

YANKEE 3



Yankee 3 is a sensor used to measure wind speed and it is designed for all the machines and systems that require constant monitoring of the weather conditions in which they operate.

The construction technology adopted and the materials used make it suitable for the most extreme conditions: high-performance technopolymers for the cups, aluminium casing and stainless steel screws. The system uses state-of-the-art control electronics from the sector of compact sensors.

The sensor is available in various configurations depending on the output signal: current, voltage, PWM, CAN-BUS.

Yankee 3 can be installed on construction cranes, dockside cranes, lifting facilities, livestock facilities, greenhouses, etc.

YANKEE 3 ANEMOMETER



SPECIFICATIONS

Conformity to Community Directives	2004/108/CE
Conformity to Standards	EN 60529 EN 61326
Markings	CE

ELECTRICAL SPECIFICATIONS

Power supply	12V dc
Absorption	70 mA
2 V1 and V2 voltage outputs with difference of 120°	0-10V dc
Alarm output related to V1	5-0 VDC
Current output I	4-20 mA
Alarm output related to I	5-0 VDC
PWM output	f=1kHz Duty Cycle 0-100%
Resolution	12 bit
Linearity	+/- 0.5%
Full scale tolerance	+/- 0.5%
CAN Open Interface	ISO 11898

MECHANICAL SPECIFICATIONS

Free rotation	360°
Protection degree	IP65
Operational temperature	+5°C / +70°C
Mechanical life	> 3 years

YANKEE CONNECTIONS CABLE OUTPUT

Cable	Function	Value
Red	Power supply	12/24 VDC
Grey	Earth	GND
Green	Can L	
White	Can H	
Brown	Button	**
Pink	Button	**

Suggested cable

For the terminal connection, use a flexible cable suitable for the transmission of CAN BUS signals.

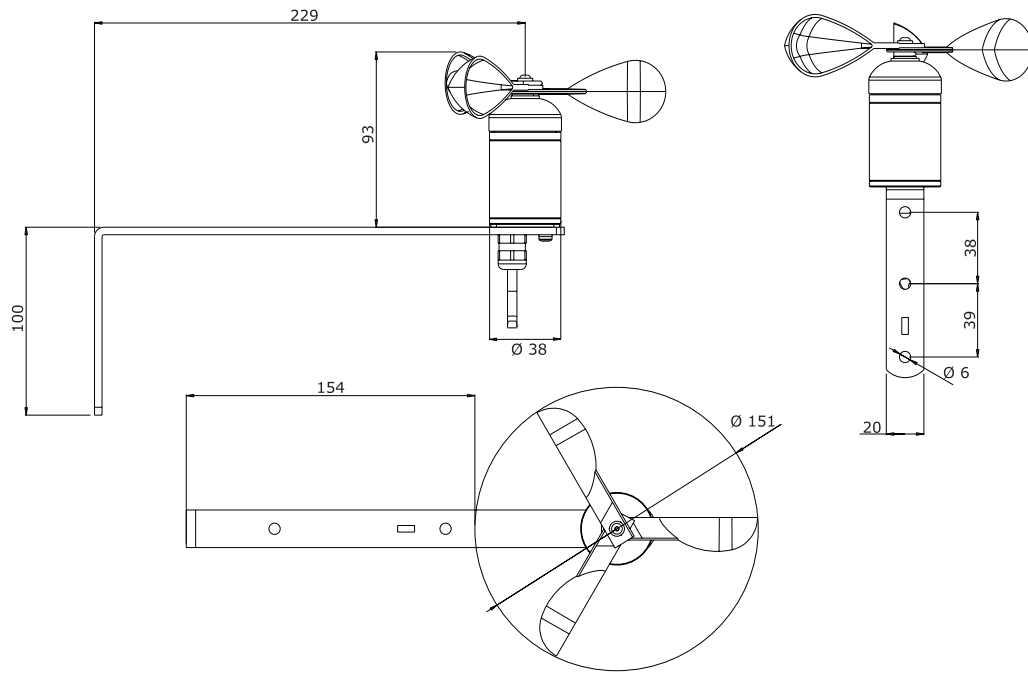
Refer to the typical values according to CiA Standard 301 (2000-06). "Can Open application layer and communication profile". Version 4.01:

Cable specifications

Characteristic impedance	120 Ohm
Conductor resistance	2,5 - 10m Ohm
Conductor section	0,25 - 0,34 mm ²
Propagation delay	<= 5 ns/m
Relative propagation speed	>= 67%
Temperature	-20 + 75 °C

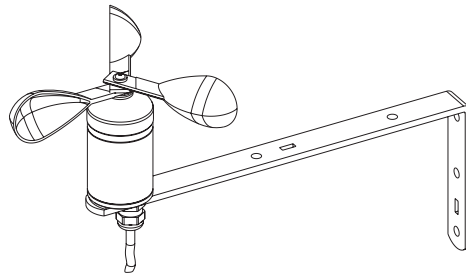


OVERALL DIMENSIONS

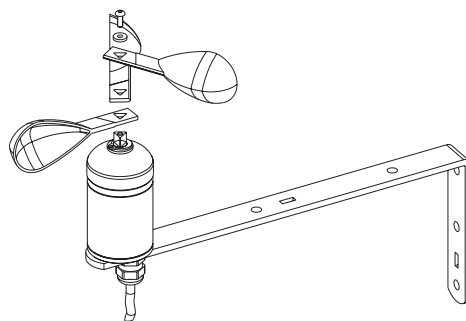


INSTALLATION DRAWINGS

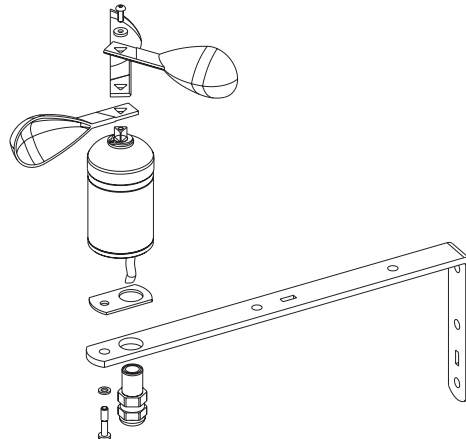
Drawing 1



Drawing 2



Drawing 3



YANKEE 3 ANEMOMETER



INSTALLATION, USE AND MAINTENANCE INSTRUCTIONS**Installation** (drawing 2)

The product is delivered ready assembled to make installation operations easier.

Choose a position that is completely exposed to wind: we recommend installing the system at least 5 m from floor, poles, walls, buildings, etc.

ATTENTION! THE AXIS OF ROTATION OF THE ANEMOMETER MUST ALWAYS BE PERPENDICULAR TO THE GROUND. DURING INSTALLATION USE A SPIRIT LEVEL TO CHECK THE ANGLE.

THE SYSTEM MUST NOT BE FIXED WITH THE CUPS FACING DOWN.

Once you have found the optimal position, fix the support bracket with 6 mm screws as shown in the drawing (see Overall Dimensions).

After fixing the bracket, proceed with the electrical connection as shown in the diagram.

After you have completed the wiring, carefully insert the 3 cups in the same direction as shown in drawing 2 (cups facing clockwise) onto the triangular section shaft; fix the cups with the retaining screw and washer.

Once you have completed the assembly, ensure that the device is correctly positioned and verify its operation.

Maintenance (drawing 3)

Yankee 3 does not require regular maintenance, but because of the type of operation after 6 months you need to check:

- that the cups are rotating freely without jamming
- that the rotor is free from dust, dirt, scaling, debris, etc.
- that wiring is intact
- that the retainer screw is tight

Should one of the cups be damaged, loosen and remove the retainer screw and replace ALL the cups as described in the installation instructions.

In case of malfunction, first of all check the above points; if the problem persists disassemble the device as follows:

- loosen and remove the bracket fixing screw, loosen the cable gland ring and then unscrew the cable gland
- disconnect the device
- remove the device as shown in drawing 3

DO NOT OPEN THE PRODUCT, BUT SEND IT TO THE SERVICE CENTRE FOR REPAIR/REPLACEMENT.