WSD Wind Speed and Direction Sensor

This product is suitable for measuring wind speed, wind direction or both. It can be used for automatic window closure in high wind conditions or general monitoring applications with BMS systems.

The 0-10vdc output signal is linear for both wind speed & direction.
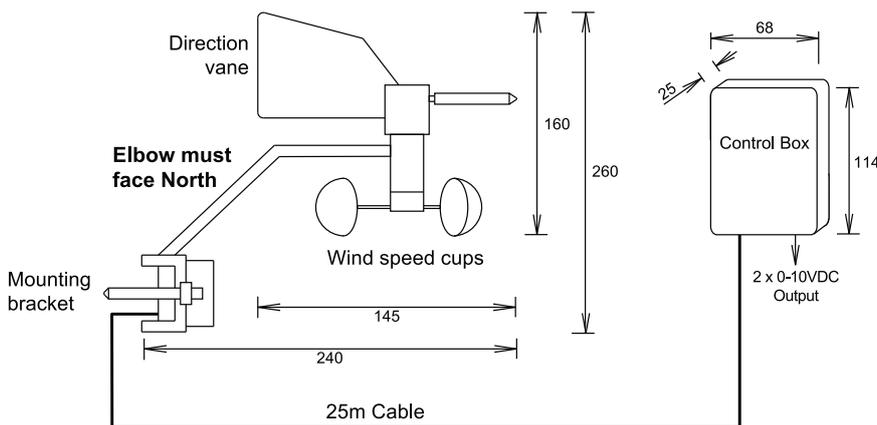
Max Ambient -20/+70°C

A bracket is provided suitable for mounting onto a mast of diameter between 30 - 50mm.

Flammability: Anodised aluminium alloy UPVC & Stainless Steel assembly with polypropylene cups.
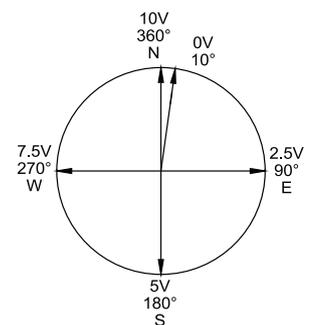
Electrical connection 25m 4-core screened cable supplied as standard. This can be extended up to 200m Max. Consumption 40mA Max.

DIMENSIONS

Direction vane

Elbow must face North

Mounting bracket

Wind speed cups

160

260

145

240

25m Cable

68

25

Control Box

114

2 x 0-10VDC Output

EXAMPLE: WIND DIRECTION

10V 360° N

0V 10°

7.5V 270° W

2.5V 90° E

5V 180° S

blue river
controls limited

WIRING DIAGRAM

Control Box

+ 5V **Red**
Direction **Yellow**
Screen **Black**
Speed **Blue**

Direction
Common.
Speed

Cable from wind Sensor

Wind Sensor   0V **+**   Output

24V

Keep away from power cables/units which may cause interference.
Screened cable is recommended.
The screen should be earthed at the controller end only.
Terminals 0.5 - 1.5mm²

Wind speed output 0-10VDC
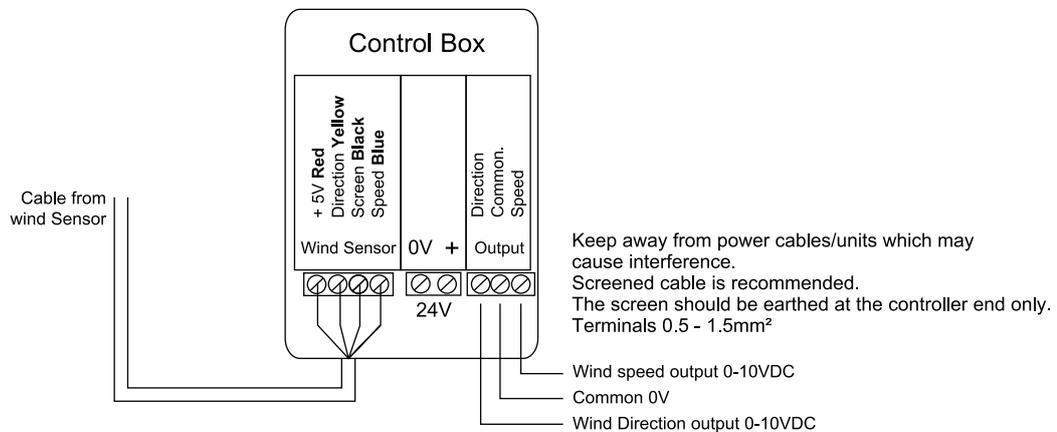Common 0V
Wind Direction output 0-10VDC

Supplied with the control box which converts the sensor signal to a standard 0-10 volt output signal.

Technical Data

Type	EWSD-10	
Application	Wind speed	Direction
Supply ±15%	24VAC/DC	
Range	0 -50 m/s	0 - 360°
Output 2 x 0 - 10VDC	0 - 10VDC	0V = 10° 5V = 180° (South) 10V = 360° (North)
Start Speed Approx.	<0.5 m/s	<0.5 m/s
Typical Accuracy	±5% or 1.5 m/s	5° typical (10° worst)
Resolution	< 0.5 m/s	<1°
Protection	IP65 Sensor	IP30 Control Box

INSTALLATION:

The unit should mounted to a mast with a diameter of between 30-50 mm with the supplied V-shaped clamp and bracket.

Situate the unit in a clear site which is most representative of the area to be monitored.

Avoid extremes ie: hilltops which may indicate increased wind speeds, or valleys and in close proximity to trees and buildings which may indicate decreased wind speeds due to shielding.

Several sensor heads can be installed to give spatial coverage and thus achieving more precise results.

Ensure the elbow points NORTH using a compass or gently rotate the vane until 0° or 357° is indicated on a suitable measuring instrument, as this will represent North. Fix and tighten the bracket at this position.

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