

# Wind Direction Sensor

## 023A

The Model 023A Wind Direction Sensor is a rugged sensor that accurately and reliably measures wind direction under the most adverse environmental conditions.

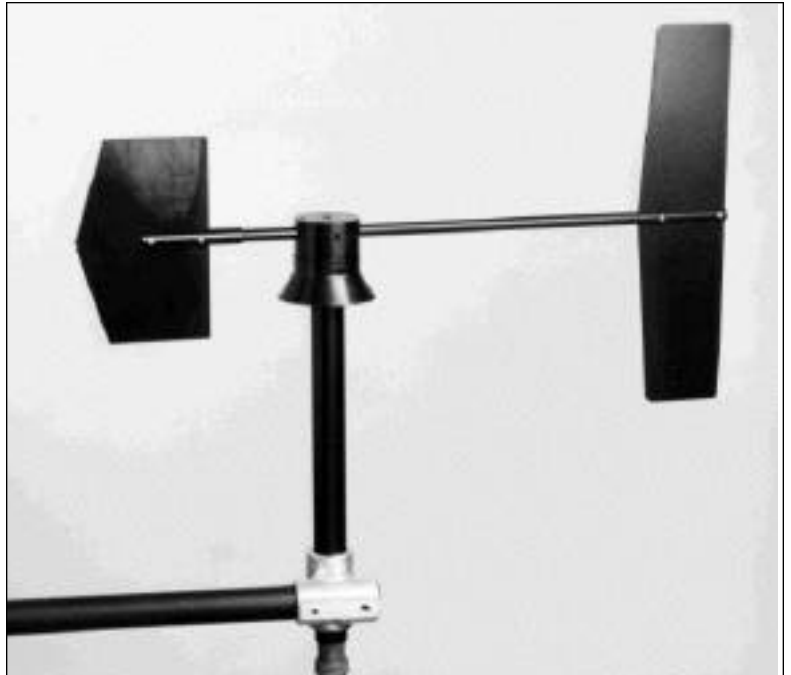
### Features

- Low Starting threshold of 1.5 mph
- Unique "Mechanical Average System" reduces sensor wear
- Built-in alignment and calibration fixture
- Operates in winds of 150 mph and ice loads of 2"

### Operation

The Model 023A has been specifically designed for use in remote, unattended monitoring applications where the sensor is likely to encounter high winds and heavy icing conditions. The sensor has a starting threshold of 1.5 mph and will operate in winds up to 150 mph. Additionally the sensor has a built-in ice skirt which allows operation with up to a 2" ice load.

The two part wind vane is connected by a unique  $\pm 10^\circ$  slotted shaft coupler to a precision wire wound potentiometer. The sensor output is an accurate MECHANICAL AVERAGE of the wind direction. An additional benefit of the slotted shaft coupler is decreased potentiometer wear and greatly increased sensor life. The Model 023A includes an orientation fixture which facilitates accurate field alignment.



The Model 023A Wind Direction Sensor is specifically designed for use in remote, unattended monitoring applications and where the sensor will encounter high winds and heavy icing conditions.

### Construction

The construction of the sensor reflects the requirement for reliability and durability.

Only the best corrosion resistant material, such as stainless steel and anodized aluminum are used. The Model 023A is used with a quick connect shielded sensor cable.

### Specifications

Electrical Range:	0-360° (0-540° when used with 540° Translator Module)
Starting Threshold:	1.5 mph
Maximum Wind Speed:	150 mph
Accuracy:	$\pm 10^\circ$ standard, others on request
Ice Load:	2 in
Delay Distance:	15 ft
Damping Ratio:	.3
Potentiometer Specifications	
Sand, Dust, Fungus:	MIL-E-5272
Salt Spray:	MIL-E-12934
Resistance Value:	10K ohms, others on request
Operating Range:	-50°C to +70°C
Cable:	10 Ft



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