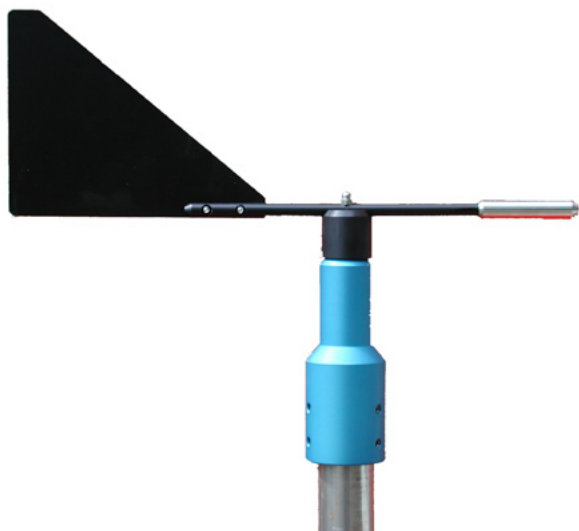


Wind Direction Sensor *standard*



Description

Sensor for the measurement of the horizontal component of the wind direction.

A potentiometer senses the position of the vane and provides a resistance signal linearly dependent on the wind direction.

A built-in electronical heating prevents the bearings and the rotating part of the sensor from getting blocked by icing.

Technical Data

Sensor

Sensing element.....	Vane
Transducer.....	Precision wire potentiometer
Output	0..358° = 0..10 kΩ
Resolution	0.5°
Accuracy.....	± 1.5°
Starting threshold	0.6 m/s at 90° displacement

Vane

Material.....	Anodized aluminium, black, stainless steel counter weight
Swept radius	ø225 mm
Bearings	Stainless steel ball bearings

Power Supply

Supply voltage	1..15 VDC
Current consumption	0.5 mA at 5 V
Maximum load	1 mA at 15 V

Heating

Heating power	20 W at < 4 °C, electronically controlled
Supply voltage	24 VDC
Current consumption	0.83 A max.

Casing

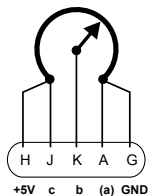
Material.....	Anodized aluminium, blue
Protection class.....	IP 55
Dimensions	ø50 x 500 mm
Weight	0.7 kg
Mounting.....	The sensor mounts on a standard one inches pipe with ø34 mm outside diameter and > ø25 mm inside diameter

Electrical Connection

Connector (at the sensor).....	7 pin circular connector DIN 45322
Connector (to the data logger, optional)	12 pin circular connector DIN 45322
Cable.....	10 x 0.25 mm ² (optionally shielded)

Wiring

7 pin connector	12 pin connector	Wire	Function
2	H	white	(+) power supply
2	J	brown	(+) power supply
5	K	green	output signal
7	A	yellow	ground
7	G	grey	ground
3	B	red (1 mm ²)	(+) heating
4	C	blue (1 mm ²)	(-) heating
casing	casing	yellow/green and shield	cable shield



Connector

Environmental Conditions

Operating temperature	-25..+70 °C
Relative humidity	0..100%
Maximum wind speed.....	60 m/s



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