Engineering Specification

Model CR Commercial Riser Assembly

**Recommended CSI MasterFormat Specification Location: 21 13 13, Wet-Pipe Sprinkler Systems (formerly 13930)**

The commercial riser assembly shall be **[**cULus Listed**]** **[**FM Approved**]** for installation in the vertical or horizontal position for use in NFPA 13 wet-pipe fire protection systems. For nominal sizes of 1½” and 2”, construction shall consist of a cast stainless steel body with threaded end connections. For nominal sizes of 2” through 8”, construction shall consist of a Schedule **[**10**] [Available for 2”-4” sizes only:** 40**]** welded body with grooved end connections per ANSI/AWWA C606.

The Commercial Riser Assembly shall be manufactured as a single preassembled component and consist of the following:

* Water pressure gauge.
* Integral single-handle, tri-position test and drain ball valve allowing both testing of the waterflow alarm and draining of a wet-pipe fire protection system with a relief valve kit.
* Vane-type waterflow alarm switch with non-corrosive insert for use on wet-pipe sprinkler systems utilizing two (2) single pole, double throw, snap action switches and an adjustable, instantly recycling pneumatic retard. Waterflow alarm switch shall have an electrical rating of 10A @ 125/250 VAC / 2.5A @ 24VDC.
* **{Optional:** Pressure relief valve trim kit with **[**175 psi (12.1 bar)**]** **[**185 psi (12.8 bar)**] [**210 psi (14.5 bar)**] [**260 psi (17.9 bar)**] [**310 psi (21.4 bar)**]** rating shall be provided.**}**

The manifold piping shall contain lettering clearly identifying manifold pipe size, flow direction, cULus Listing, and the test and drain outlet. A built-in drain port shall be available to permit hydrostatic testing without draining the system. The riser assembly shall be listed for 300 psi (20.7 bar) working pressure and maximum working temperature of 250°F.

Commercial riser assembly shall be the Reliable Model CR Riser Assembly. Refer to Reliable Bulletin 621 for associated information.