Wind Vane Thies Compact POT

S22200

Wind Vane Thies Compact POT

Order number	Availability
S22200	Usually on stock

Potentiometric wind direction transmitter

Ammonit Measurement GmbH
Measuring wind and solar power

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Description

- Potentiometric wind direction transmitter
- Full range 0 … 360°
- High quality potentiometer 0 … 2 kΩ

Measurement principle

With the help of a potentiometer the physical property is converted into an analogue resistor output signal. At zero the transducer has to pass the „north transition“ between the margins of zero and 2 kΩ.

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 (mains connection).

Specifications

Wind Vane Thies Compact POT

General Information

Order Number	S22200

Measurement

Measurement Range	0 … 360°
Measuring Accuracy	± 2°
Resolution	0.5°
Measurement Principle	Potentiometer 2 kΩ
Starting Threshold	≤ 1 m/s according to ASTM-Standards D5366-96 ≤ 0.4 m/s according to VDI-Standard 3786 Part 2
Delay Distance	< 2.5 m acc. ASTM D 5366-96

Electrical

Electrical Supply (Potentiometer)	Voltage U_S: 0 … 24 VDC **Important:** The supply voltage of the potentiometer must show a current limitation of max. 1 mA. An additional protective resistance is strongly recommended. Resistor Rv: 15 kΩ @ supply voltage: 12 … 15 V
Heating	24 VDC/AC (Power consumption: max. 20 W)

Environmental

Survival Speed	max. 80 m/s, 30 min
Ambient Temperature	-40 … +70 °C

Construction

Connection	7-pole plug
Mast Fixture	Mounted on a steel tube with an inner thread of PG21 or mounted on a traverse with a drill of 29 mm
Material	Aluminum, stainless steel and plastic (Housing and wind vane)
Type of Ball Bearings	Metallic ball bearings
Protection	IP 55
Weight	approx. 0.4 kg

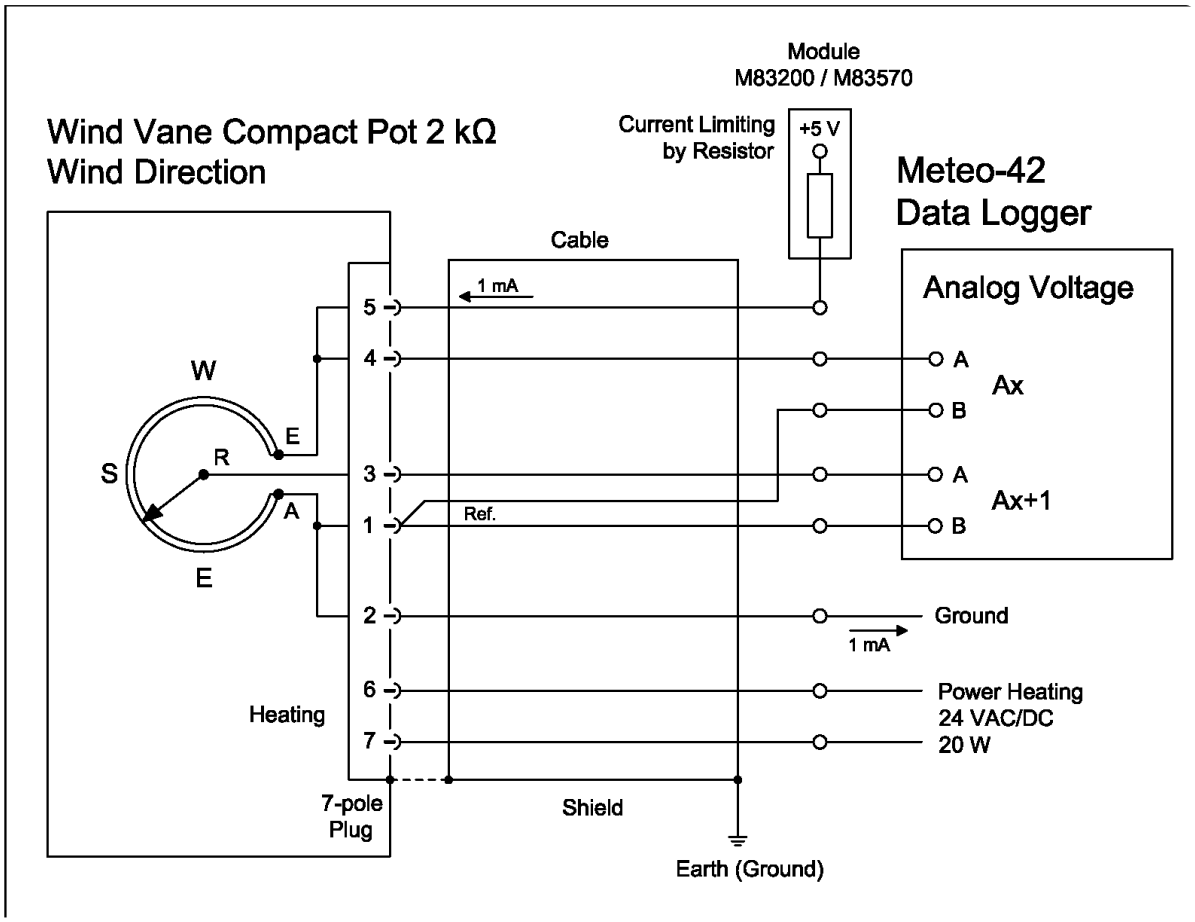
Manufacturer

Wind Vane Thies Compact POT

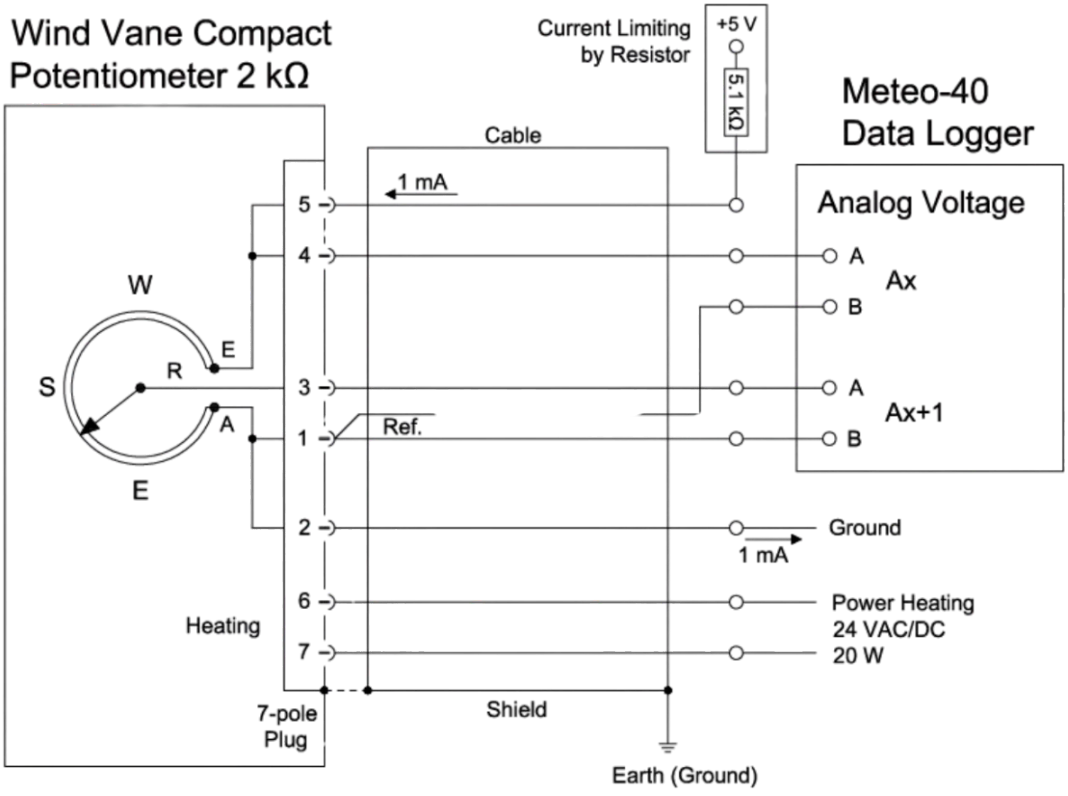
Manufacturer	Thies

Sensor connection diagram

Sensor connection diagram to Ammonit Meteo-42 data logger



Sensor connection diagram to Ammonit Meteo-40 data logger



Sensor	Plug Pin No.	Ammonit Cable Wire Color*	Meteo-40 Digital	Supply Sensor
Supply Voltage	4	white	Ax	Sense
Ground	1	blue	Bx	
Wind Direction Data	3	brown	Ax+1	
Ground	1	pink	Bx+1	
Supply	5	red		12 … 15 V / 1 mA Rv: 15 kΩ
Ground	2	black		Main Ground
Heating	6	orange, orange		24 V AC/DC
	7	violet, violet		

Cable type without heating: LiYCY 6 x 0.25 mm²
Cable type with heating wires: LiYCY 10 x 0.25 mm²
Connect the shield logger-sided to Ground (GND)