

## S6040A1003 AIR FLOW SWITCH

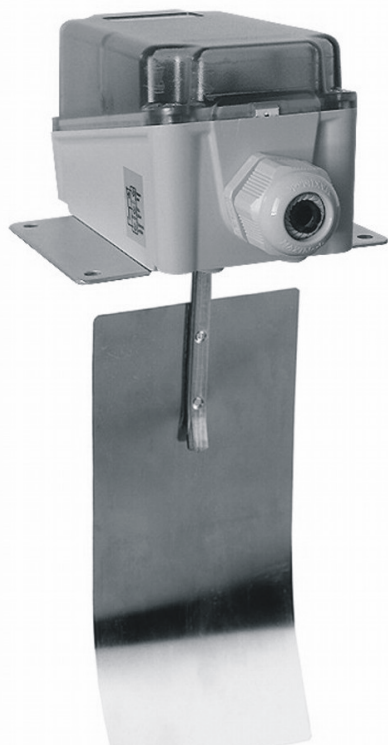
### SPECIFICATION DATA & MOUNTING INSTRUCTIONS

#### FEATURES

- Cost-effective flow switches for HVAC applications.
- High-capacity, fully-encapsulated NC/NO micro-switch.

#### SPECIFICATIONS

|                           |   |
|---------------------------|---|
| Switching capacity        | 15 (8) A, 24...250 Vac  |
| Lifetime                  | 50000 cycles at nominal load                                    |
| Working temperature       | -40...+85 °C at 90% rel. humidity, non-condensing               |
| Internal duct temperature | -40...+85 °C  |
| Electrical connection     | Screw terminal, wire up to 1.5 mm <sup>2</sup> cable Ø 6...9 mm |
| Protection class          | I according to EN60730  |
| Protection standard       | IP65 according to EN60529                                       |
| Housing material          | ABS base and transparent PC cover                               |
| Accessories               | PA1 Paddle set  |



S6040A1003

#### GENERAL

The S6040A1003 Air Flow Switch monitors air flow and the flow of non-aggressive gases in the air ducts of air conditioning systems and air treatment systems.

#### MODELS

| Specification            | S6040A1003   |
|--------------------------|--|
| Flow medium              | air  |
| Mounting                 | vertically through a 20-mm hole in the duct; mount paddle inside |
| Maximum duct temperature | 85 °C  |
| Pressure                 | 0.25 bar   |
| Paddle material          | 1.4310   |
| Lever                    | yellow brass   |
| Sensor body              | zinc-plated steel  |
| Housing dimensions       | See Fig. 2   |
| Weight                   | 630 g  |
| Approvals                | --   |

## MOUNTING

The S6040A1003 Air Flow Switch (with separate paddle) is mounted in the vertical position (i.e. with the switch box at the top).

In order to avoid air turbulence and paddle instability, the device should be installed in straight duct runs having a length of at least 5 times the duct diameter both upstream and downstream from the location of installation.

The device must be mounted with the seal plate (incl. in package) through an approx. 20-mm hole in the duct. The device must be fixed with two screws (incl. in package.) The paddle must then be mounted with a screw on the shaft inside of the duct.

**NOTE:** The flow switch is factory-set to the min. flow rate. To adjust the device to other levels, turn the adjustment screw clockwise. Because of the risk of breakage at air speeds > 5 m/s, when installed in ducts in which high air speeds are expected, the paddle must be cut off along the two markings. When the paddle is narrowed in this way, the min. switch point is increased from 1 m/s to 2.5 m/s.

## SWITCH-POINT ADJUSTMENT

Min. switch point: approx. 2.5 m/s; reset point: 1 m/s.

Max. switch point: approx. 9.2 m/s; reset point: 8.0 m/s.

## FIELD WIRING

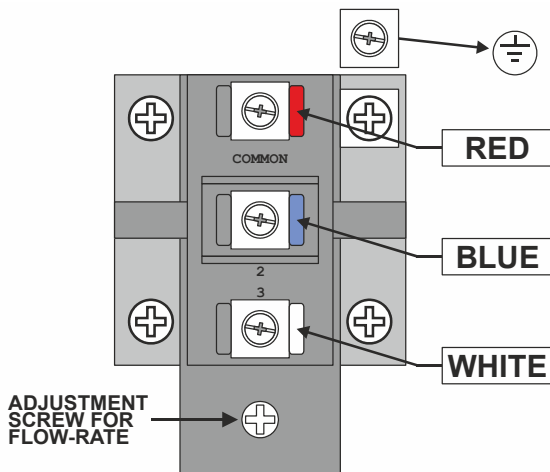
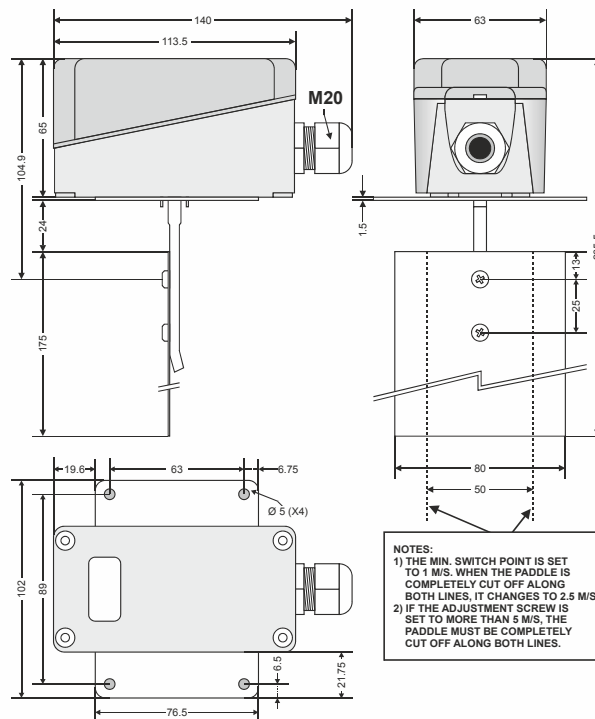


Fig. 1. Field wiring

Connect the red and the white contacts. The contact “red-white” opens when the flow drops below the switch point.

When the flow is absent, the contact “red-blue” closes and can be used as a signal or alarm contact.

## DIMENSIONS



NOTES:  
 1) THE MIN. SWITCH POINT IS SET TO 1 M/S. WHEN THE PADDLE IS COMPLETELY CUT OFF ALONG BOTH LINES, IT CHANGES TO 2.5 M/S.  
 2) IF THE ADJUSTMENT SCREW IS SET TO MORE THAN 5 M/S, THE PADDLE MUST BE COMPLETELY CUT OFF ALONG BOTH LINES.

Fig. 2. S6040A1003 dimensions (in mm)

**Honeywell**

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