

Reliable

Model F1FR-SS Series Stainless Steel Sprinklers

Standard spray, quick-response
cULus Listed

Product Features

- **Type 316 stainless steel alloy frame and deflector**
- **cULus Listed as Corrosion Resistant sprinklers**
- **Available as Upright, Pendent, or Recessed Pendent sprinklers**

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 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 pendent sprinklers. Model F1FR-SS series pendent sprinklers are cULus Listed for installation with Reliable Model F1 and FP recessed escutcheons, which are available in Type 316 stainless steel alloy. In addition, Reliable Model B one-piece escutcheons are also available in Type 316 stainless steel alloy.

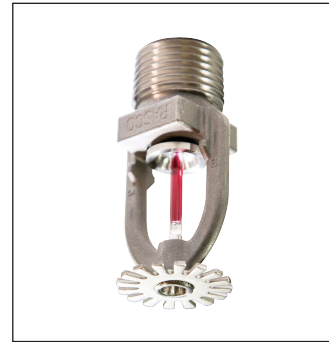
All Model F1FR-SS series sprinklers use a 3 mm glass bulb operating element and beryllium-nickel sealing washer with PTFE tape on both sides.



F1FR-56SS Upright



F1FR-80SS Upright



F1FR-56SS Pendent



F1FR-80SS Pendent



Model F1
Recessed Escutcheon



Model FP
Recessed Escutcheon



Model B
Escutcheon

Table A

Sprinkler Model	Nominal K-Factor gpm/psi ^{1/2} (l/min/bar ^{1/2})	Thread Size NPT or ISO7-1	Sprinkler Identification Number (SIN)
F1FR-56SS Pendent	5.6 (80)	1/2	RA6514
F1FR-56SS Upright	5.6 (80)	1/2	RA6524
F1FR-80SS Pendent	8.0 (115)	3/4	RA6512
F1FR-80SS Upright	8.0 (115)	3/4	RA6522

Model F1FR-56SS Pendent Standard Spray Sprinkler

SIN RA6514

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)

Finishes

None

Sensitivity

Quick-response

Material Specifications

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

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 (pendent)
 Model GFR2 (recessed pendent)

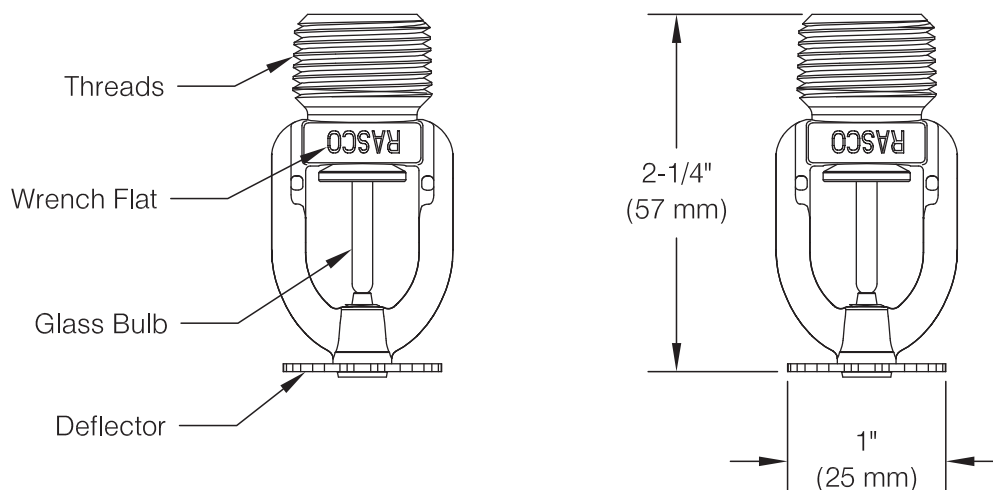
Listings and Approvals

cULus Listed



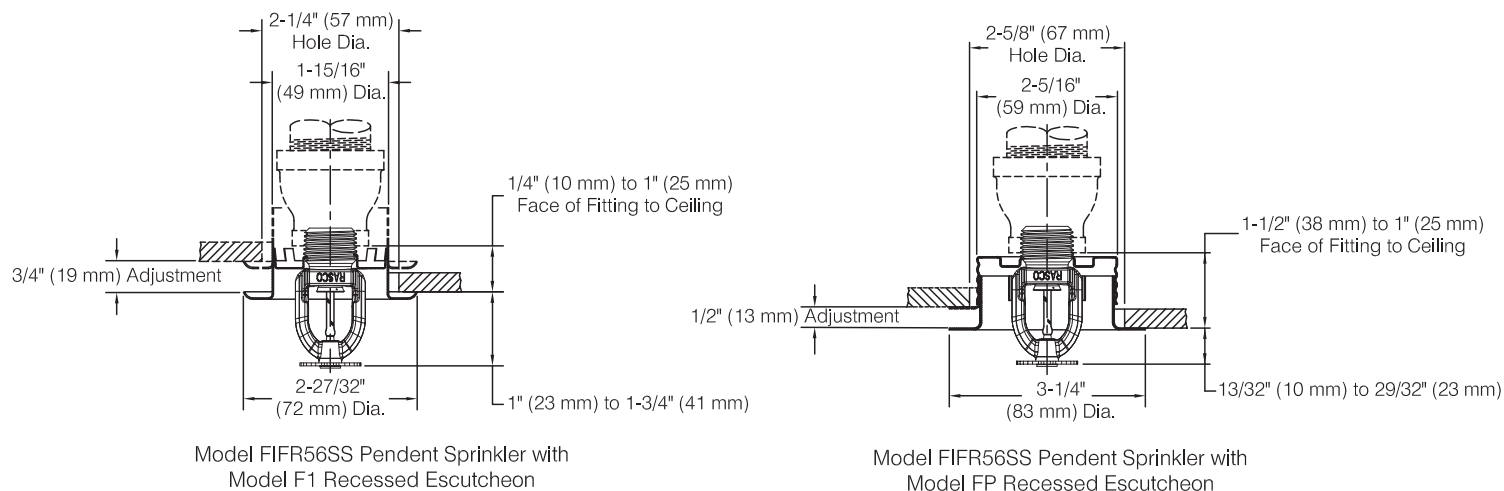
Model F1FR-56SS Pendent Sprinkler Components and Dimensions

Figure 1



Model F1FR-56SS Recessed Pendent Sprinkler Installation and Dimensions

Figure 2



Model F1FR-56SS Upright Standard Spray Sprinkler

SIN RA6524

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)

Finishes

None

Sensitivity

Quick-response

Material Specifications

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

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

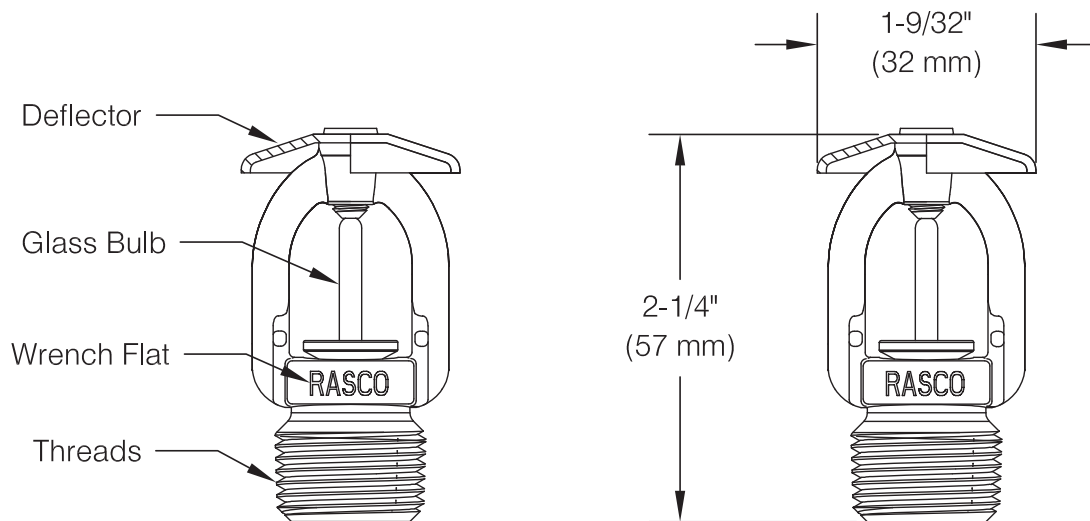
Listings and Approvals

cULus Listed



Model F1FR-56SS Upright Sprinkler Components and Dimensions

Figure 3



Model F1FR-80SS Pendent Standard Spray Sprinkler

SIN RA6512

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)

Finishes

None

Sensitivity

Quick-response

Material Specifications

Thermal Sensor: 3 mm glass bulb

Frame: Type 316L stainless steel

Sealing Assembly: Nickel Alloy with PTFE tape

Load Screw: Type 316L stainless steel

Deflector: Type 316L stainless steel

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 (pendent)

Model GFR2 (recessed pendent)

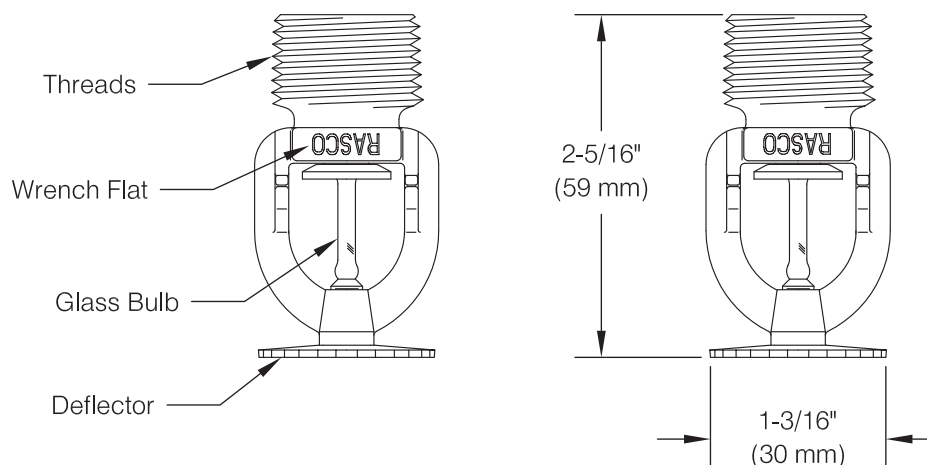
Listings and Approvals

cULus Listed



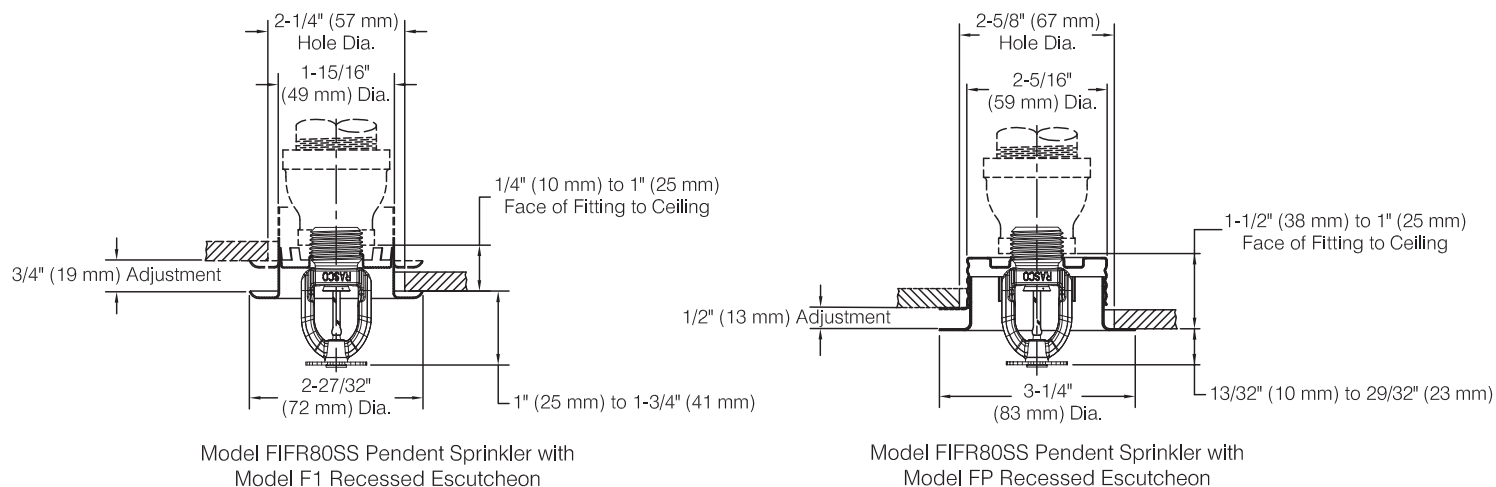
Model F1FR-80SS Pendent Sprinkler Components and Dimensions

Figure 4



Model F1FR-80SS Recessed Pendent Sprinkler Installation and Dimensions

Figure 5



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 316L stainless steel
Deflector: Type 316L stainless steel

Finishes

None

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

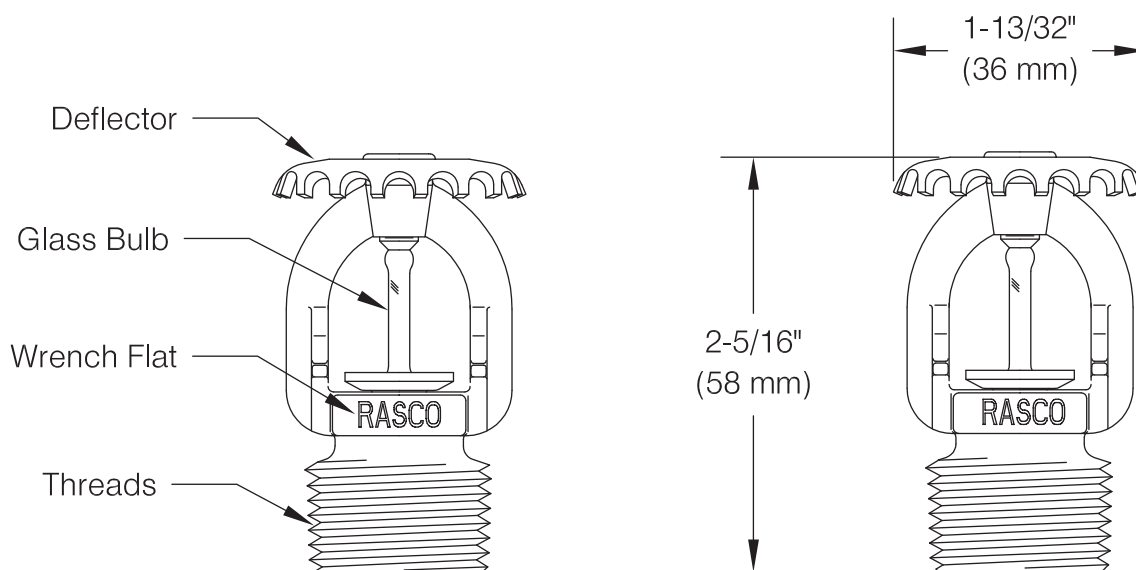
Listings and Approvals

cULus Listed



Model F1FR-80SS Upright Sprinkler Components and Dimensions

Figure 6





Model W2 (upright, pendent)



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 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 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)

UL Listing Category

Sprinklers, Automatic and Open

UL Guide Number

VNIV

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

Escutcheon (Pendent Only)

- Model: F1 recessed stainless steel, FP recessed stainless steel, B stainless steel

Sprinkler Wrench

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