



F1-56-300 and F1FR56-300 Series Conventional Sprinklers

K-factor 5.6 (80)

Features

- Standard Response or Quick Response
- Conventional deflector
- Low profile, compact design

Product Description

Conventional (or “old-style” sprinklers) direct approximately 40% of their water discharge up against the ceiling and the remainder downward to the floor, and may be used in either the upright or pendent position.

Reliable Model F1-56-300 Conventional Sprinklers are standard response fire sprinklers utilizing a 5.0 mm glass bulb thermal element.

Reliable Model F1FR56-300 Conventional Sprinklers are quick response fire sprinklers utilizing a sensitive 3.0 mm thermal glass bulb element. These sprinklers are available in 5.6 (80 metric) K factor.

When used in the pendent position, sprinklers may be installed exposed or surface mounted using escutcheons such as the Reliable Models B, C, or HB (reference Technical Bulletin 204).

Table A provides a summary of the approvals and availability of specific Model F1-56-300 and F1FR56-300 Series Conventional sprinkler configurations. Additional technical information for each sprinkler model is provided on the following pages.

Important! Reliable fire sprinklers must be handled, stored, and installed in accordance with the guidelines in Caution Sheet 310 and this bulletin. Failure to follow these instructions may result in unintended operation or nonoperation of the fire protection system.



Model F1-56-300
Conventional



Model F1FR56-300
Conventional

F1-56-300 and F1FR56-300 Series Conventional Sprinklers

Table A

Sprinkler Model	K-Factor gpm/psi ^{1/2} (lpm/bar ^{1/2})	Orientation	Response	Listings & Approvals	Max. Working Pressure psi (bar)	Sprinkler Identification Number (SIN)
F1-56-300	5.6 (80)	Conventional	SR	cULus	300 psi (20.7 bar)	R104
F1FR56-300	5.6 (80)	Conventional	QR	cULus	300 psi (20.7 bar)	R201

Model F1-56-300 Conventional Sprinkler**SIN R104****Technical Specifications****Style:** Upright or Pendent**Threads:** 1/2" NPT or ISO 7-R1/2**Nominal K-Factor:** 5.6 (80 metric)**Max. Working Pressure:** 300 psi (20.7 bar)**Material Specifications****Thermal Sensor:** 5 mm Glass Bulb**Sprinkler Frame:** Brass Alloy**Cap:** Bronze Alloy**Sealing Washer:** Nickel with PTFE**Load Screw:** Copper Alloy**Deflector:** Brass Alloy**Sprinkler Finishes**

(See Table B)

Sensitivity

Standard Response

Temperature Ratings

135°F (57°C)

155°F (68°C)

175°F (79°C)

200°F (93°C)

286°F (141°C)

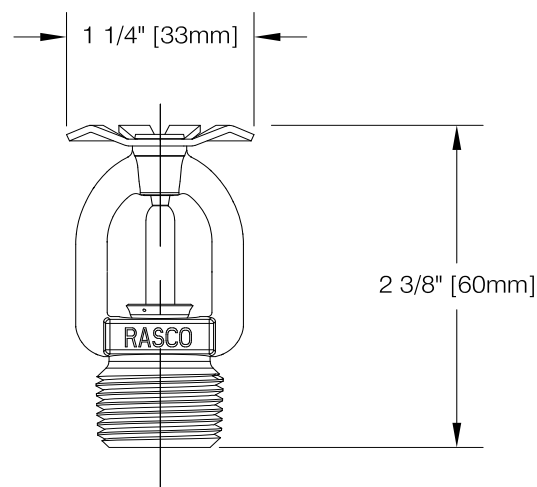
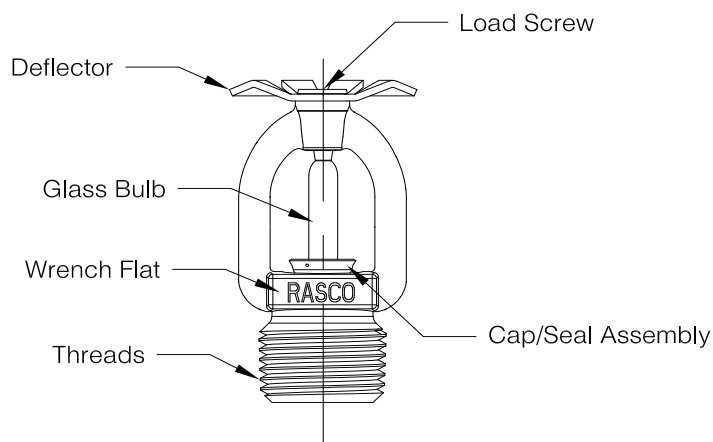
360°F (182°C)

Sprinkler Wrench

Model W2

Listings and Approvals

cULus

**Model F1-56-300 Conventional Sprinkler Components and Dimensions****Figure 1**

Model F1FR56-300 Conventional Sprinkler

SIN R201

Technical Specifications

Style: Upright or Pendent

Threads: 1/2" NPT or ISO 7-R1/2

Nominal K-Factor: 5.6 (80 metric)

Max. Working Pressure: 300 psi (20.7 bar)

Material Specifications

Thermal Sensor: 3 mm Glass Bulb

Sprinkler Frame: Brass Alloy

Cap: Bronze Alloy

Sealing Washer: Nickel with PTFE

Load Screw: Copper Alloy

Deflector: Brass Alloy

Sprinkler Finishes

(See Table B)

Sensitivity

Quick Response

Temperature Ratings

135°F (57°C)

155°F (68°C)

175°F (79°C)

200°F (93°C)

286°F (141°C)

Sprinkler Wrenches

Model W2

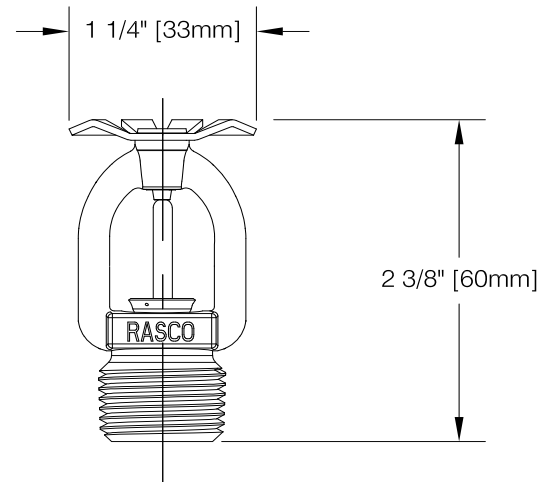
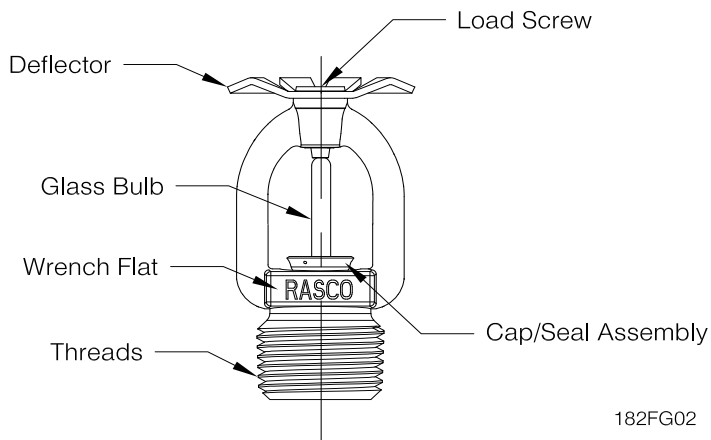
Listings and Approvals

cULus



Model F1FR56-300 Conventional Sprinkler Components and Dimensions

Figure 2



Model W2 Wrench

Figure 5



Installation

Model F1-56-300and F1FR56-300Series sprinklers must be installed with the Reliable Model W2 sprinkler installation wrench as identified in the Design and Installation Information table in this Bulletin. Any other wrench may damage the sprinkler. The Model W-2 wrench has two sets of jaws. Use the smallest set of jaws that fit on the wrench flats of the sprinkler. A leak tight sprinkler joint can be obtained with a torque of 8 to 18 lb-ft (11 to 24 N-m). Do not tighten sprinklers over the maximum recommended installation torque. Exceeding the maximum recommended installation torque may cause leakage or impairment of the sprinkler.

Glass bulb sprinklers have orange bulb protectors or protective caps 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.

Maintenance

Reliable Model F1-56-300and F1FR56-300series sprinklers should be inspected and the sprinkler system maintained in accordance with NFPA 25, as well as the requirements of any Authorities Having Jurisdiction.

Prior to installation, sprinklers should remain in the original cartons and packaging until used. This will minimize the potential for damage to sprinklers that could cause improper operation or non-operation.

Do not clean sprinklers with soap and water, ammonia liquid or any other cleaning fluids. Remove dust by gentle vacuuming without touching the sprinkler.

Replace any sprinkler which has been painted (other than factory applied). A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers. Failure to properly maintain sprinklers may result in inadvertent operation or non-operation during a fire event.

Sprinkler Finishes⁽¹⁾⁽²⁾

Table B

Standard Finishes
Bronze

Notes:

- 1. Other finishes and colors are available on special order. Consult your Reliable sales representative for details.
- 2. Paint or any other coating applied over the factory finish will void all approvals and warranties.

Guarantee

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

Ordering Information

Specify the following when ordering:

- **Sprinkler**
F1-56-300 Conventional
F1FR56-300 Conventional
- **Temperature Rating**
- **Sprinkler Finish**
See Table B
- **Sprinkler Wrench**
Model W2