

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.

Technical Data

Sensor

Sensing element.....	Vane
Transducer.....	Precision wire potentiometer
Output	$0..358^\circ = 0..10 \text{ k}\Omega$
Resolution	0.5°
Accuracy.....	$\pm 1.5^\circ$
Starting threshold	0.3 m/s at 90° displacement

Vane

Material.....	Anodized aluminium, black, stainless steel counter weight
Swept radius	$\varnothing 225 \text{ mm}$
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	No heating
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Casing

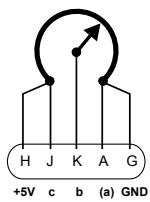
Material..... Anodized aluminium, blue
 Protection class IP 55
 Dimensions Ø50 x 500 mm
 Weight 0.7 kg
 Mounting The sensor mounts on a standard one inches
 pipe with Ø34 mm outside diametre and
 > Ø25 mm inside diametre

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..... 5 x 0.25 mm² (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
casing	casing	yellow/green and shield	cable shield



Environmental Conditions

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

