



wind

## *Heavy Duty Wind Sensor*



Model 05108  
**Wind Monitor HD**



# YOUNG

## Model 05108 Wind Monitor HD

*The Wind Monitor HD has important features that greatly extend the service life of this popular sensor.*

The reliability of the Wind Monitor sensor is well known. The sensitive vane and propeller combination has proven effective for countless applications in many disciplines. The Wind Monitor-HD (Heavy Duty) model is designed to address the most common concern of mechanical wind sensors: bearing replacement. The HD utilizes extremely long-wearing, oversize ceramic bearings to increase service life many times longer than standard stainless steel bearings. In addition to being more wear-resistant, ceramic is resistant to corrosion in environments that are hostile to steel bearings.

The Wind Monitor-HD also has oversized propeller shaft, high pitch propeller and locking propeller nut, all features that will further enhance long-term reliability of the sensor.

For specific applications, separate signal conditioning is available. **Model 05608C Wind Sensor Interface** offers calibrated voltage outputs for wind speed and direction. **Model 05638C Wind Line Driver** provides calibrated 4-20 mA current signals for each channel. Each circuit is supplied in a weatherproof junction box with mounting hardware.



*Ceramic bearings are long-lasting and corrosion resistant*

### Specifications

**Range:**

Wind Speed: 0-100 m/s (224 mph)  
 Wind Direction: 0-360 degrees

**Accuracy:**

Wind Speed:  $\pm 0.3$  m/s (0.6 mph) or 1% of reading  
 Wind Direction:  $\pm 3$  degrees

**Threshold:**

Propeller: 1.0 m/s (2.2 mph)  
 Vane: 1.0 m/s (2.2 mph)

**Power Requirement:**

Potentiometer excitation: 15 VDC max

**Signal Output:**

Wind speed: magnetically induced AC voltage, 3 pulses per revolution, 1 rev = 50 cm air passage  
 Wind direction: Analog DC voltage from conductive plastic potentiometer-resistance 10K $\Omega$ , 0.25% linearity, life expectancy 50 million revolutions.

**Operating Temperature:**

-50 to +60°C

**Dimensions:**

Overall height: 40 cm  
 Overall length: 57cm  
 Propeller: 18 cm Dia x 50 cm pitch  
 Weight: 1.0 kg  
 Mounting: 34 mm (1.34 in) diameter (1 inch IPS)

### MODEL 05608C 0-5VDC outputs

**Power requirement:**

8-24 VDC (5 mA @12 VDC)

**Operating Temperature:**

-50 to +60°C

**Output signal:**

WS: 0-5.00 VDC (0-100 m/s)  
 WD: 0-5.00 VDC (0-360 deg)

### MODEL 05638C 4-20 mA outputs

**Power requirement:**

12-30 VDC (40 mA max.)

**Operating Temperature:**

-50 to +60°C

**Output signal:**

WS: 4-20 mA (0-100 m/s)  
 WD: 4-20 mA (0-360 deg)

### Ordering Information

	MODEL
WIND MONITOR HD — 3M CABLE PIGTAIL .....	05108
WIND MONITOR HD — 8M CABLE PIGTAIL .....	05108-8M
WIND MONITOR HD — 12M CABLE PIGTAIL .....	05108-12M
Sensor Cable (6 CONDUCTOR SHIELDED) .....	18721
WIND SENSOR INTERFACE (0-5.00VDC).....	05608C
WIND LINE DRIVER (4-20 MA).....	05638C



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**CE** Complies with applicable CE directives.  
 Complies with EN60945

Specifications subject to change without notice.