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WPCCM

Air Flow and Velocity Transmitter

INSTRUCTION AND MAINTENANCE MANUAL (IOM)

Product Overview

The air flow sensor (transmitter) is designed for precise measurement of air velocity below 30 m/s (customizable ranges). The high-precision thin film sensor used in this product ensures the high precision and response speed of the transmitter. It is manufactured based on the principle of hot film anemometer. By installing the flange in conjunction with the wind speed transmitter, the insertion depth can be continuously changed on the pipeline. Measurement range and response time can be adjusted by inserting jumper wires on the circuit board. Wind speed transmitters are specifically designed for accurate and reliable wind speed measurement in building automation and ventilation applications.

Attention

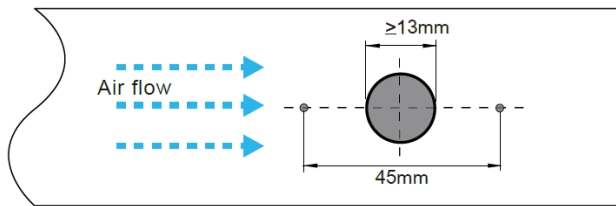
- The accuracy and stability of the air velocity measurement of the transmitter depend on the correct installation and positioning of the probe
- Accurate measurements can only be made when the probe is installed in a straight flow position
- For duct installation, the installation position must be observed and combined with the inlet and outlet to determine the laminar flow path
- The installation environment should be well protected and should not be installed in corrosive environments or air that can produce condensation

Technical Specifications

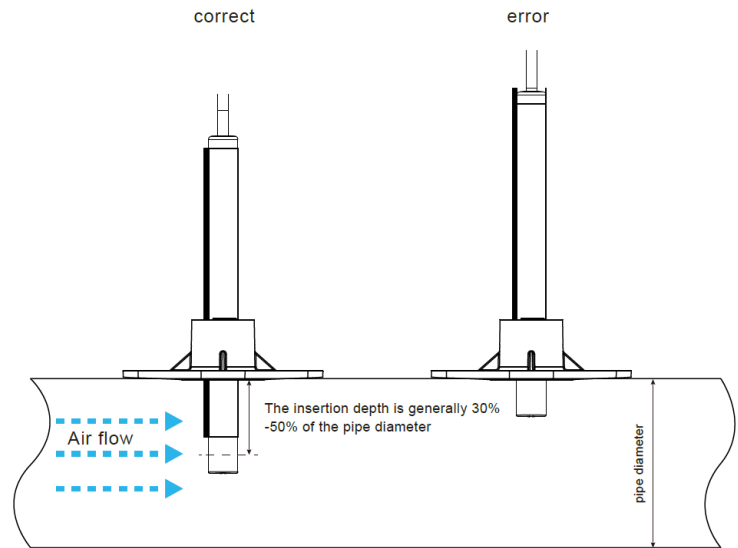
Specifications			
Measurement Range	0...5m/s	0...20m/s	0...40m/s
	0...10m/s	0...25m/s	0...50m/s
	0...15m/s	0...30m/s	0...60m/s
Output 0...10m/s / 0...15 m/s / 0...20 m/s	0...10 V4-20 mA MODBUS Customize	-1 mA< I <1 mA R < 500 (linear, 3-wires) Rs485 Customize	
Accuracy	0.2...10m/s	±(0.2 m/s + 3 % of m.v.)	
	0.2...30m/s	±(0.2 m/s + 3 % of m.v.)	
	0.2...40m/s	±(0.2 m/s + 3 % of m.v.)	
	Customize	Customize	
Response Time	0.1 seconds (at constant temperature) adjustable		
Power Supply	24V AC/DC + 20% 220 VAC		
Operating Current	Communication Power Supply: Maximum 170 mA DC Power Supply: Maximum 70 mA		
Electrical Connection	Screw fastening terminal, maximum wire size 1.5mm (AWG16)		
Cable Sealing Sleeve	M16 x1.5		
Electromagnetic Compatibility	EN61326-1 EN61326-2-3 Industrial Environment		
Material	Polycarbonate, UL94V-0 approved		
Protection Level	IP65 shell. IP00 probe		
Temperature Range	Probe Operating Temperature	-25... +50°C (-13..122°F)	
	Operating Temperature of Electronic Component	-10 ... +50°C (14..122°F)	
	Storage and Transportation Temperature	-30 ... +60°C (-22..140°F)	
Operating Humidity	5...95% RH (no condensation)		

INSTALL

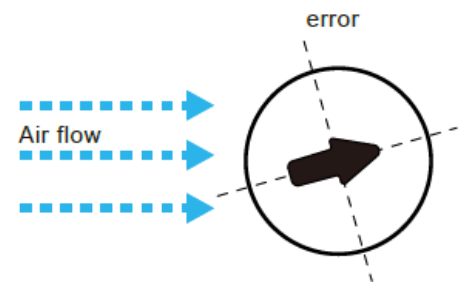
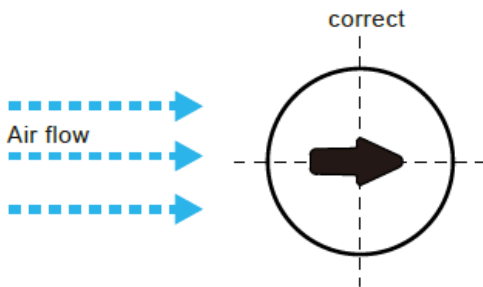
Holes for installing flanges > hole spacing drilled on the pipe wall: 45mm in a straight or cross arrangement



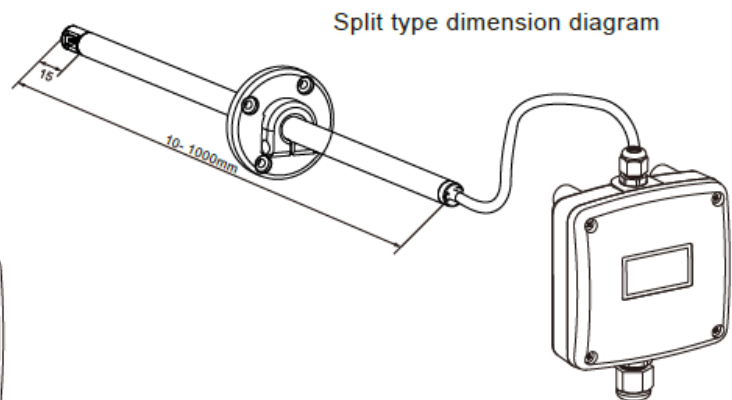
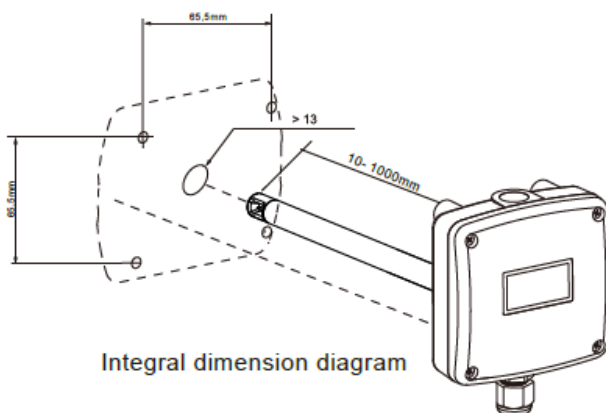
Adjust the depth of inserting the sensor probe. Observe that the measured air flow rate is stable and ensure that the sensor head is completely submerged in the flow. Proper installation and adjustment are crucial for measurement accuracy.



Adjust the sensor probe in conjunction with the flange to ensure that the air flow transmitter is aligned parallel to the airflow direction



DIMENSIONS (MM)



CABLE CONNECTION

Quasi output type wind speed(air volume)sensor

Applicable to the following sensors

Non display wind speed sensor

Display type wind speed sensor

Non display wind speed and volume sensor

Display type wind speed and volume sensor



Analog output type

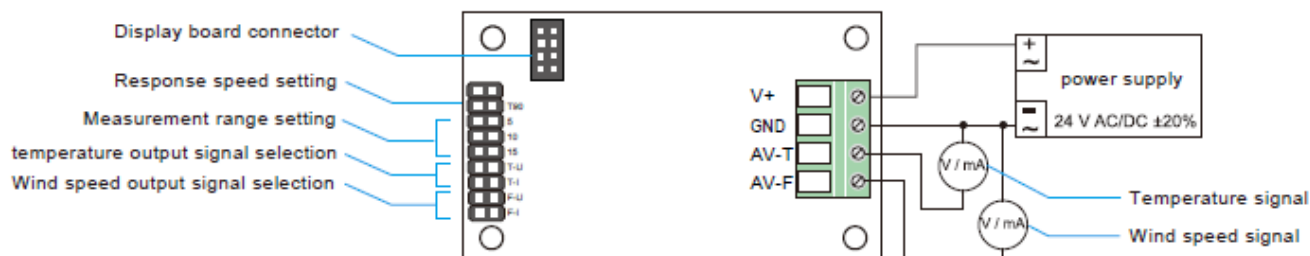
Applicable to the following sensors

Non display type wind speed and temperature sensor

Display type wind speed and temperature sensor

Non display type wind speed and air volume temperature sensor

Display type wind speed and air volume temperature sensor



RS485 communication output type

Applicable to the following sensors

Non display wind speed sensor

Display type wind speed sensor

No display type wind speed and airvolume sensor

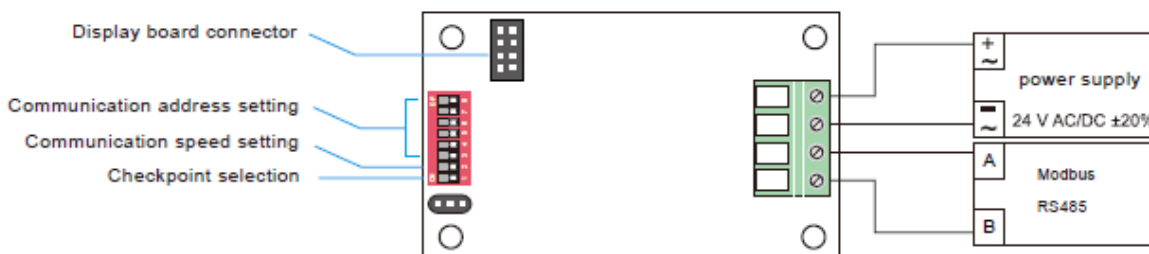
Display type windspeed and air volume sensor

Non display wind speed and temperature sensor

Display type wind speed and temperature sensor

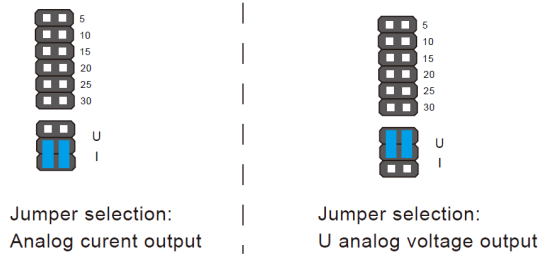
Non display type wind speed,air volume,and temperature sensor,

display typewind speed,air volume,and temperature sensor

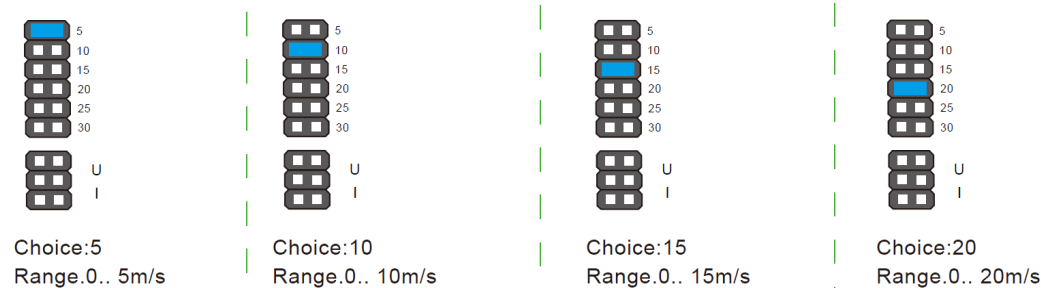


WPCM Series Air Flow and Velocity Transmitter

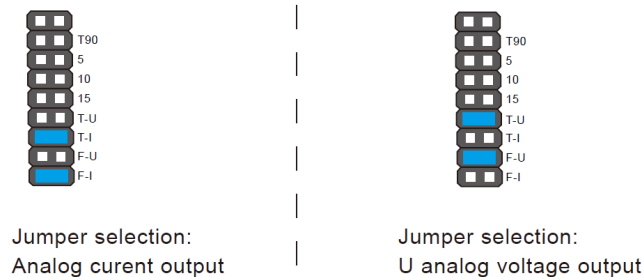
OUTPUT SIGNAL SELECTION



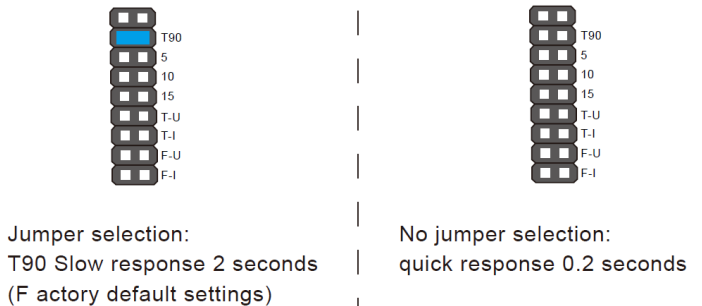
COMBINATION MEASUREMENT RANGE SETTINGS



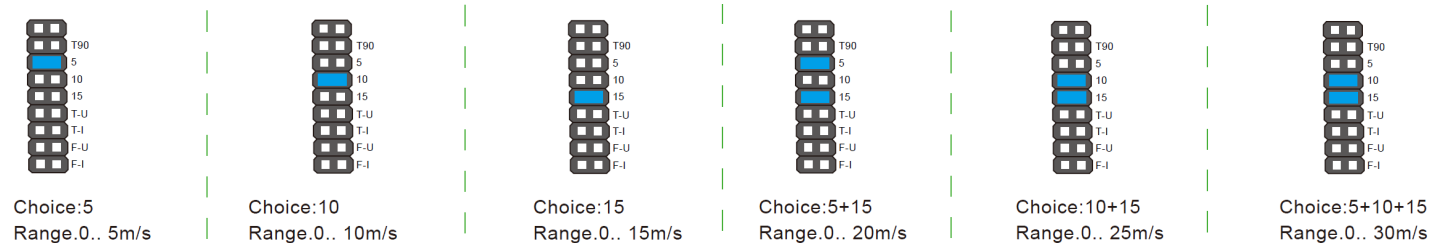
OUTPUT SIGNAL SELECTION



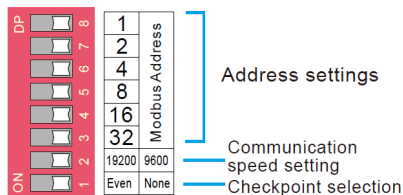
RESPONSE TIME SETTING



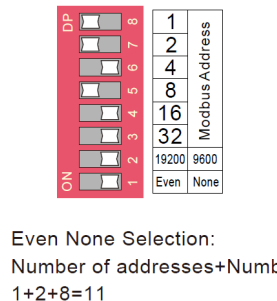
COMBINATION MEASUREMENT RANGE SETTING



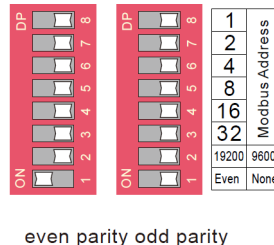
DIAL CODE INSTRUCTIONS



COMBINATION ADDRESS SETTING



PARITY CHECK SETTINGS



COMMUNICATION SPEED SETTING

