

# THERMAL FLOW SWITCHES

TRODEKS®

## FSW-420/30 Series



- ✓ Automatic Scaling and Setpoint
- ✓ No Moving Parts
- ✓ Pushbutton Re-Scaling if Needed
- ✓ Easy to Install

The FSW-420/30 Series monitors your relative flow rate for applications where the actual flow rate is not important. The FSW-420/30 series is easy to install and use. Just put it into the pipe and it's ready to go. The FSW-420/30 series sets your present flow-rate at 100% at power up. Relative flow rate is indicated by the 7 LED lights. When the flow rate drops to 50%, an alarm goes off. If you prefer, you can adjust the alarm point to fit your needs. A green output indicating LED is also included.

### SPECIFICATIONS

**Media:** Liquids

**Low Flow Setpoint:** Pre-set to 50% (field adjustable)

**Operating Temperature:** -20 to 80°C (-4 to 176°F)

**Response Time:** 25 sec (typical)

**Repeatability:** 1%

**Hysteresis:** 10% of setpoint value typical

**Range:**

**FSW-420 Series:** 0 to 150 cm/sec

**FSW-431:** 0 to 2.25 L/min

**FSW-432:** 0 to 5.1 L/min

**FSW-433:** 0 to 14.1 L/min

**Operating Pressure:** 30 Bar (450 psi)

**Protection Class:** NEMA 6 (IP67)

**Housing:** Anodized aluminum

**Sensor Material:** 303 stainless steel

**Tube Housing (FSW-430 Series):** Polyacetal

**Mounting (FSW-420 Series):** ½ NPT

**Connection Tube OD:**

**FSW-431:** 6 mm (0.24")

**FSW-432:** 8 mm (0.31")

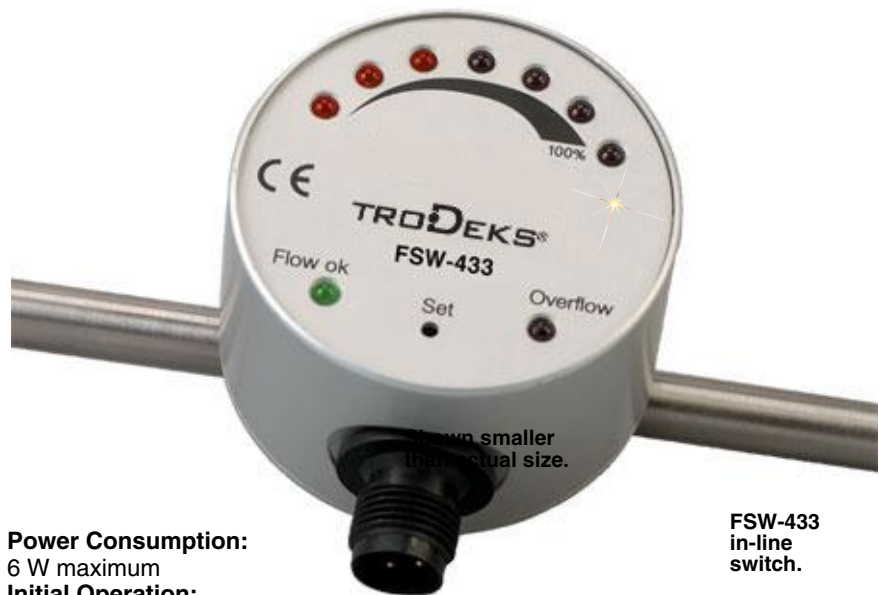
**FSW-433:** 12 mm (0.47")

**Electrical Connection:** M12 male socket 4-pin, 2 m (6.5') cable with M12 connector and pigtail leads

**Supply Voltage:**

20 to 30 Vdc (short circuit protected)

**Switching Current:** <200 mA



FSW-433 in-line switch.

**Power Consumption:**

6 W maximum

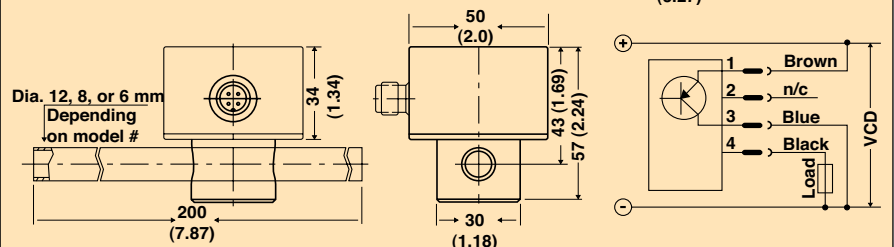
**Initial Operation:**

15 seconds

**Output:** Standard PNP normally open (closed with flow), optional normally closed (open with flow)

Model	X
FSW-421	12.5
FSW-422	50.5

**Dimensions:** mm (inch)



### To Order

Model No.	Description
FSW-421	Insertion flow switch, standard length
FSW-422	Insertion flow switch, extended length
FSW-431	In-line flow switch, 6 mm (0.24") tube
FSW-432	In-line flow switch, 8 mm (0.31") tube
FSW-433	In-line flow switch, 12 mm (0.47") tube

For units with BSP threads, add "-BSP" to model number, no additional charge.

### Accessories

Model No.	Description
FSW-400-CABLE-2M	Replacement connection cable 2 m (6.5')
FSW-400-CABLE-4M	Replacement connection cable 4 m (13')
70A-1	Audible alarm
PSU-93	Power supply

Comes complete with 2 m (6.5') pre-wired cable and operator's manual.

Standard valves are normally open. For optional normally closed valves, add "-NC" to model number, no additional charge.

**Ordering Examples:** FSW-431, flow switch and mating connector, 6 mm (0.24") and PSU-93 power supply, 70A-1 audible alarm.

FSW-421, insertion flow switch and PSU-93, unregulated 24 Vdc power supply.