

FLOW AND TEMPERATURE SWITCHES

FSW-410 Series

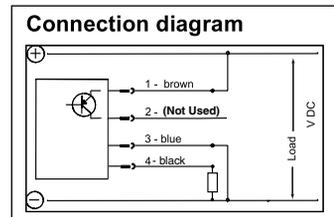


- ✓ Compact Electronic Unit with No Moving Parts
- ✓ No Adjustment or Calibration Needed
- ✓ Maintenance Free
- ✓ Fail Safe Normally Open Switch
- ✓ Easy to Install

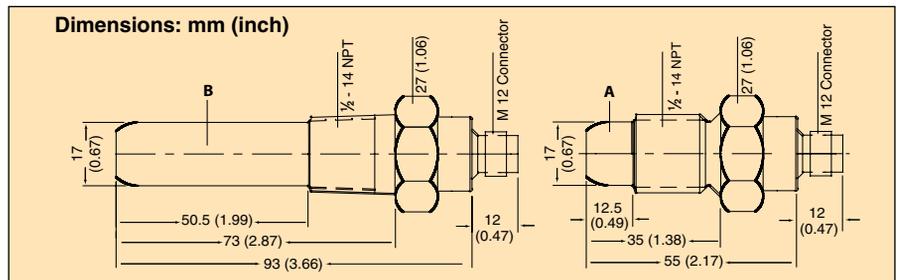


FSW-414 shown smaller than actual size.

FSW-413 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.



SPECIFICATIONS

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

High Temperature 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 maximum

Initial Operation: after 15 seconds

Output PNP: Normally open (switch closed with flow)

To Order

Model No.	Description	Temperature Pre-Set °C (°F)	Dim
FSW-411	Flow/temperature switch	15 (59)	A
FSW-412	Flow/temperature switch	15 (59)	B
FSW-413	Flow/temperature switch	50 (122)	A
FSW-414	Flow/temperature switch	50 (122)	B
FSW-415	Flow/temperature switch	70 (158)	A
FSW-416	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.	Description
FSW-400-CABLE-2M	Cable 2 m (6.5')
FSW-400-CABLE-4M	Cable 4 m (13')
PSU-93	Power supply (24 Vdc, 200 mA)
70A-1	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.

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.