

Reliable®

Model F156 EC K5.6 (80 metric) Standard Response Extended Coverage Sprinklers

Model F156 EC Extended Coverage Pendent Sprinkler

Model F156 EC Recessed Extended Coverage Sprinkler with Model F1, F2 & FP Escutcheon

Features:

- Extended Coverage up to 20 by 20 feet (6m by 6m)
- cULus Listed for Light Hazard Occupancies only
- Standard Response bulb thermal element
- Nominal K-factor of 5.6 (80 metric)
- 1/2 inch NPT or ISO 7-R1/2 Threads
- Available with Model F1, F2 and FP Recessed escutcheons.

Approval Organizations

1. Listed by Underwriters Laboratories, Inc. and Certified for Canada (cULus)

UL Listing Category

Sprinklers, Automatic & Open (VNIV)

Product Description

The F156 EC sprinkler is an extended coverage, standard response sprinkler that is cULus Listed for Light Hazard applications. For sprinkler systems required to comply with the 1996 and later editions of NFPA 13, the F156 EC sprinkler is permitted to be used only for modifications or additions to existing systems equipped with standard response sprinklers, or as a replacement for individual standard response sprinklers in existing systems.

The F156 EC sprinkler must also be installed in accordance with the requirements of all authorities having jurisdiction.

The Model F156 EC Sprinkler utilizes a frangible 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 F156 Extended Coverage Sprinkler temperature rating is identified by the color of the glass bulb capsule.



Extended Coverage
Pendent



Recessed Extended Coverage
Pendent F1/F2



Recessed Extended Coverage
Pendent FP

Model F156 Extended Coverage Pendent Sprinkler

Deflector: EC Pendent

Installation Wrench: Model W2 Sprinkler Wrench

Approval Type: Extended Coverage - Light Hazard Occupancy

Table 1

Coverage Area					
Max. Area Width x Length		Flow Rate		Pressure Nominal	
				K=5.6 (80)	
ft. x ft.	m x m	gpm	L/min	psi	bar
16 x 16	4.9 x 4.9	26	98.4	21.6	1,5
18 x 18	5.5 x 5.5	33	125.0	34.7	2,4
20 x 20	6.0 x 6.0	40	151.4	51.0	3,5

Installation Data:

Nominal Orifice	Thread Size	Nominal K Factor		Sprinkler Height	Temperature Rating		Sprinkler Identification Number (SIN)
		US	Metric		°F	°C	
½" (15mm)	½" NPT (R½)	5.6	80	2.25" (57mm)	135, 155	57, 68	RA2745

Model F156 Recessed Extended Coverage Pendent Sprinkler

Deflector: EC Pendent

Installation Wrench: Model GFR2 Sprinkler Wrench

Approval Type: Extended Coverage - Light Hazard Occupancy

Installation Data⁽¹⁾:

Nominal Orifice	Thread Size	Nominal K Factor		Sprinkler Height	Temperature Rating		Sprinkler Identification Number (SIN)
		US	Metric		°F	°C	
½" (15mm)	½" NPT (R½)	5.6	80	2.25" (57mm)	135, 155	57, 68	RA2745

⁽¹⁾See Table 1 for Coverage Area.

Model F156 EC Pendent & F156 Recessed EC Pendent Sprinklers

Application

Model F156 EC and F156 EC Recessed 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.

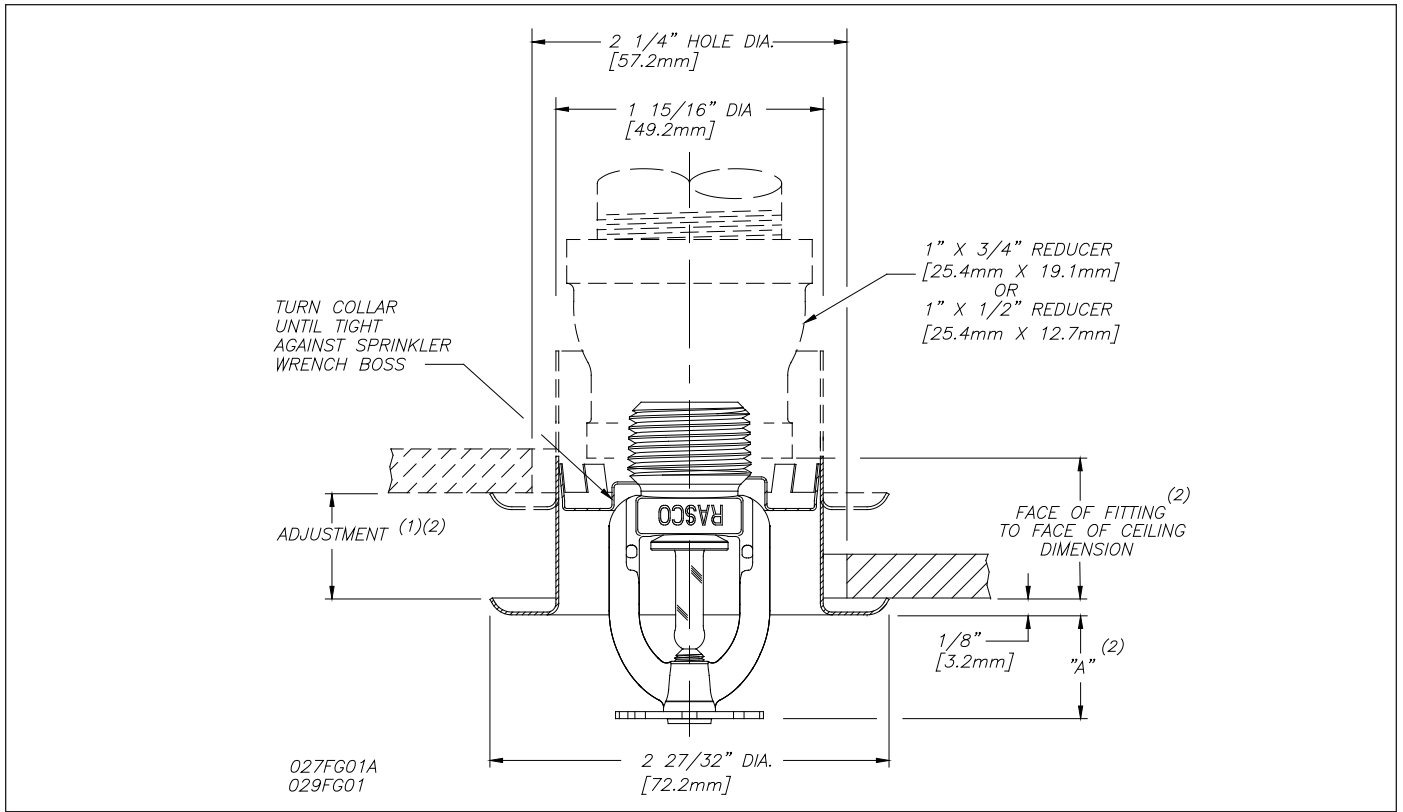
Installation

Model F156 EC sprinklers are standard response extended coverage sprinklers intended for installation as specified in NFPA 13.

The Model F156 EC Recessed Sprinklers are to be installed with a maximum recess of ¾ inch (19mm). The Model F1, F2, and FP Escutcheons illustrated are the only recessed escutcheons to be used with the Model F156 EC Sprinklers. The use of any other recessed escutcheon will void all approvals and negate all warranties.

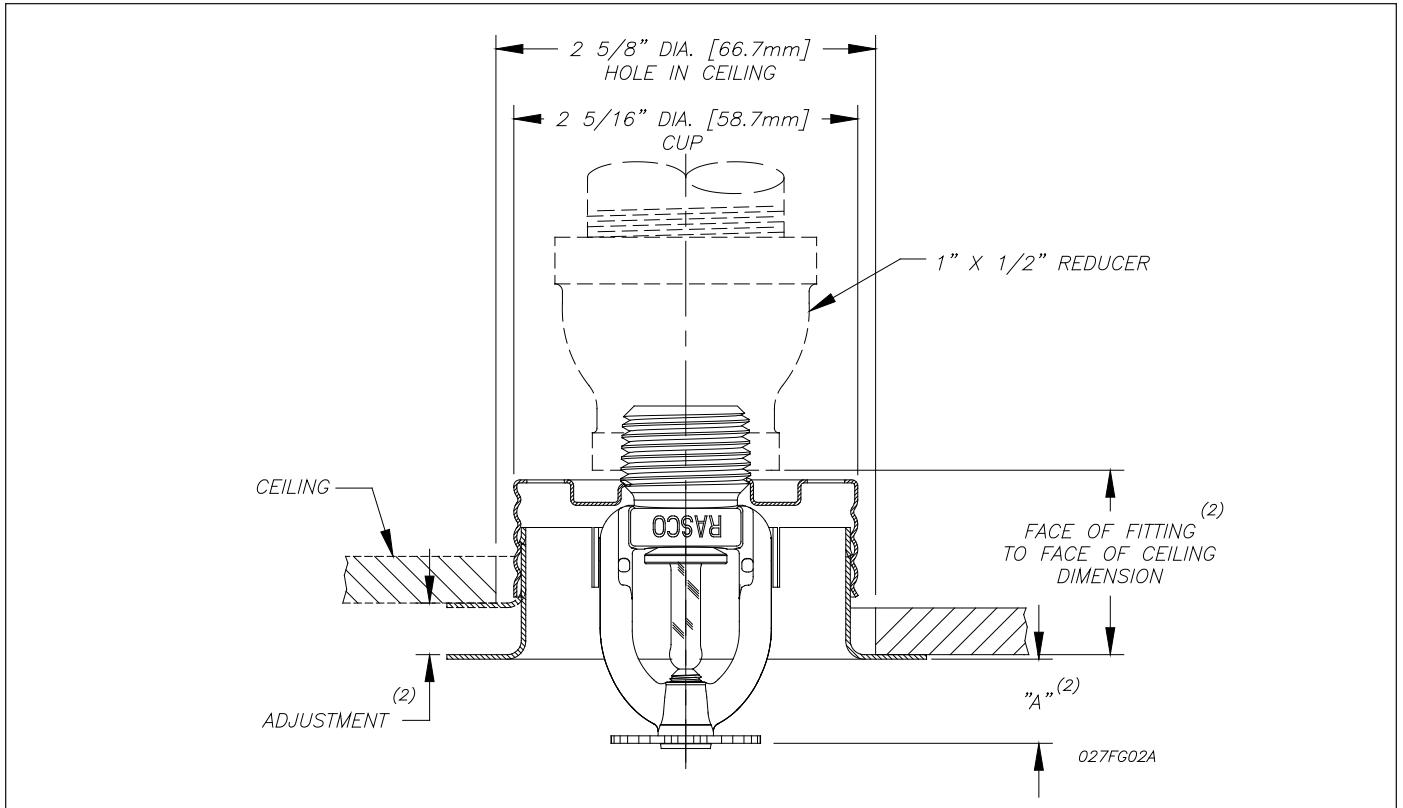
Model F156 EC Pendent sprinklers must be installed with the Reliable Model W2 Sprinkler Wrench. Model F156 EC Recessed Pendent sprinklers must be installed with the Reliable Model GFR2 wrench. Any other type of wrench may damage these sprinklers.

Glass bulb sprinklers have orange covers to protect the bulb during the installation process. REMOVE THIS PROTECTION ONLY AFTER THE SYSTEM HAS BEEN HYDROSTATICALLY TESTED AND, WHEN APPLICABLE, THE ESCUTCHEONS HAVE BEEN INSTALLED. RASCO wrenches are designed to install sprinklers when covers are in place.



Model F156 EC Recessed Pendant Sprinklers with Model F1/F2 Escutcheon

Fig. 1



Model F156 EC Recessed Pendant Sprinkler with Model FP Escutcheon

Fig. 2

(1) When installed directly into a tee, the escutcheon adjustment will be reduced.

(2) Refer to escutcheon data table for dimensions.

Maintenance

The Models F156 EC Pendent and F156 EC Recessed Pendent 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 fluid. 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.

Escutcheon Data (See Fig. 1 and Fig. 2)

Escutcheon Model	Adjustment	"A" Dimension	Face of Fitting to Ceiling Dimension
F1	Max Recessed	1 1/2" (38.1mm)	3/16" - 15/16"
	Min Recessed	3/4" (19.1mm)	(5m - 24mm)
F2	Max Recessed	1 1/2" (38.1mm)	3/16" - 11/16"
	Min Recessed	1" (25mm)	(5m - 17mm)
FP Push-on/ Thread-off	Max Recessed	7/16" (11mm)	1 1/2" (38.1mm)
	Min Recessed	15/16" (24mm)	1" (25mm)

Temperature Ratings

Classification	Sprinkler Temperature		Maximum Ambient Temperature		Bulb Color
	°F	°C	°F	°C	
Ordinary	135	57	100	38	Orange
Ordinary	155	68	100	38	Red

Maximum Working Pressure

250 psi (17 bar)

100% Factory tested hydrostatically to 500 psi (34.5 bar)

Finishes ⁽¹⁾

Standard Finishes	
Sprinkler	Escutcheon
Bronze Chrome White or Black Polyester Coated ⁽³⁾	Brass Chrome White Painted
Special Applications Finishes	
Sprinkler	Escutcheon
Electroless Nickel PTFE ⁽³⁾ Bright Brass Black Plating Black Paint Off White Satin Chrome Lead Plated ⁽²⁾ Wax Coated ⁽²⁾ Wax Over Lead ⁽²⁾	Electroless Nickel PTFE Bright Brass Black Plating Black Paint Off White Chrome Dull

⁽¹⁾ Other colors and finishes are available on special order. Consult factory for details.

⁽²⁾ 155°F (68°C) rating only.

⁽³⁾ cULus Listed Corrosion Resistant

Note: Paint or any other coating applied over the factory finish will void approvals and warranties.

Ordering Information

Specify:

1. Sprinkler Model: F156 EC
2. Temperature Rating: [135°F (57°C)] [155°F (68°C)]
3. Sprinkler Finish: See table
4. Escutcheon: [None] [F1] [F2] [FP]
5. Escutcheon Finish (where applicable)

Note: When Model F156 EC Recessed Pendent Sprinklers are ordered, the sprinklers and escutcheons are packaged separately.

The equipment presented in this bulletin is to be installed in accordance with the latest published 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.

Manufactured by

Reliable®

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