



## Description

The HWS14\_M is optimized for highly accurate measurement of very low air velocity in laminar flow control and special ventilation applications, for instance in clean rooms. HWS14\_M series provides current, voltage signal or RS485 output. In addition, HWS has LCD display and models with independent sensor probe.

## Feature

- Multiple output signals are optional.
- Linear compensation and temperature compensation, improve the accuracy and resolution.
- Good stability.
- Measured faster and more accurately.
- Multiple input ranges are optional.

## Applications

- HVAC.
- Filter pressure drop monitoring.
- Flue gas treatment.
- Textile, chemical, aviation, power plant, coal mine application.
- Pipeline air flow.
- VAV system.
- Biosafety cabinet.
- Operating room, purification room, biological laboratory, electronic medical environment and other fields.
- Slightest breeze velocity measurement.



## Technical data

### Input

|               |  |
|---------------|--|
| Working range | 0-1m/s, 0-2m/s, 0-5m/s, 0-10m/s, 0-15m/s, 0-20m/s, 0-30m/s, 0-40m/s, 0-50m/s |
| Accuracy      | 0.2%fs   |
| Resolution    | 0.05m/s  |
| Response time | 0.2 sec at constant temperature  |

### Output

|               |                                |
|---------------|--------------------------------|
| Output signal | 0-10Vdc, 4-20mA, 0-5Vdc, RS485 |
| Protocol      | Modbus RTU                     |
| Display type  | LCD module                     |

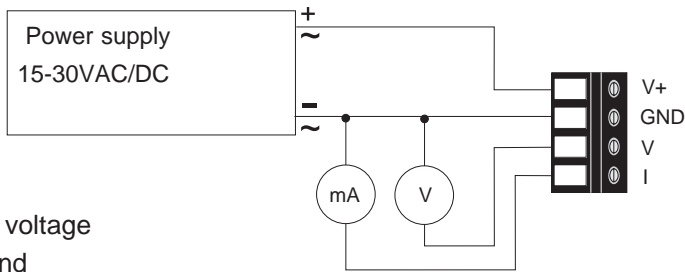
### Supply

|                     |                                     |
|---------------------|-------------------------------------|
| Power supply        | 24Vac/dc or 12Vac/dc $\pm$ 20%      |
| Frequency           | 50Hz                                |
| Current consumption | 170mA(AC supply) or 70mA(DC supply) |

### General

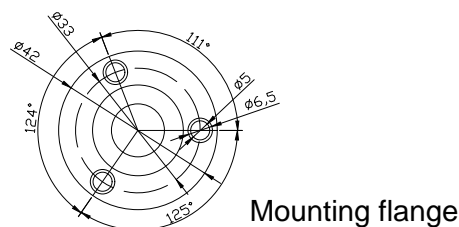
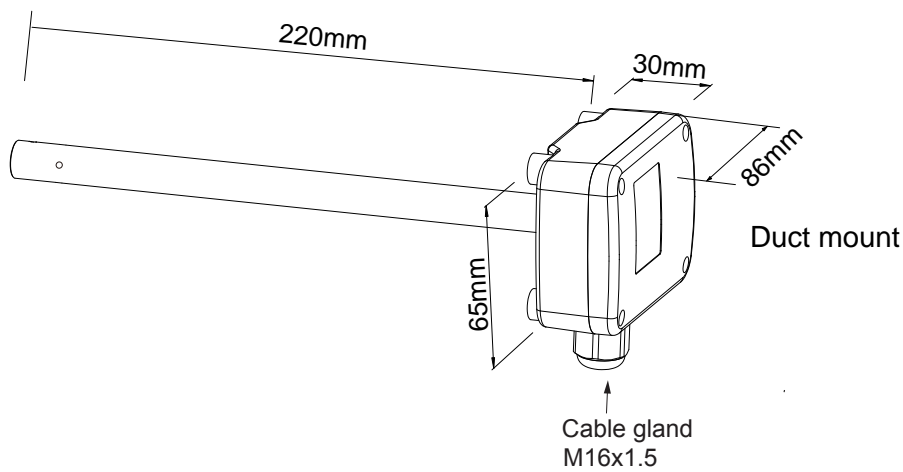
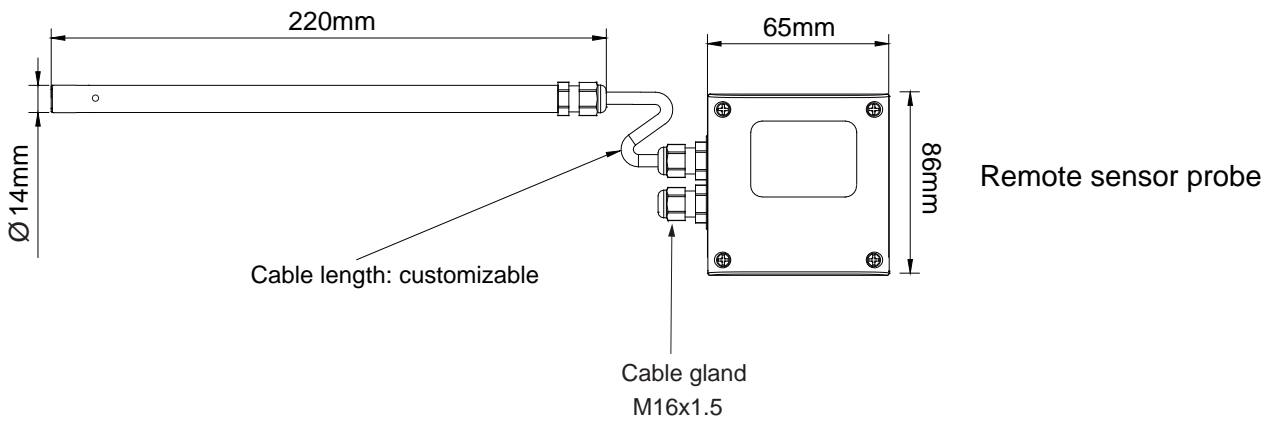
|   |   |
|---|---|
| Cable gland                                   | M16x1.5   |
| Electromagnetic compatibility                 | EN61326-1, EN61326-2-3  |
| Enclosure material                            | Polymer resin, RoHS certified   |
| Protection class                              | Enclosure IP65, remote probe IP20   |
| Installation                                  | Duct / remote, flange   |
| Storage temperature                           | -10 - +80°C   |
| Working environment temperature               | -20 - +80°C   |
| Working environment temperature(probing rod ) | -40 - +200°C  |
| Humidity                                      | Not condensation from 0-90%RH   |
| Length of probe                               | 220mm standard  |
| Electrical connection                         | Screw terminals max. 1.5 mm <sup>2</sup>  |
| Material                                      | Aluminum rod  |
| Installation                                  | Flange installation   |
| Cable length                                  | BVVR 0.5mm <sup>2</sup> allow 70m, BVVR 1mm <sup>2</sup> allow 200m, BVVR 1.5mm <sup>2</sup> allow 300m |

### Analogue output



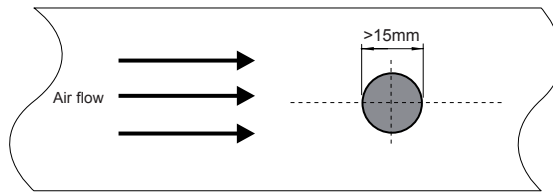
V+ = supply voltage  
 GND = ground  
 V = voltage output (RS485 A)  
 I = current output (RS485 B)

### Structure and dimension

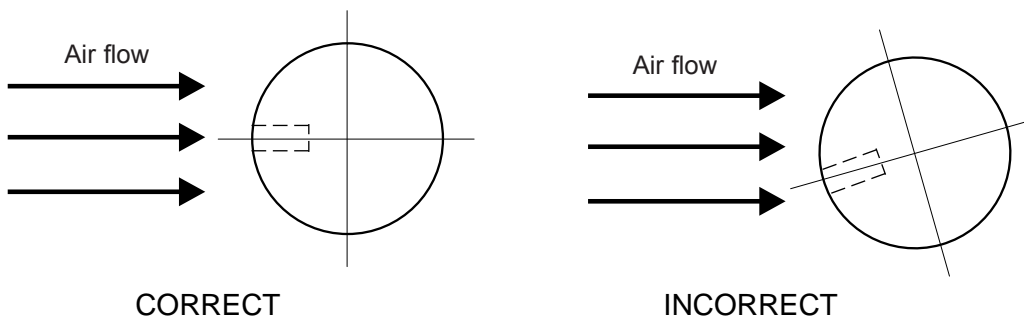


## Mounting

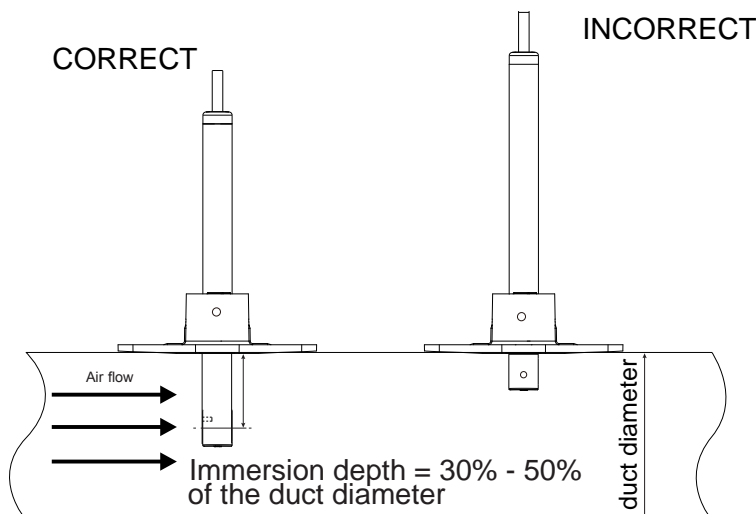
Drilling in the wall of the duct for installing the mounting flange.



The arrow engraved on the sensing head of HWS\_M indicates the direction of the air stream during factory adjustment. When installing the HWS probe, make sure that the arrow matches exactly the flow direction.



The mounting flange allows for precise setting of the HWS\_M immersion depth in a duct. The entire sensing head must be in the air flow to be measured.





## Model description

