Wind speed&direction (wind cup and vane)

Models

Combined Wind speed and Direction sensors

Combined wind speed and wind direction sensor. Direct signal output for wind speed (Hz) and wind direction (0-1 Vdc). This sensor range includes, in a single apparatus, transducers for both wind speed and wind direction measurement. Its use simplifies installation requirements, other than being smaller, lighter and cheaper than the general 2-sensor kit. Model DNA122#S is equipped with a potentiometer and its wind direction output is in Ω, with very low power consumption and it can be used in applications with limited energy availability.

Order numb.	DNA121#C	DNA122#C	DNA821	DNA827
WS output	0÷833 Hz		4÷20 mA	0÷5 Vdc
WD output	0-1 Vdc	0-2000 Ω	4÷20 mA	0÷5 Vdc
Power supply	12 Vdc		10÷30 Vac/dc	
Power consumption	30 mA	2 mA	0,5 W	
Wind direction principle	Hall effect sensor	2 KΩ potentiom.	Hall effect sensor	
Microprocessor	-	-	PIC 18F2620	
Data logger compatibility	M-Log (ELO007-008) R-Log (ELR515), E-Log (all models)			

Common features.

Wind speed	Principle	N.32 step optoelectronic disk
	Measuring range	0-60 m/s
	Uncertainty	0÷3 m/s=1,5%, >3 m/s= 1%
	Threshold	0,26 m/s
	Delay distance	4,8 m (at 10 m/s). Acc to VDI3786 and ASTM 5096-96
	Resolution	0,07 m/s
Wind direction	Principle	See table above
	Measuring range	0-360° (0-355° DNA122#C)
	Uncertainty	1%
	Threshold	0,15 m/s
	Resolution	0,3°
	Delay distance	1,2 m (at 10 m/s). Acc to VDI3786 and ASTM 5366-96
	Damping coeff.	0,21 (at 10 m/s). Acc to VDI3786 and ASTM 5096-96
General Information	Connector	7 pin IP65 watertight connector
	Housing	Anodized aluminum,
	Cup	PA6 plastic and fiberglass
	Vane	Aluminum
	Mounting	Mast ø 48 ÷ 50 mm
	Protections	Tranzorb and Emifilters
	Operative temperature	>-30°C (without ice)

Accessories

	Order numb	
	DZC405	Calibration certificate Includes in DNA121#C and DNA122#C
	DWA510	Cable L.= 10 m
	DWA525	Cable L.= 25 m
	DWA526	Cable L.= 50 m
	DWA527	Cable L.= 100 m
	MG2251	7 pin free female connector
	DNA124	Spare part: rotor
	DNA127	Spare part: vane
	MM2011	Spare part: bearings for Wind direction (QT.2 required)
	MM2020	Spare part: bearing for Wind speed (QT.2 required)