

DESCRIPTION

Concealed Pendant Automatic Glass Bulb Fire Sprinklers
 Models FA019 & FA020

Model FA019: Standard Response, 5mm Glass Bulb, UL Listed

Model FA020: Quick Response, 3mm Glass Bulb, UL Listed

Product Overview

The Series FA019 and FA020 fire sprinklers feature a 5.6 K-factor with a flat plate concealed design, suitable for standard coverage applications. Designed for discreet ceiling installations, these sprinklers are activated when exposed to heat from a fire.

Key Features

Model FA019: Standard Response sprinkler with a 5mm glass bulb.

Model FA020: Quick Response sprinkler with a 3mm glass bulb, allowing faster activation in fire emergencies.

Operation Mechanism

The sprinkler's soldered cover plate detaches when it reaches its rated temperature, exposing the sprinkler's glass bulb to heat. As the bulb heats, the internal fluid expands, compressing the air bubble within. Once the bubble can no longer compress, the pressure breaks the glass bulb, triggering the release of the water seat assembly and initiating water discharge to suppress the fire.

TECHNICAL SPECIFICATION

SIN	FA019	FA020
Style	Concealed Pendent	
K Factor	5.6 (80 metric)	
gpm/(psi) ^{1/2} (L ³ /min(bar) ^{1/2})		
Nominal Pressure	1/2" NPT OR 1-2" BSPT	
Max. Working Pressure	175 PSI (12BAR)	
Response	STANDARD	QUICK
Factory Test Pressure	500 PSI (35BAR)	
Min. Operating Pressure	7 PSI(0.5 BAR)	
Cover Plate Finishes	White Coating, Chrome, Bright Brass, Brass & Custom	



SPRINKLER MATERIAL

Part	Material
Load Screw	DZR Brass
Bulb Seat	Brass
Frame	DZR Brass
Seal	Beryllium Nickel w/Teflon
Deflector	Bronze
Support Cup	Steel
Guide Pins	Stainless Steel 316
Cover Plate	H162 Brass
Skirt	Brass
Ejection Spring	C5191

TEMPERATURE RATE

SIN	K-Factor	135°F(57°C) Cover Plate		165°F(74°C) Cover Plate	
		135°F (57°C) Sprinkler	155°F (68°C) Sprinkler	175°F (79°C) Sprinkler	200°F (93°C) Sprinkler
FA019/FA020	5.6	Y	Y	Y	Y

INSTALLATION

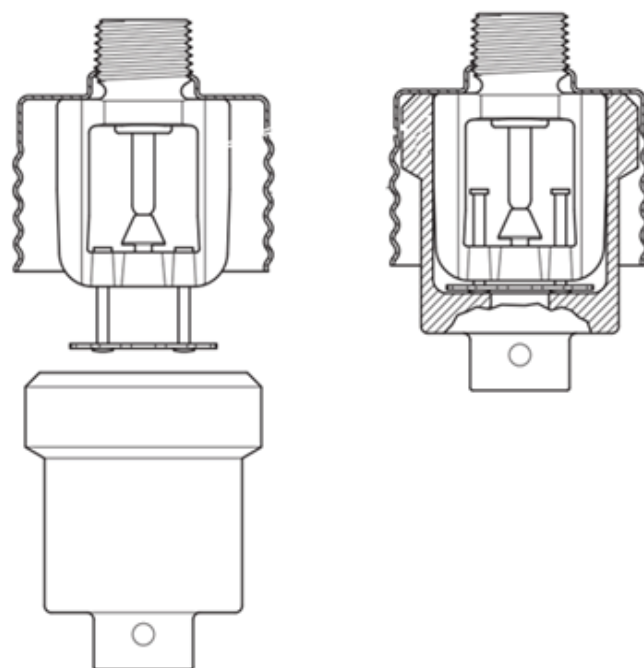
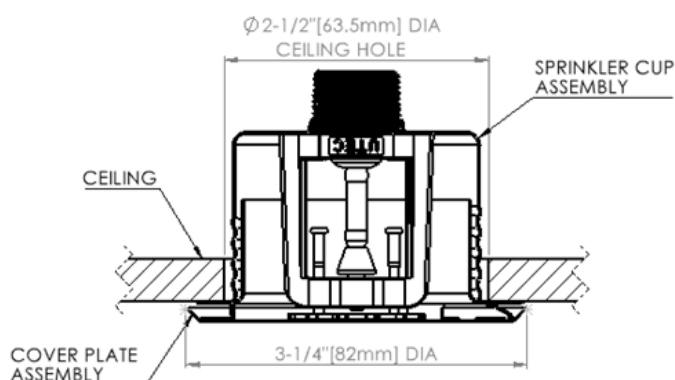
The sprinklers which are manufactured and tested in accordance with the rigid requirements of the Standard UL 199, also should be installed in accordance with the current Standard NFPA 13.

The system piping must be properly sized to insure the minimum required flow rate at the sprinkler. Check for the proper model, style, orifice size and temperature rating prior to installation, install sprinkler after the piping is in place to avoid mechanical damage, replace any damage units, wet pipe systems must be protected from freezing.

Upon completion of the installation, the system must be tested per recognized standard. In case of a thread leak, remove the unit, apply new pipe joint compound or tape and re-install.

INSTALLATION METHOD

1. The sprinklers are intended to be installed in accordance with NFPA 13, FM Global Property Loss Prevention Data Sheets, and the requirements of applicable authorities having jurisdiction. This type of sprinklers must not be installed in ceilings with positive pressure in the space above. Ensure that the 4 slots in the cup are open and unobstructed following installation. There are shipped with a wrench-able protective cap that should remain on the sprinkler until the sprinkler system is placed in service following construction. Only using the non-hardening pipe joint compound or Teflon tape apply to the male thread only.
2. Tighten the sprinkler into fitting with Wrench, fully insert the wrench over the sprinkler until the wrench engages the body. Do not wrench any other part of the sprinkler/cup assembly. And the wrenches are designed to be turned with a standard 1/2" square drive. Tighten the sprinkler into the fitting with proper torque.
3. To install the ceiling cover plate, align it with and press it over the support ring assembly, then push upward and twist to the right



CAUTION

It is recommended not to exceed 14 ft-lb torque for 1/2 inch NPT sprinkler threads.