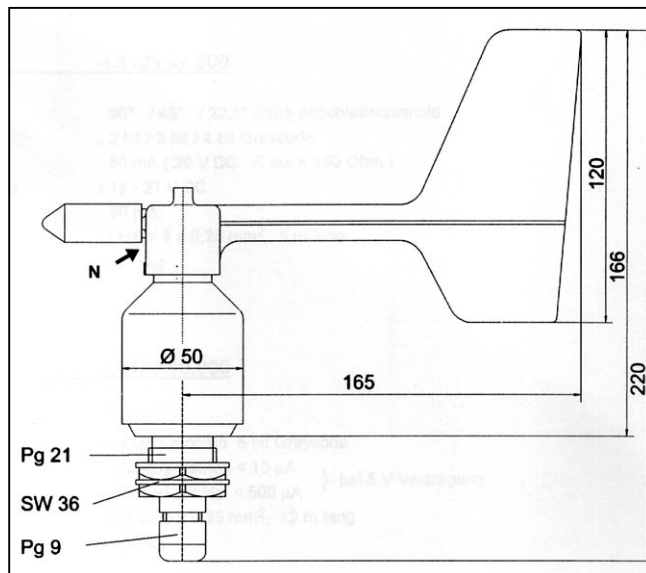


Wind Vane „compact“

Order-No: P 6240 – heatable
P 6245 – not heatable

- Potentiometric wind direction transmitter
- Full Range 0 ... 360°, no north gap
- 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).

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!

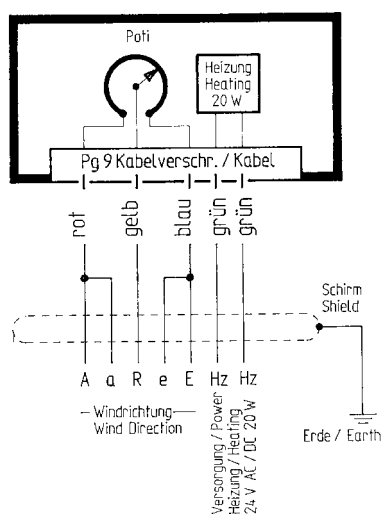
To avoid damage due to lightning a protection rod and proper grounding of all metal parts is to be recommended.

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.

Technical Data

| type | P6240 / P6245 |
|--------------------------|---|
| Range | 0 ... 360° without north gap |
| Accuracy | ± 2° |
| Resolution | 1° |
| damping coefficient | > 0.3 |
| survival wind speed | max. 60 m/s |
| ambient temperature | -30 °C ... +70 |
| transducer | resistor |
| <i>electrical output</i> | 0 ... 2 kΩ |
| <i>max. power</i> | 1,5 W |
| <i>max. voltage</i> | 50 V |
| <i>max. current</i> | 100 mA |
| weight sensor | 0.55 kg |
| gross weight | approx. 1.55 kg |
| mast fixture | mast tube with PG 21 or drill: diameter 29 mm |
| exchange of bearings | recommended approx. every 24 months |
| manufacturer, type | Thies 4.3129.X0.012 |



| Connection | Ammonit Cable color of cores | Connector data logger | |
|------------|------------------------------|-----------------------|--------|
| | | 8-pin <plug> | 12-pin |
| A | white | 1 | G |
| a | brown | 2 | E |
| R | green | 3 | F |
| e | n.c. | | |
| E | yellow | 4 | D |
| Heating 1 | grey, pink | | |
| Heating 2 | blue, red | | |

Cable type without heating cores: LiYCY 4 x 0,25 mm²

Cable type with heating cores: LiYCY 8 x 0,25 mm²