ANEMOMETER VV20 and DV20

The anemometer is a partially electronic and partially mechanic sensor built to measure wind direction and velocity.

The analysis of these two parameters returns the measurement of the wind's 2D vector, that is essential to control the real time development of climatic conditions, and to predict the level of risk under particular circumstances (such as fires, intense meteorological phenomena, etc.). The wind, different from other phenomena of slower evolution, may vary significantly within few seconds, strongly influencing parameters such as the temperature and intensity of the precipitations, wave energy or wave motion and others.

TECNOLOGY AND FUNCTIONING

The sensor is composed of two sensible elements: a weathercock gonio-anemometer to measure the wind's direction and a three-cup tacho-anemometer to measure the speed. The high quality bearing, with which both sensors are equipped, assure accurate and correlationable measurements to obtain the vector value of real wind.

The sensor is installed on the special support bar BSA20. The high quality of construction details allows the sensor a longstanding useful life.

It is lodged inside of strong waterproof containers, also resistant to marine environment. A heated version is available for the operation in places where low temperature can produce ice formations.

The supporting bar BSA20 is integrated with a lightning rod to eliminate the risk of atmospheric induced damages.

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TECHNICAL SPECIFICATIONS

GONIO-ANEMOMETER DV20

- Anodized aluminium weathercock
- Angular position transducer (Hall effect sensor)
- Low tension output 0,5 - 4,5 V - 0-360°
- Measurement range: 0° ÷ 360°
- Resolution: 0.35° for the system
- Accuracy: ± 2°
- Working temperature: 0 ÷ +60 °C; -30 ÷ +60 °C with electric heater
- Size: 561 x 406 mm
- Weight: 0,9 Kg

TACO-ANEMOMETER VV20

- Three cup poly-carbonate whirlpool
- Solid state measurement transducer with frequency output
- Security range: 0 ÷ 220 Km/h (61 m/sec)
- Resolution: 0,06 m/s (0.2 km/h)
- Sensibility: minus 0.02 m/s, threshold 1.8 Km/h (0.5 m/s)
- Accuracy: ± 0.25 Km/h (0.07 m/sec) or 1% of reading
- Working temperature: from -30 a +60 °C (with heating)
- Size: 178 (Ø) x 281 mm
- Weight: 0.9 Kg

SUPPORTING BSA20

- 100% stainless steel
- Complete with wires and sensor connectors
- Size: 1490 x 790 mm
- Weight: 6,5 Kg (including sensors)
- Stainless steel lightning rod. Length 1700 mm for 10 mm of diameter

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