

# ECONOMICAL AIR FLOW SWITCH

## FST1000 Series



- ✓ 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.

### 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 121°C (-40 to 250°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)



Fixed probe

FST1001A

Terminal connection

### To Order

Model No.	Range FPM (m/sec)	Description
FST1001A(*)	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.