# ECONOMICAL AIR FLOW SWITCH

## FST1000 Series


1 YEAR WARRANTY

**OMEGA™**

- ✔ **Air Velocity Range up to 10,000 FPM (50.8 m/sec)**
- ✔ **250 msec Response Time**
- ✔ **2% Full Scale Accuracy**
- ✔ **Two Sensor Probe Configurations (Fixed and Remote)**
- ✔ **Hot Wire Air Velocity Sensor Design**
- ✔ **Adjustable High and Low Alarm Set-Points**
- ✔ **Two SPST Relay Contact Closures with Red LED Indicators**
- ✔ **Used in HVAC Monitoring, Exhaust/Ventilation Hoods**

The FST1000 Series measures air velocity and provides two SPST relay contact closures corresponding to high and low alarm set points. The alarm set points are adjustable from 0 to 100% of the air flow range. The unit comes with a green power LED, and two red LEDs for high and low alarm indications. They can be used in research and development labs, HVAC applications, exhaust/ventilation hoods and other manufacturing processes. The sensor design is based on RTD elements; the air velocity is measured by the heat loss from the RTD sensor as it cools down by the air flow. The sensor probe comes in two configurations, fixed mount and remote probe.


Measuring air flow and providing relay output in a ventilation hood.

Fixed probe

## SPECIFICATIONS

**Air Velocity Range:** 0 to 5000, 0 to 10,000 FPM

**Accuracy:** 2% FS (air velocity)

**Air Velocity Probe:** ¼" OD stainless steel, 305 mm L (12"), or remote probe with 4.6 m (15') of shield cable

**High and Low Alarm Set Point:** Adjustable from 0 to 100% of air flow range

**Alarm Indication:** Red LEDs on the back plate

**Alarm Deadband:** 5% of FS

**Built-In Relays:** Two 12V SPST NO relays (high and low)

**Contact Rating:** 10A @ 24 Vdc, 10A @ 250 Vac

**Operating Ambient Temperature:**
   **Sensor Probe:** -40 to 93°C (-40 to 199°F)
   **Electronic Case:** 0 to 50°C (32 to 122°F)

**Power Indicator:** Green LED

**Power:** 15 to 24 Vdc @ 200 mA

**Dimensions:** 89 H x 51 W x 31.8 mm D (3.5 x 2 x 1.25")

**Weight:** 160 g (5.6 oz)



FST1001A

Terminal connection

## To Order

| Model No. | Range FPM (m/sec) | Description |
|---|---|---|
| F ST1001A(*) | 0 to 5000 (0 to 25.4) | Air velocity switch, 2 relay outputs, fixed probe |
| FST1001R(*) | 0 to 5000 (0 to 25.4) | Air velocity switch, 2 relay outputs, remote probe |
| FST1002A(*) | 0 to 10,000 (0 to 50.8) | Air velocity switch, 2 relay outputs, fixed probe |
| FST1002R(*) | 0 to 10,000 (0 to 50.8) | Air velocity switch, 2 relay outputs, remote probe |

### Accessories

| Model No. | Description |
|---|---|
| TX8-100 | 8 conductor shielded cable, PVC insulation, 30.5 m (100') spool |
| PSR-24S | Regulated 24 Vdc @ 400 mA power supply, screw terminal |
| PSR-24L | Regulated 24 Vdc @ 400 mA power supply, stripped leads |
| SSLK-14-14 | Compression fitting |
| T-FER-1/4 | ¼" PTFE ferrules (10 pack) for use with SSLK-14-14 compression fitting |

*Comes complete with 305 mm (12") long sensor probe (or remote probe), and operator's manual.*
**(*)** *For 95 mm (3.75") short probe, add suffix **"-S",** no additional charge.*
**Ordering Example: FST1001A,** *air velocity switch, 0 to 5000 FPM range, 2 relay outputs, and fixed probe.*