



Model F1FR 56 Model F1FR 56 Recessed Quick Response Sprinklers

Model F1FR 56 Sprinkler Types

Standard Pendent

Model F1FR 56 Recessed Sprinkler Types

Recessed Pendent/F1 and F2

Recessed Pendent/FP

Corrosion Resistant (UL, ULC) Polyester Coated

Listings & Approvals

1. Listed by Underwriters Laboratories, Inc. (UL)
2. Listed by Underwriters' Laboratories of Canada (ULC)
3. Certified by FM Approvals

UL Listing Category

Sprinklers, Automatic & Open
Quick Response Sprinkler

UL Guide Number

VNIV

Product Description

Reliable Models F1FR 56 and F1FR 56 Recessed Sprinklers are quick response sprinklers which combine the durability of a standard sprinkler with the attractive low profile of a decorative sprinkler.

The Models F1FR 56 and F1FR 56 Recessed automatic sprinklers utilize a 3.0 mm frangible glass bulb. These sprinklers have demonstrated response times in laboratory tests which are five to ten times faster than standard response sprinklers. This quick response enables the Model F1FR 56 and F1FR 56 Recessed sprinklers to apply water to a fire much faster than standard sprinklers of the same temperature rating.

The glass bulb consists of an accurately controlled amount of special fluid hermetically sealed inside a precisely manufactured glass capsule. This glass bulb is specially constructed to provide fast thermal response. The balance of parts are made of brass, copper and beryllium nickel.

At normal temperatures, the glass bulb contains the fluid in both the liquid and vapor phases. 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.



Pendent



Recessed Pendent/F1
and F2



Recessed Pendent/FP

Application

Quick response sprinklers are used in fixed fire protection systems: Wet, Dry, Deluge or Preaction. Care must be exercised that the orifice size, temperature rating, deflector style and sprinkler type are in accordance with the latest published standards of the National Fire Protection Association or the approving Authority Having Jurisdiction. Quick response sprinklers are intended for installation as specified in NFPA 13. Quick response sprinklers and standard response sprinklers should not be intermixed.

Model F1FR 56 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 Height	Approval Organizations	Sprinkler Identification Number (SIN)
	US	Metric			
1/2" (15mm) Standard Orifice with 1/2" NPT (R1/2) Thread	5.6	80	2.25" (57mm)	1,2,3	RA1414



Pendent

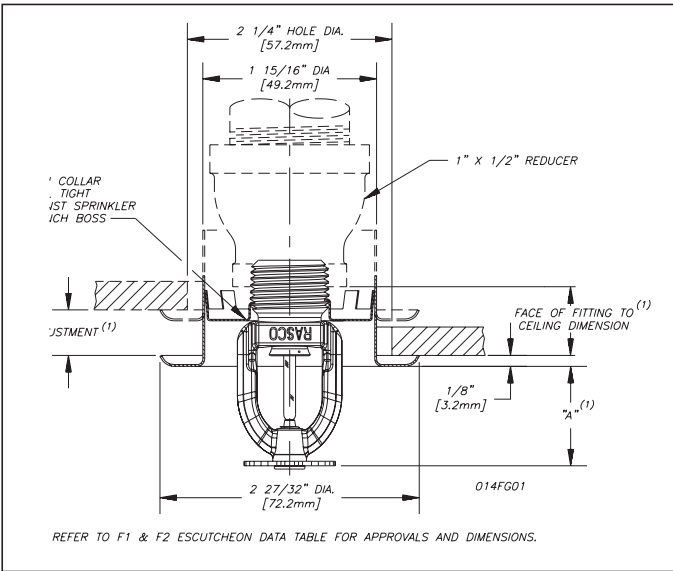
Model F1FR 56 Quick Response Recessed Pendent Sprinkler

Installation Wrench: Model GFR2 Sprinkler Wrench

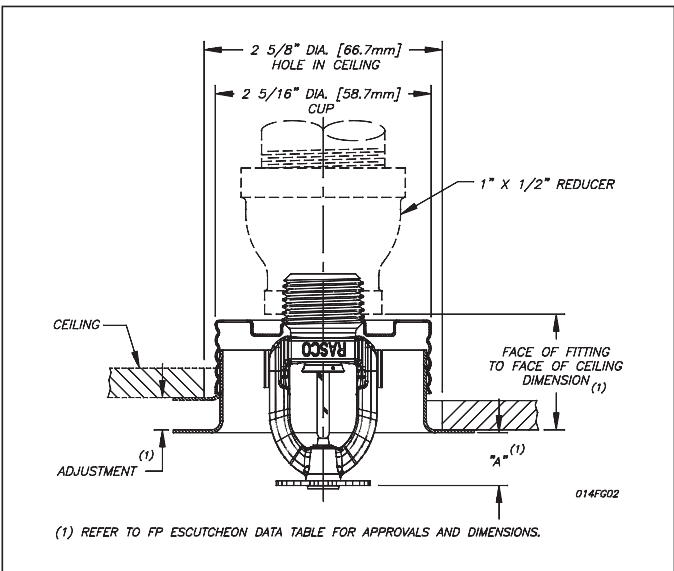
Installation Data:

Nominal Orifice	Thread Size	K Factor		Sprinkler Height	Approval ⁽¹⁾ Organizations	Sprinkler Identification Number (SIN)
		US	Metric			
1/2" (15mm)	1/2" NPT (R1/2)	5.6	80	2.25" (57mm)	1,2,3	RA1414

⁽¹⁾ Refer to escutcheon data table for approvals and dimensions.



Model F1FR 56/F1 or F2



Model F1FR 56/FP

Installation

Quick response sprinklers are intended for installation as specified in NFPA 13. Quick response sprinklers and standard response sprinklers should not be intermixed.

The Model F1FR 56 Recessed Quick Response Sprinklers are to be installed as shown. The Model F1 or F2 Escutcheons illustrated are the only recessed escutcheons to be used with the Model F1FR 56 Sprinklers. The use of any other recessed escutcheon will void all approvals and negate all warranties.

When installing Model F1FR 56 Sprinklers, use the Model D Sprinkler Wrench. Use the Model GFR2 Wrench for installing F1FR 56 Recessed Pendent Sprinklers. Any other type of wrench may damage these sprinklers.

NOTE: A leak tight 1/2" NPT (R1/2) 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.

Glass bulb sprinklers have orange bulb protectors to minimize bulb damage during shipping, handling and installation. REMOVE THIS PROTECTION AT THE TIME THE SPRINKLER SYSTEM IS PLACED IN SERVICE FOR FIRE PROTECTION. Removal of the protectors before this time may leave the bulb vulnerable to damage. RASCO wrenches are designed to install sprinklers when covers are in place. REMOVE PROTECTORS BY UNDOING THE CLASP BY HAND. DO NOT USE TOOLS TO REMOVE THE PROTECTORS.

Temperature Ratings

Classification	Sprinkler Temperature		Max. Ambient Temp.	Bulb Color
	°C	°F		
Ordinary	57	135	100°F (38°C)	Orange
Ordinary	68	155	100°F (38°C)	Red
Intermediate	79	175	150°F (66°C)	Yellow
Intermediate	93	200	150°F (66°C)	Green
High ⁽¹⁾	141	286	225°F (107°C)	Blue

⁽¹⁾ Not available for recessed sprinklers.

Escutcheon Data

Escutcheon Model	Approvals	Adjustment	"A" Dimension	Face of Fitting to Ceiling or Wall Dimension
F1	1,2	Max Recessed Min Recessed	1 1/2" (38.1mm) 3/4" (19.1mm)	3/16" - 15/16" (5mm - 24mm)
F2	1,2,3	Max Recessed Min Recessed	1 1/2" (38.1mm) 1" (25mm)	3/16" - 1 1/16" (5mm - 24mm)
FP Push-on/ Thread-off	1,2	Max Recessed	7/16" (11mm)	1 1/2" (38.1mm)
	1,2	Min Recessed	15/16" (24mm)	1" (25.4mm)

No Dimensional Figure for FP

Maintenance

The Models F1FR 56 and F1FR 56 Recessed Sprinklers should be inspected quarterly 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 using a soft brush or gentle vacuuming. 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 to minimize the potential for damage to sprinklers that would cause improper operation or non-operation.

Sprinkler Types

- Standard Pendent
- Recessed Pendent

Finish

Sprinkler	Escutcheon
White Polyester Coated ⁽¹⁾⁽²⁾	White Painted

⁽¹⁾ UL, ULC and FM approved. UL and ULC listed corrosion resistant sprinkler.

⁽²⁾ FP Push-on/Thread-off escutcheon

Ordering Information

Specify:

1. Sprinkler Model
2. Sprinkler Type
3. Orifice Size
4. Deflector Type
5. Temperature Rating
6. Sprinkler Finish
7. Escutcheon Type
8. Escutcheon Finish (where applicable)

Note: When Model F1FR 56 Recessed sprinklers are ordered, the sprinklers and escutcheons are packaged separately.

Reliable . . . For Complete Protection

Reliable offers a wide selection of sprinkler components. Following are some of the many precision-made Reliable products that guard life and property from fire around the clock.

- Automatic sprinklers
- Flush automatic sprinklers
- Recessed automatic sprinklers
- Concealed automatic sprinklers
- Adjustable automatic sprinklers
- Dry automatic sprinklers
- Intermediate level sprinklers
- Open sprinklers
- Spray nozzles
- Alarm valves
- Retarding chambers
- Dry pipe valves
- Accelerators for dry pipe valves
- Mechanical sprinkler alarms
- Electrical sprinkler alarm switches
- Water flow detectors
- Deluge valves
- Detector check valves
- Check valves
- Supertrol electrical system
- Sprinkler emergency cabinets
- Sprinkler wrenches
- Sprinkler escutcheons and guards
- Inspectors test connections
- Sight drains
- Ball drips and drum drips
- Control valve seals
- Air maintenance devices
- Air compressors
- Pressure gauges
- Identification signs
- Fire department connections

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 80 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
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