



# JAD SMART Fume Hood

## Vertical Movement Sash Sensor

### SSD-V10



#### OVERVIEW

**SMART SSD-V10 Fume Hood Vertical Movement Sash Sensor** is a linear sensor that measures the extension and contraction of the spring-loaded cable and converts to an electrical output signal. The function is to measure the fume hood sash height and calculate the sash opening area. This signal is then sent to a VAV Venturi Valve to control a constant face velocity of 0.3/0.5 m/s within the minimum and maximum airflow volume allowable.

**SMART SSD-V10** utilizes a potentiometer in a spring coil structure to measure the sash height position through the varying resistance value. This resistance value is then converted to a 0-5vdc signal and input into the DDC controller of the variable air volume venturi valve for face velocity control accordingly to international guideline like ASHARE 110-2016.

#### APPLICATION

**SMART SSD-V10 Fume Hood Vertical Movement Sash Sensor** is suitable for fume hood face velocity control due to its fast response, stable and linear signal especially for fume hood with only vertical sash. Fume hood that has combinations sashes is recommended to use side wall sensing instead of sash sensing technique with SMART KfV Air Velocity Transmitter for better response. SMART SSD-V10 is used in conjunction with VVA Venturi or fast response VAV box and SMART SHT 5631 Fume Hood Touch Screen Monitoring System to control, monitor and alarm alert to ensure the user safety in operating the fume hood.

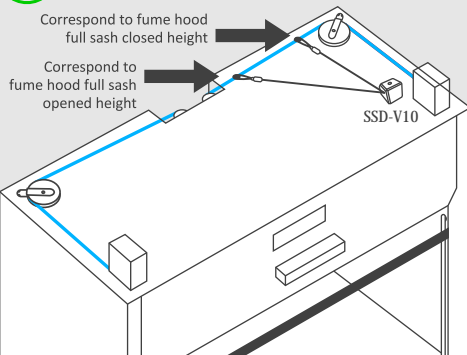
#### TECHNICAL SPECIFICATIONS

<b>Product Model</b>	<b>SSD-V10-40</b> (Maximum stroke 1000mm) <b>SSD-V10-80</b> (Maximum stroke 2000mm)
<b>Linear Accuracy</b>	Above 0.1%
<b>Output Signal</b>	0~5KΩ
<b>Drawstring Material</b>	Multi-strand stainless steel cable
<b>Operating Temperature</b>	0°C to 60°
<b>Repeatability</b>	Above 0.01%
<b>Relative Temperature</b>	20% to 90% non-condensing
<b>Drawstring Diameter</b>	0.65mm
<b>Included Cable</b>	1m, 3×0.3mm cable

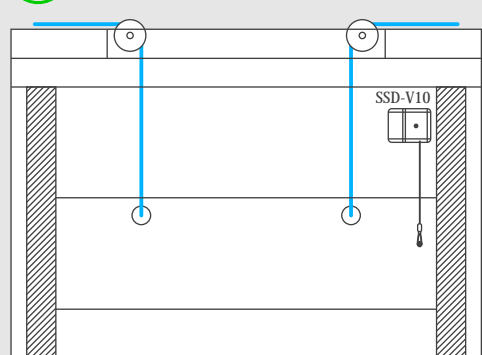
## INSTALLATION METHOD



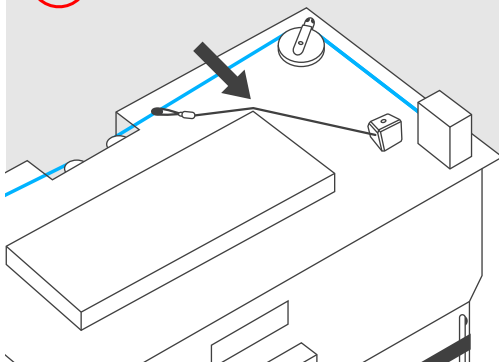
### MOUNTED ON TOP OF THE FUME HOOD



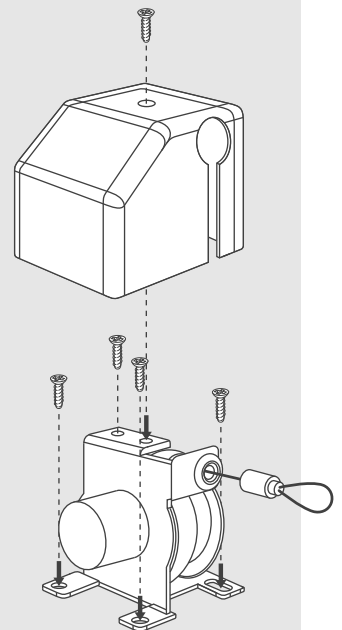
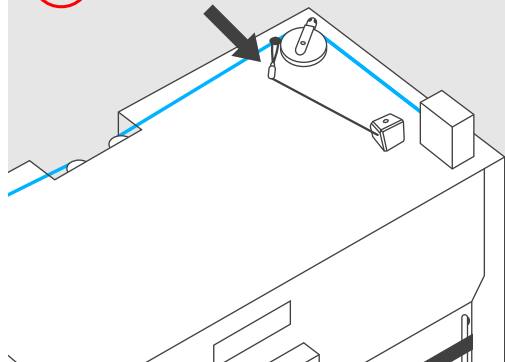
### MOUNTED ON THE BACK OF THE FUME HOOD



### SSD-V10 WIRE DRAWSTRING BLOCKAGE

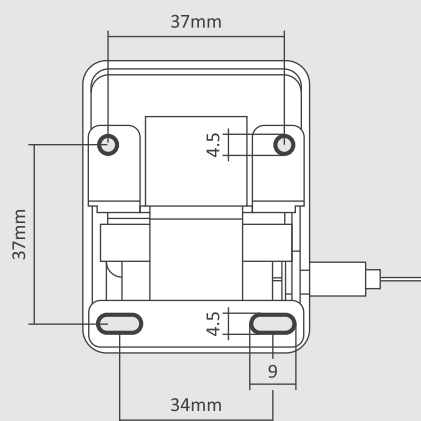
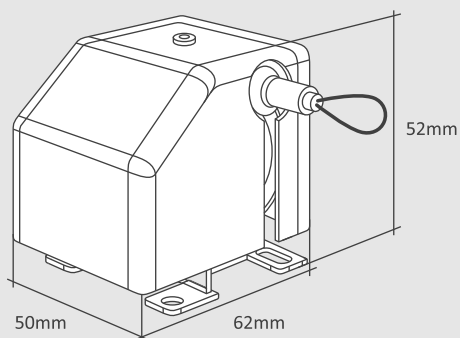


### SSD-V10 WRONG FIXING OF WIRE DRAWSTRING

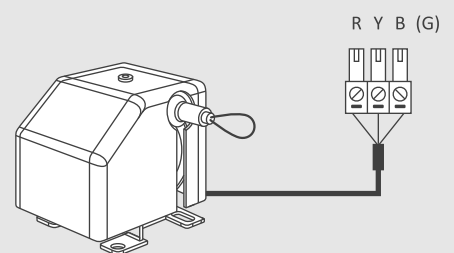
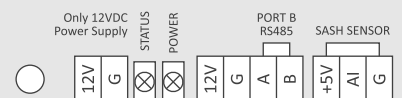


### INSTALLATION METHOD

1. Remove SSD-V10 protective cover screw and then the protective cover.
2. Put the SSD-V10 in place and install the screws one at a time in the 4 mounting bracket screw holes.
3. Close the protection cover and tighten the protection cover screw.



### VVA FUME HOOD CONTROLLER



everything under control

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