# Series 747M FireLock<sup>™</sup> Zone Control Riser Module Assembly



# **INSTALLATION OF THE SERIES 747M**

The Series 747M FireLock Zone Control Riser Module includes the module body, a UL or ULC Listed and FM Approved waterflow detector, a pressure gauge, and an alarm test module available with different orifice sizes (K-factors). In addition, an optional pressure relief valve kit is available. Refer to the "Installation of the Optional Pressure Relief Valve Kit" section.

#### NOTE CONCERNING WATERFLOW DETECTOR INSTALLATION AND MAINTENANCE INSTRUCTIONS VERSUS RISER MANIFOLDS, AS STATED FROM THE WATERFLOW DETECTOR MANUFACTURER:

"The section 'Installation Guidelines' suggests mounting the detector at least 6 inches/152 mm from a fitting that changes the direction of water flow and no less than 24 inches/610 mm from a valve or drain. This is a general statement that is superseded when a riser manifold assembly is listed or approved by agencies such as UL and/or FM. The agency approval takes precedence because this configuration has been tested and its operation validated."

### NOTICE

- The Series 747M can be installed in either the horizontal (leftto-right or right-to-left flow) or vertical (up) position. The flow direction arrow SHALL point toward the sprinkler distribution, as shown in the drawing above.
- The thumb screw or round-head screw (shown in the drawings above) can be switched to the opposite side's test/drain valve handle for accessibility purposes.
- 1. Install the Series 747M into the system using Victaulic couplings for grooved-end pipe. Always refer to the instructions, supplied with the coupling, for complete installation requirements.

- For 2½ 6-inch/73.0 168.3-mm modules: Connect the drain outlet from the Series 747M to a building drain by using a Victaulic coupling for grooved-end pipe (refer to the drawing above). Always refer to the instructions, supplied with the coupling, for complete installation requirements.
- 2a. For 1¼ 2-inch/42.4 60.3-mm modules with the NPT threaded drain outlet: Follow standard piping practices to make the threaded connection. NOTE: The drawings, shown on page 2, provide examples of alternative ways to make the threaded drain connection with a street elbow to avoid interference with couplings on the water supply side and sprinkler distribution side of the module body.
- For 1¼ 2-inch/42.4 60.3-mm modules, the nominal drain size is 1 inch/25 mm.
- For 2½ 3-inch/73.0 88.9-mm modules, the nominal drain size is 1¼ inches/32 mm.
- For 4 6-inch/114.3 168.3-mm modules, the nominal drain size is 2 inches/50 mm.
- **3.** Apply thread sealant to the threads of the pressure gauge. Install the pressure gauge into the tee coming from the gauge valve. Verify that the face of the gauge is visible.
- 3a. Open the gauge valve.
- **4.** Connect the water-flow detector to the alarm system in accordance with the instructions supplied.
- **5.** To install the optional pressure relief valve, follow the "Installation of the Optional Pressure Relief Valve Kit" section.
- 6. Perform the system flow test, as outlined in the "System Flow Test" section.



# EXAMPLES OF ALTERNATIVE WAYS TO MAKE THE THREADED DRAIN CONNECTION

The following drawings provide examples of alternative ways to make the threaded drain connection to avoid interference with couplings on the water supply side and sprinkler distribution side of the module body. **NOTE:** The Series 747M with optional pressure relief valve kit is shown below.



When installing a street elbow directly into the drain port, the street elbow shall be threaded into the drain port before the Series 747M is installed into the system with grooved pipe and grooved pipe couplings.



If the Series 747M was installed in the system before the connection to the drain port was made, install a close nipple and a straight coupling before installing the street elbow.

# SYSTEM FLOW TEST

# A WARNING

• DO NOT operate the "Test/Drain Valve" under pressure. Verify that the "Shutoff Valve" is in the "Closed" position before operating the "Test/Drain Valve."

Failure to follow these instructions could result in serious personal injury and property damage.

Notify the authority having jurisdiction, remote station alarm monitors, and anyone in the affected area that the system flow test is being conducted.

1. Before performing the system flow test, confirm that all valves are in their normal operating positions ("Shutoff Valve" in "Closed" position and "Test/Drain Valve" in "Drain" position).

- 2. For 1¼ 2-inch/42.4 60.3-mm modules: Turn the thumb screw on the handle of the "Test/Drain Valve" counterclockwise. Place the handle of the "Test/Drain Valve" in the "Test" position.
- **2a.** For 2½ 6-inch/73.0 168.3-mm modules: Lift the handle of the "Test/Drain Valve" up and rotate it to the "Test" position.
- 3. Place the "Shutoff Valve" in the "Open" position.
- **4.** Verify that the water-flow detector is operating properly and that the alarms have sounded.
- **5.** When the system flow test is complete, place the "Shutoff" valve in the "Closed" position.
- 6. For 1¼ 2-inch/42.4 60.3-mm modules: Place the handle of the "Test/Drain Valve" in the "Drain" position. Hand-tighten the thumb screw.
- **6a.** For 2½ 6-inch/73.0 168.3-mm modules: Lift the handle of the "Test/Drain Valve" up and rotate it to the "Drain" position.



### PRESSURE RELIEF VALVE KIT OPTION

The following instructions apply to a Series 747M with pressure relief valve installed in either the horizontal (left-to-right or right-to-left flow) or vertical (up) position. The pressure relief valve is rated to 175 psi/1206 kPa/12 Bar.



Failure to follow these instructions could cause improper operation, resulting in property damage.

- 1. Verify that all instructions in the "Installation of the Series 747M" section have been followed.
- **5.** Install the pressure relief valve into the pressure relief valve port, as shown above.
- **6.** Connect the drain tubing from the drain port's close nipple to the pressure relief valve using the barbed fittings and hose clamps provided.
- 7. Follow all steps in the "System Flow Test" section.



# Series 747M FireLock<sup>™</sup> Zone Control Riser Module Assembly

orscontinution product

 For complete contact information, visit victaulic.com

 I-747M
 5013 REV F
 UPDATED 10/2016
 Z00747M02

 VICTAULIC AND FIRELOCK ARE REGISTERED TRADEMARKS OR TRADEMARKS OF VICTAULIC COMPANY AND/OR ITS AFFILIATED ENTITIES

 IN THE UNITED STATES AND/OR OTHER COUNTRIES.
 © 2016 VICTAULIC COMPANY AND/OR ITS AFFILIATED ENTITIES

