wind

Heavy Duty Wind Sensor

YOUNG

Model 05108-45

Wind Monitor HD Alpine

YOUNG

Model 05108-45 **Wind Monitor HD-Alpine**

The Wind Monitor HD-Alpine combines the features of the Heavy Duty unit along with the ice-resistant coating of our popular Alpine Wind Monitor. Robust, reliable, durable.... all words to describe the latest addition to the Young family of Wind Monitors.

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

All external housing surfaces are coated with a specially formulated, ice-resistant coating to improve performance in harsh Alpine conditions. The all-black color scheme further enhances the ice shedding performance of the sensor.

Ceramic bearings are long-lasting and corrosion resistantt

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.

Ordering Information — MODEL

WIND MONITOR HD-ALPINE – 3M CABLE PIGTAIL	**05108-45**
WIND MONITOR HD-ALPINE – 8M CABLE PIGTAIL	**05108-45-8M**
WIND MONITOR HD-ALPINE – 12M CABLE PIGTAIL	**05108-45-12M**
SENSOR CABLE (6 CONDUCTOR SHIELDED)	**18721**
WIND SENSOR INTERFACE (0-5.00 VDC)	**05608C**
WIND LINE DRIVER (4-20 MA)	**05638C**

Specifications

Range:
Wind speed: 0-100 m/s (224 mph)
Azimuth: 360° mechanical, 355° electrical (5° open)

Accuracy:
Wind Speed: ±0.3 m/s (0.6 mph) or 1% of reading
Wind Direction: ±3 degrees

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

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 10KΩ, 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 **0-5 VDC 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 output**

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)

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

Specifications subject to change without notice.

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