

REFERENCES AND ACCESSORIES

References	Anemometer
ANTC_V1.1	PULSE Hz OUTPUT
ANTC_V2.2_A02.1	VOLTAGE OUTPUT 0-10V, Km/h 0-100
ANTC_V2.2_A03.1	VOLTAGE OUTPUT 0-10V, Km/h 0-120
ANTC_V2.2_A04.1	VOLTAGE OUTPUT 0-10V, Km/h 0-180
ANTC_V2.2_A05.1	VOLTAGE OUTPUT 0-10V, Km/h 0-200
ANTC_V2.2_A06.1	VOLTAGE OUTPUT 0-5V, Km/h 0-100
ANTC_V2.2_A07.1	VOLTAGE OUTPUT 0-5V, Km/h 0-120
ANTC_V2.2_A08.1	VOLTAGE OUTPUT 0-5V, Km/h 0-180
ANTC_V2.2_A09.1	VOLTAGE OUTPUT 0-5V, Km/h 0-200
ANTC_V2.2_A10.1	VOLTAGE OUTPUT 1-5V, Km/h 0-100
ANTC_V2.2_A11.1	VOLTAGE OUTPUT 1-5V, Km/h 0-120
ANTC_V2.2_A12.1	VOLTAGE OUTPUT 1-5V, Km/h 0-180
ANTC_V2.2_A13.1	VOLTAGE OUTPUT 1-5V, Km/h 0-200
ANTC_V2.2_A14.1	VOLTAGE OUTPUT 2-10V, Km/h 0-100
ANTC_V2.2_A15.1	VOLTAGE OUTPUT 2-10V, Km/h 0-120
ANTC_V2.2_A16.1	VOLTAGE OUTPUT 2-10V, Km/h 0-180
ANTC_V2.2_A17.1	VOLTAGE OUTPUT 2-10V, Km/h 0-200
ANTC_V2.2_A18.1	CURRENT OUTPUT 0-20mA, Km/h 0-100
ANTC_V2.2_A19.1	CURRENT OUTPUT 0-20mA, Km/h 0-120
ANTC_V2.2_A20.1	CURRENT OUTPUT 0-20mA, Km/h 0-180
ANTC_V2.2_A21.1	CURRENT OUTPUT 0-20mA, Km/h 0-200
ANTC_V2.2_A22.1	CURRENT OUTPUT 4-20mA, Km/h 0-100
ANTC_V2.2_A23.1	CURRENT OUTPUT 4-20mA, Km/h 0-120
ANTC_V2.2_A24.1	CURRENT OUTPUT 4-20mA, Km/h 0-180
ANTC_V2.2_A25.1	CURRENT OUTPUT 4-20mA, Km/h 0-200

References	Display
0106030501	WM44-P V3 230Vac
0106030502	WM44-P V3 48Vac
0106030503	WM44-P V3 24Vac
0106030504	WM44-P V3 24Vdc NOT INSULATED
0106030505	WM44-P V3 12Vdc NOT INSULATED
0106030601	WM44-SS V3 24Vac
0106030701	WM44-DRM V3 230Vac
0106030702	WM44-DRM V3 48Vac
0106030411	WM44-EVO11 V3 IP 65 24Vdc
0106030412	WM44-EVO11 V3 IP 65 230Vac

Optional	Description
ANTC_V_R	Self-regulating heater integrated into the body
ANTC_V_INOX	Anemometer material in AISI 316 STAINLESS STEEL
CAV_SCH5x0,5	Connection cable for anemometer with heater supplied in the required length
CAV_SCH3x0,5	Connection cable for anemometer supplied in the required length

Industrial design

Pulse frequency output or analog in mA or V

Range up to 200 Km/h.

Rotating transducer mounted on double ball bearing

Male connector M12

Compatibility with PLC and / or market electronics

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ANTC V1.1 - ANTC V2.2- ANODIZED ALUMINIUM

Anemometer cups with multiple outputs for industry-standard ACCREDIA certificate

The ANTC series has been designed and built for industrial applications, in particular:

- Surveys for wind towers
- Historical analysis data logger
- Wind threshold control for photovoltaic sails and solar trackers

However, it is used in any sector where reliable, robust and precise product characteristics are required.

The body of the rotor is machined aluminum with stainless steel support. The head rotates on ball bearings. The cups are made of nylon shock-absorbent and easily interchangeable. It also features a convenient connector for connection. The count rate is via optical transducer, a digital encoder with 12 pulses per revolution.

EACH TRANSDUCER IS TESTED IN A WIND TUNNEL AND EQUIPPED WITH A CALIBRATION CERTIFICATE. On request, it's possible a periodic check and product calibration.

NUOVACEVA

AUTOMATION

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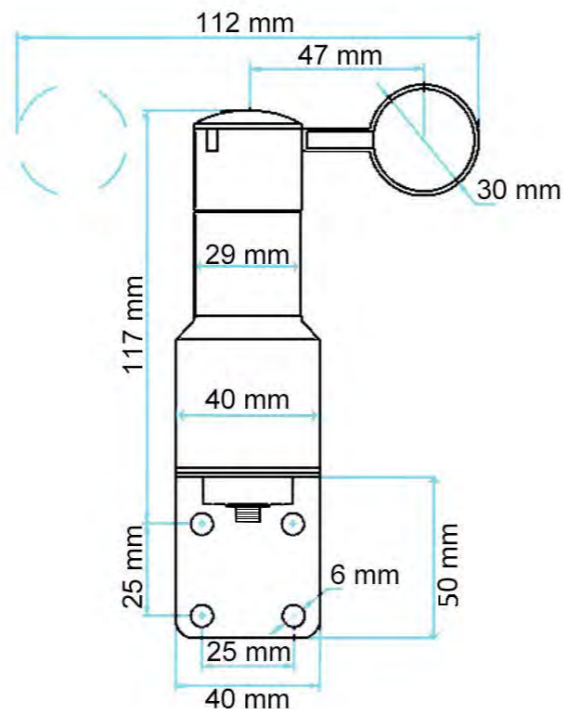


APPLICATION

The ANTC anemometer has been expressly designed for industrial applications such as:

- Cranes and Mobile Cranes
- Buildings and general structures
- Photovoltaic solar trackers
- Wind turbines
- Weather Stations
- Irrigation systems
- Automated greenhouses
- Cable cars for ski plants
- Cannons snow
- Telescopic cranes
- Platforms self-mounting
- Structures for playgrounds
- Ornamental fountains
- Pressostatic structures
- Highway tunnels and viaducts

DIMENSIONS



TECHNICAL FEATURES

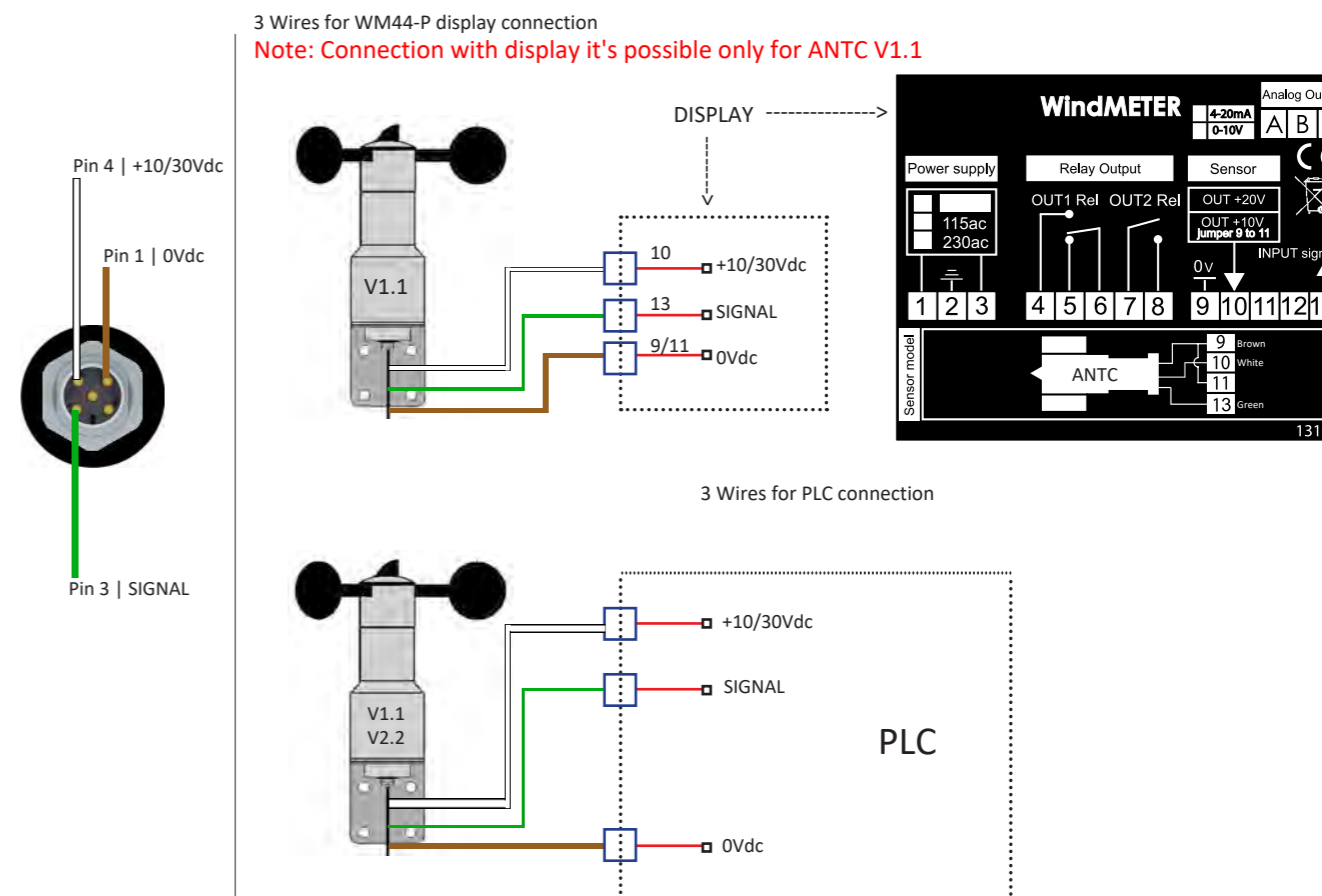
Electric Features	
Power Supply	10...30 Vdc
Max. Current	50 mA
Output	Frequency, Current, Volt
Type of contact	Photodiode - 12 pulses/rotation
Measurements	
Mechanical Range	2-200 km/h
Full-scale	0-100, 0-120, 0-180, 0-200
Average Error	0,06%
Standard deviation error	1,01%
Output	Frequency, Voltage, Current

Mechanical Features	
Materials	Machined aluminum
Connector	M12
Weight (No cable)	300 g
Body rotor H	115mm
Body rotor + support	154mm
Size with connector M12	7,5 mm
Top body rotor min. diam.	29 mm
Top body rotor max. diam.	40 mm
Max. diam. with cups	112 mm
Storage temperature	-40 °C +85 °C
Operating temperature	-20 °C +85 °C
EMC	EN 61000-6-1:2001 EN 55022:2001, Class B
Protection	IP66

CONNECTIONS

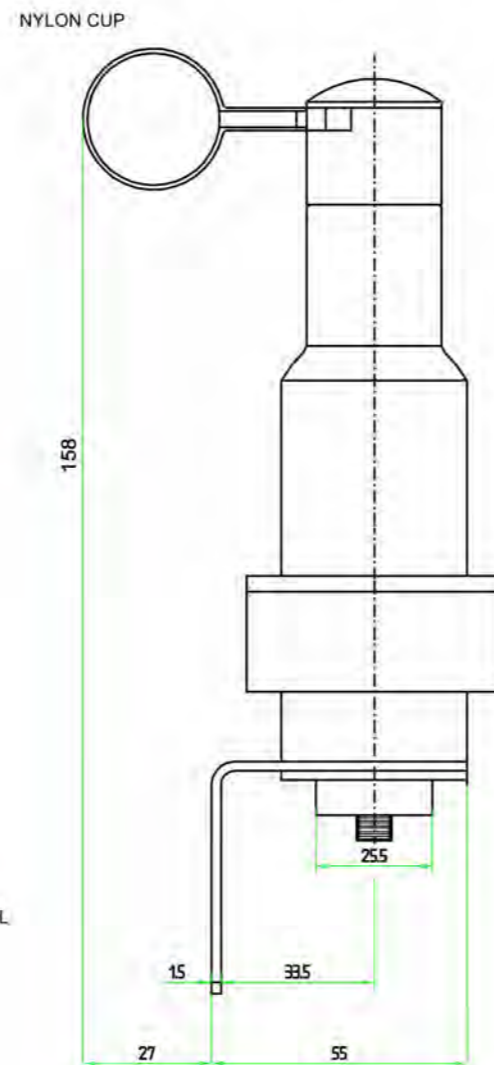
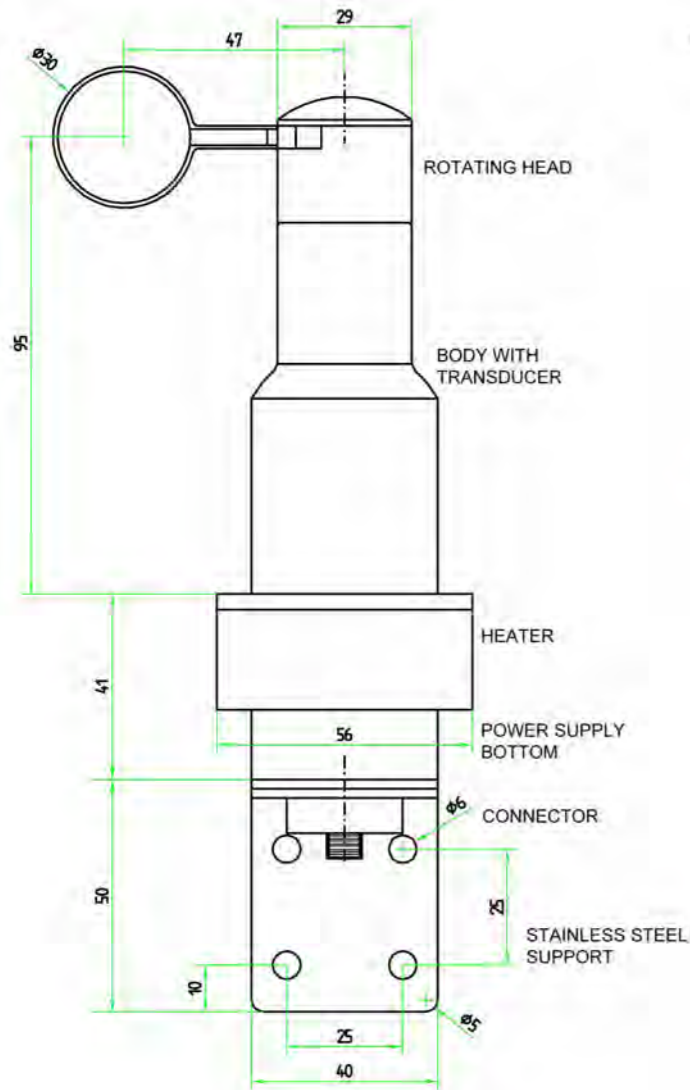
It is possible to combine the anemometer with a PLC or with a programmable display with two relay outputs to view the data immediately and give alarm signals

Model	Configurable outputs	Operation	Graphics
ANTC_V1.1_Hz	Frequency output	Relation between Wind Speed – Frequency output. The output pulses are proportional to the wind speed in relation with the graphic in the right column.	
ANTC_V2.2_Vdc	Voltage output	Relation between Wind Speed – Voltage output. The voltage output is proportional to the wind speed in relation with the graphic in the right column. These follow are configurable sets: 0-5 / 1-5 / 0-10 / 2-10 Vdc The graph to the side is represented in function of the maximum speed configurable = 200 km / h Are available the follow Fullscale value: 200 km/h 180 km/h 120 km/h 100 km/h	 Scale 0-5 Vdc green line Scale 1-5 Vdc lilac line Scale 0-10 Vdc red line Scale 2-10 Vdc blue line
ANTC_V2.2_mA	Current output	Relation between Wind Speed – Current output. The current output is proportional to the wind speed in relation with the graphic in the right column. These follow are configurable sets: 0-20 / 4-20 mA The graph to the side is represented in function of the maximum speed configurable = 200 km / h Are available the follow Fullscale value: 200 km/h 180 km/h 120 km/h 100 km/h	 Scale 0-20 mA red line Scale 4-20 mA blue line



DIMENSION AND MECHANICAL FEATURES

- Mounting $\pm 3^\circ$ on vertical axis
- Cups upward
- Measurement range from 2 to 200 km/h
- Stainless steel support assembled
- IP 66 degree protection
- Operating temperature -40°C $+85^\circ\text{C}$
- Storage temperature -40°C a $+125^\circ\text{C}$
- Weight 370 g connection cable excluded
- Average error 0,06%
- Standard deviation error 1,01%
- Analisis made in a wind tunnel with a 0 to 200 km/h wind speed exceeding
- Nylon Cups Reinforced for the hail, resistant from -40°C to $+120^\circ\text{C}$, diam. 30mm, interchangeable



ANTC_V_R CONNECTION

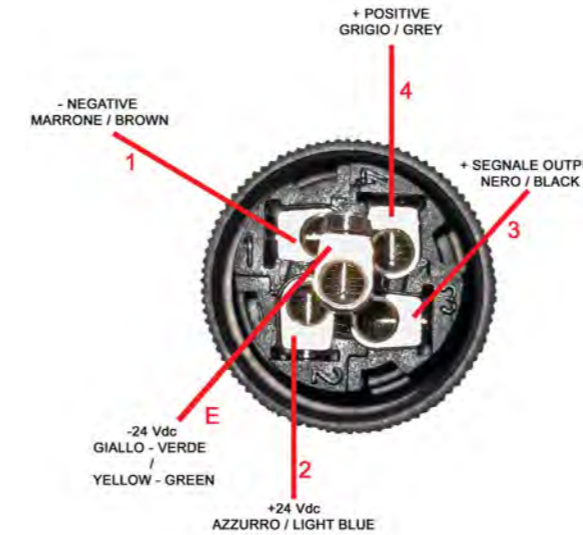
NOTE: ANTC_V_R POWER SUPPLY MUST BE 24Vdc

CAUTION:

- **Anemometer + Heater parallel 24VDC Power supply** use shielded cable 3x0,5 sq mm - the braided shield **MUST NOT BE CONNECTED** to the ground connector but completely isolated. It should be connected to ground only from the connection to the PLC electronics, display or electronic ANTC
- **Anemometer and Heater separated Power supply** use shielded cable 5x0,5 sq mm - the braided shield **MUST NOT BE CONNECTED** to the ground connector but completely isolated. It should be connected to ground only from the connection to the PLC electronics, display or electronic ANTC

HEATER POWER SUPPLY:

- 24Vdc parallel to anemometer supply voltage if equal or more than 500 mA
- 24Vdc 24Vdc Heater to be conected on pins 2 + E with separated cable if supply voltage if less than 500 mA



ANTC_V_R - HEATER VERSION

ANTC_V_R is an anemometer, which meets every requirement of use in electronics. Is in fact equipped with its own programmable logic. It can be used for any on-board detection of wind turbines in the presence of sources of power from batteries 24 vdc. Its output signal can be configured for pulse output, voltage output 0-5 / 1-5 / 0-10 / 2-10 Vdc, current output 0-20 / 4-20 mA. It can be connected through the various outputs available depending on the model directly to PLC and / or board electronic market, tachometers WM44P as the model of our product range. The body of the rotor is machined aluminum. The head rotates on ball bearings. The cups are made of nylon shock-absorbent and easily interchangeable. It also features a convenient connector for connection. The count rate is via optical transducer, a digital encoder with 12 pulses per revolution.

Complete of anti-icing HEATER.

Each anemometer is equipped with black Nylon Cups interchangeable, stainless steel support, 5 pin M12 screw jack connector.