

# SPRINKLER MANUAL

## SD050 & SD055



### DESCRIPTION

SD050 & SD055 available with k-factor 5.6, Is flat plate concealed pendent sprinkler Having standard coverage. Model: SD050 is Standard sprinkler with 5mm glass bulb and SD055 is quick response sprinkler with 3mm glass Bulb.

### OPERATION

The soldered cover plate drops of the retainer assembly when exposed to heat e.g. a fire that has reached the plate's listed temperature rating as heat encompasses the glass bulb's operating element of the sprinkler, the fluid in the bulb expands, compressing the air bubble with in the bulb. When the air bubble can no longer be compressed, the fluid expansion causes the breakage of the glass bulb, resulting in the release of the water seat assembly and the discharge of the water from the sprinkler.

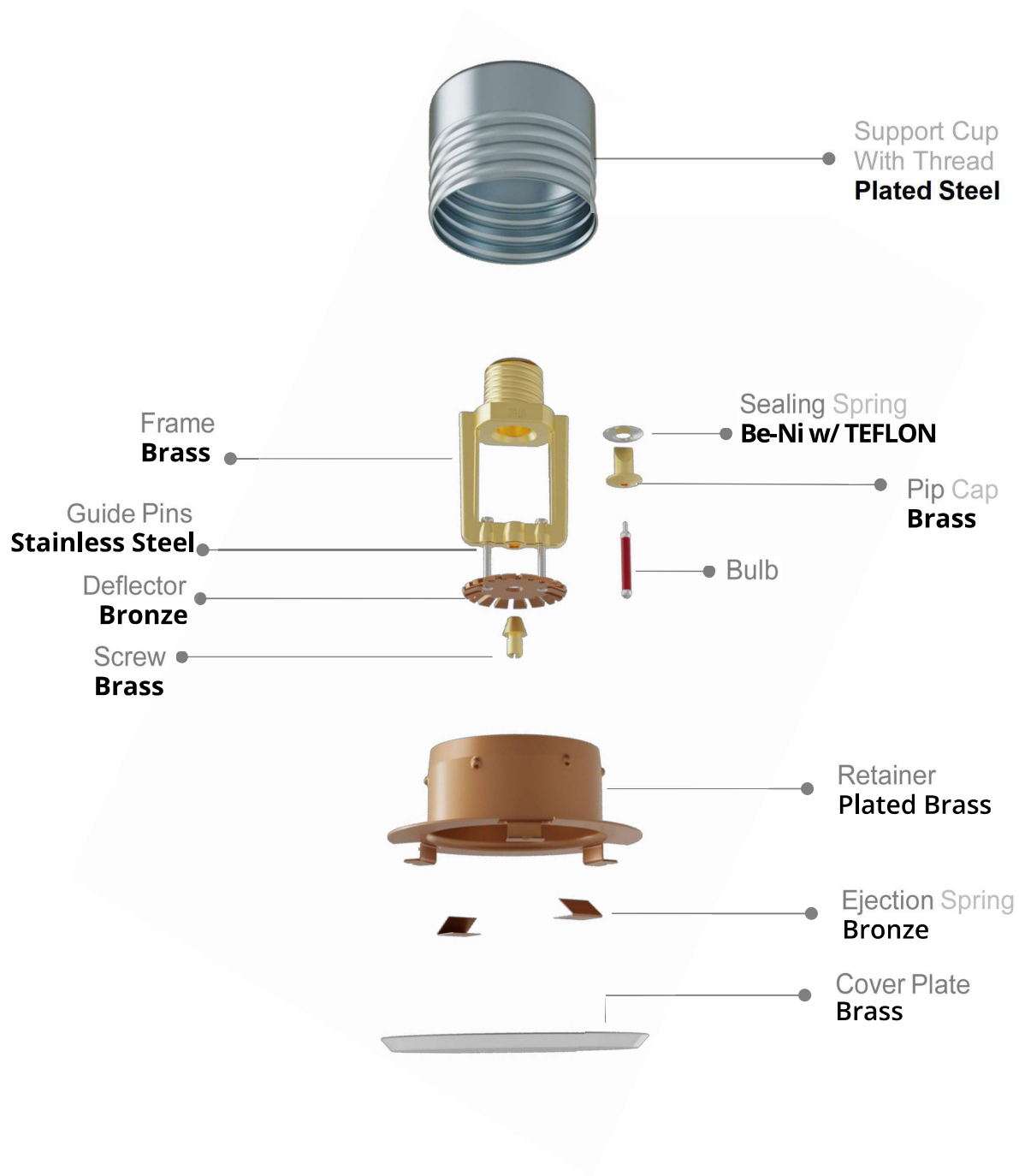


### TECHNICAL SPECIFICATION

Style	SD050 - Standard Response SD055 - Quick Response
K Factor gpm/(psi) <sup>1/2</sup> (L <sup>3</sup> /min(bar) <sup>1/2</sup> )	5.6 (80)
Nominal Thread Size	1/2" NPT and 1/2" BSPT
Max. Working Pressure	175 PSI (12bar)
Factory Testing Pressure	500 PSI (35bar)
Min. Operating Pressure	7 PSI (0.5 bar)
Finish	Brass or Chrome Plated or White Plated Available

### TEMPERATURE RATING

SIN	Response Type	Sprinkler Style	K-Factor	Temp. Rating °F (°C)
SD050	SR	Conc. Pendent	5.6	135(57) 155(68) 175(79) 200(93)
SD055	QR	Conc. Pendent	5.6	135(57) 155(68) 175(79) 200(93)



## INSTALLATION

The sprinklers which are manufactured and tested in accordance with the compulsory requirements of UL 199, also should be installed in accordance with the current standard NFPA13. The system piping must be properly sized to insure the minimum required flow rate at the sprinkler. Check the type, style, orifice size, and temperature rating prior to installation. After the piping is in place, sprinklers start to be Installation installed. Pay attention to avoid mechanical damage, and replace any damaged sprinkler. As for wet pipe system, it must be protected from freezing. Upon completion of the installation, the system must be tested per recognized standard. In case of thread leakage, remove the sprinkler, apply new piping joint compound or Teflon tape, and then re-install.

## INSTALLATION METHODS

1. This type of sprinkler must not be installed in the ceiling with positive pressure above them. Ensure that the 4 slots in the cup are open and unobstructed after the installation. There is an adjustable protective cap shipped with the sprinkler that should remain on the sprinkler until the sprinkler system is placed in service following the installation.
2. Twist - off the blue protective cap
3. Only using the non-hardening pipe joint compound or Teflon tape apply to the male thread.
4. 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.
5. To install the cover plate, align it with support ring assembly and press it over the support ring assembly, then push upward and twist to the right.

## CAUTION

It is recommended not to exceed 14ft-lb torque for 1/2" NPT sprinkle threads. Protective caps must be removed from sprinklers before placing the system in service

