



F1-80 Series Standard-Response Sprinklers

K-factor 8.0 (115)

Features

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

Product Description

Reliable Model F1 series sprinklers are standard-response standard spray automatic fire sprinklers utilizing a 5mm glass bulb thermal element.

Pendent sprinklers may be installed exposed or surface mounted using escutcheons such as the Reliable Models B, C, or HB (reference Technical Bulletin 204). When installed recessed, the Model F1-80 series sprinklers are specifically listed with and may only be installed with listed Reliable recessed escutcheons. Refer to the technical information on the following pages for specific listings for recessed installations and refer to Figure 3 for dimensional information.

When fitted with an approved Reliable water shield, these sprinklers may be considered intermediate sprinklers for use in racks, below grated walkways, and other areas where intermediate level sprinklers are required.

Table A provides a summary of the approvals and availability of specific Model F1 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 F1-80 Upright



Model F1-80 Pendent

Note: Not all versions of the product are shown.

F1-80 Series Sprinkler Summary

Table A

Sprinkler Model	K-Factor gpm/psi ^{1/2} (lpm/bar ^{1/2})	Max. Working Pressure psi (bar)	Listings & Approvals	Orientation	Sprinkler Identification Number (SIN)
F1-80	8.0 (115)	175 (12) 250 (17) (cULus only)	cULus, FM, LPCB, VdS, CE, UKCA	Upright	RA6222
				Pendent	RA6212

Model F1-80 Upright Sprinkler

SIN RA6222

Technical Specifications

Style: Upright
Threads: 3/4" NPT or ISO 7-R3/4
Nominal K-Factor: 8.0 (115)
Max. Working Pressure:
 175 psi (12 bar)
 250 psi (17 bar) (cULus only)

Material Specifications

Thermal Sensor: 5mm 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)

Guards & Shields

F-1 Guard (cULus)
 F-2 Guard (FM)
 F-3 Guard with Shield (cULus, FM)

Sprinkler Wrenches

Model W2
 Model W14 (with guard installed)

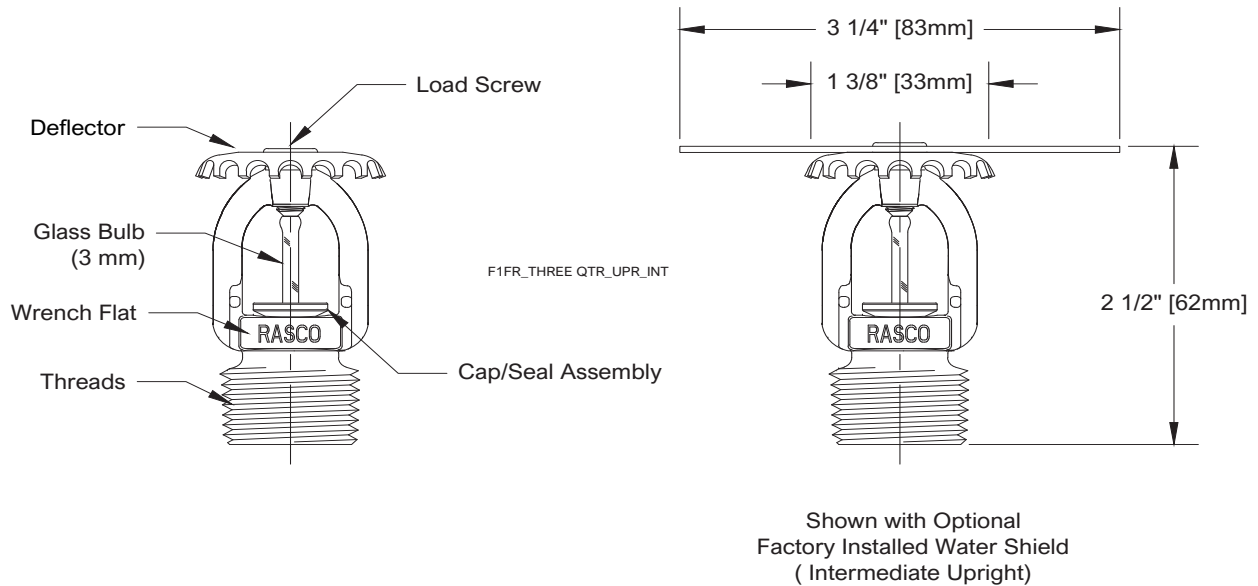
Listings and Approvals

cULus
 FM
 LPCB
 VdS
 CE
 UKCA: 0832-UKCA-CPR-S5076



Model F1-80 Upright Sprinkler Components and Dimensions

Figure 1



Technical Specifications**Style:**

Pendent
Recessed Pendent

Threads: 3/4" NPT or ISO 7-R3/4**Nominal K-Factor:** 8.0 (115)**Max. Working Pressure:**

175 psi (12 bar)
250 psi (17 bar) (cULus only)

Material Specifications**Thermal Sensor:** 5mm 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⁽¹⁾

135°F (57°C)

155°F (68°C)

175°F (79°C)

200°F (93°C)

286°F (141°C)

360°F (182°C)

Recessed Escutcheons

Model F1 (cULus)

Model F2 (cULus, FM)

Model FP (cULus)

Guards & Shields⁽²⁾

F-2 Guard (FM)

F-6 Guard/Shield Kit (FM)

F-7 Guard (cULus)

F-8 Guard/Shield Kit (cULus)

S-2 Shield (cULus, FM)

Sprinkler Wrenches

Model W2 (pendent)

Model W1 (recessed)

Model W14 (with guard installed)

Listings and Approvals⁽³⁾

cULus Listed

FM Approved

LPCB

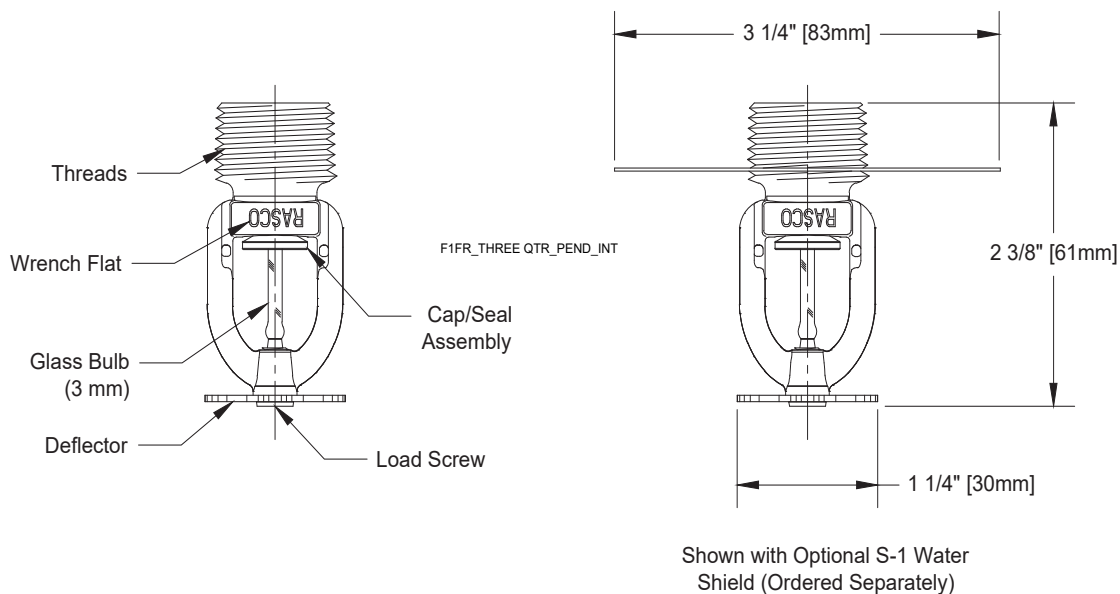
VdS

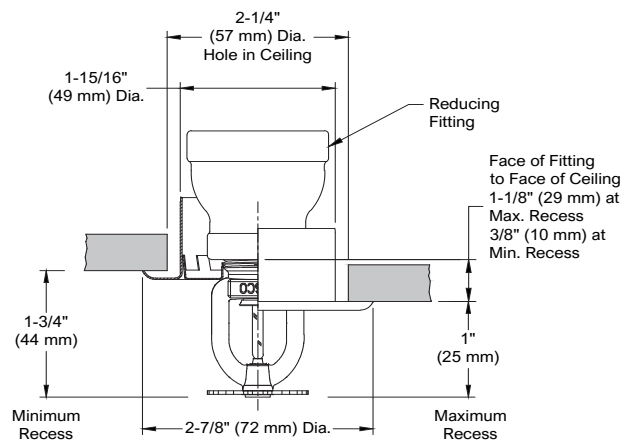
CE

UKCA: 0832-UKCA-CPR-S5077

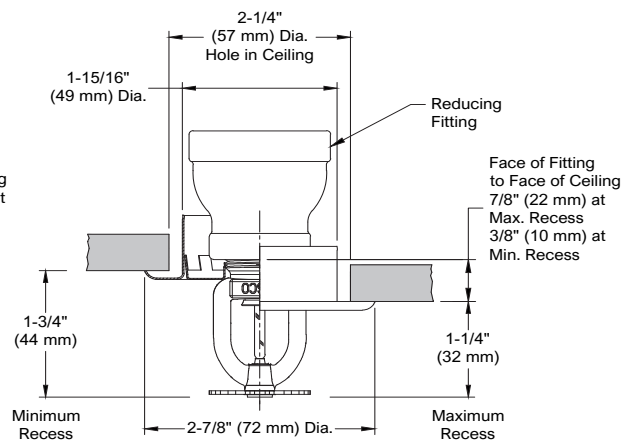
**Notes:**

1. 286°F (141°C) and higher temperature rated sprinklers not listed for recessed use.
2. Not suitable for use with recessed pendent installations.
3. When used surface mounted or exposed. See Recessed Escutcheon section for specific approvals when installed recessed.

Model F1-80 Pendent Sprinkler Components and Dimensions**Figure 2****Note:** Please refer to Figure 3 for recessed installation.

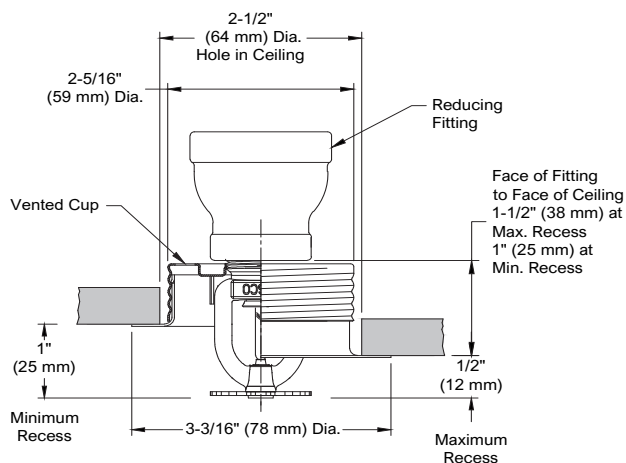


Models F1 & F1FR Pendent Sprinkler
with Model F1 Recessed Escutcheon
3/4" (19mm) Nominal Adjustment



Models F1 & F1FR Pendent Sprinkler
with Model F2 Recessed Escutcheon
1/2" (13mm) Nominal Adjustment

F1_REC_PEND



Models F1 & F1FR Pendent Sprinkler
with Model FP Recessed Escutcheon
1/2" (13mm) Nominal Adjustment

Note: Model FP recessed assemblies may not be used where the pressure in the space above the ceiling is positive with respect to the protected area. Ensure that the openings in the Model FP cup are unobstructed following installation.

