

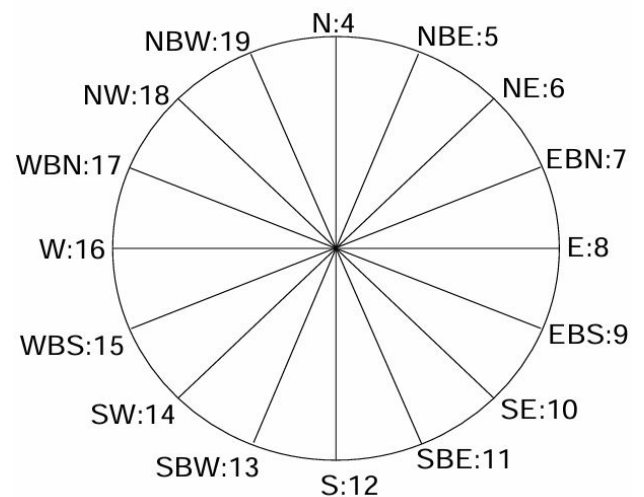
4...20mA is corresponding to 0 ... 360 ° from north to north by clockwise.

- **Voltage (Resolution = 1°)**

The zero point voltage to full scale voltage is corresponding to 0... 360°from north to north by clockwise.

- **RS485**

If the transmission distance is over 100m, please add a 120Ω terminal matching resistances on the front end and back end of bus interface respectively. See the Modbus communication protocol specification.

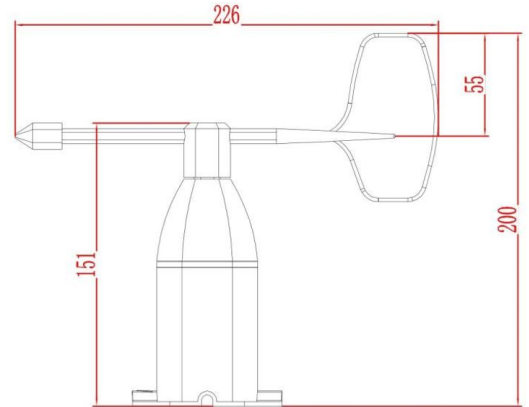
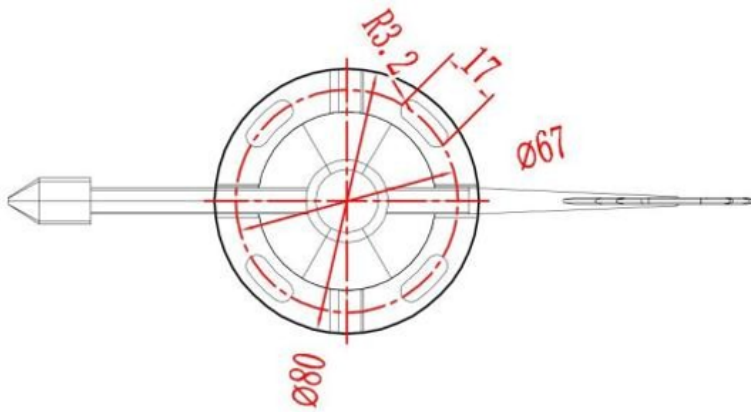


Dimension and Mounting

Flange mounted, fix four screws on the bracket and keep the product horizontal

Remark:

There is one red or white mark point on each product, it should be pointed to north when installation.



Parameter Selection Table

Remark	Series	Type	Output	Resolution	Cable Length	
BS	110	01	A			4 ~ 20mA
			B			5V
			C			0 ~ 10V
			D			
			E			RS485
			X			Other
				A		
				B		1°
					1500	Units: mm(typ)
					3000	Units: mm
					...	Units: mm

Example: RKBS110-01 AB1500 Output: 4 ~ 20mA, Resolution: 1°, Cable Length: 1.5m.

The default power supply voltage is 12 ~ 24VDC, if you have other requirements please confirm when ordering.

For comprehensive details, visit: www.buraq.com/BS110-01



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