

# Reliable®

## Model JL-17 (SIN RA1914) K16.8 (240 metric) Early Suppression Fast Response Sprinkler

### Features:

1. cULus, VdS, and LPCB listed as a nominal K16.8 (240 metric) ESFR sprinkler.
2. FM Approved as a quick-response, storage and non-storage, sprinkler.
3. Fusible link operating element.
4. Compact design allows piping to be installed farther from the ceiling and obstructions compared with larger sprinklers.

### Listings and Approvals

1. Listed by Underwriters Laboratories Inc. and UL certified for Canada (cULus) - Category Code VNWH.
2. FM Approved as a quick-response, storage and non-storage, sprinkler.
3. VdS Schadenverhütung GmbH (VdS).
4. Loss Prevention Certification Board (LPCB).
5. CNBOP Technical Approval.

### Product Description

The Reliable Model JL-17 Early Suppression Fast Response (ESFR) Sprinkler with a nominal k-factor of 16.8 (240 metric). This sprinkler is designed to respond quickly to growing fires and will deliver a heavy water discharge to “suppress” rather than “control” fires. FM Global classifies the Model JL-17 as a quick-response sprinkler, storage and non-storage, when the sprinkler is used in accordance with FM Global Property Loss Prevention Data Sheets.

The Model JL-17 ESFR sprinkler utilizes a levered fusible alloy solder link in either a 165°F (74°C) or a 212°F (100°C) rating. Model JL-17 sprinklers are cULus Listed for compliance with UL/ULC 1767, including the high clearance test for rack storage.

The Model JL-17 ESFR sprinkler was designed to be shorter and more compact than other ESFR sprinklers. The shorter sprinkler allows piping to be installed farther from the ceiling and obstructions. The JL-17 ESFR sprinkler is also less susceptible to damage due to smaller deflector and frame design. The lighter JL-17 ESFR passed rough use and abuse listing tests without plastic protectors.



**Model JL-17 ESFR Sprinkler**

### Application and Installation

The Model JL-17 ESFR sprinkler is intended for installation in accordance with NFPA 13 and FM Loss Prevention Data Sheets 2-0 and 8-9, as well as the requirements of any Authorities Having Jurisdiction. See Table B for information on NFPA and FM Global design criteria for the Model JL-17 sprinkler.

Use only the Model J1 sprinkler wrench for removal and installation. Any other type of wrench may damage the sprinkler. A grooved wrench boss is provided on the sprinkler to limit the potential for the wrench to slip during installation.



**Model J1  
Sprinkler Wrench**

When handling sprinklers, hold sprinklers only on frame arms and do not apply any force on the link assembly. Sprinklers should be tightened between 14 - 40 ft-lbs (19 - 54 N-m) torque.

Sprinklers not tightened to recommended torque may cause leakage or impairment of the sprinkler. Damage sprinklers must be replaced immediately.

## Temperature Ratings and Approvals

Temperature Classification	Temperature Rating		Link Color	Frame Color	Maximum Ambient Temperature		Approvals	Sprinkler Identification Number (SIN)
	°F	°C			°F	°C		
Ordinary	165	74	Black	Uncolored	100	38	cULus, FM, VdS, LPCB, CNBOP	RA1914
Intermediate	212	100	White	White	150	66	cULus, FM, VdS, LPCB, CNBOP	

## Installation Data

Sprinkler Type	Thread Size	Nominal K-Factor		Maximum Working Pressure	Finish
		US	Metric		
Pendent	¾" (R¾)	16.8	240	175 psi (12.1 bar)	Bronze

Pendent	¾" (R¾)	16.8	240	175 psi (12.1 bar)	Bronze
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## Installation Criteria

See Table B on page 3 of this document.

## Maintenance

The Model JL-17 ESFR Sprinkler should be inspected and the sprinkler system maintained in accordance with NFPA 25. Do not clean sprinkler with soap and water, ammonia or any other cleaning fluid. Replace any sprinkler that has been painted (other than factory applied) or damaged in any way. A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Prior to installation, sprinklers should be maintained in the original cartons and packaging until used, to minimize the potential for damage to sprinklers that would cause improper operation or non-operation.

Once operated, automatic sprinklers cannot be reassembled and reused. New sprinklers of the same size, type and temperature rating must be installed. A cabinet of replacement sprinklers should be provided for this purpose.

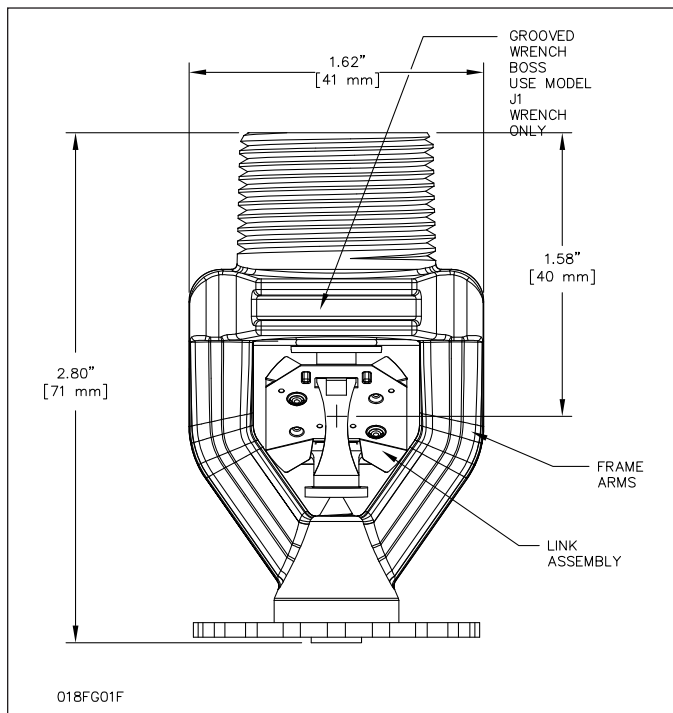
## Model JL-17 ESFR Sprinkler Specification

Sprinklers shall be Early Suppression Fast Response (ESFR) pendent sprinklers specifically tested and [cULus Listed] [FM Approved] [VdS Approved] [LPCB Approved] for commodity storage applications. Sprinkler frame and deflector to be of bronze construction. Fusible link assembly shall utilize the strut and lever principle of operation with approved fast response black-painted or white-painted beryllium-nickel thermal element. Water seal shall consist of a PTFE coated Bellville spring washer and brass cap assembly containing no plastic parts. ESFR sprinklers shall have a nominal K-factor of 16.8 (240 metric) with [¾" NPT] [ISO 7-R¾] threaded end connections. Sprinkler temperature rating shall be [Ordinary 165°F (74°C)] [Intermediate 212°F (100°C)]. ESFR pendent sprinklers shall be Reliable Model JL-17 (Bulletin 019).

## Ordering Information

### Specify:

1. Sprinkler: Model JL-17
2. Temperature rating: [Ordinary 165°F (74°C)]  
[Intermediate 212°F (100°C)]
3. Thread type: [¾" NPT] [ISO 7-R¾]



ITEM	DESCRIPTION
Sprinkler Identification Number (SIN)	RA1914
K Factor US (Metric)	16.8 (240)
Thread Size	3/4" (R3/4)
Sprinkler Orientation	Pendent
Maximum Working Pressure, PSI (bar)	175 PSI (12 bar)

Model JL-17 Commodity Selection and Design Criteria Overview

Table B

Storage Type	NFPA	FM GLOBAL
Sprinkler Type	ESFR	Storage
Response Type	ESFR	QR
System Type	Wet	Wet
Temperature Rating F (C)	165F, 212 (74, 100)	165F, 212 (74, 100)
Roof Construction	See NFPA 13	See FM Global 2-0
Ceiling Slope	See NFPA 13	See FM Global 2-0
Maximum Coverage Area	See NFPA 13	See FM Global 2-0
Minimum Coverage Area	See NFPA 13	See FM Global 2-0
Maximum Spacing	See NFPA 13	See FM Global 2-0
Minimum Spacing	See NFPA 13	See FM Global 2-0
Minimum Clearance to Commodity	See NFPA 13	See FM Global 2-0
Sprinkler Distance to Ceiling	See NFPA 13	See FM Global 2-0
Open Frame, Single, Double, Multiple Row, or Portable Rack Storage of Class I - IV, Cartoned Unexp Plastics	See NFPA 13	See FM 2-0 & 8-9
Solid Pile or Palletized Storage of Class I - IV, Cartoned Unexp Plastics	See NFPA 13	See FM 2-0 & 8-9
Idle Pallet Storage	See NFPA 13	See FM 2-0,8-9 & 8-24
Rubber Tire Storage	See NFPA 13	See FM 2-0 & 8-3
Rolled Paper Storage	See NFPA 13	See FM 8-21
Flammable Liquid Storage	See NFPA 30	See FM 7-29
Aerosol Storage	See NFPA 30B	See FM 7-31
Auto Components in Portable Racks	N/A	N/A

The equipment presented in this bulletin is to be installed in accordance with the latest published Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.

Products manufactured and distributed by Reliable have been protecting life and property for almost 100 years.

Manufactured by



**Reliable Automatic Sprinkler Co., Inc.**

(800) 431-1588 Sales Offices  
 (800) 848-6051 Sales Fax  
 (914) 829-2042 Corporate Offices  
 www.reliablesprinkler.com Internet Address



Revision lines indicate updated or new data.