LEFOO

LFS10
AIR VELOCITY TRANSMITTER MANUAL

Product Operation Manual

OVERVIEW AND PARAMETERS

- Adopting imported high-precision MEMS sensor,long-term stability and anti-interference capability.
- Power supply and output has overload and reversed -connection function.
- Isolated output Optional.
- Strong anti-pollution ability, easy to install and maintain.

DESCRIPTION

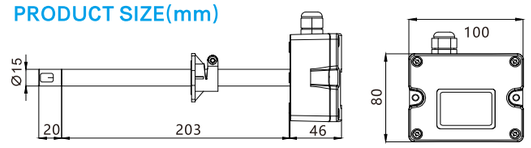
Based on heat conduction principle, the sensor probe of Air Velocity Transmitter LFS10 is made of MEMS technology which has the characteristics of high measurement accuracy wide measurement range,good stability, and strong environmental adaptability. It is an ideal choice for windspeed measurement in HVAC, pipeline air volume measurement, process and environmental controland other application scenarios.

DESCRIPTION

Working voltage	24V AC/DC±20%
Range	0-10m/s, 0-15m/s, 0-20m/s, 0-30m/s optional
Accuracy	±(0.2m/s+3%of mv)(20℃,45%RH and 1013hPa)

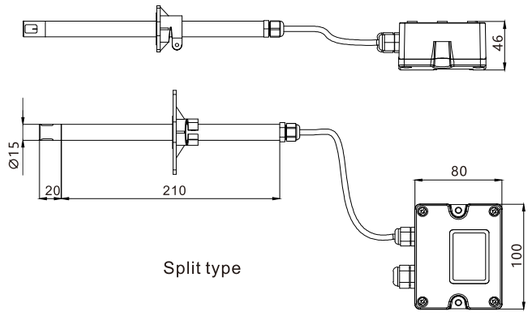
Resolution	0.01m/s
Output mode	RS485/Modbus,0~10VDC/4~20mA (3-wire) optional
Output load	⩽500Ω(Current type)，≥5KΩ(Voltage type)
Working temperature	-10~ 60℃
Storage temperature	-20 ~80℃
Probe length	210mm(optional)
Display	Optional LCD display with unit display and backlight
Protection	IP65，IP20(Probe)
Sheathing material	PC, PA6 （Probe）
Electromagnetic compatibility	EN 61326-1
Certification	ROHS，EU Electrical Safety Standards CE

PRODUCT SIZE(mm)



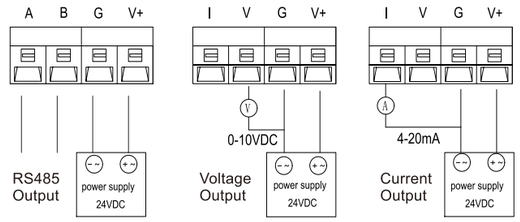
Duct type

DIMENSIONS AND WIRING



Split type

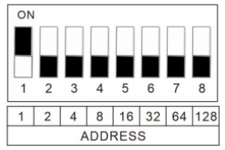
WIRING INSTRUCTIONS



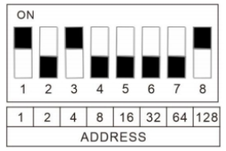
DIPSWITCHES AND RANGES

DIP SWITCH SETTINGS (RS485 VERSION ONLY)

The 8-digit DIP switch sets the slave address, the address can be set to 1-255, the factory default setting is 01, the setting method is as follows: dial to ON for 1, vice versa for 0, 1~8 digits on the dial panel represent low to high



- Default address 01,---0x01 (hex) 0000 0001(binary)



- The address is 1+4+128=133 0x85(hex) 1000 0101(binary)

Note 1: In order to prevent product damage, it is recommended to adjust the DIP switch in the event of a power failure, and after changing the address using the DIP switch, it must be powered on again for the change to take effect.

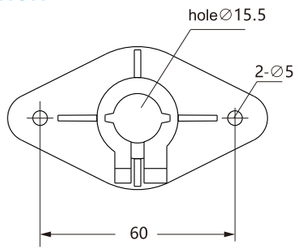
Note 2: The address set by the DIP switch has the highest priority when modifying the slave address online, all DIP switches must be set to 0 to modify successfully, if necessary, the DIP switch is preferred to modify the address

RANGE SELECTION (ANALOG OUTPUT VERSION ONLY)

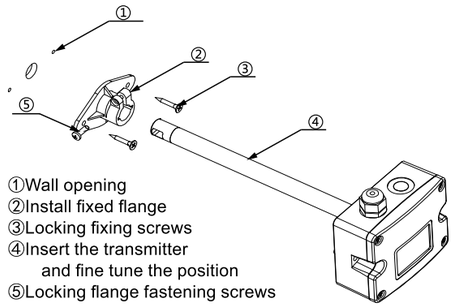
- Analog output products can be ranged by means of jumper caps.

INSTALLATION INSTRUCTIONS

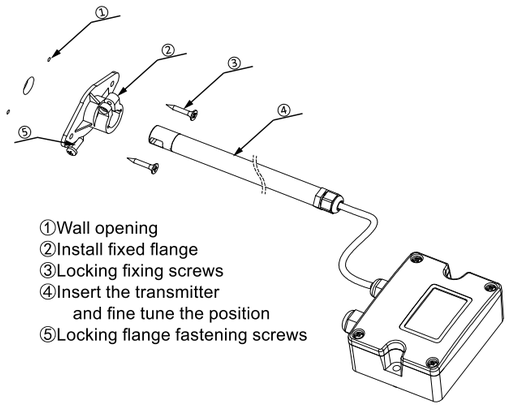
INSTALLATION



• Mounting Flange Size •



①Wall opening
②Install fixed flange
③Locking fixing screws
④Insert the transmitter
and fine tune the position
⑤Locking flange fastening screws



①Wall opening
②Install fixed flange
③Locking fixing screws
④Insert the transmitter
and fine tune the position
⑤Locking flange fastening screws

1. LFS10 recommends that flange accessories be used for installation, and the insertion depth can be adjusted. Fix the mounting flange on the air duct with two screws, and the screws on the flange can lock the inserted probe. The opening of the duct is φ 15.5mm. After the probe is installed, the duct should be sealed to avoid air leakage.

2. When installing the air duct, pay special attention to the fact that the air inlet is consistent with the wind speed flow inside the duct, and the sensor is parallel to the wind speed flow.

SELECTION

3. Open the upper cover, connect the power wires and signal wires into the bottom box through the waterproof connector, complete the wiring according to the wiring diagram, and install the upper cover back as it is. Pay attention to the sealing between waterproof joint and bottom box (with sealing ring) and the sealing between upper cover and bottom box (with sealing ring), so that the overall protection level can reach IP65.

4. Do not touch or rub the sensor probe, and do not use any mechanical tools to clean it.

SELECTION INSTRUCTIONS

LFS10-	Air Velocity Transmitter			Model
	VI	0~10VDC/4~20mA		Output
	RS	RS485/Modbus		
		1	Duct Type	Installation method
		2	Split type	
		D	With display	Display
		N	Without display	

- Selection example LFS10-RS1D: Duct-type wind speed transmitter, output: RS485/Modbus, with display.