Wind-Sensor
for
Velocity and/or Direction
Model 262

Cup-star and vane are made of CFK ensuring maximum sensivity. (CFK = Carbon-Fibre)

* Output 0-20 mA (4-20 mA) for velocity and/or direction.
The signals are received directly from the sensor.
* Optionally supplied with a Heater for the shaft and a De-Icing System
* Sensor-electronic is fitted out with an overvoltage protection, consisting of gas-discharge suppressors and TransZorb diodes.
Technical Description of the Windsensor Model 262 and 262R

The windspeed-sensor model 262 and the winddirection-sensor model 262R can be combined. In this case they are mounted together on a cross-arm. The cross-arm is mounted on a short pipe by means of a socket on its base. The pipe must have a diameter of 1 1/2” or 50 mm.

Both transmitters have connectors and can be easily detached. The wires from these connectors pass through the cross-arm to a junction box which is fitted out with terminals.

The wind vane and the cup assembly are constructed of CFK (carbon-fibre) which enables a low starting threshold.

The wind-speed sensor can be fitted out with different transmitters. A basic opto-electronic assembly is sensing the revolution of the cup-star. The output impulses are converted either into current impulses 10 to 20 mA (2-pole amplifier) or in an analog current 0-20 mA (4-20 mA). All converters are housed in the sensor.

The wind-direction sensor is fitted out with a special precision potentiometer which has a high reliability. A built-in converter converts this resistance signal also into current Impulses or into an analog current.

Both sensors are supplied with a built-in overvoltage protection. Every wire which passes the housing of the sensor are electronically connected with a gasdischarge suppressor to earth. A filter and TransZorb diodes complete this protection circuit.

To prevent excessive oscillation of the wind vane a damping device is incorporated. It works with 2 cylinders with a viscous silicon-fluld between them causing a damping effect without any friction.

Technical details:

- Diameter of the cup star 220 mm
- Start threshold: 0.5 m/s
- Sensitivity of the wind vane: 0.2 m/s at 90 degree deflection.
- Operating temperature: -55 °C - 70 °C
- Weight:
  - Model 262 or 262R: 1,5 kg.
  - The combined sensor with the cross-arm and the de-Icing system: 11 kg
- Height over all:
  - Model 262 or 262R: 370 mm. The combined sensor: 500 mm
  - Length of the cross arm: 800 mm

Fixing: Models 262 as well as the combined sensor: On a pipe with a diameter of 1 1/2” or 50 mm
**Following models are available:**

*For Wind-Velocity:*

**Model 262A:**

With opto-electronic assembly and converters.
Output-signal: 0-20 mA (4-20 mA) = 200 km/h,
Power supply: 24 VDC +/-10%, power consumption approx. 40 mA.

**Model 262P**

With opto-electronic assembly for the wind speed.
Current Impulses from 10 to 20 mA.
315 Hz = 100 km/h. Power supply: 11-30 VDC.

*For Wind-Direction:*

**Model 262RA**

With precision potentiometer and converter
Output-signal: 0-20 mA (4-20 mA) = 0 – 360 degrees,
Power supply: 24 VDC +/-10%, power consumption approx. 40 mA.

**Model 262RP**

With a converter for the precision potentiometer. It converts the resistance also into current impulses 10 to 20 mA.
Output-signals: 315 Hz = 100 km/h, 3.6 kHz=360 degrees.
Power supply: 11-30 VDC.

**Model 262R**

Precision potentiometer for the wind direction 10.22 kOhm = 358 degrees.

**Options:**

**Heater for the shaft** with Thermostat
Below 5 degrees ambient temperature the heater is switched on automatically.
Power consumption: 40 VA at 24 VAC
for model 262 or 262R (combined sensor: 80 VA)

**De-icing system** consisting of 4 radiators mounted at a short distance under the cup-star.
Power requirement: 42 VAC, 12 A (4x125 VA = 500 VA)
A built-in Thermostat which closes the contacts below 5 degrees can be used to energize a power relay, to switch off and on externally the heating system.

The de-icing system does not work in all weather-conditions but the ice will melt immediately after the storm gets weaker. In addition no icing effect occurs normally at a strong wind.