WS3033 Ultrasonic Wind Speed And Direction Detector For Tunnel

MAIN FEATURES

- Cast aluminum fuselage, surface treatment, adapt to the harsh environment of the tunnel
- The sampling area is across the inner lane of the tunnel, which reflects the gas velocity in the tunnel more realistically
- The ultrasonic testing principle is adopted, which is not affected by the ambient temperature
- Non contact detection, no moving parts inside, reduce the failure rate

OVERVIEW

WS3033A tunnel ultrasonic wind speed and direction detector is a special type for tunnel. The detection probe is installed on the tunnel wall to provide the wind speed and wind direction detection value in the tunnel for the tunnel general control room as the basic basis for ventilation and operation. At the same time, the analog and switch signal output from the data output interface can be connected to the PLC in the nearby sub control room, and then the data optical transceiver and optical fiber can be connected to the main control room.

SPECIFICATION

Measurement principle	Ultrasonic Technology
Installation method	tunnel side wall
Measurement range	wind speed - 30 m / s ~ +30 m / S
Measurement accuracy	wind speed ± 0.1 M / S
Average time	0.1 seconds ~ 60 minutes adjustable
Switch output	two passive relay outputs
Digital interface	RS232, RS485
Power supply voltage	220 VAC ± 10%, 50 Hz / 60 Hz
Protection grade	IP67

OVERVIEW

WS3033B tunnel ultrasonic wind speed and direction detector is specially designed and manufactured for on-line monitoring of wind speed and direction in the tunnel. Based on the principle of ultrasonic time difference method, two ultrasonic probes are respectively installed on the walls on both sides of the tunnel. When the air flow in the tunnel passes between the two ultrasonic probes, the time difference between ultrasonic waves transmitting beams from each other can be obtained Wind speed and wind direction.

Measurement principle	ultrasonic time difference method
Installation method	on both sides of the tunnel
Measurement range	wind speed: - 30 m / S ~ +30 m / S
Measurement path	5m 50m
Measurement accuracy	wind speed ± 0.1 M / S
Average time	1 second
Switch output	two passive relay outputs
Digital interface	RS232, RS485
Communication protocol	MODBUS
Power supply voltage	220 VAC ± 10%, 50 Hz / 60 Hz
Protection grade	IP67

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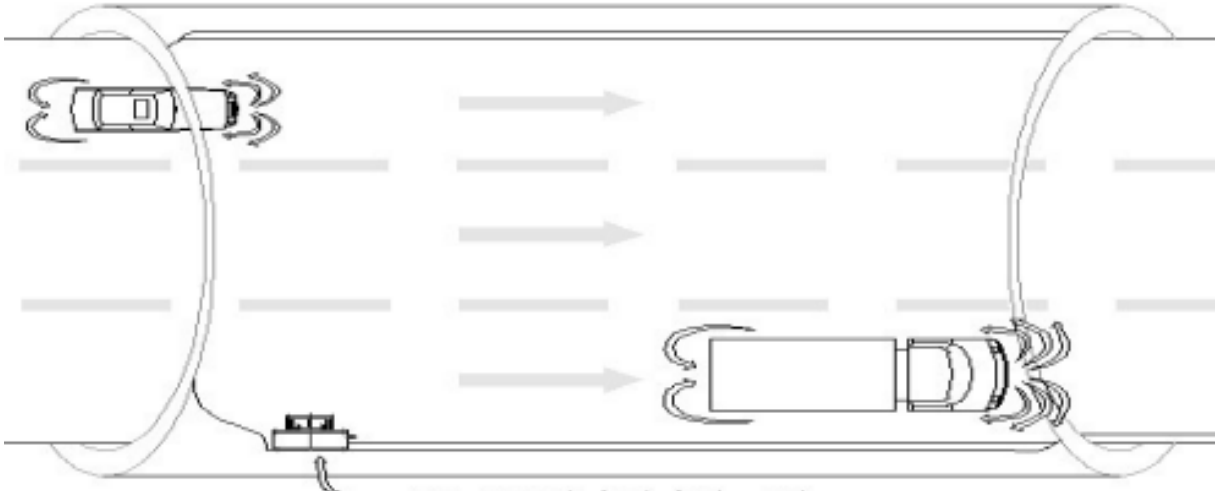
INSTALLATION

According to the requirements of the joint design drawings, it is directly installed on the tunnel wall with a height of 3-4 meters on the right side of the tunnel wall in the direction of tunnel traffic. Two twisted pair shielded wires or RVVP4 * 0.3 are used for transmission signal cable.



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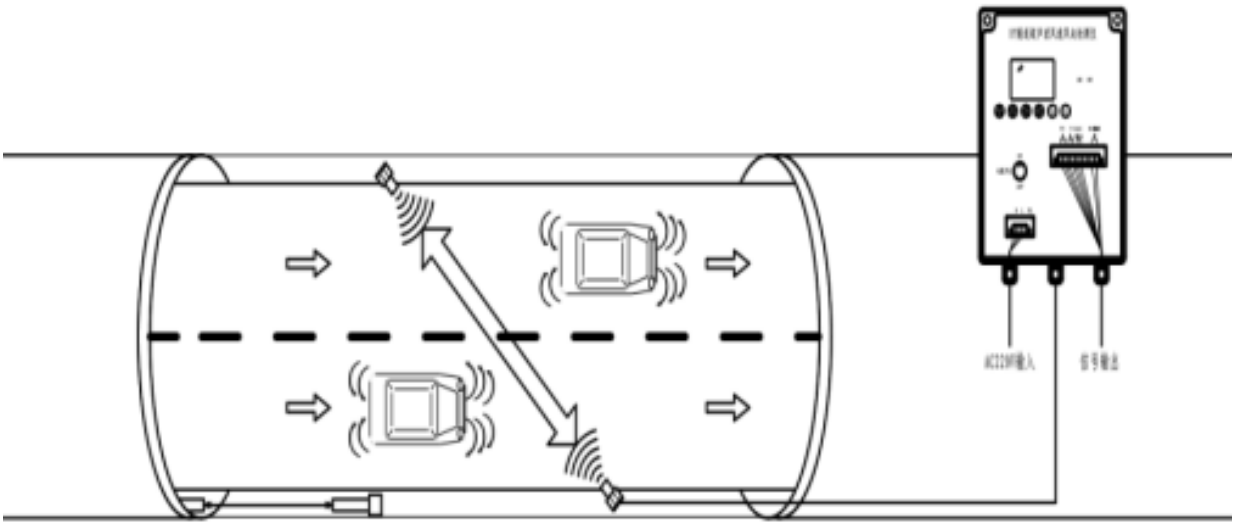

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