

# FLOW AND TEMPERATURE SWITCHES

FSW-410 Series  
Starts at  
**\$195**



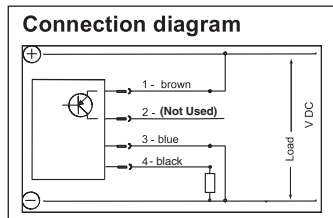
- ✓ Compact Electronic Unit with No Moving Parts
- ✓ No Adjustment or Calibration Needed
- ✓ Maintenance Free
- ✓ Fail Safe Normally Open Switch
- ✓ Easy to Install



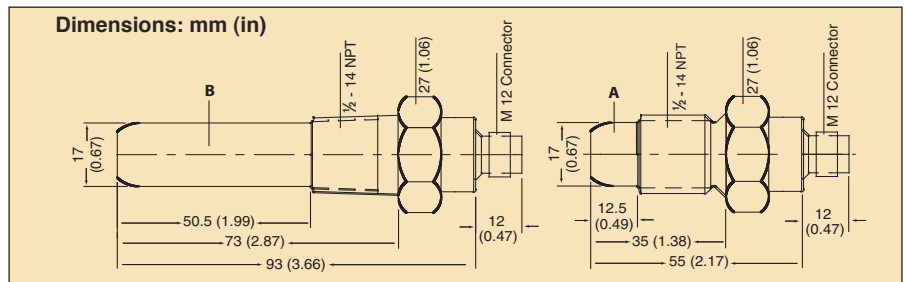
FSW-414, \$220, shown smaller than actual size.



FSW-413, \$195, shown smaller than actual size.



The FSW-410 Series is the safe sensing solution for industrial cooling systems. The FSW-410 utilizes the calorimetric principle and the all-in-one monitoring of flow and temperature of the coolant these sensors are especially designed, for all types of cooling systems, as a reliable alternative to mechanical flow switches.



**MOST POPULAR MODELS HIGHLIGHTED!**

## SPECIFICATIONS

**Low Flow Setpoint:** 0.3 m/s (0.9 fps) (water related)

**High Temp Setpoint:** 15, 50 or 70°C (59, 122 or 158°F)

**Medium Temperature:**

-20 to 80°C (-4 to 176°F)

**Response Time:** 5 to 10 sec

**Repeatability:** < 0.5%

**Hysteresis Approx:** 20% of setpoint value

**Pressure:** 10 bar (150 psi)

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

**Housing Material:** 303 SS

**Thread:** ½ - 14 NPT or

G ½ A (BSP) (optional)

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

**Operating Voltage:** 18 to 30 Vdc, including residual ripple

**Switching Current:** ≤ 200 mA

**Power Consumption:** 4 W max

**Initial Operation:** after 15 seconds

**Output PNP:** Normally open (switch closed with flow)

## To Order (Specify Model Number)

Model No.	Price	Description	Temperature Pre-Set °C (°F)	Dim
<b>FSW-411</b>	<b>\$195</b>	Flow/temperature switch	15 (59)	A
<b>FSW-412</b>	<b>220</b>	Flow/temperature switch	15 (59)	B
<b>FSW-413</b>	<b>195</b>	Flow/temperature switch	50 (122)	A
<b>FSW-414</b>	<b>220</b>	Flow/temperature switch	50 (122)	B
<b>FSW-415</b>	<b>195</b>	Flow/temperature switch	70 (158)	A
<b>FSW-416</b>	<b>220</b>	Flow/temperature switch	70 (158)	B

For units with BSP threads add “-BSP” to model number, at no additional charge.

Connection cable sold separately, see accessories chart below.

## Accessories

Model No.	Price	Description
<b>FSW-400-CABLE-2M</b>	<b>\$25</b>	Cable 2 m (6.5')
<b>FSW-400-CABLE-4M</b>	<b>35</b>	Cable 4 m (13')
<b>PSU-93</b>	<b>40</b>	Power supply (24 Vdc, 200 mA)
<b>70A-1</b>	<b>20</b>	Audible alarm continuous tone, 95 dB @ 2900 Hz

Comes complete with operator's manual (pre-wired cable sold separately).

**Ordering Examples:** FSW-411, flow and temperature switch set to 15°C, PSU-93, power supply, FSW-400-CABLE-2M, pre-wired 2 m (6.5') cable and 70A-1 audible alarm, \$195 + 40 + 25 + 20 = \$280.

FSW-414, flow and temperature switch set to 50°C, FSW-400-CABLE-2M, pre-wired 2 m (6.5') cable and PSU-93, unregulated 24 Vdc power supply, \$220 + 25 + 40 = \$285.

Recommended Reference Book: Flow Measurement, **GE-1400, \$110**  
See Section Y For Additional Books





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1-800-TC-OMEGA  
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### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

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### • Heaters

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