

WTF-B(100)型 数字风速仪 使用说明书

[WT-178V2.0]

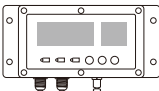
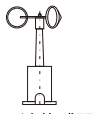
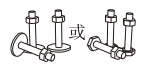
微特技术有限公司



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① 拆箱清单

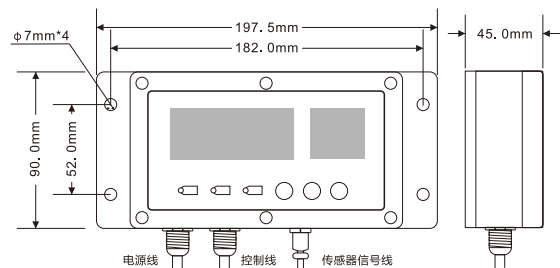


 风速仪主机	 风速传感器	 电缆（选配）
 法兰盘式螺丝 / 自吸式强磁吸盘	 说明书	 合格证

打开包装箱请检查风速传感器和风速仪主机是否完好无损，清点所有配件。如有不符请立即通知销售人员沟通解决。
※电缆按商务合同约定内容执行。

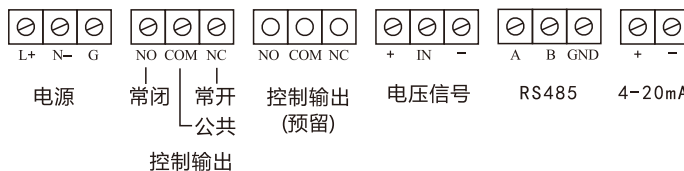
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2、仪表安装尺寸



将主机仪表安装在驾驶室合适位置,再将风速传感器三芯屏蔽电缆线引出(备注：RS485型输出风速传感器采用四芯屏蔽线)，接入主机仪表。

3、接线示意图



⑤ 仪表调试说明

1、指示灯功能说明

工况	指示灯	蜂鸣器	工作条件
正常	绿灯	无声	风速小于设定预警值时
预警	黄灯	发出间断报警声	风速大于设定预警值小于控制值时
超速	红灯	发出连续报警声	风速大于设定控制值时

② 产品说明

风速仪是专为各种大型机械设备研制开发的智能风速传感报警设备，内部采用先进的微处理器作为控制核心，外围采用了先进的数字通讯术。系统稳定性高、抗干扰能力强，检测精度高，风杯采用特殊材料制成，机械强度高、抗风能力强，显示器机箱设计新颖独特，坚固耐用，安装使用方便。所有的电接口均符合国际标准，安装时免调试，适用于不同的工作环境。

WTF-B(100)型数字风速仪用于测量瞬时风速和平均风速，具有自动监测、实时显示、超限报警和控制等功能。

③ 主要技术参数

1.风速传感器技术数据

测量范围：1.0~60m/s
准确度：<30m/s±(0.5+0.05v)
≥30m/s±5%
分辨率：0.1m/s
起动风速：<0.7m/s
工作环境：-30℃~+60℃

2、主机部分技术数据

显示误差：≤3%
电压范围：AC 220V±15%
绝缘能力：≥10MΩ
功耗：≤20W
工作环境 室外温度 -30℃~+60℃ 湿度90%
室内温度 -5℃~+50℃ 湿度90%
输出：≤2路（无源）/ RS485 / 4-20mA
IP等级：Ip55

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2、运转调试

根据仪表外标签选择合适电源，电源用220V交流电源试验，将电源插入交流电源插座内。直流电源供电，将电源插头插入DC24V供电回路，仔细检查无误后方可通电试验。

风速检查：快速拨动风杯，显示窗应有风速指示。如有条件，可借用一个电风扇吹动风杯，当风扇调速时，显示窗的风速应有相应的变化。

3、设置说明

a、按键介绍



b、预警风级设置：按"确定"键，窗口显示

"F"表示预警参数 "04"表示预置的报警风级为4级风



操作步骤：按"确定"键数字闪烁,再按"数选"键增减报警风级至所需数值,按"确定"键确认,设置成功后，当风速达到设定值后仪表将报警、同时指示灯闪烁。

c、控制风级设置：按"数选"键，窗口显示

"P"表示控制参数 "06"表示预置的控制风级为6级风

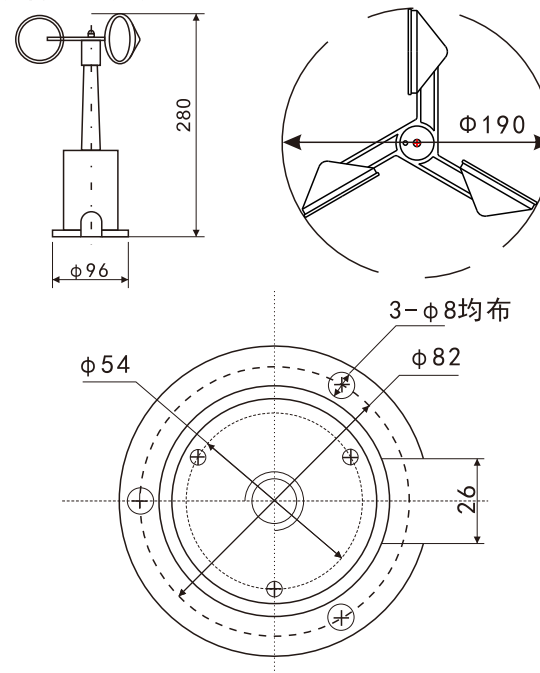


操作步骤：按"确定"键数字闪烁,再按"数选"键增减控制风级至所需数值,按"确定"键确认,设置成功后，当风速达到设定值后仪表将报警、同时指示灯闪烁。

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④ 安装连接

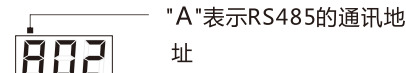
1、风速传感器安装尺寸



- a、风速传感器应安装在迎风面及设备制高点上
- b、本机由交流220V供电时，三相插头的接地线必须接地，以增加抗电网干扰能力。

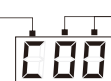
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d、按"数选"键，窗口显示



e、按"数选"键，窗口显示

"C"表示所选风杯类型 00对应WFS-1
01对应SC50
出厂时已设置，无需修改



⑥ 维护和故障处理

风速传感器，安装于室外露天环境，为了适应常年的室外环境，微特品牌风速传感器设计有独特的保护措施来延长使用寿命。但同样平时对传感器的维护，保养也是很重要的。根据使用情况和海洋观测规范的有关章节的要求，对传感器自安装之日起使用满一年应进行一次维护。

维护主要部件是：

- 1、表面污尘清洗
- 2、轴承清洁加油
- 3、水密橡胶圈更换

⑦ 服务体系

WTF-B(100)数字风速仪质保期为一年。（自交付之日起12个月内，因用户的非正常使用，电源电压超标以及其它外力造成的损坏不在质保范围内。）

※本标准产品(不含定制)功能最终解释权属微特公司所有。

产品返修时请注明详细的故障现象、使用工地、联系方式等内容。

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WTF-B(100) DIGITAL ANEMOMETER Operation Manual

[WT-178V2.0]

WEITE TECHNOLOGIES CO.,LTD.

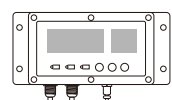
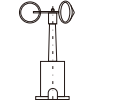
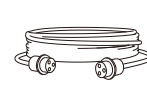
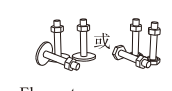
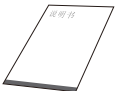


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① Unpacking list

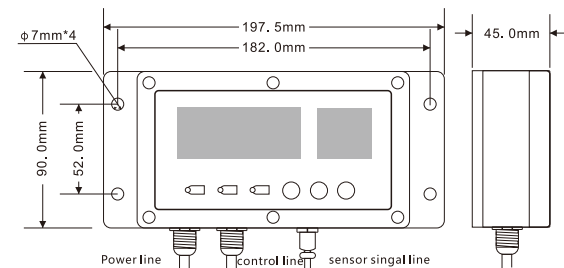


 Anemometer Display	 Wind Speed sensor	 Standard electric wires
 Flange type screws or self-suction strong magnetic sucker	 Operation Manual	 Inspection Certificate

please confirm if the digital anemometer and the wind speed sensor appearance is in good condition and check all the components, if anything is missing, please contact with seller.

※cables is business contract matching parts.

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The wind speed sensor is using the three core cable wire to connect with the monitor.

3.monitor wire connecting diagram

																
Power			Output control			Output control (Re serred)			Anemometer signal			RS485			4-20mA	
			 Normally close			 Common			 Normally open							

⑤ Dispal Calibration

1.indicator light function

Working Situation	Light	Buzzer	Working Condition
Normal	Green	No voice	When wind speed is lower than the preset alarming value
Alarm	Yellow	Send discontinuous voice	When the wind speed is higher than the preset alarming value lower than the preset control value
Over speed	Red	Send continuous voice	When the wind speed is higher than the preset control value

2.Running Test:

The power supply can be made as customer demands:1.220V AC power supply 2.DC 24V ,please check everything is correct before the power test.

Wind speed check: connect the anemometer with the monitor

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② Product Description

WTF-B(100)Anemometer is designed as the intelligent wind speed sensing alarm devices,its interior adapts an advanced microprocessor as the control core,the exterior use the advanced digital communications technology. The system has high stability, strong anti-interference ability, high detection, wind cup with the special material, high mechanical strength, strong wind resistance ability, the display case design is novel and unique, durable, convenient installation and use. All the electric interfaces are in line with the international standards, without installation debugging, can be used on different working conditions.

WTF-B100 digital anemometer is used to measuring the current and average wind speed, it has the automatic monitoring, real-time display, overrun alarm control functions.

③ Technical Specifications

1.wind speed sensor technical parameters

Measurement range : 1.0 ~ 60m/s

Accuracy : < 30m/s±(0.5 + 0.05v) ≥30m/s±5%

Resolution : 0.1m/s

Starting wind speed : < 0.7m/s

Work environment : - 30°C ~ + 60°C

2.the Instrument technology parameters

Display Error : ≤3%

Voltage Range : AC 220V±15%

Insulating Ability : ≥10MΩ

Power Consumption : ≤20W

Work Environment:outdoor: - 30°C ~ + 60°C humidity:90%

indoor: - 5°C ~ + 50°C humidity:90%

Output : ≤2 roads(passive) / RS485 / 4-20mA

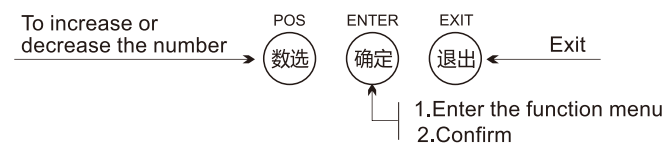
IP GRASS : Ip55

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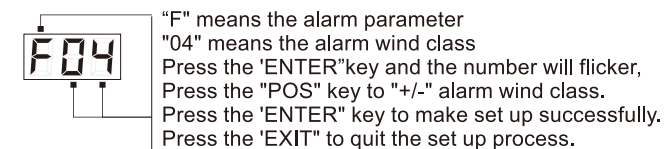
by wires, and blow the wind cup quickly, and the display window should have wind speed. You can use an electric fan to blow the wind cup, when the fan's wind speed change, the wind speed of the display should be corresponding change.

3.Setup instructions

3-1.Key's introduction

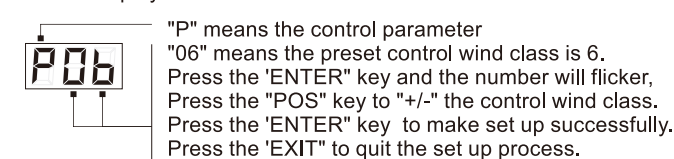


3-2.Set up the alarm wind class, press the "ENTER" button, the display will show as follows.



If you set up successfully, when the wind speed reach the preset value the indicator will send sound and light alarms

3-3.Set up the control wind class: press the "ENTER" and the "POS" button the display will show like this.

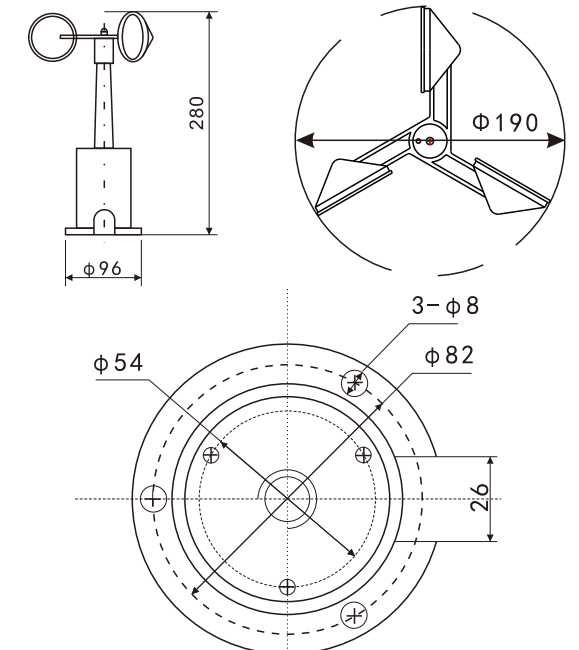


If you set up successfully, when the wind speed reach the preset value the indicator will send sound and light alarms, and will give a switch signal.

3-4.RS485 communication address: press the "ENTER" and "POS" button for many times, until the display show as follows.

④ Installation and Connection

1.Anemometer installation size

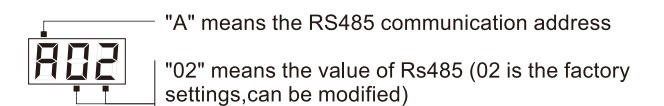


a. The wind speed sensor should be installed in the windward and on the high ground of instrument

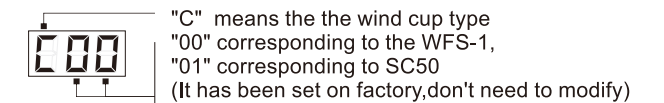
b. when the machine is powered by AC 220V, the ground wire of the three-phase plug must be grounded in order to increase the ability to resist the grid interference

2.Monitor dimension picture installation size

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3-5.Check the wind cup's type: press the "ENTER" and "POS" button for many times, until the display show as follows.



⑥ Maintenance

Anemometer is used outdoor, it will suffer from the years of the impact on the environment, especially the impact of bad weather on the sensor. So when producing the sensor, we have took protective measures to prolong the service life of the sensor, the normal maintenance, maintenance is also very important. According to the ocean observation standard usage and requirements of the relevant sections, sensors should have a maintenance after using a full year from the date of installation

Maintenance of main components:

- 1) The surface dust cleaning
- 2) The bear should be cleaned and refueled
- 3) Should replace the watertight rubber ring

⑦ Product assurance

WTF-B(100) Digital Anemometer guarantee period is 12 months which is from the installation acceptance delivery date on. But except follow damage reasons which are non-normal use, excessive supply voltage, and other external damage.

※This standard products (excluding customization) function finally explain belongs to the WTAU.

Please indicate the specific symptoms, use site, contact information and other content when the product returned for repair.

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