

## LFM-110-W

### LEFOO Wind Speed Transmitter User Manual

# 1

## Overview

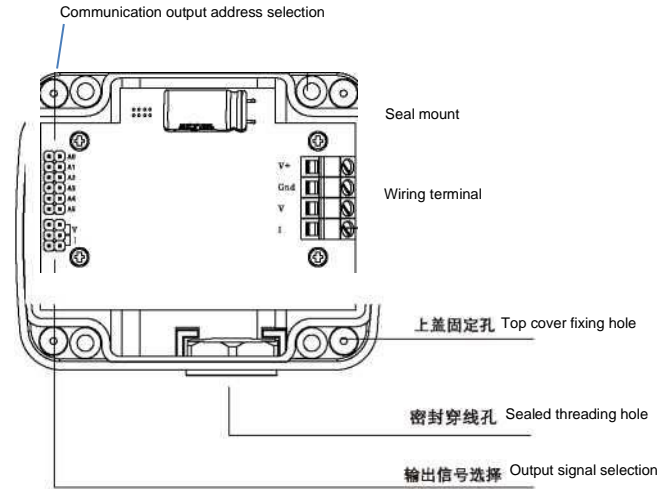
Wind Speed Transmitter produced by our company, has high-temperature corrosion-resistant material for the housing. Benefit from heat dissipation or Pitot tube principle, the Transmitter the requires minimum amount of air, and even in harsh environments, its performance is stable and reliable. Comparing with other traditional wind speed sensors, it has better stability, can ensure faster and accurate micro air volume measurement and accuracy, wide range ratio. The detection data is accurately calibrated in the full range through the internal micro-controller. Linear compensation and temperature compensation are realized digitally, so the accuracy and resolution are high. There is no zero drift, and long-term stability is excellent, making it more cost-effective. In addition, this series of transmitters can withstand instantaneous high wind speed and high wind pressure.

## Application

HVAC, filter pressure drop monitoring, flue gas treatment, textiles, chemicals, aviation, power plants, coal mines, pipeline air flow, variable air volume systems, micro-wind speed measurement fields, such as biological safety cabinets, operating rooms, clean rooms, biological laboratories, electronics, medical environment.

# 2

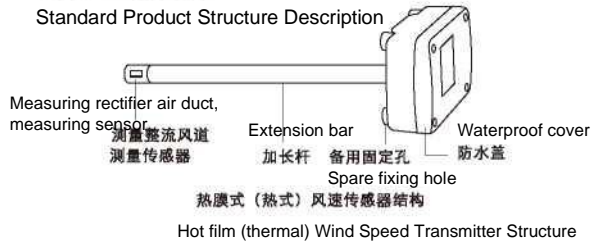
## Function and Layout



# 3

## 标准产品结构说明

### Standard Product Structure Description

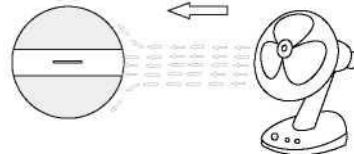


## Installation direction description

It is recommended that the wind direction measured on site is consistent with the direction calibrated by the factory, to obtain higher accuracy and more accurate measurement results.

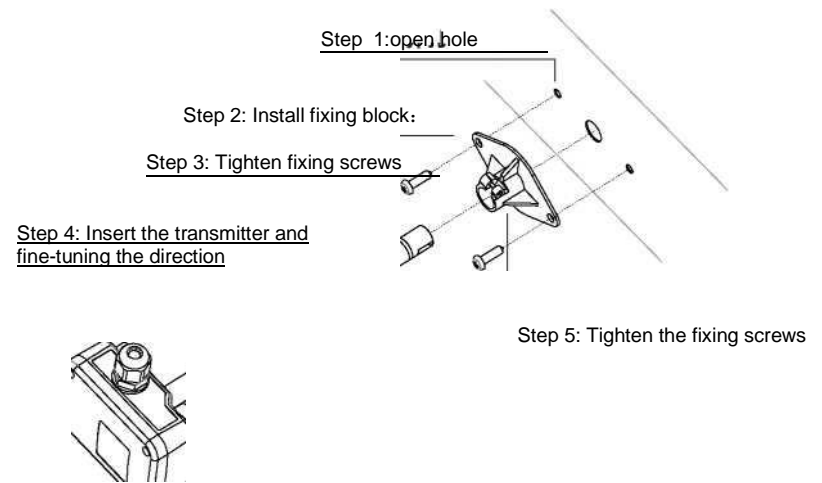


## 风向标示 Wind Direction

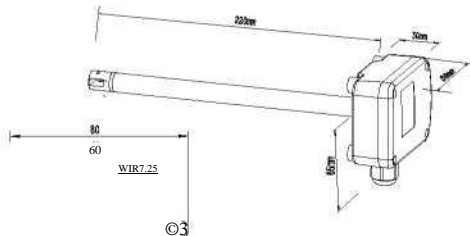


Sectional View of Hot Film Transmitter

## Installation explosion view



Installation Sequence Breakdown



Standard Transmitter Dimension

# 4

## Line Connection

### Power supply wiring

#### Direct Current(DC) power supply



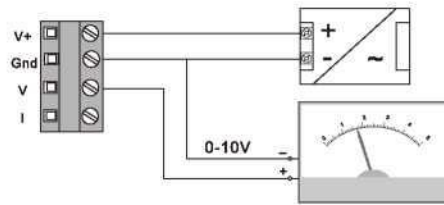
#### Alternating Current(AC) power supply



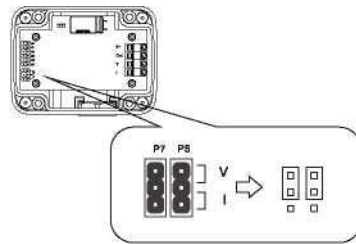
### Signal output wiring

#### Voltage signal output wiring method

#### 电压信号输出接线方法

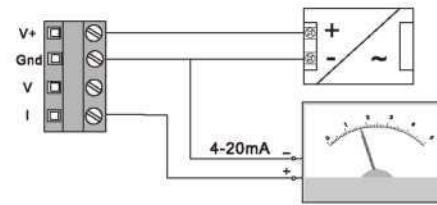


#### Voltage signal output jumper setting

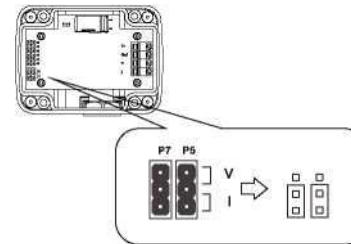


### Current signal output wiring method

#### 电流信号输出接线方法

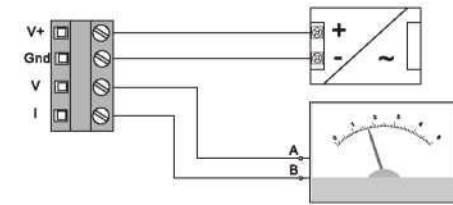


#### Current signal output jumper setting



### Rs485 Communication output wiring method

#### Rs485通讯输出接线方法



# 5

## Installation Key Points

### Installation Key Points

The ideal installation position for the Wind Speed Transmitter is a straight pipeline. When it must be installed in a curved pipeline, the following principles should be followed.

测量处位于进风弯管直径的4倍距离;即

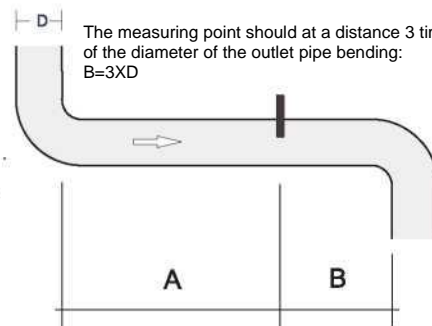
A=4XD

测量处位于出风弯管直径的3倍距离;即

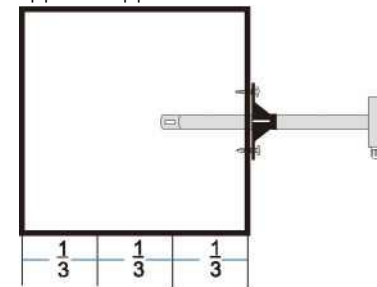
B=3XD

The measuring point should be at a distance 6 times of the diameter of the inlet pipe bending: A=6XD

The measuring point should be at a distance 3 times of the diameter of the outlet pipe bending: B=3XD



Due to pipelines difference, turbulence effect and the like factors, multiple position adjustments should be made when installing the Wind Speed Transmitter. It is recommended that the measurement point of the single-point Wind Speed Transmitter should be selected at 1/3 or 2/3 of the diameter of the pipe, and observe that the measurement result does not jump too much, avoiding measure the pipe wall or pipe center.



侧方安装  
Side Installation

### Technical Data

Range: refer to Transmitter marks

Accuracy: 0.2%fs

Resolution: 0.05m/S

Power supply:13-24VAC(DC)

Frequency: 50Hz

Output signal:

0-10VDC;4 · 20mA;(non-standard 0-5V, Rs485)

Operation Environment:Temperature -5--+7CTC;

Humidity: 0-90%RH, no condensation

Probe Length:Standard 220mm

Standard probe length shorter than 1500mm or non-standard probe length shorter than 5000mm can be customized.

Connection Terminal: 3X1.5<sup>2</sup>mm terminal, screw fastening

Wire length: BVVR0.5mm<sup>2</sup>, 70m

BVVR1mm<sup>2</sup>, 200m

BVVR1.5mm<sup>2</sup>, 300m