POTTER The Symbol of Protection

VSR-AT Waterflow Alarm Switch with Auto Test Feature

Water Flow Auto Test Specifications

Furnish and install a Potter VSR-AT Vane type AUTO-TEST flow switch at each fire sprinkler system connection to the wet pipe main where indicated on the drawings and plans and as required by applicable local and national codes and standards.

All wetted parts of the water flow switch shall be non-metallic. Water flow switch enclosure shall be NEMA 4 rated and shall be held captive by tamper resistant screws. The device shall be listed for pressures up to 450 psi, maximum water surges of 18 fps and alarm activation by 10gpm.

The electronic retard shall also contain a motor and software that allow the flow switch to be tested without discharging water out of the system. The test shall ensure that water is in the pipe as well as ensure the integrity of the paddle and trip stem assembly. The test is initiated by a separate test switch developed specifically for the flow switch.

The test switch shall consist of a key-switch, momentary pushbutton switch and LED. Activation of the key-switch shall enable the momentary push button switch. Depressing the push button shall initiate the test of the flow-switch. As the retard is being tested, the LED shall flash once per second until the retard time expires. At that point the flow-switch



Auto Test Switch

shall conduct a test to ensure compliance with the applicable UL standard for water-flow detection. If the test is successful, the switch outputs shall activate for approximately two seconds and automatically restore to normal. The LED on the test switch shall momentarily go steady on, and then turn off allowing the key switch to be turned off. An unsuccessful test shall be indicated by no activation of the switch contacts and the test LED shall flash four times per second continuously. The test can also be initiated by a Listed relay from a Listed addressable FACP, however there would not be the LED to provide the visual status indication. The single gang box test switch shall be a model ATC-1 for testing a single device or ATC-4 for testing up to four devices, manufactured by Potter Electric Signal Company LLC. Switch assembly shall be UL Listed and FM Approved.