Features

- Type 316 stainless steel alloy frame and deflector
- cULus Listed and FM Approved as Corrosion Resistant sprinklers
- Available as Upright, Pendant, or Recessed Pendant sprinklers
- Available with polyester finishes.

Product Description

Model F1FR-SS series sprinklers are standard spray, quick-response sprinklers intended for installation in accordance with NFPA 13. The sprinklers are cULus Listed and FM Approved as Corrosion Resistant sprinklers and feature a frame and deflector made of Type 316 stainless steel alloy.

Model F1FR-SS series sprinklers include upright and pendant sprinklers. Model F1FR-SS series pendant sprinklers are cULus Listed for installation with Reliable Model F1 and FP recessed escutcheons, which are available in Type 316 stainless steel alloy. The Reliable Model F2 escutcheon is available in stainless steel, and is cULus Listed and FM Approved for use with Model F1FR-SS series sprinklers. In addition, Reliable Model B one-piece escutcheons are also available in Type 316 stainless steel alloy.

All Model F1FR-SS series sprinklers use a 3 mm glass bulb operating element and beryllium-nickel sealing washer with PTFE tape on both sides.

<table>
<thead>
<tr>
<th>Sprinkler Model</th>
<th>Nominal K-Factor gpm/psi³/² (l/min/bar³/²)</th>
<th>Thread Size NPT or ISO7-1</th>
<th>Sprinkler Identification Number (SIN)</th>
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</thead>
<tbody>
<tr>
<td>F1FR-56SS Pendent</td>
<td>5.6 (80)</td>
<td>1/2</td>
<td>RA6514</td>
</tr>
<tr>
<td>F1FR-56SS Upright</td>
<td>5.6 (80)</td>
<td>1/2</td>
<td>RA6524</td>
</tr>
<tr>
<td>F1FR-80SS Pendent</td>
<td>8.0 (115)</td>
<td>3/4</td>
<td>RA6512</td>
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<tr>
<td>F1FR-80SS Upright</td>
<td>8.0 (115)</td>
<td>3/4</td>
<td>RA6522</td>
</tr>
</tbody>
</table>

www.reliablesprinkler.com
Model F1FR-56SS Pendent Standard Spray Sprinkler

Technical Specifications
- **Style:** Pendent or Recessed Pendent
- **Threads:** 1/2" NPT or ISO 7-1R1/2
- **Nominal K-Factor:** 5.6 (80 metric)
- **Max. Working Pressure:** 175 psi (12 bar)

Material Specifications
- **Thermal Sensor:** 3 mm glass bulb
- **Frame:** Type 316L stainless steel
- **Sealing Assembly:** Nickel Alloy with PTFE tape
- **Load Screw:** Type 316 stainless steel
- **Deflector:** Type 316 stainless steel

Recessed Escutcheons
- F1 (cULus Listed)
- F2 (cULus Listed, FM Approved)
- FP (cULus Listed)

Guards and Shields*
- D-1 Guard (cULus & FM)
- D-5 Guard & Shield (cULus & FM)
- C-1 Guard (FM)
- C-5 Guard & Shield (FM)
- D-4 Guard & Shield (FM)
- S-1 Shield (cULus & FM)

Sensitivities
- **Quick-response**

Temperature Rating
- 135°F (57°C)
- 155°F (68°C)
- 175°F (79°C)
- 200°F (93°C)
- 286°F (141°C) (pendent only, non-recessed)

Sprinkler Wrench
- Model W2 (pendent)
- Model GFR2 (recessed pendent)

Listings and Approvals
- cULus Listed
- FM Approved

*Note: Guards and shields are formed from steel and are not considered corrosion resistant.

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Model F1FR-56SS Pendent Sprinkler Components and Dimensions

- **Threads**
- **Wrench Flat**
- **Glass Bulb**
- **Deflector**

Model F1FR-56SS Recessed Pendent Sprinkler Installation and Dimensions

- **Face of Fitting to Ceiling**
  - 1/4" (6 mm) to 1" (25 mm)
  - 1/4" (6 mm) to 3/4" (19 mm)

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### Technical Specifications
- **Style:** Upright
- **Threads:** 1/2" NPT or ISO 7-1R1/2
- **Nominal K-Factor:** 5.6 (80 metric)
- **Max. Working Pressure:** 175 psi (12 bar)

### Material Specifications
- **Thermal Sensor:** 3 mm glass bulb
- **Frame:** Type 316L stainless steel
- **Sealing Assembly:** Nickel Alloy with PTFE tape
- **Load Screw:** Type 316 stainless steel
- **Deflector:** Type 316 stainless steel

### Guards and Shields*
- D-1 Guard (cULus)
- C-3 Guard & Shield (cULus, FM)
- D-3 Guard & Shield (cULus)
- C-1 Guard (FM)

### Finishes
- None
- White Polyester
- Black Polyester
- Custom Color Polyester

### Sensitivity
- Quick-response

### Temperature Rating
- 135°F (57°C)
- 155°F (68°C)
- 175°F (79°C)
- 200°F (93°C)
- 286°F (141°C)

### Sprinkler Wrench
- Model W2

### Listings and Approvals
- cULus Listed
- FM Approved

---

*Note: Guards and shields are formed from steel and are not considered corrosion resistant.*

---

### Model F1FR-56SS Upright Sprinkler Components and Dimensions

![Sprinkler Components and Dimensions Diagram](image-url)

**Deflector**

**Glass Bulb**

**Wrench Flat**

**Threads**

1-9/32" (32 mm)

2-5/16" (59 mm)
**Model F1FR-80SS Pendent Standard Spray Sprinkler**

**Technical Specifications**
- **Style:** Pendent or Recessed Pendent
- **Threads:** 3/4" NPT or ISO 7-1R3/4
- **Nominal K-Factor:** 8.0 (115 metric)
- **Max. Working Pressure:** 175 psi (12 bar)

**Material Specifications**
- **Thermal Sensor:** 3 mm glass bulb
- **Frame:** Type 316L stainless steel
- **Sealing Assembly:** Nickel Alloy with PTFE tape
- **Load Screw:** Type 316 stainless steel
- **Deflector:** Type 316 stainless steel

**Recessed Escutcheons**
- F1 (cULus Listed)
- F2 (cULus Listed, FM Approved)
- FP (cULus Listed)

**Guards and Shields**
- D-1 Guard (cULus)
- D-5 Guard & Shield (cULus)
- S-2 Shield (cULus, FM)
- C-1 Guard (FM)
- C-5 Guard & Shield (FM)

**Finishes**
- None
- White Polyester
- Black Polyester
- Custom Color Polyester

**Sensitivity**
- Quick-response

**Temperature Rating**
- 135°F (57°C)
- 155°F (68°C)
- 175°F (79°C)
- 200°F (93°C)
- 286°F (141°C) (pendent only, non-recessed)

**Sprinkler Wrench**
- Model W2 (pendent)
- Model GFR2 (recessed pendent)

**Listings and Approvals**
- cULus Listed
- FM Approved

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*Note: Guards and shields are formed from steel and are not considered corrosion resistant.*

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**Model F1FR-80SS Pendent Sprinkler Components and Dimensions**

![Diagram of Pendent Sprinkler](image1)

- **Threads**
- **Wrench Flat**
- **Glass Bulb**
- **Deflector**

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**Model F1FR-80SS Recessed Pendent Sprinkler Installation and Dimensions**

![Diagram of Recessed Pendent Sprinkler](image2)

- **Face of Fitting to Ceiling**
  - 1/4" (6 mm) to 1" (25 mm)
  - 1/4" (6 mm) to 3/4" (19 mm)

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**Model F1FR-80SS Pendent Sprinkler with Model F1 or F2 Recessed Escutcheon**

![Diagram with Escutcheon](image3)

**Model F1FR-80SS Pendent Sprinkler with Model FP Recessed Escutcheon**

![Diagram with Escutcheon](image4)
**Model F1FR-80SS Upright Standard Spray Sprinkler**

### Technical Specifications
- **Style:** Upright
- **Threads:** 3/4" NPT or ISO 7-1R3/4
- **Nominal K-Factor:** 8.0 (115 metric)
- **Max. Working Pressure:** 175 psi (12 bar)

### Material Specifications
- **Thermal Sensor:** 3 mm glass bulb
- **Frame:** Type 316L stainless steel
- **Sealing Assembly:** Nickel Alloy with PTFE tape
- **Load Screw:** Type 316 stainless steel
- **Deflector:** Type 316 stainless steel

### Guards and Shields*
- C-1 Guard (cULus, FM)
- C-3 Guard & Shield (cULus)

### Finishes
- None
- White Polyester
- Black Polyester
- Custom Color Polyester

### Sensitivity
- Quick-response

### Temperature Rating
- 135°F (57°C)
- 155°F (68°C)
- 175°F (79°C)
- 200°F (93°C)
- 286°F (141°C)

### Sprinkler Wrench
- Model W2

### Listings and Approvals
- cULus Listed
- FM Approved

*Note: Guards and shields are formed from steel and are not considered corrosion resistant.

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**Model F1FR-80SS Upright Sprinkler Components and Dimensions**

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**Figure 6**

- Deflector
- Glass Bulb
- Wrench Flat
- Threads

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**Figure 6**

- 1-3/8" (36 mm)
- 2-5/16" (58 mm)

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*Note: Guards and shields are formed from steel and are not considered corrosion resistant.*
Guarantee

For the Reliable Automatic Sprinkler Co., Inc. guarantee, terms, and conditions, visit www.reliablesprinkler.com.

Ordering Information

Specify the following when ordering.

Sprinkler
- Model: F1FR-56SS Pendent, F1FR-56SS Upright, F1FR-80SS Pendent, F1FR-80SS Upright
- Temperature Rating: 135°F (57°C), 155°F (68°C), 175°F (79°C), 200°F (93°C), 286°F (141°C)
- Threads: NPT or ISO7-1
- Finish: None, White Polyester, Black Polyester, Custom Color Polyester

Escutcheon (Pendent Only)
- Model: F1 recessed stainless steel, F2 recessed stainless steel, FP recessed stainless steel, B stainless steel

Sprinkler Wrench
- Model W2 (pendent, upright)
- Model GFR2 (recessed pendent)

Application

Model F1FR-SS series sprinklers are standard spray, quick-response sprinklers intended for installation in accordance with NFPA 13 and the requirements of applicable Authorities Having Jurisdiction. Model F1FR-SS series sprinklers are cULus Listed and FM Approved as Corrosion Resistant sprinklers. Verify compatibility with the environment where the sprinkler will be located prior to installation.

Installation

Glass bulb sprinklers have orange bulb protectors to minimize bulb damage during shipping, handling, and installation. Reliable sprinkler installation wrenches are designed to install sprinklers with bulb protectors in place. Remove the bulb protector at the time when the sprinkler system is placed in service for fire protection. Removal of the bulb protector before this time may leave the bulb vulnerable to damage. Remove bulb protectors by undoing the clasp by hand. Do not use tools to remove bulb protectors.

Model F1FR-SS series sprinklers must be installed with the Reliable sprinkler installation wrench identified in this Bulletin. Any other wrench may damage the sprinkler. Recommended installation torque is 8 to 18 lb/ft (11 to 24 N/m) for 1/2" NPT and ISO7-1R1/2 sprinklers or 14 to 20 lb/ft (19 to 27 N/m) for 3/4" NPT and ISO7-1R3/4 sprinklers. Do not tighten sprinklers over the maximum recommended installation torque. Exceeding the maximum recommended installation torque may cause leakage or impairment of the sprinkler.

Recessed pendent sprinklers are to be installed as shown in Fig. 2 or Fig 5., as applicable to the specific model being installed. Model F1FR-SS series recessed pendent sprinklers may only be installed with the Reliable Model F1 stainless steel, Model F2 stainless steel, or Model FP stainless steel recessed escutcheon. The use of any other recessed escutcheon will void all approvals and negate all warranties. The Reliable Model FP escutcheon may not be used in ceilings having positive pressure with respect to the space below. Ensure that the openings in the Model FP escutcheon/can assembly are unobstructed following installation.

Maintenance

Model F1FR-SS series sprinklers should be inspected and the sprinkler system maintained in accordance with NFPA 25. Do not clean sprinklers with soap and water, ammonia or any other cleaning fluids. Remove dust by gentle vacuuming. Replace 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.

Listings and Approvals

- Listed by Underwriters Laboratories, Inc. and UL Certified for Canada (cULus) - Guide Number VNIV
- FM Approved

Guarantee

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