

# Model F1FR-FS LO Large Orifice Flat Spray Sprinkler Types

Standard Pendent

# **Listings & Approvals**

- VdS Schadenverhütung GmbH: Certificate
- EC-Certificate: EC Certificate: 0786-CPD-40284

## **Product Description**

The F1FR-FS LO Flat Spray Sprinklers are designed for installation in accordance with CEA 4001 or EN 12845 (Automatic Sprinkler Systems - Design, Installation and Maintenance). The spray pattern created by this sprinkler makes this an excellent choice for applications with lower clearance above the suspended open ceilings and in racks.

The F1FR-FS LO Flat Spray Sprinkler utilizes a frangible 3.0mm glass bulb. The glass bulb consists of an accurately controlled amount of special fluid hermetically sealed inside of a precisely manufactured glass capsule. This glass bulb is specially constructed to provide fast thermal response.

At normal temperatures, the glass bulb contains the fluid in both the liquid phase and in the vapor phase. The vapor phase can be seen as a small bubble. As heat is applied, the liquid expands forcing the bubble smaller and smaller as the liquid pressure increases. Continued heating forces the liquid to push out against the bulb, causing the glass to shatter, opening the waterway and allowing the deflector to distribute the discharging water.

The F1FR-FS LO Flat Spray Sprinkler temperature rating is identified by the color of the glass bulb capsule.

Model F1FR-FS LO Large Orifice Quick Response Flat Spray Sprinkler With  $\frac{1}{2}$ " Connection Thread





Pendent

# Model F1FR-FS5 LO Quick Response Pendent Sprinkler

Installation Wrench: Model D Sprinkler Wrench

#### Installation Data:

Sprinkler Type Standard–Pendent (SSP) Deflectors Marked to Indicate Position		K Factor		Sprinkler	Approval
		US	Metric	Height	Organizations
(20mm) Sta	ndard Orifice with R1/2 Thread	8.0	115	58mm	VdS



Pendent

## Application

Model F1FR-FS LO Flat Spray Sprinkler is used in concealed spaces, suspended open ceiling and in racks in accordance with CEA 4001 Sprinkler System Planning) and EN 12845 (Automatic Sprinkler Systems - Design Installation and Maintenance).

## Installation

Model F1FR-FS LO Flat Spray Sprinklers are quick response sprinklers intended for installation as specified in CEA 4001 and EN 12845. They must also be installed with the Model D Sprinkler Wrench specifically designed by Reliable for use with these sprinklers.

**Note:** A leak tight ½" NPT sprinkler joint can be obtained with a torque of 8-18 ft-lbs (10,8 - 24,4 N-m). Do not tighten sprinklers over maximum recommended torque. It may cause leakage or impairment of the sprinklers.

## **Ordering Information**

Specify:

- 1. Sprinkler Model
- 2. Sprinkler Type
- 3. Orifice Size
- 4. Deflector Type
- 5. Temperature Rating - Specify Bulb Size when ordering
- 6. Sprinkler Finish Bronze only

#### Maintenance

The Model F1FR-FS LO Pendent should be inspected quarterly. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluid. Remove any sprinkler which 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.

#### **Temperature Ratings**

Classification	Sprinkler Temperature		Max. Ambient	Bulb Color
	°C	°F	Temp.	Color
Ordinary Ordinary Intermediate Intermediate High	57 68 79 93 141	135 155 175 200 286	100°F (38°C) 100°F (38°C) 150°F (66°C) 150°F (66°C) 225°F (107°C)	Orange Red Yellow Green Blue

The equipment presented in this bulletin is to be installed in accordance with the latest pertinent 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 over 90 years, and are installed and serviced by the most highly qualified and reputable

sprinkler contractors located throughout the United States, Canada and foreign countries.

#### Manufactured by



#### The Reliable Automatic Sprinkler Co., Inc.

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



Revision lines indicate updated or new data