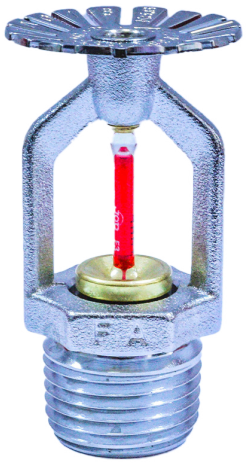
FIREGUARD GLOBAL LTD

AUTOMATIC SPRINKLERS

Sidewall,Upright,Pendent sprinkler, (Standard/Quick Response)



DESCRIPTION

Automatic Glass Bulb Fire Sprinklers – UL Listed (1/2" NPT/BSPT, K-Factor 5.6) Our Automatic Glass Bulb Sprinklers are engineered for reliable and efficient fire suppression across various commercial and industrial environments. Designed with precision, these UL-listed sprinklers come in Upright, Pendant, and Sidewall orientations to meet diverse installation requirements. Each sprinkler features a 1/2" NPT / BSPT thread size and a 5.6 K-Factor, with both Standard Response and Quick Response options available, providing optimal water distribution to effectively control and extinguish fires.

TECHNICAL SPECIFICATION

Style	Pendent, Upright, Sidewall
K Factor gpm/(psi)½ (L³/min(bar)½)	5.6 (80)
Nominal Thread Size	1/2" NPT or 1/2" BSPT
Max. Working Pressure	175 PSI(12 bar)
Factory Testing Pressure	500 PSI (35 bar)
Min. Operating Pressure	7 PSI (0.5 bar)
Finish	Brass or Chrome Plated or White Plated Available

Key Features:

Type Options: Available in Upright, Pendant, and Sidewall models to suit a wide range of building layouts and installation needs. Reliable Activation: Equipped with a sensitive glass bulb with temperature ratings of 57°C, 68°C, 79°C, 93°C, and 141°C that responds quickly to rising temperatures, enabling timely water discharge during fire incidents. K-Factor 5.6: Ensures balanced water flow, ideal for standard coverage in various hazard applications. 1/2" NPT / BSPT Thread Size: Universally compatible for straight forward installation with standard pipe fittings. UL Listed: Meets stringent UL safety and performance standards, providing peace of mind for building safety and compliance.

Applications:

Perfect for installation in offices, warehouses, hospitals, retail spaces, and residential properties, our Automatic Glass Bulb Sprinklers deliver reliable fire protection across various settings.

SPRINKLER MATERIAL

BULB	Glass with Glycerin Solution JOB G5 or Day-impex-937 for FA011, FA013, FA015, FA0017 JOB F3 or Day-impex-941 for FA012, FA014, FA016
LOADING SCREW	Brass UNS-28000
SEAL	Brass UNS-28000
FRAME	Brass UNS-28000
SEAL WASHER	Washer, Coated on Both Sides and Applied with Teflon Tape
NOMINAL BULB DIAMETER	Standard Response 5.0mm, Quick Response 3.0mm

TEMPERATURE RATE

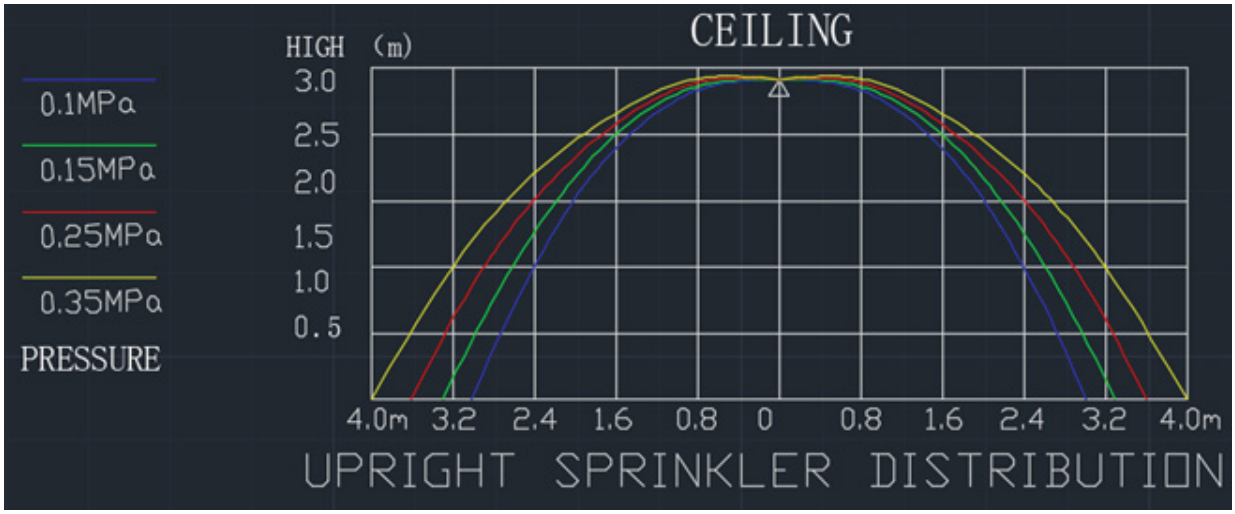
SIN	Temperature	Classification	Bulb Color
FA011 - FA016	135°F/57°C	ORDINARY	ORANGE
FA011 - FA016	155°F/68°C	ORDINARY	RED
FA011 - FA016	175°F/79°C	INTERMEDIATE	YELLOW
FA011 - FA016	200°F/93°C	INTERMEDIATE	GREEN
FA011 - FA016	286°F/141°C	HIGH	BLUE

ORDERING INFORMATION

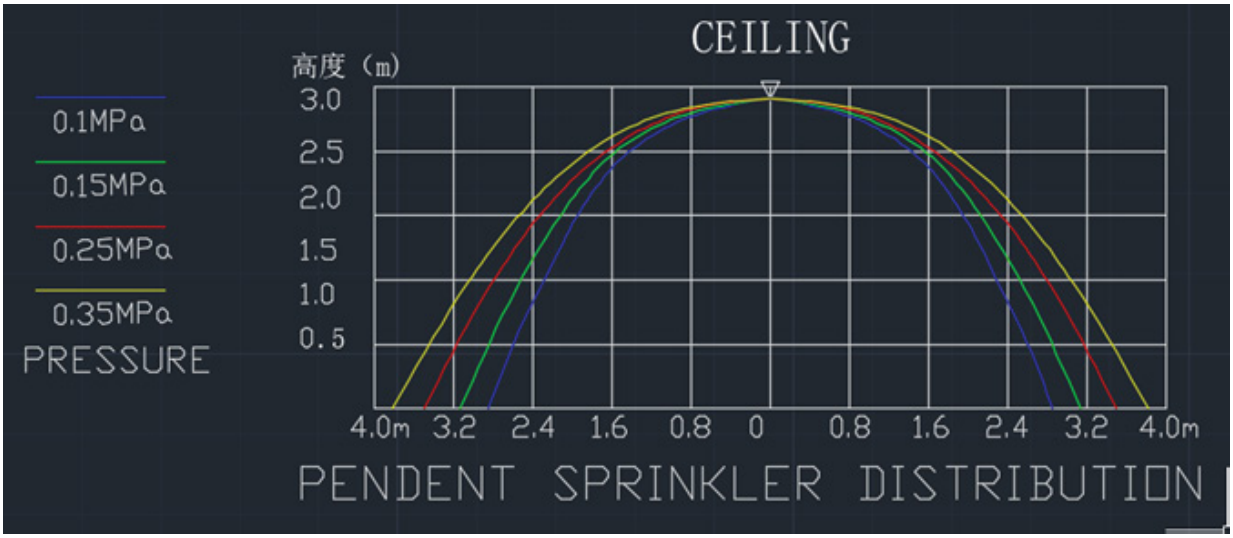
Model	Description	Temperature	Thread Size	Finish
FA011	STANDARD RESPONSE SIDEWALL K5.6, 175 PSIG	135°F/57°C OR 155°F/68°C OR 175°F/79°C OR 200°F/93°C OR 286°/141°C	1/2" NPT OR 1/2" BSPT	BRASS CHROME PLATED WHITE PLATED
FA012	QUICK RESPONSE SIDEWALL K5.6, 175 PSIG			
FA013	STANDARD RESPONSE UPRIGHT K5.6, 175 PSIG			
FA014	QUICK RESPONSE UPRIGHT K5.6, 175 PSIG			
FA015	STANDARD RESPONSE PENDENT K5.6, 175 PSIG			
FA016	QUICK RESPONSE PENDENT K5.6, 175 PSIG			

DISTRIBUTION FIGURE

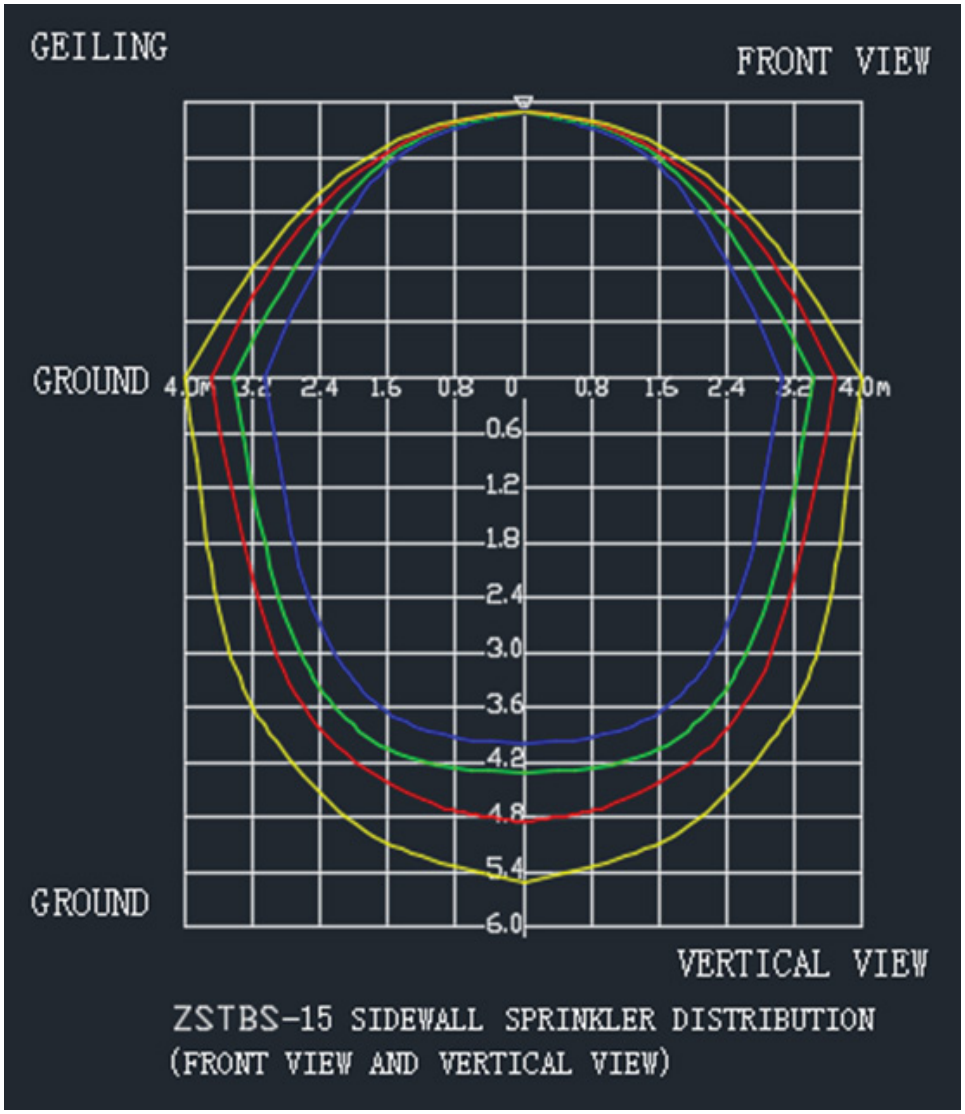
UPRIGHT SPRINKLER DISTRIBUTION



PENDENT SPRINKLER DISTRIBUTION



SIDEWALL SPRINKLER DISTRIBUTION



DISCHARGE COEFFICIENT "K"

Sprinklers are rated for use at a maximum service pressure of 175 psig(12bar)

$$K=Q/P^{1/2}$$

In which:
Q- The flow in gallons per minutes
K- Discharge Coefficient, K=5.6(80)
P- The pressure in Pounds per square inch gauge (psig)

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 NFPA 13. 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 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, then re-install.

INSTALLATION METHOD

A. Pendent sprinkler must be mounted in a pendent position, and upright sprinkler must be mounted in an upright position, the conventional sprinkler may be mounted in both upright and pendent position, the horizontal sidewall sprinkler is installed at horizontal position, to suit field condition.
B. Tighten the sprinkler into the sprinkler fitting by hand. It is recommended that a torque of 7 ~14 ft-lbs. be used to obtain a thread 1/2-inch NPT sprinkler joint. A radial force of 10 – 20 lbs.
C. Only use the non-hardening piping joint compound or Teflon tape, and apply to male thread only.
D. Tighten the sprinkler into fitting by hand, use a 22mm open spanner or 8" (200mm) adjustable wrench to tighten the unit into the fitting, do not use spanner on the frame arms, for it will cause the arms to break and glass bulb to burst.

REMOVE PROTECTION COVER

Be sure to remove the plastic protective cover after completing the installation, don't clamp the cover on the frame, otherwise it will affect the heat response function.

CAUTION

Be sure to remove the plastic protective cover after completing the installation, don't clamp the cover on the frame, otherwise it will affect the heat response function.

Escutcheon for clean attractive installation

In case of installing a decoration of escutcheon for clean attractive purpose, the step is as below:

i. Spin the inner component of escutcheon into sprinkler threads.
ii. Only use the non-hardening piping joint compound or Teflon tape, and apply to male thread only.
iii. Tighten the sprinkler into fitting by hand, use a 22mm open spanner or 8" (200mm) adjustable wrench to tighten the unit into the fitting.
iv. Keep the plastic protective cover clamping on sprinkler arms while the building's inside decoration work is ongoing.
v. Once decoration work completed, take off the plastic protective cover.
vi. Insert the outer component of escutcheon into inner component, make the escutcheon be flush to the ceiling, then the sprinkler is ready for services.