

# **Polycarbonate wind speed transmitter (Pulse type)**

**SN-3000-FSJT-\***

**Ver 2.0**

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## 1.1 Product Overview

SN-3000-FSJT-\* wind speed transmitter (pulse type) is small and light, easy to carry and assemble. The three-cup design concept can effectively obtain wind speed information. The shell is made of polycarbonate composite material, which has good anti-corrosion and anti-erosion characteristics, which can ensure that the transmitter will not rust after long-term use. At the same time, the smooth internal bearing system ensures the accuracy of information collection. It is widely used in wind speed measurement in greenhouses, environmental protection, weather stations, ships, docks, breeding and other environments.

## 1.2 Features

- Range:0-70m/s, resolution0.0875m/s
- Anti-electromagnetic interference processing
- The bottom outlet is adopted to completely eliminate the aging problem of the rubber pad of the aviation plug, and it is still waterproof after long-term use.
- Adopt high-performance imported bearings, small rotation resistance and accurate measurement
- Polycarbonate shell, strong mechanical strength, high hardness, corrosion resistance, no rust, can be used outdoors for a long time
- The structure and weight of the equipment are carefully designed and distributed, with small moment of inertia and sensitive response.

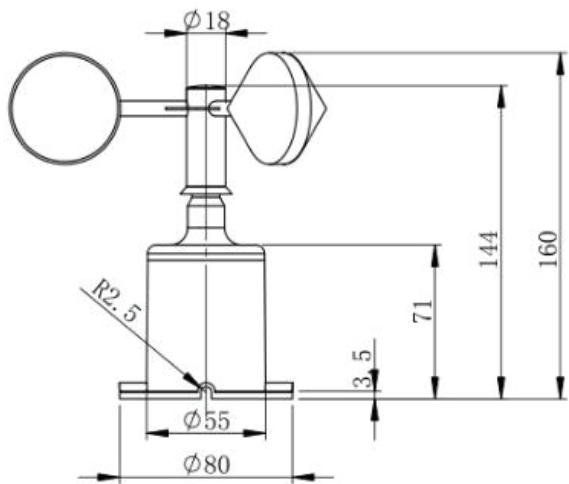
## 1.3 Main parameters

DC power supply (default)	5~30V DC
Transmitter circuit operating temperature	-40℃~+60℃,0%RH~80%RH
Communication interface	Pulse output
Resolution	0.0875m/s
Accuracy	$\pm(0.2+0.03V)$ m/s,@(0~30m/s,25℃) V indicates wind speed
Measuring range	0~70m/s
Dynamic response time	$\leq 0.5$ s

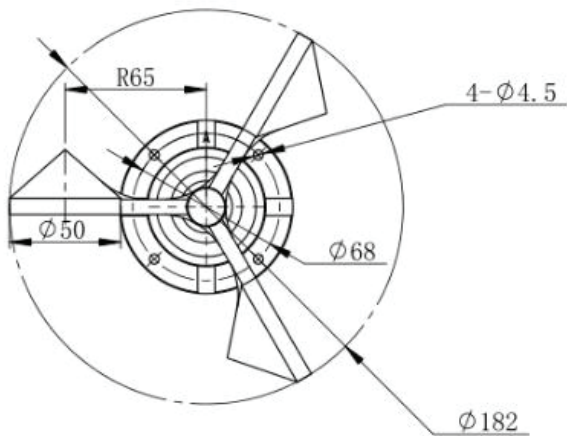
Start wind speed	$\leq 0.2\text{m/s}$	
Load Capacity	PNP	$\geq 100\text{mA}$
	NPN	$\geq 100\text{mA}$

For long-term use, please keep the ambient wind speed within 30m/s the following

Product size:



整体高度：160  
主轴高度：144  
底座高度：71  
底座直径：φ80  
单位 (mm)



安装孔径：φ4.5  
分布直径：φ68  
单位 (mm)

1.5Product Selection

SN-				Company Code
	3000-			Shell code
		FSJT-		Wind speed transmitter
			PNP	PNPOutput
			NPN	NPNOutput
			NPNR	Internal pull-up resistorNPNOutput

## No. 2chapter Hardware Hookup

### 2.1Equipment pre-installation inspection

Equipment List:

- Transmitter equipment 1 tower
- Mounting Screws 4 individual
- Certificate of conformity, warranty card

### 2.2Interface Description

Wide voltage power input 5~30V Both are acceptable.

#### 2.2.1Sensor Wiring



	Line Color	illustrate
power supply	brown	Power supply positive (5~30V DC)
	black	Negative power supply
Pulse signal	Yellow (green)	PNP OUT
	blue	NPN (NPNR) OUT

### 2.3Installation

Flange installation and threaded flange connection make the lower pipe of the wind speed sensor firmly fixed on the flange plate and chassis. Ø80mm, exist Ø68mm Open four equal Ø4.5mm The mounting holes are used to fix it tightly on the bracket with bolts to keep the whole set of instruments at the best level and ensure the accuracy of wind speed data. The flange connection is easy to use

and can withstand greater pressure.



## 2.4 Notes

1. Users are not allowed to disassemble or touch the sensor core to avoid damage to the product.

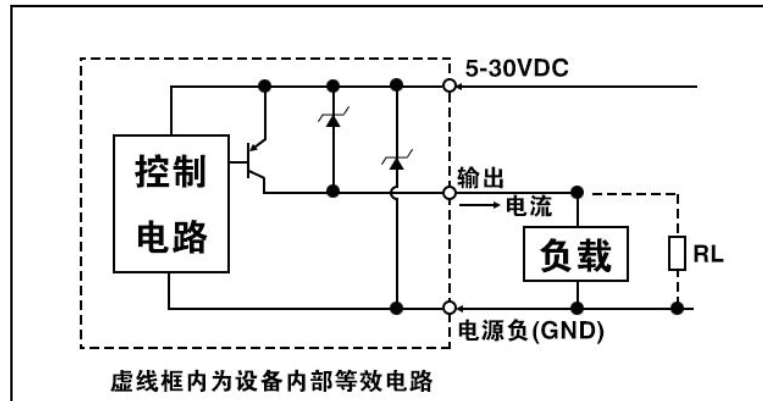
2. Try to stay away from high-power interference equipment to avoid inaccurate measurements, such as frequency converters, motors, etc. When installing or removing the transmitter, the power supply must be disconnected first. Water entering the transmitter may cause irreversible changes.

3. Prevent chemical reagents, oil, dust, etc. from directly damaging the sensor. Do not use it for a long time in an environment with condensation or extreme temperature. Prevent cold and hot shocks.

## No. 3chapter Instructions

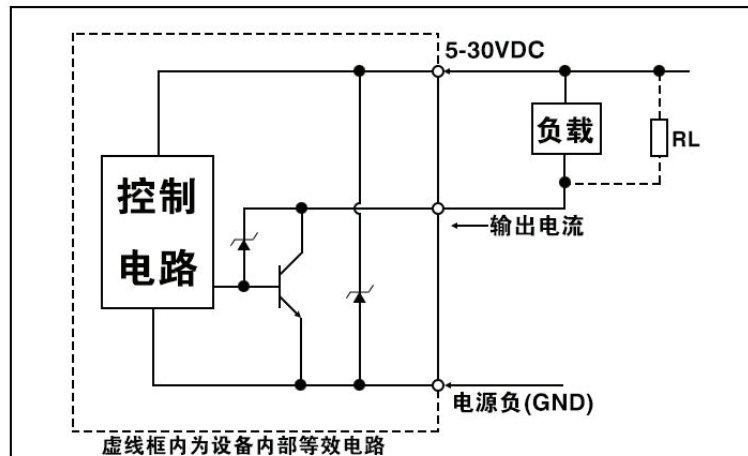
### 3.1Output circuit diagram

**PNP**The output circuit diagram is as follows: (maximum output current=100mA)



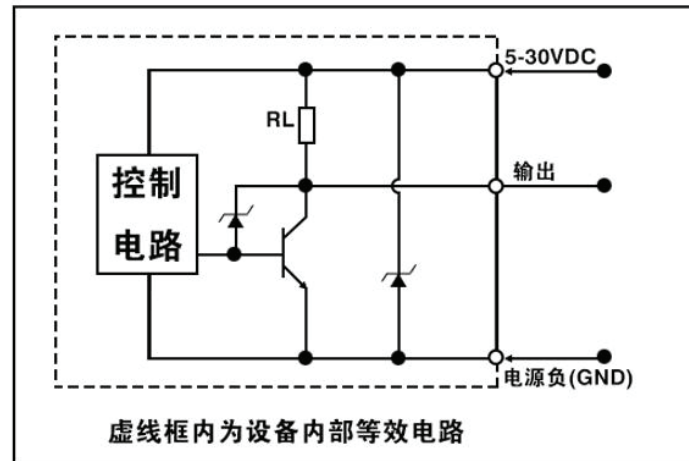
当使用电压信号时，需连接电阻 $R_L$ ，推荐阻值 $5.1K\Omega$ ，功率 $\geq 0.25W$

**NPN**The output circuit diagram is as follows: (maximum sink current=100mA)



当使用电压信号时，需连接电阻 $R_L$ ，推荐阻值 $5.1K\Omega$ ，功率 $\geq 0.25W$

**Internal pull-up resistor****NPN**The output circuit diagram is as follows: $R_L=5.1K\Omega$ )



## 3.2 Pulse output type calculation

Transmitter1Circle, Output20Pulse

For example, when the wind speed transmitter1schange1When the transmitter1sOutput20Pulses, representing wind speed1.75m/s.