Wind Direction 0-10Vdc or 4-20mA

WDS

Jan.09

WDS

Features

- **No potentiometer or analogue hall sensor**
- **Digital data output RS232 oh RS485**
- **Programable analogue outputs (current or voltage)**
- **North Calibration with the PC**
- **Wind direction without death angle and a resolution better than 1 degree**
- **Excitation delay time 3 sec.**
- **Open collector outputs**

Design Features

With this leight, long life wind vane the wind direction is measured over the full 360 degree without dead angle.

The angle is measured contact free using Hall effect.

Using RS232 or RS485 communication the analogue (mA or Volt) outputs are onfigurable.

Also two programmable open ollector output are available for control purposes.

A mechanically very robust sensor with a glass fibre epoxy vane blade, a brass painted balance weight, oil bronze bearings and stainless steel mounting hardware.

Technical Data

Measuring principle	Hall effect
Life expectation	>20 x 10 6 rotations
Electrical angle	360 degree
Mechanical angle	360 degree without stop
Damping ratio	0.35
Threshold	1,2...1,5m/s
Lineraty	1%
Operating temperature	-30...+80C
Temperature cofficient	+/- 200ppm/C
Analogue outputs	mA or V
Digital communications	RS232 or RS485
Power supply	11...30Vdc
Power consumption	30...40mA
Housing	POM, black
Vane blade	painted glass fibre epoxy
Bearings	oil bronze
Mounting hardware	stainless steel

Application

Wind direction transmitters are used for demanding recording of wind angle:

- crane installations
- ski lifts and cableways
- building management systems
- blind protection
- weather station
- scientific and research purposes
- wind power installations
- green house control
- in hydrology

Ordering Codes

WDS 010	Wind direction transmitter **0-10Vdc**
WDS 420	Wind direction transmitter **4-20mA**
WDS 020	Wind direction transmitter **0-20mA**
WDS 001	Wind direction transmitter **0-1Vdc**
WDS 232	Wind direction transmitter **RS 232**
WDS 485	Wind direction transmitter **RS 485**
WDS Open	Wind direction transmitter **Open collector**
MB 1	Mounting bracket for one wind sensor
MB 2	Mounting bracket for two wind sensor

Dimensions