## **STORAGE**

# Early Suppression Fast Response Sprinkler (ESFR) Pendent



#### DESCRIPTION:

The early suppression fast response (ESFR), Model AG-25 is intended for use against severe fire challenges. This sprinkler is designed to respond quickly to growing fires and will deliver a heavy water discharge to "suppress" rather than "control".

The smaller deflector and frame provide a broad, very symmetrical, hemispherical pattern capable of suppressing fires between sprinklers in high storage height areas and at the same time retaining a high momentum central core to penetrate and suppress fires occurring directly beneath the sprinkler in low storage height areas.

This sprinkler model is designed for ceiling only sprinkler system with no in-rack sprinklers required. It can be used for protection of cartoned exposed expanded plastics as well as some storage arrangements of rubber tires, rolled paper, and aerosols.

## TECHNICAL DATA:

Nominal "K" Factor	25,2 (362 metric)
Thread Size	1" (available in NPT or ISO 7-R1)
Temperatures	165°F (74°C) 212°F (100°C)
System Pipe	Wet Pipe Systems Only
Maximum / Minimum area of coverage	100 ft² (9,3 m²) / 64 ft² (5,8 m²)
Maximum slope ceiling	9.5°
Maximum spacing	12 ft (3,7 m) for building heights up to 30 ft
	12 ft (3,7 m) for building heights up to 30 ft (9,1 m) 10 ft (3,1 m) for building heights greater than 30 ft (9,1 m)
Minimum spacing	8 ft (2,4 m)
Minimum Deflector distance from walls	4" (102 mm)
Minimum Deflector distance to top of	36" (914 mm)
Storage	
Minimum Deflector distance to ceiling	6-18" (152 a 457 mm)
Center Line of Thermal Sensing Element To Ceiling Distance	4-17" (102-425 mm)
Maximum Working Pressure	175 psi (12,1 bar)
Materials	Frame:
	Brass
	Deflector:
	Bronze
	Load Screw:
	Stainless SteelLever:
	Stainless Steel Strut: Stainless Steel
	Link Assembly: Berylium
	Nickel, SolderedCap; Brass
	Washer: Berylium Nickel Kick Spring: Stainless Steel
Finish	Bronze

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#### **OPERATION:**

The ESFR sprinkler model AG-25 uses a link which make the rest of the items to be in tension which prevent from the water output, maintaining the assembly in tension. When the temperature rate is approached, the fusible melts and the rest of the items separate, allowing the sprinkler activation and the water flow to exit.

#### **INSTALLATION:**

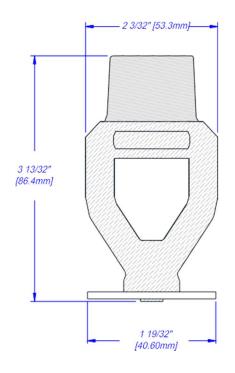
Model AG-25 sprinklers are quick response sprinklers intended for installation as specified in NFPA13. They must also be installed with the Model N Sprinkler Wrench specifically.

A leak tight 3/4" NPT (R3/4) sprinkler joint can be obtained with a torque of 8-18ft-lbs (10.8- 24.4N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of these sprinklers.

#### **TEMPERATURE RATING:**

Classification		SprinklerMax. AmbierTemperatureTemperature			Bulb Color	Frame Color
	°F	°C	°F	°C		
Ordinary	165	74	100	38	Black	Uncolore d
Intermedi ate	212	100	150	66	White	White

### **DIMENSIONS:**



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