Flow Switches
(Part Nos. ST9–ST11)

Thank you for purchasing another fine product from Pentair Aquatic Eco-Systems. This flow switch will give excellent service for many years. Inspect the switch upon receipt for physical damage and completeness.

Call us when shipping container appears undamaged and parts are missing. Call the shipper if parts have been damaged in shipment or if container appears to have been opened during shipment and parts are missing.

Electrical Specifications

ST9 and **ST11** electrical switches are rated at 115V and 230V @ 25 amps.
The **ST12** electrical switch is rated at 115V @ 10 amps.

Features

1. Threaded electrical 1/2" female conduit sockets on all switches.
2. All switches are saltwater compatible.
3. All switches have adjustable settings.
4. Each flow switch has a removable cover for ease of wiring, servicing and calibration, if necessary.
5. Switches are rated to handle line pressure of up to 60 psi.
6. Switches can handle liquids up to 110ºF in continuous operation.
7. All switches are fitted with standard PVC slip fittings.
8. All flow switch wetted surfaces are made from one of the following: PVC, polypropylene, Buna N or stainless steel.

Cautions

1. Flow switches must be installed in a horizontal, level position.
2. Switches are factory-set at the safest, lowest set point gpm.
3. Do not screw down the calibration set screw (see diagram), as this may cause the flow switch to stick in the ON position.
4. Use the flow switches in filtered liquids ONLY.
5. Install a filter or strainer before the switch to prevent sand and foreign objects from interfering with operation.

Mechanical Specifications

ST9: 1 1/2" PVC slip socket
ST11: 2" PVC slip socket
ST12: 1" PVC slip socket

Switch Installation Procedure

NOTE: Each flow switch is marked "Flow In" and "Flow Out" on the housing.

1. For proper operation, flow switches must be installed horizontally and in a level position. Do not cock to one side and keep the removable cover on the top.
2. Make sure the directional arrow is pointing in the same direction that the fluid will be flowing. The fluid can only travel in one direction due to the anti-surge check valve incorporated within the flow switch.
3. Use an I.A.P.M.O., NSF or ATSM approved or listed PVC cement. Follow manufacturer's instructions.
4. The 1/2" sockets are provided to accept either a cord grip restraint or flex conduit. Check local or national electric codes for your application. Do not use ridged conduit.

Electrical Connection

1. Remove cover by unscrewing the three screws.
2. Use push-on, quick female disconnect terminals (0.032 x 0.250) to attach wires.
3. Route all wires to the top of the switch to prevent wires from interfering with the switch operation.
4. Replace cover and hand tighten the three cover screws.

NOTE: N.O. = Normally Open (Load) Terminal. Connect to power "IN" on device to be switched if you want this device to be energized when water flows through the flow switch at its set point.

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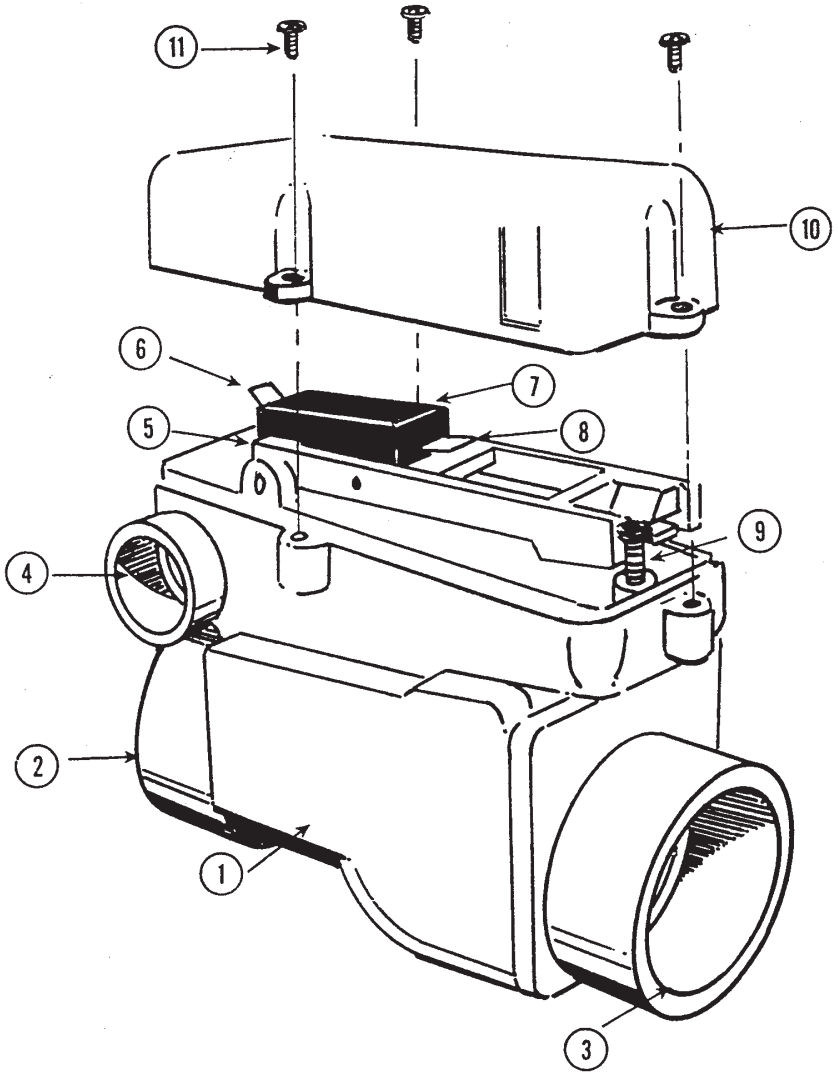
ST9, ST11, ST12 FLOW SWITCHES



1. Flow switch body
2. Outlet
3. Inlet
4. 1/2" conduit socket (both sides)
5. Electrical connection N.C. (load)
6. Electrical connection N.O. (load)
7. Switch
8. Electrical connection (line)
9. Calibration screw
10. Cover
11. Cover screw (3)

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