ROWIND

STATIC ULTRASONIC

ROWIND is a new generation wind sensor without moving parts, which provides the following signals on a standard serial port: wind velocity in m/sec or knots, relative direction in degrees and the temperature in degrees Celsius. (atmospheric pressure in optional)

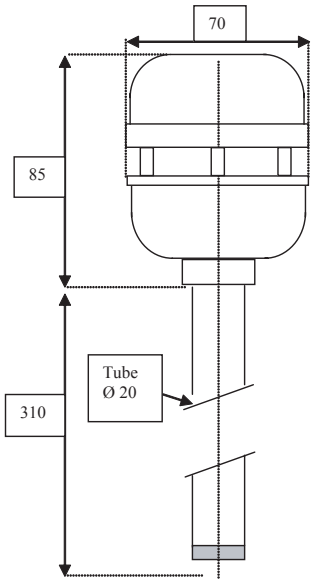
The wind sensor can directly be connected to a PC or can be read by equipment with a standard NMEA 183 input.

The advantages of the ROWIND wind sensor are:

- Robust design, resistant to: shock, wind pulses, birds
- No wear: no moving parts
- Insensible to gyroscopic effects
- Stable sensibility at low wind speeds
- Small wind surface
- Open electric connection
- Mast inclination due to wind is compensated
- Protected against weather conditions

Principle of operation:

The movement of the medium through which it passes transports ultrasonic sound. Four electro-acoustic transponders are coupled pair according to two perpendicular axes by ultrasonic signals to measure the delay time of the sound waves, which are displaced by the moving air.
The measurements are calibrated in an integrated processor, which determines the speed and the direction relative to a reference axis. The temperature signal is used for calibration. This measuring method has a sensibility of 0,5 knot, a dynamics of 100 knots and an excellent linearity.
Mast inclination due to wind is compensated to 45 degrees… Typical modification of modulus of wind = 7%



Delivery contents:

- Measuring head ROWIND
- Support 300 mm
- Connection ring
- 25 m coaxial cable with connection
- Connection box for power supply and read out
- Mounting instructions

Characteristics:

- Numeric output signals: NMEA 183, MWV, XDR
- Sensibility for wind speed: 0,5 knot
- Resolution: 0,1 knot
- Dynamics of wind speed: 0,5 to 99,5 knot
- Sensibility for direction: +/- 1,5 degree
- Resolution: 1 degree
- Power supply: 10 to 14 VDC, 25 m-amp
- Temperature range: 0 - 40 °C