

## FS-521 Air Flow Paddle Switch



### Features:

- Adjustable switching point
- High capacity, fully encapsulated N/C, N/O micro-switch

### Benefits:

- Lid-mounted screws provide tamper proofing
- Cost-effective flow switch for many HVAC applications

### Technical Overview

The FS-521 is a paddle switch intended to monitor air flow within ductwork and provide a switch output on detection of either a specific flow rate or flow failure.

Switching sensitivity can be adjusted by means of a calibration screw within the unit. The paddle can be trimmed to increase sensitivity if necessary.

## Specification:

## Part Codes:

Contact Rating: 250Vac 16(6)A  
 Switch: Dust tight microswitch  
 Switching:  
     Minimum setting  
         Cut in   Cut out  
         2.5m/s  1m/s  
     Maximum setting  
         Cut in   Cut out  
         9.2m/s  8m/s

Dimensions:  
     Housing       133 x 70 x 70mm  
                     (4.45 x 2.76 x 2.76")  
     Paddle        175 x 80mm (6.89 x 3.15")

Materials:  
     Main Body     ABS  
     Rod            Brass  
     Paddle:        Stainless steel.

Temperature range:  
     Media         -20 to +120°C (-4 to 248°F)  
     Ambient       -20 to +70°C (-4 to 158°F)

Protection        IP65  
 Country of origin   China

**FS-521**  
 Duct air flow switch



The products referred to in this data sheet meet the requirements of EU 2014/30/EU and 2014/35/EU

## Installation:

- The switch should be installed in a straight length of duct of 5 x diameter before and after the location of installation to avoid air swirl and paddle instability, and as far away from bends as possible.
- The arrow on the side of the switch should coincide with the direction of air flow.
- Care should be taken not to damage the paddle during installation.
- The switch can be mounted in any aspect but is factory set for use in a horizontal plane. In vertical installations some adjustment may be necessary to take account of the weight of the paddle and switch arm.

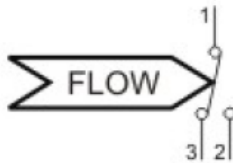
### Note:

The units are calibrated to the minimum switch-off value. A higher value can be adjusted by turning the range screw clockwise. Due to the risk of fracture at air speed higher than 5 m/s the paddle must be cut off on the marked side. When the paddle is cut off, the minimum cut-out value increases from 1 m/s to 2,5 m/s.

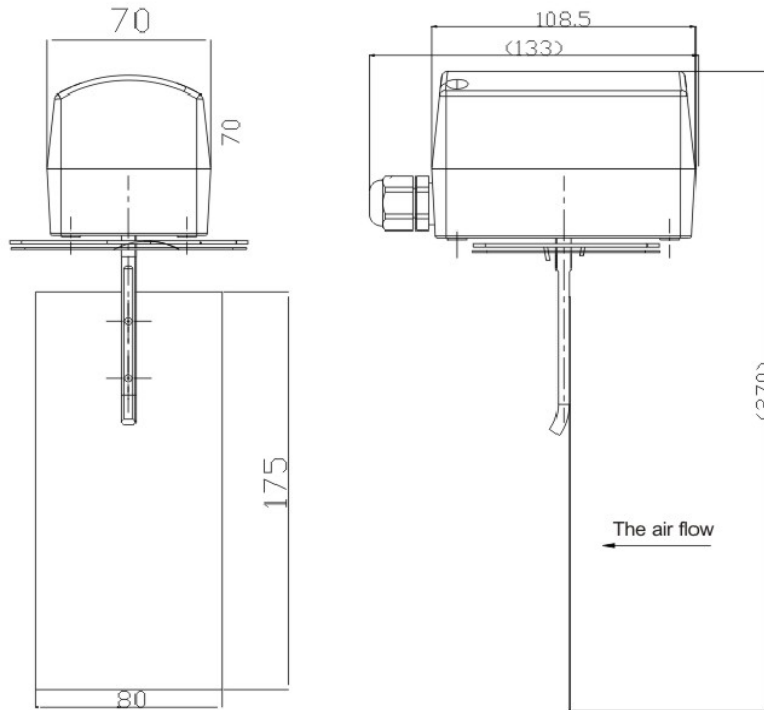
## Connections:



Dangerous voltages may exist within this unit. Connection should be carried out by a competent and suitably qualified electrician only. The relevant earthing requirements should be observed when connecting the unit, especially when using higher voltages. Do not over tighten the terminals.



## Dimensions:



Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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