WV4403 v2 4-20mA

Enhanced wind vane sensor with analog output 4-20mA

INTRODUCTION

High resistance to radio frequency intereferences (RFI) and electromagnetics (EMI)
Magnetic sensor, unlimited life and no dead zones
Analog output 4-20 mA. Passive output (2 wire connection)
Power supply: 12...30 Vdc (common 24 Vdc)
Made of aluminium and high quality technical plastics
Up to 200 km/h of wind-speed
Easy connecting. 20 m cable included
Excellent resistance against impacts, overload, crashes and erosion
No maintenance required

The wind vane should be oriented north and its output signal will correspond to the angles and directions of the table.

FEATURES

Enhanced wind direction sensor with robust design, compact and modern.
Manufactured of aluminium and high quality technical plastics
Dust and water proof. Corrosion and UV resistant

APPLICATIONS

The wind direction sensor WM4403 v2 has been designed for the use in industrial and domestic applications.
Connected to devices such as data acquisition systems, PLCs, displays of analog signals (see our ref. WM44 EVO11, V10, V12, V201, BS100/3 4-20 mA) it measures the wind direction, registers it and/or activates predefined alarm levels.

Examples of use:
Irrigation control systems, automation in greenhouses, solar trackers, lifts at ski resorts, cranes, wind turbines, climate and weather stations and so on. To sum up, all applications that contribute to greater control and security in their facilities.

OPERATING

Inputs/outputs

Up to 200 km/h wind speed
Power supply: 12...30 Vdc (common 24 Vdc)
Output: Analog= 4-20 mA
(see table at right)

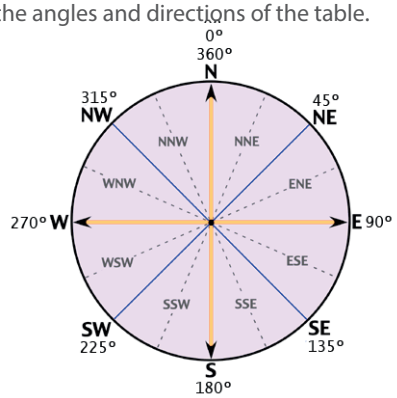
Chart relating Wind direction - Analog output

Direction	Angle (*)	Analog output
North	0.0	4mA
North-Northeast	22.5	5mA
Northeast	45.0	6mA
East-Northeast	67.5	7mA
East	90.0	8mA
East-Southeast	112.5	9mA
Southeast	135.0	10mA
South-Southeast	157.5	11mA
South	180.0	12mA
South-Southwest	202.5	13mA
Southwest	225.0	14mA
West-southwest	247.5	15mA
West	270.0	16mA
West-Northwest	292.5	17mA
Northwest	315.0	18mA
North-northwest	337.5	19mA
Static wind	If the wind speed is lower or equal than 3 km/h. the angle will be uncertain.	

Wind vane orientation:

To orientate the wind vane to the NORTH, align it NORTH with the edge of the base as it is indicated on the label

The wind vane should be oriented north and its output signal will correspond to the angles and directions of the table.



WV4403 v2 4-20mA Wiring

Type of connection	Connection	Color
2-Wire. Passive output	Vcc	Red
	Iout	Yellow
	NC or GND	Black

TECHNICAL SPECIFICATIONS

Power Supply WV4403 v2 4-20mA	12...30 Vdc (common 24 Vdc)	Connectable load impedance	$R_L < \frac{V_{CC} - 8V}{0.02A}$ [Ohm]
Analog Output	4 -20 mA	Tª de almacenaje	-35ºC... +85ºC
Starting speed	3 km/h	Operating temp. (free ice)	-20ºC... +85ºC
Measure range	0~360º	Weight	200 g approx.
Resolution	22.5º	Weight (cable= 20meters)	1300 g approx.
Accuracy	+/- 3º		