The Model 03002 Wind Sentry Anemometer and Vane are professional quality sensors suitable for a wide range of wind measurement applications. These economically priced sensors provide excellent sensitivity, corrosion resistance, and minimal parts count for easy maintenance.



The anemometer uses three lightweight hemispherical cups to measure wind speed. Cup wheel rotation produces an AC frequency that is linearly proportional to wind speed. The vane employs a balanced vane assembly with vane position sensed by a long life precision potentiometer. Precision stainless steel ball bearings are used throughout.

The Model 03002 Wind Sentry Anemometer and Vane set includes crossarm with junction box and mounting for standard 1 inch pipe.

Model 03002V Wind Sentry with Voltage Outputs provides calibrated voltage output signals for wind speed and wind direction. The voltage outputs are convenient for use with many data loggers and recorders.

Model 03002L Wind Sentry with 4-20 mA Outputs provides separate 4-20 mA signals for wind speed and wind direction. The 03002L is useful where cables must pass though high noise areas, span distances up to several kilometers, or for certain industrial applications.

For wind speed only, ***Model 03102 Wind Sentry Anemometer*** is available separately. The Wind Sentry Anemometer is also available with voltage and 4-20 mA current output options.

Ordering Information

03002 WIND SENTRY ANEMOMETER AND VANE
03002L* WIND SENTRY ANEMOMETER AND VANE (4-20mA outputs)
03002V* WIND SENTRY ANEMOMETER AND VANE (0-1VDC outputs)
03102 WIND SENTRY ANEMOMETER (with mounting bracket)
03102L* WIND SENTRY ANEMOMETER (4-20mA outputs)
03102V* WIND SENTRY ANEMOMETER (0-1 VDC outputs)

**** SPECIFY SUFFIX FOR DESIRED WIND SPEED SCALE:***

0-50 M/S .....ADD SUFFIX "M"
0-100 MPH .....ADD SUFFIX "P"
0-100 KNOTS.....ADD SUFFIX "N"
0-200 KM/HR.....ADD SUFFIX "K"

Specifications

Range:
Wind Speed - 0 to 50 m/s (112 mph)
Azimuth- 360° mechanical, 352° electrical, 8° open

Accuracy:
Wind Speed- ± 0.5 m/s (1.1 mph)
Wind Direction - ± 5°

Threshold:*
Cup Anemometer- 1.1 m/s (2.5 mph)
Vane- 1.3 m/s (2.9 mph) at 10°

Dynamic Response:*
Cup wheel distance constant - 2.3 m (7.5 ft)
Vane delay distance - 0.5 m (1.6 ft)
Damping ratio - 0.2

Signal Output:
Wind speed- AC sine wave, 1 pulse per rev.
1800 rpm (30 Hz) = 22.8 m/s (51.0 mph)
Wind direction- Analog DC voltage from 10KW conductive plastic potentiometer, 1.0% linearity, life expectancy 50 million revolutions.

Power Requirement:
Potentiometer excitation-15 VDC maximum

Dimensions:
Overall height- 32 cm (12.6 in)
Crossarm length- 28 cm (11.0 in) between instrument centers.
Vane length- 22 cm (8.7 in)
Cup wheel diameter- 12 cm (4.7 in)
Crossarm mounting- 34 mm (1.34 in) diameter (standard 1 inch pipe)

Weight:
Shipping weight-1.3 kg (3 lbs)

MODEL 03002V ***0-1 VDC outputs***

Specify wind speed scaling as shown in Ordering Information.

Power Requirement:
8 to 24 VDC (5mA @ 12 VDC)

Output:
0 to 1.00 VDC full scale, 0 to 5.00 VDC optional

MODEL 03002L ***4-20 mA outputs***

Specify wind speed scaling as shown in Ordering Information.

Power Requirement:
8 to 30 VDC (40mA max)

Output:
4 to 20mA full scale.

**Nominal values determined in accordance with ASTM standard procedures.*

CE *Complies with applicable CE directives.*
Specifications subject to change without notice.

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