

Thies Wind Vane Compact POT (Plug)

P6245HP / P6245P

- Potentiometer Wind Direction Transmitter
- Full Range 0 .. 360°
- High Quality Potentiometer 0 ... 2k Ohm

Measurement principle

With the help of a potentiometer the physical property is converted into an analog resistor output signal.

At zero the transducer has to pass the "north transition" between the margins of zero and 2kOhm. Wind direction signal conditioning and data processing in all Ammonit data acquisition systems carefully pays attention to this speciality.

The wind vane can be equipped with an electronically regulated heating system in order to prevent ice from the bearings. To use this heating the connection cable must have additional cores and you should provide a sufficient power supply (main connection).



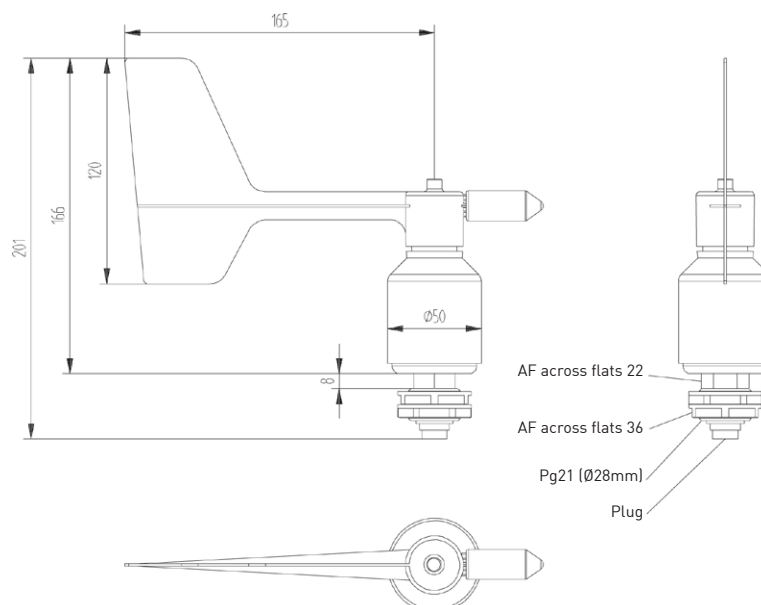
Mounting

The sensor can easily be screwed on a piece of steel tube (outer diameter 35 mm, wall thickness 5mm) with an inner thread for PG21 or mounted to a traverse with a drill of 29 mm. The sensor cable is located weather protected in the inner tube. Please pay attention to the proper orientation of the „N“-mark towards north. When mounting the sensor please note that you never turn the sensor at the aluminium tube because this can be opened. To fix and to loosen the lock nut the sensor must be hold with a screw spanner (SW 22) above the thread!

To avoid damage due to lightning a protection rod and proper grounding of all metal parts is to be recommended.

Maintenance

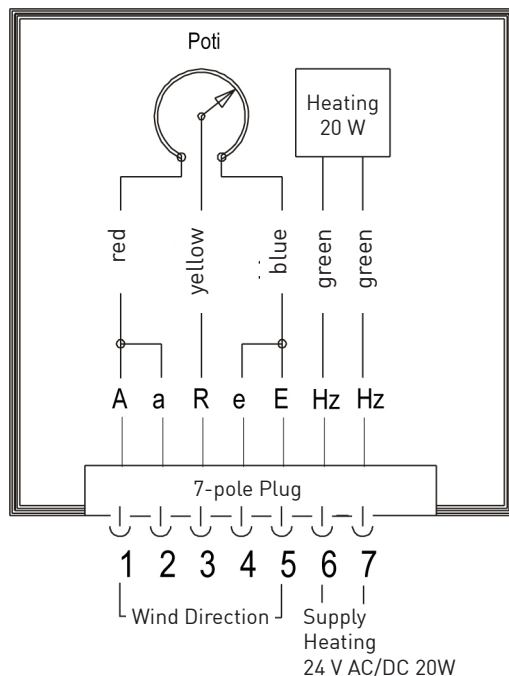
When mounted properly, the wind vane operates almost maintenance-free. Dust or dirt may clog the space between the rotating parts and the shaft. Therefore you should check for plausibility of measurement results at regular terms and clean the device if necessary. In true long-term operation (years) the bearings may be subject to wear and tear showing delayed start-up behaviour or even stand-still of the vane. Should such a defect occur we would recommend that you return the instrument for repairs.



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Characteristic	Description / Value
Range	0 ... 360°
Accuracy	± 2°
Resolution	0.5°
Starting threshold	≤ 1 m/s according to ASTM-Standards D5366-96 ≤ 0.4 m/s according to VDI-Standard 3786 page 2
Survival speed	max. 80 m/s, 30 min
Ambient temperature	-40 ... +70°C
Measurement principle	potentiometer
Potentiometer output	2k0hm
Electrical supply	Voltage U_s : 0 V DC ... 24 V DC
Operating voltage (heating)	24 V DC/AC, max. 20W
Connection	7-pol plug
Protection	IP 55
Weight	approx. 1.10 kg
Manufacturer	Thies 4.3129.00.712 (with heating) / 4.3129.10.712 (without heating)



Sensor Connection

Plug PIN No.	Wire Colour	Meteo-32	
		1st wind vane	2nd wind vane
1	white	G	GND
2	brown	E	M
3	green	F	J
4 (5)	yellow	D	K
Heating (6+7)	grey, pink		
	blue, red		

GND: Ground

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