



F1FR80VdS Series Quick-Response Sprinklers

K-factor 8.0 (115)

Features

- Standard coverage quick-response sprinklers
- Upright and pendent orientations
- Low profile, compact design
- Available in a wide variety of finishes

Product Description

Reliable Model F1FR80VdS series sprinklers are quick-response standard spray automatic fire sprinklers utilizing a sensitive 3mm glass bulb thermal element.

This sprinkler is provided with ISO 7-1 R $\frac{1}{2}$ threads.

Pendent 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 F1FR series 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 F1FR80VdS Upright Sprinkler



Model F1FR80VdS Pendent Sprinkler

Note: Not all versions of the product shown.

Sprinkler Summary

Table A

Sprinkler Model	K-Factor gpm/psi ^{1/2} (lpm/bar ^{1/2})	Orientation	Listings & Approvals	Max. Working Pressure psi (bar)
F1FR80VdS	8.0 (115)	Upright	VdS, CE	175 (12)
		Pendent		175 (12)

Model F1FR80VdS Upright Sprinkler

Technical Specifications

Style: Upright

Threads: ISO 7-1 R1/2

Nominal K-Factor: 8.0 (115)

Max. Working Pressure:

175 psi (12 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

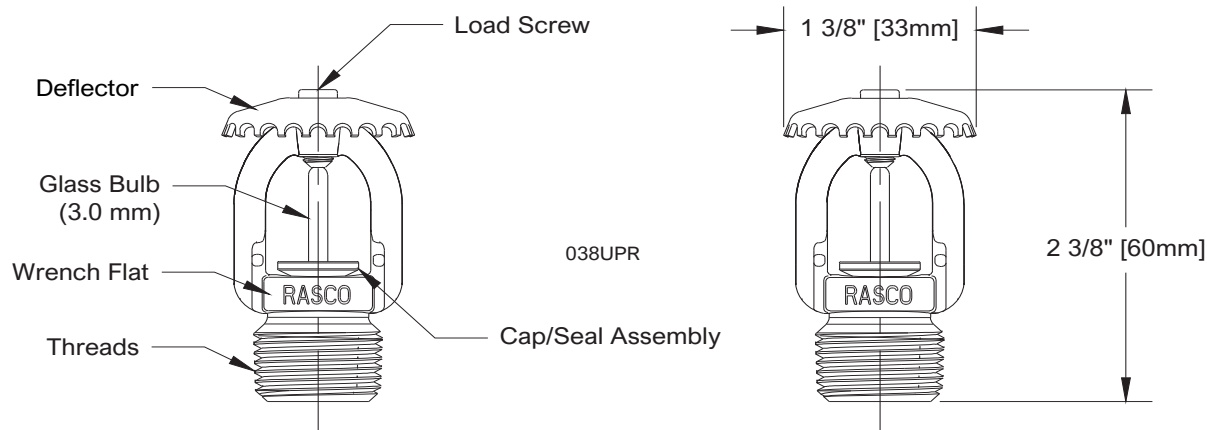
VdS

CE



Model F1FR80VdS Upright Sprinkler Components and Dimensions

Figure 1



Model F1FR80VdS Pendent Sprinkler

Technical Specifications

Style:
Pendent⁽¹⁾
Threads: ISO 7-1 R1/2
Nominal K-Factor: 8.0 (115)
Max. Working Pressure:
175 psi (12 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 (pendent)

Listings and Approvals

VdS
CE

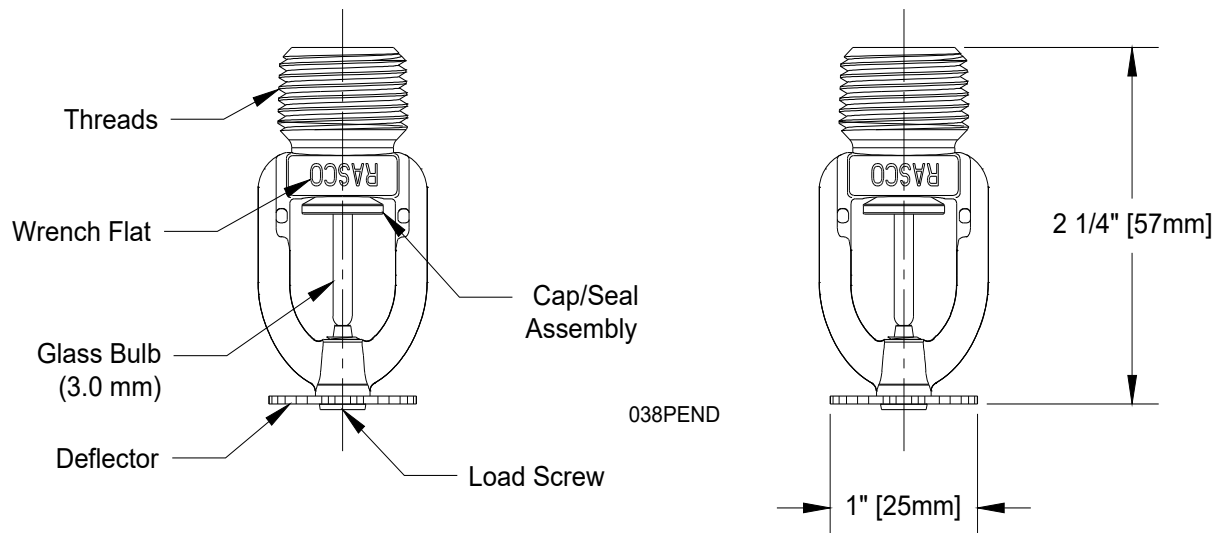


Notes:

1. Not approved by VdS for use in recessed installations.

Model F1FR80VdS Pendent Sprinkler Components and Dimensions

Figure 2



Wrench



Model W2 (upright, pendent)

Installation

Model F1FR Series sprinklers must be installed in accordance with NFPA13 and the requirements of all applicable authorities having jurisdiction. Model F1FR Series sprinklers must be installed with the Reliable sprinkler installation wrench identified in this Bulletin. Any other wrench may damage 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 F1FR series 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.

Finishes⁽¹⁾⁽²⁾

Table B

Standard Finishes	Special Application Finishes
Sprinkler	Sprinkler
Bronze	Bright Brass ⁽³⁾
Chrome	Black
White	Off White
	Satin Chrome

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.
3. For 200°F (93°C) maximum temperature rated sprinklers only.

Guarantee

For the guarantee, terms, and conditions, visit www.reliablesprinkler.com.

Ordering Information

Specify the following when ordering:

Model

- F1FR80VdS

Deflector/Orientation

- Upright
- Pendent

Temperature Rating

- See sprinkler technical specifications

Sprinkler Finish

- See Table B

Sprinkler Wrench

- Model W2 (upright and pendent)

Note: The Model F1FR80VdS pendent sprinkler is not listed for recessed installations.