The Model VS-SPB is a vane type waterflow switch for use on wet sprinkler systems. These devices may be used as sectional flow indicators on large sprinkler systems and on smaller sprinkler systems such as mobile homes and residential dwellings. The VS-SPB does not have a retard to prevent false alarms due to water surges. Therefore it should NOT be used on systems with variable water pressure supplies except in the case of elevator recall.

Installation
These devices may be mounted in horizontal or vertical pipe. On horizontal pipe they should be installed on the top side of the pipe where they will be accessible. The units should not be installed within 15cm (6") of a valve, drain or fitting which changes the direction of the water flow. Select the proper paddle for the pipe size and type of TEE used. See Fig. 1 for instructions on how to change the paddle. The unit has a 1" BSPT bushing for threading into a non-corrosive TEE.

WARNING
Install VS-SPB in systems that are not subject to variable water pressure. Failure to do so will result in false alarms.

CAUTION
This device is not intended for applications in explosive environments.

Service Use:
- Automatic Sprinkler: NFPA-13
- One or two family dwelling: NFPA-13D
- Residential occupancy up to four stories: NFPA-13R
- National Fire Alarm Code: NFPA-72

Optional:
- Extra Contacts Switch Kit, Stock No. 0090013
- Extra Contacts Switch is Field Installed
- Cover Tamper Switch Kit, Stock No. 5420220

The VS-SPB is for use on wet sprinkler systems. Failure to do so will result in false alarms. This device is not intended for applications in explosive environments.
VS-SPB
VANE TYPE WATERFLOW
ALARM SWITCH - SMALL PIPE (BSPT)

Important:
There are 12 paddles furnished with each unit. One for each size of threaded, sweat or plastic TEE as described in Fig. 2. These paddles have raised lettering that shows the pipe size and type of TEE that they are to be used with. The proper paddle must be used. The paddle must be properly attached (see drawing) and the screw that holds the paddle must be securely tightened.

Important - The depth to the inside bottom of the tee should have the following dimensions:

<table>
<thead>
<tr>
<th>Tee Size</th>
<th>Threaded</th>
<th>Sweat</th>
<th>CPVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 1&quot; x 1&quot;</td>
<td>2 1/16&quot;</td>
<td>1 3/4&quot;</td>
<td>2 7/16&quot;</td>
</tr>
<tr>
<td>1 1/4&quot; x 1 1/4&quot; x 1&quot;</td>
<td>2 7/16&quot;</td>
<td>2 7/16&quot;</td>
<td>N/A</td>
</tr>
<tr>
<td>1 1/2&quot; x 1 1/2&quot; x 1&quot;</td>
<td>2 11/16&quot;</td>
<td>2 1/4&quot;</td>
<td>N/A</td>
</tr>
<tr>
<td>2&quot; x 2&quot; x 1&quot;</td>
<td>3 3/16&quot;</td>
<td>2 3/4&quot;</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Use only factory TEEs with a 1" NPT bull. Reducing bushings, mechanical TEEs, weld-o-lets are not allowed.

An uninsulated section of a single conductor should not be looped around the terminal and serve as two separate connections. The wire must be severed, thereby providing supervision of the connection in the event that the wire becomes dislodged from under the terminal.

Testing
The frequency of inspection and testing for the Model VS-SPB and its associated protective monitoring system should be in accordance with applicable NFPA Codes and Standards and/or the authority having jurisdiction (manufacturer recommends quarterly or more frequently).