



LOW COST FLOW SWITCHES

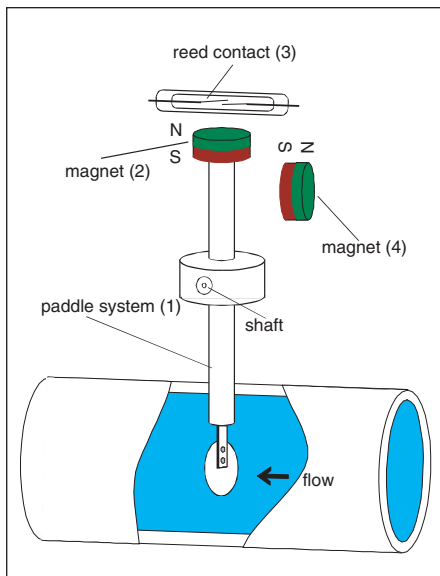
FSW300 Series



- ✓ Adjustable Switch Point
- ✓ Low Pressure Drop
- ✓ Economical
- ✓ Field Installation for ½ to 8" Pipes
- ✓ Instant Response
- ✓ High Repeatability

The FSW301 flow switch comprises a paddle system (1) with a permanent magnet attached (2). Above that magnet is a reed contact (3), located outside the flow of fluid. A second magnet with opposing poles (4) creates the force necessary to reset the switch back to the no flow position.

When the monitored flow pushes the paddle and changes the position of the magnet (2) in relation to the reed contact (3) it activates the contact. As soon as the flow is interrupted, the paddle moves back to its starting position, which returns the reed contact to the initial position. The force necessary to push the magnet back is provided by the two magnets repelling each other. Using magnetic force instead of the usual leaf spring means the switch is considerably more stable in the long term and much less sensitive to pressure peaks.



The reed contact used as a sensing element consists of two ferro-magnetic contact blades located in a glass bulb filled with inert gas. This practically eliminates wear resulting from contact burning. This construction allows a useful life of up to 100,000,000 switching cycles.

COMMON SPECIFICATIONS

- Max Pressure:** 25 bar (365 psi)
- Max Process Temp:** 110°C (230°F)
- Max Ambient Temp:** 80°C (176°F)
- Protection Class:** IP65
- Connection:** ½-14 NPT
- Materials of Construction:**
 - Body:** Brass
 - Paddle System:** Polypropylene, Noryl®
 - Shaft:** Stainless steel

Insertion Type Switch

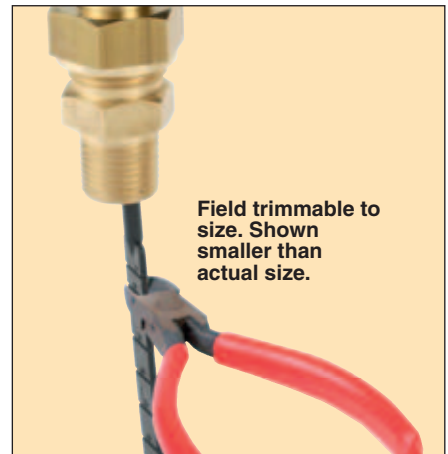
To Order (Specify Model Number)		
Model No.		Description
FSW301		Flow switch, insertion style, ½ male NPT
70A-2		Fast pulse tone audible alarm

Comes complete with operator's manual.

Ordering Example: FSW301, insertion style flow switch and 70A-2, fast pulse tone alarm.



FSW301, shown actual size.



Field trimmable to size. Shown smaller than actual size.

FSW301

Pipe Size mm (in)	Setpoint Range LPM (GPM)
19.0 (¾)	15 (4.0) to 18 (4.7)
25.4 (1)	17 (5.0) to 22 (5.7)
31.75 (1¼)	27 (7.0) to 32 (8.4)
38.1 (1½)	30 (8.0) to 35 (9.3)
50.8 (2)	40 (11) to 45 (11.9)
63.5 (2½)	80 (21) to 85 (22.5)
101.6 (4)	97 (26) to 107 (28.2)
152.4 (6)	238 (63) to 258 (68.2)
203.2 (8)	485 (128) to 500 (132)

AVAILABLE FOR FAST DELIVERY!

Recommended Reference Book: Instrumentation Control Systems, FW-336. See Section Y for Additional Books.





**SPECIFICATIONS
FSW301**

Max Switching Current: 1 A
Max Switching Voltage: 230 Vac, 48 Vdc
Maximum Rating: 26 VA, 20 W
Set Point Tolerance: ±15%
Plug Connector: DIN 43650 form A/ISO 4400 cable socket with terminal screws, suitable for outer cable diameter 4.57 to 6.85 mm (0.18 to 0.27")
Dimensions (Excluding Paddle or Tee): 114 x 38 x 89 mm (4.5 x 1.5 x 3.5")

**SPECIFICATIONS
FSW302, 303, 304**

Max Pressure: 25 bar (362 psi)
Max Process Temp: 110°C (230°F)
Max Ambient Temp: 80°C (176°F)
Material of Construction: Brass body, pipe section and paddle system



FSW304, \$170, shown smaller than actual size.

AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)			
Model No.		Description	Setpoint Range LPM (GPM)
FSW302		Flow switch, inline 1/2", brass tee	3.4 to 4.2 (0.9 to 1.1)
FSW303		Flow switch, inline 3/4", brass tee	6.8 to 9.1 (1.8 to 2.4)
FSW304		Flow switch, inline 1", brass tee	13.2 to 16.7 (3.5 to 4.4)

Comes complete with operator's manual.

Ordering Example: FSW303, inline flow switch, 3/4" brass NPT connection, 70A-2, audible alarm.



FSW307, shown smaller than actual size.

**SPECIFICATIONS
FSW305, 306, 307**

Max Pressure: 10 bar (145 psi)
Max Process Temp: 60°C (140°F)
Max Ambient Temp: 60°C (140°F)
Materials of Construction:
Pipe Section: PVC
Body: Polypropylene, Noryl®
Paddle System: Polypropylene, Noryl

AVAILABLE FOR FAST DELIVERY!



To Order (Specify Model Number)			
Model No.		Description	Setpoint Range LPM (GPM)
FSW305		Flow switch inline 1/2" PVC tee	4.9 to 6.8 (1.3 to 1.8)
FSW306		Flow switch inline 3/4" PVC tee	9.5 to 12.1 (2.5 to 3.2)
FSW307		Flow switch inline 1" PVC tee	10.6 to 14.8 (2.8 to 3.9)

Comes complete with operator's manual.

Ordering Example: FSW305, inline flow switch, 1/2" PVC tee connection, 70A-2, audible alarm

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

FRANCE

www.omega.fr

0800-466-342

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• 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

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters