

RK100-05 Pipe Wind Speed Sensor is designed based on the principle of hot-wire, the probe and housing adopt resistance to high temperature and anti-corrosion materials. In the bad environment, it also can work stably and reliably. It can quickly and accurately tiny air flow measurement. The product has realized high precision and high resolution through internal linear compensation and temperature calibration, and long-term stability is extremely good, which should be installed directly.

## FEATURES

- High accuracy in low speed
- High resistance to the instantaneous wind speed
- Strong corrosion resistant ability
- Wide range, good stability
- Various output signals optional
- Easy Installation



## APPLICATIONS

- HVAC
- Air condition
- Ventilating system
- Flue gas cleaning system
- Air purification system

## SPECIFICATIONS

| Item                  | Specification  |
|-----------------------|--|
| Output                | 4-20mA,0-10V,RS485,0-5V                              |
| Supply                | 12-24VDC   |
| Range                 | 0-5m/s,0-10m/s,0-20m/s,0-30m/s                       |
| Response time         | <1s  |
| Accuracy(0-50℃)       | ±3%FS  |
| Resolution            | <0.05m/s   |
| Power consumption     | <80mA@24VDC(4-20mA)<br><60mA@24VDC(RS485,0-5V,0-10V) |
| Long-term stability   | ±0.1m/s per year                                     |
| Display               | optional   |
| Ingress protection    | IP55   |
| Operating temperature | -20℃~+70℃  |
| Main material         | ABS  |
| Probe length          | 210mm typ., Other length can be customized           |
| Storage condition     | 10℃-60℃@20%-90%RH                                    |

## OUTPUT CHARACTERISTICS

- **4-20mA**
- $$V(m/s)=((I_{out}-4)/(20-4))*(Range\_max-Range\_min)+Range\_min$$
- **0-10V**

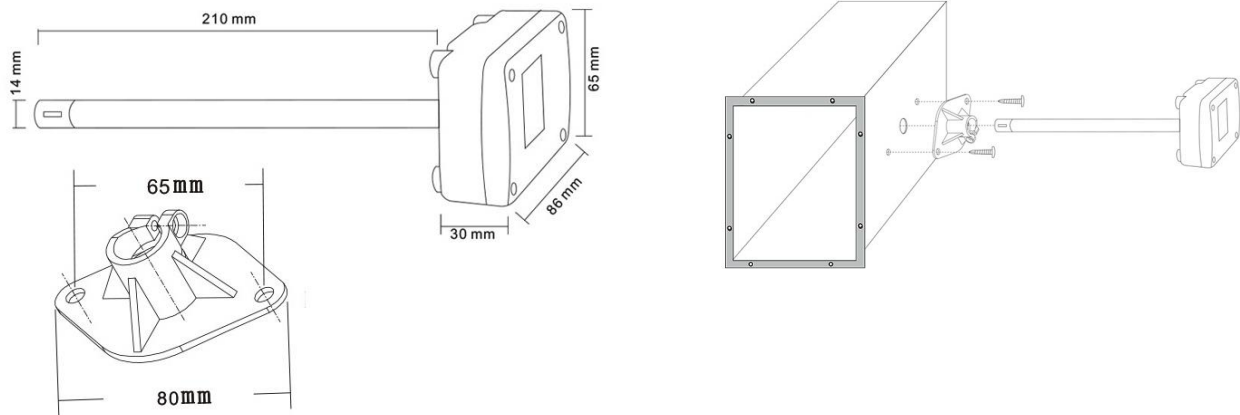
$$V(m/s) = (V_{out}/10) * (Range_{max} - Range_{min}) + Range_{min}$$

- **RS485**

If the transmission distance is over 100m, please add a 120Ω terminal matching resistances on the front end and back end of bus interface respectively. See the modbus communication protocol specification.

## DIMENSION & MOUNTING

When installing the product, please keep the direction of the arrow on the probe and the direction of the wind.




## PARAMETER SELECTION TABLE

| Remark | Series | Type | Output | Range | Display |                 |
|--------|--------|------|--------|-------|---------|-----------------|
| RK     |        |      |        |       |         |                 |
|        | 100    |      |        |       |         |                 |
|        |        | 05   |        |       |         |                 |
|        |        |      | A      |       |         | 4-20mA          |
|        |        |      | B      |       |         | 0-10V           |
|        |        |      | C      |       |         | RS485           |
|        |        |      | X      |       |         | Other           |
|        |        |      |        | A     |         | 0-5m/s          |
|        |        |      |        | B     |         | 0-10m/s         |
|        |        |      |        | C     |         | 0-20m/s         |
|        |        |      |        | D     |         | 0-30m/s         |
|        |        |      |        | X     |         | Other           |
|        |        |      |        |       | D       | With display    |
|        |        |      |        |       | N       | Without display |

Example: RK100-05ABN Output:4-20mA, Range:0-10m/s, without display

The default power supply voltage is 12-24VDC, if you have other requirements please confirm when ordering.


 Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.0

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