



# AFS1

## Air flow switch

AFS1 is a electro-mechanical flow switch for use in ventilation systems.

The AFS1 flow switch is intended for flow control of air and non-aggressive gas. They have a built-in switch with an alarm signal for flow shortage signalling.

### Applications

AFS1 is well-suited for ducts used in general industrial applications, such as:

- Air conditioning systems
- Ventilation ducts
- Air treatment facilities

### Installation

The flow switch can be installed in either a horizontal or vertical position.

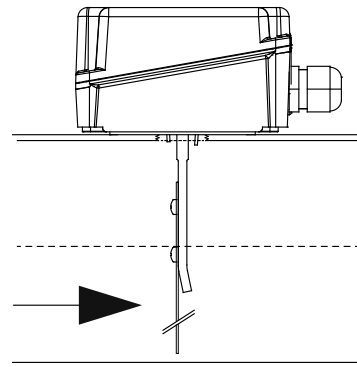
The air flow breakpoint can be changed by turning the setting screw under the cover. The unit is set to the lowest setting on delivery.

If air flow in the duct exceeds 5 m/s, the paddle may risk fracturing. When used at greater speeds, the paddle must therefore be trimmed by being vertically cut to an appropriate width (indicated on the back of the paddle). When properly trimmed, the minimum measuring range of the device will increase from 1 m/s to 2.5 m/s.

The device should be mounted so that the arrows match the flow direction of the air stream inside the duct (see picture on right).

### Short facts about AFS1

- Paddle can be trimmed to fit higher air flows
- For vertical or horizontal mounting
- Breaking capacity 15 (8) A at 24...250 V AC
- Protection class IP65



If the duct is vertical, the range of the flow switch must be recalibrated so that the paddle weight is properly balanced.

AFS1 must be installed in a straight duct with an unimpeded length of at least 5 times the duct diameter available both upstream and downstream of the unit, in order to prevent air swirl and paddle instability.

**Note:** If the flow switch is used as a minimum flow controller, it is necessary to add another device downstream from the first one for alarm condition activation.

## Models

Type	Min. air flow (m/s)	Max. air flow (m/s)	Max. air temp (°C)
AFS1	1.0 (not trimmed) or 2.5 (trimmed)	8.0 (not trimmed) or 9.2 (trimmed)	85

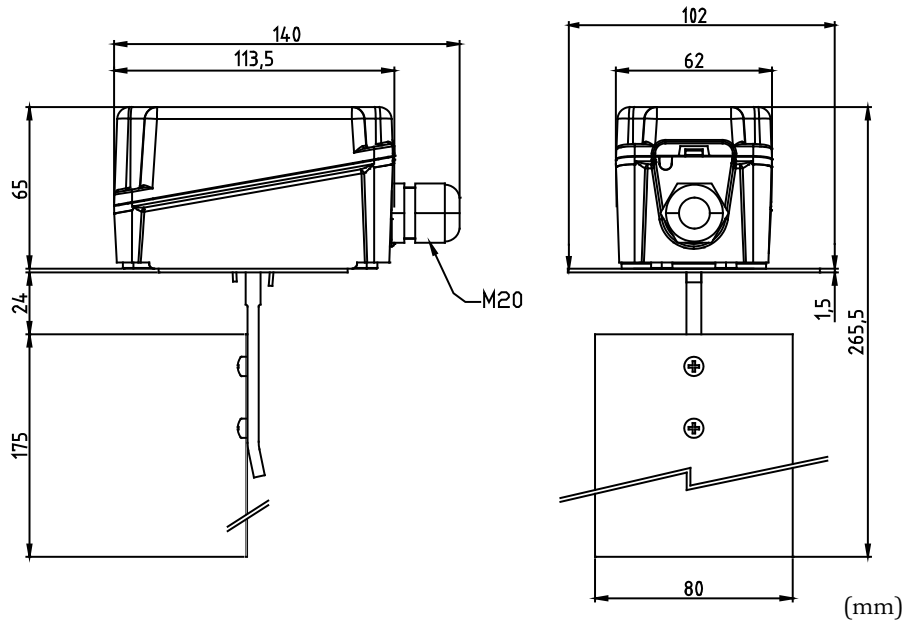
## Accessories

Name	Description
SL1E	Stainless steel AISI 301 paddles for air flow switch

## Technical data

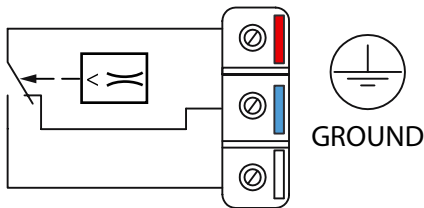
Contacts	Dust-tight microswitch with switching contacts (NC/NO)
Switch capacity	15 (8) A, 24...250 V AC
Operating temperature (for switch housing outside of duct)	-40...+85°C
Internal duct operating temperature	-10...+85°C
Humidity	10...90 % RH (non-condensing)
Paddles	Stainless steel AISI 301
Housing	Base in ABS, transparent Polycarbonate (PC) cover
Protection class	IP65, class I
Size	265.5 x 140 x 102 mm
<b>CE</b>	<p><b>Low Voltage Directive (LVD) standards:</b> This product conforms to the requirements of the European Low Voltage Directive (LVD) 2014/35/EU through product standard EN 60730-2-15.</p> <p><b>EMC emissions &amp; immunity standards:</b> This product conforms to the requirements of the EMC Directive 2014/30/EU through product standard EN 60730-2-15.</p> <p><b>RoHS:</b> This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.</p>

## Dimensions



## Wiring

The below diagram details wiring for flow presence:



Connect to the red and white contacts of the microswitch. They will open when the flow drops below the set level.

When no flow is present, the red/blue contacts will close and can be used for a signal or alarm.

## Product documentation

Document	Type
AFS1 instruction	Instruction for AFS1

The document can be downloaded from [www.regincontrols.com](http://www.regincontrols.com).