# STORAGE Suppression Mode Fast Response (ESFR) Pendent

### **DESCRIPTION:**



The early suppression fast response (ESFR), Model AG-14 designed to respond quickly to growing fires with a high volume of water discharge to "suppress" rather than "control" fires.

The 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.

The ESFR sprinkler model AG-14 is intended for protection of palletized and solid piled and open frame single row, double row, multiple row and portable rack storage of most common materials including unexpanded and cartoned expanded plastics.

This sprinkler was designed to be shorter, and more compact than other ESFR sprinklers. The shorter sprinkler allows piping to be installed further from the ceiling and obstructions. It sprinkler is also less susceptible to damage due to smaller deflector and frame design.

#### **TECHNICAL DATA:**

Nominal "K" Factor	14,0 (200)		
Thread Size	3/4" (R3/4)		
Tomperatures	165°F (74°C)		
Temperatures	212°F (100°C)		
System Type	Wet Pipe systems only		
Maximum / minimum area of coverage	100 ft <sup>2</sup> (9,3 m <sup>2</sup> ) / 64 ft <sup>2</sup> (5,8 m <sup>2</sup> )		
Maximum slope ceiling	eiling 2/12 (9,5°)		
Flow discharge	100 gpm (378 l/min) of water at 50 psi (3,5 bar)		
Maximum apooing	12 ft (3,7 m) for building heights up to 30 ft (9,1 m)		
Maximum spacing	10 ft (3,1 m) for building heights greater than 30 ft (9,1 m)		
Minimum spacing	8 ft (2,4 m)		
Deflector distance from walls	4" (102 mm)		
Deflector to top storage	36" (914 mm)		
Deflector to ceiling distance	6-14" (152 a 356 mm) per NFPA13		
	5-14" (102 a 356 mm) per FM		
Center line of thermal sensing element to ceiling distance	4-13" (102-3030 mm) per FM		
Maximum working pressure	175 psi (12,1 bar)		
Finish	Bronze		

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#### **OPERATION:**

The ESFR sprinkler model AG-14 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 thetemperature rate is approached, the fusible melts and the rest of the items separate, allowing the sprinkler activation and the water flow to exit.

## **INSTALLATION:**

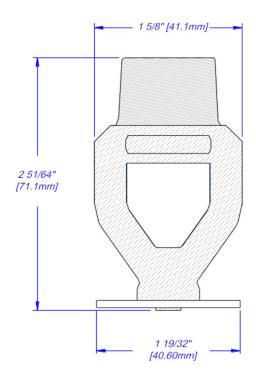
Model AG-14 sprinklers are designed for installation as specified in NFPA 13. They must also be installed with the Model J1 Sprinkler Wrench specifically designed.

The sprinkler joint can be obtained with a torque of 14-20 ft-lbs (19-27,1 N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of these sprinklers.

#### **TEMPERATURE RATING:**

Classification	Nominal Temperati	ure	Maximum Ambient Temperature		Link Color	Frame Color
	٥F	°C	۰F	°C		
Ordinary	165	74	100	38	Black	Uncolored
Intermedi	212	10	150	66	White	White
ate		0				

## **DIMENSIONS:**



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