Instructions for Installation, Operation, Care and Maintenance

For Use with Reliable Model DDX Deluge and Preaction Systems, and Reliable Model EX Dry System

Rated Working Pressure is 175 psi (12.1 bar). Listed by Underwriters Laboratories, Inc. (UL). Certified by FM Approvals and other fire insurance and governmental agencies in the United States and foreign countries.

Box Dimensions:
- Height: 6-1/4" (156 mm)
- Width: 3-1/4" (83 mm)
- Depth: 3-7/8" (99 mm)
Installation
1. Locate Manual Pull Box in accordance with rules of Authority Having Jurisdiction.
2. Connect Outlet Side of Valve into suitable, ½” or larger, drain line.
3. Connect inlet side of valve (side with union) to the hydraulic release line, wet pilot line, or dry pilot line of the system.
4. Box should be firmly supported so that the force required to shear the breakable strut (95006901), as the cover is opened, does not overload the piping.

Hydraulic Manual Emergency Pull Box Bill of Materials

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Part No.</th>
<th>Description</th>
<th>No. Req’d</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>91206901</td>
<td>Pull Box</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>96816901</td>
<td>Valve, Quick Opening, Bronze, Ball-Type – ½”</td>
<td>1</td>
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<tr>
<td>3</td>
<td>98815200</td>
<td>Union, Galvanized G.J.–½”</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>98543219</td>
<td>Nipple, Galvanized – ½” x 5”</td>
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<tr>
<td>5</td>
<td>95006901</td>
<td>Shear Pin (Breakable Strut)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>94606901</td>
<td>Name Plate</td>
<td>1</td>
</tr>
</tbody>
</table>

Testing and Inspection
1. Hydraulic Manual Pull Boxes should be periodically checked to insure that they can be easily located, and most important, easily reached.
2. The cover should be opened to insure it operates with a firm but not excessive pull. It is necessary to replace the breakable strut after this operation.

**NOTE:** Do not operate the valve without performing the operations in Step 3 as this will trip the Deluge or Dry Valve.

3. To test the Manual Pull Box without causing the Deluge or Dry Valve to operate, proceed as follows:
   A. Close the main valve that controls the water supply to the Deluge or Dry valve.
   B. Open the main drain valve on the Deluge or Dry Valve.
   C. It is now possible to operate the Quick Operating Valve in the Model A Pull Box. The valve should operate smoothly when opened, and there should be a severe drop in pressure in the Push Rod Chamber and associated release trim.
   D. (For DDX Systems only) Allow water to flow through the Quick Opening Valve until clear with no air bubbles. Close the ball valve supplying water to the Push Rod Chamber.
   E. Reset the system in accordance with the procedure found in the applicable technical bulletin.

Operation

When a system utilizes a hydraulic or pneumatic line as the detection and/or release mechanism, the Model A Hydraulic Manual Pull Box can be used. The Pull Box consists of a Quick Opening Valve located in a protective enclosure. The enclosure cover is held closed by a breakable strut that prevents accidental opening, and must be replaced after each opening. The Manual Pull Box is connected to the detection/release line. When it is operated, it duplicates the fusing of a sprinkler and triggers the opening of the Deluge or Dry Valve.

The equipment presented in this bulletin is to be installed in accordance with the latest published Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.

Products manufactured and distributed by Reliable have been protecting life and property for over 90 years, and are installed and serviced by the most highly qualified and reputable sprinkler contractors located throughout the United States, Canada and foreign countries.

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