Engineering Specification

Model F3QR80 Quick Response Dry Sprinklers

**Recommended CSI MasterFormat Specification Location: 21 13 00, Fire Suppression Sprinkler Systems (formerly 13930)**

Sprinklers shall be standard coverage, quick response [cULus Listed] [FM Approved] dry [pendent] [horizontal sidewall] style sprinklers. Sprinkler and deflector shall be of all brass frame construction attached to a 1” diameter galvanized extension nipple of specified length, “A” dimension - [*standard escutcheon:* 2” (51 mm)] [*HB escutcheon or recessed pendent/horizontal sidewall:* 3½” (89 mm)] to 48” (1219 mm), measured from face of fitting to [*pendent:* ceiling] [*horizontal sidewall:* wall] surface, having a machined [¾” NPT (ISO7-1R3/4)] [1” NPT (ISO7-1R1)] thread. Extension nipple shall have an extended inlet above the thread, having a minimum dimension of ¾” (19 mm). Internal construction shall consist of an inner tube/yoke assembly with orifice adapter consisting of all brass parts. Inlet seal assembly shall consist of a Teflon-coated Belleville spring washer with brass cap. Sprinklers shall have a 3 mm frangible glass bulb thermal operating element with sealed adjustable seat adapter in conformance with UL requirements. {*Standard escutcheon:* Dry [pendent] [horizontal sidewall] sprinklers shall be capable of providing 1½” (38 mm) of escutcheon adjustment.} Nominal K-factor of dry sprinklers shall be 8.0 gpm/psi1/2 (115 l/min/bar1/2) and the sprinkler temperature rating shall be [135°F (57°C)] [155°F (68°C)] [200°F (93°C)] [286°F (141°C)]. Rated working pressure shall be 175 psi (12.1 bar). Standard finishes: [Bronze] [Chrome plated] [White Painted] [Special finish– specify]. [*Optional:* Exposed dry pendent sprinklers subject to corrosive atmospheres shall have a factory applied corrosion resistant coating] [*Optional:* Dry sprinklers subject to damage shall have a listed/approved sprinkler guard for impact protection].

Quick response dry sprinklers shall be Reliable Model F3QR80 Series. Refer to Bulletin 061 for associated sprinkler identification number (SIN) with respect to style and thread combination.

**For recessed pendent / recessed horizontal sidewall sprinklers, add**:

Recessed escutcheon assembly shall be a factory assembled, two-piece steel escutcheon of push-on and thread-off design capable of providing ½” of escutcheon adjustment. Standard finish shall be [Bronze] [Chrome plated] [White Painted] [Special finish – specify].

**For concealed pendent sprinklers, add**:

Cover plate assembly shall consist of a brass cover plate and copper alloy retainer flange. Method of attaching the cover plate to the sprinkler cup shall be a push-on and thread-off design capable of providing 3/8” (9.5 mm) of cover plate adjustment. Cover plate temperature rating shall be **[**135°F (57°C)**] [**165°F (74°C)**]**. A factory-applied protective cap shall be provided to protect against installation damage. Standard cover plate finish to be: **[**Chrome Plated**] [**White**] [**Special finish – specify**]**. Cover plates used with the Model F3QR80 Dry Concealed Pendent sprinklers shall be the Model CCP cover plate.