

# Reliable®

## Sprinkler Guards, Water Shields, and Guard/Shield Assemblies

### Product Description

Sprinkler guards and water shields in this bulletin are independent components which are Listed or Approved with specific fire sprinklers. Sprinkler guards are designed to protect the sprinkler from damage due to incidental contact. Water shields are intended for use in racks or under grated walkways and prevent water from above from cooling and thereby delaying activation of the shielded sprinkler.

Refer to the guard selection table in this bulletin and sprinkler technical bulletins for listing and approval information regarding sprinkler and guard combinations.

### Model C Guards and Guard/Shield Assemblies

#### Model C-1 Guard

This guard is used with pendent, upright, horizontal sidewall, and vertical sidewall sprinklers and does not incorporate a water shield.

#### Model C-2 Guard

This guard is used with non-recessed dry pendent sprinklers.

#### Model C-3 Guards

This guard has a built-in water shield. When assembled to an upright sprinkler, the combination forms an upright intermediate level sprinkler with guard.

#### Model C-5 Guard/Shield Assembly

This assembly is a Model C-1 guard supplied with either an S-1 (3-1/4" diameter) water shield threaded onto 1/2" sprinkler threads, or an S-2 (3-1/4" diameter) water shield threaded onto 3/4" threads. The combination forms a pendent intermediate level sprinkler with guard.

### Model D Guards and Guard/Shield Assemblies

#### Model D-1 Guard

These guards are used with pendent, upright, and horizontal sidewall sprinklers and do not incorporate a water shield.

#### Model D-3, D-6, and D-7 Guards

These guards have a built-in water shield. When assembled to an upright sprinkler, the combination forms an upright intermediate sprinkler with guard.

#### Model D-4 and D-5 Guard/Shield Assembly

These assemblies are model D-1 guards supplied with either an S-1 (3-1/4" diameter) water shield threaded onto 1/2" sprinkler threads, or an S-2 (3-1/4" diameter) water shield threaded onto 3/4" threads. The combination forms a pendent intermediate level sprinkler with guard.



Example: Model D1 Sprinkler Guard

#### Model D-8 Guard

This guard is used with pendent sprinklers and does not incorporate a water shield.

#### Model D-9 Guard/Shield Assembly

This assembly is a Model D-8 guard supplied with an S-2 (3-1/4" diameter) water shield that is threaded onto 3/4" sprinkler threads. The combination forms a pendent intermediate level sprinkler with guard.

### Model E and S Water Shields

Model E and S Shields are threaded water shields designed to create a pendent intermediate level sprinkler when installed on an approved sprinkler. The water shields are UL listed and/or FM Approved with the sprinklers listed in Table A, Listed and Approved Sprinkler, Guard, and Water Shield Combinations.

#### Model E-1 and S-1

Model E-1 and S-1 water shields are threaded onto 1/2" sprinkler inlet threads prior to installation.

#### Model E-2 and S-2

Model E-2 and S-2 water shields are threaded onto 3/4" sprinkler inlet threads prior to installation.

#### Model E-3 and S-5

Model E-3 and S-5 water shields are threaded onto 1" sprinkler inlet threads prior to installation.

**Note:** Model E water shields cannot be used with a guard.

## Model 22 and 25 Sprinkler Guards

Model 22 and 25 sprinkler guards are FM Approved for in-rack installation only. Each guard is supplied with a 1" locknut that must be threaded onto the sprinkler prior to sprinkler installation. Where permitted by Table A, the guards may also be used in combination with the S-5 water shield which replaces the locknut. The guard is assembled to the sprinkler following installation of the sprinkler.

## Model F Sprinkler Guards and Water Shields

The Model F Series sprinkler guards are supplied as kits to be assembled to the sprinkler at the job site before sprinkler installation. The kit consists of the guard, 1/2" and 3/4" lock-nuts (when used without a water shield) or a threaded water shield (when being used as an intermediate level pendent sprinkler). Model F Series guards are also available factory assembled on the sprinkler ready for immediate installation of the sprinkler and guard assembly.

### Model F-1, F-2, and F-7

These guards are used with pendent, upright, horizontal sidewall, and vertical sidewall sprinklers and do not incorporate a water shield.

### Model F-3 Guard

This guard has a built-in water shield. When assembled to an upright sprinkler, the combination forms an upright intermediate sprinkler with guard.

### Model F-5 Guard/Shield Assembly

This assembly is a Model F-1 guard supplied with an S-1 (3-1/4" diameter) water shield that is threaded onto 1/2" sprinkler threads. The combination forms a pendent intermediate level sprinkler with guard.

### Model F-6 Guard/Shield Assembly

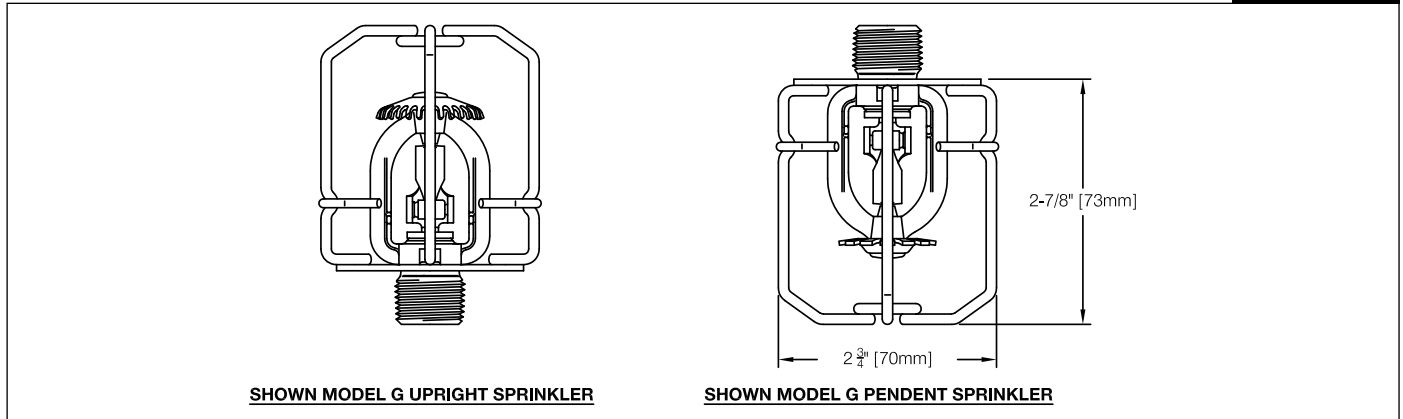
This assembly is a Model F-2 guard supplied with an S-2 (3-1/4" diameter) water shield that is threaded onto 3/4" sprinkler threads. The combination forms a pendent intermediate level sprinkler with guard.

### Model F-8 Guard/Shield Assembly

This assembly is a model F-7 guard supplied with either an S-1 (3-1/4" diameter) water shield which is threaded onto 1/2" sprinkler threads, or an S-2 (3-1/4" diameter) water shield threaded onto 3/4" threads. The combination forms a pendent intermediate level sprinkler with guard.

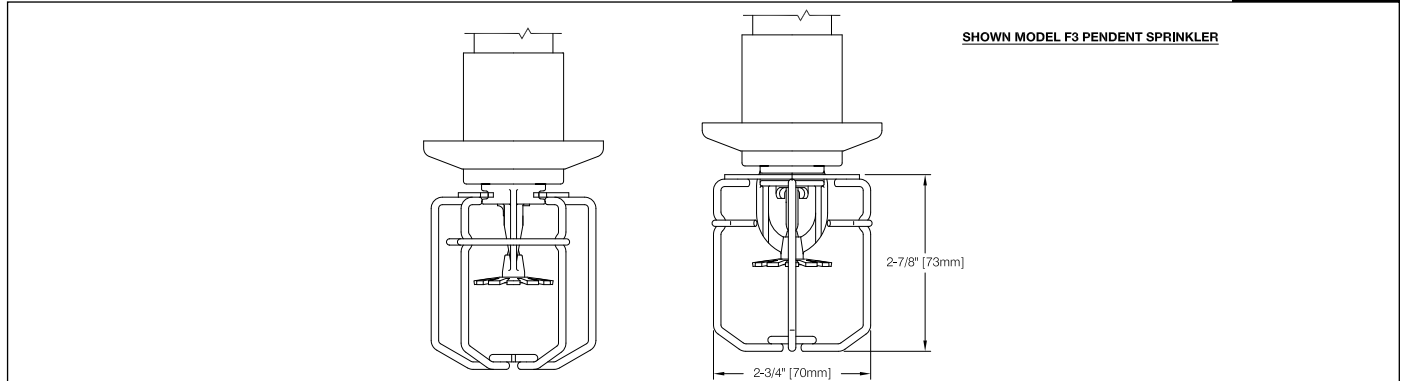
## Model C-1 Guards

Figure 1



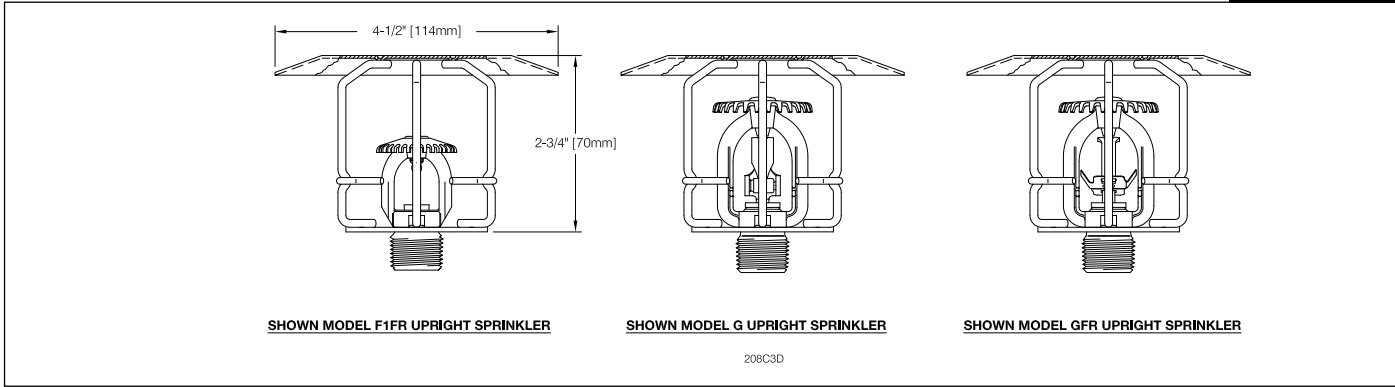
## Model C-2 Guards

Figure 2



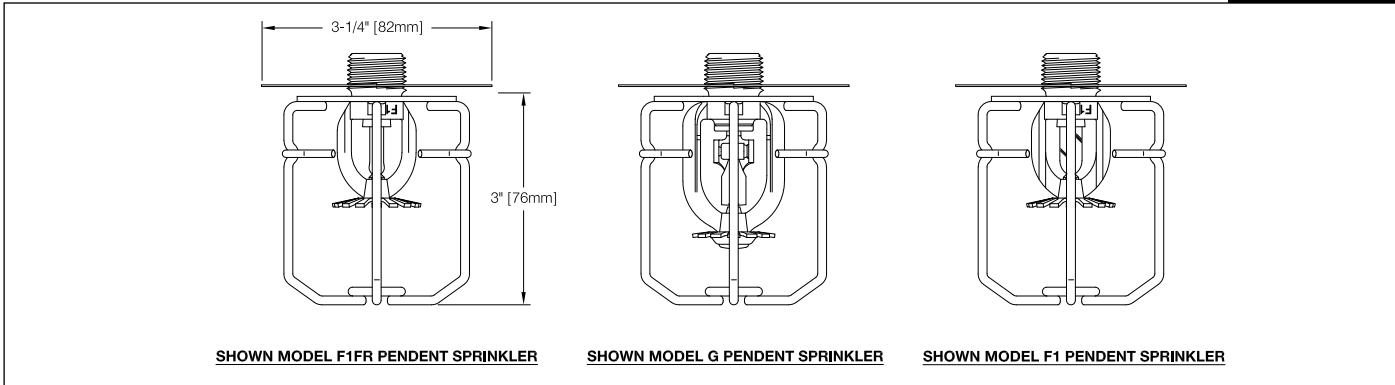
**Model C-3 Guards and Water Shield**

**Figure 3**



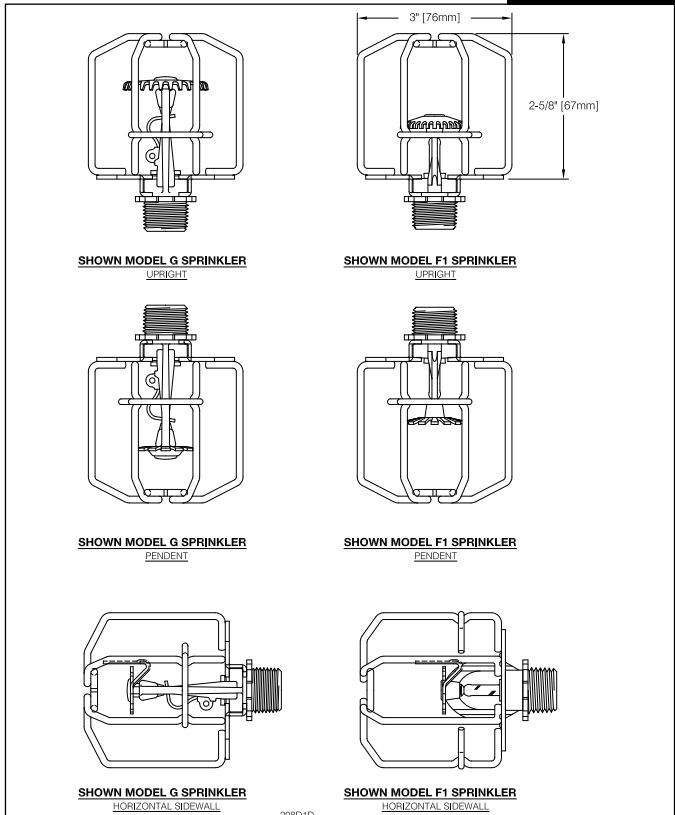
**Model C-5 Guards and Water Shield**

**Figure 4**



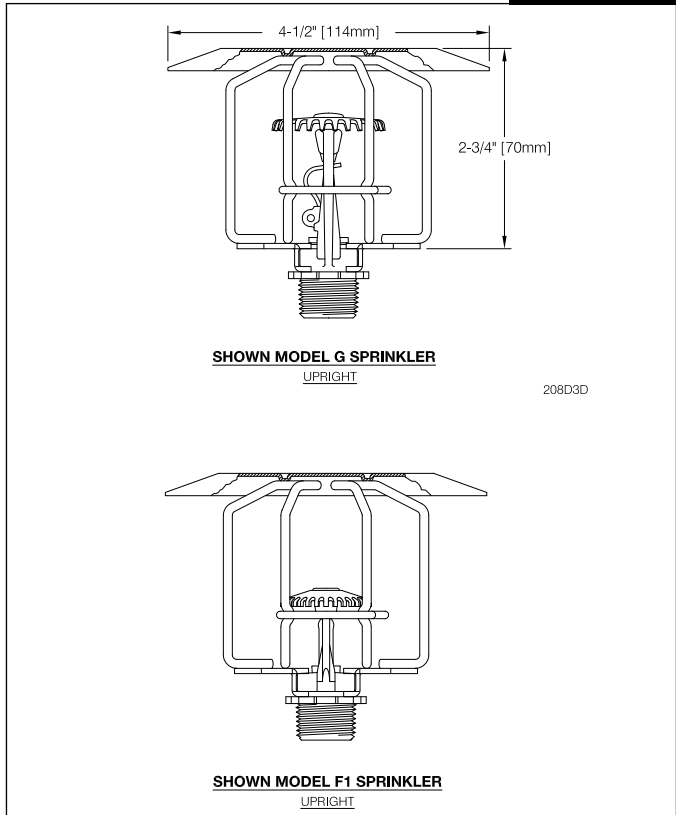
**Model D-1 Guard**

**Figure 5**



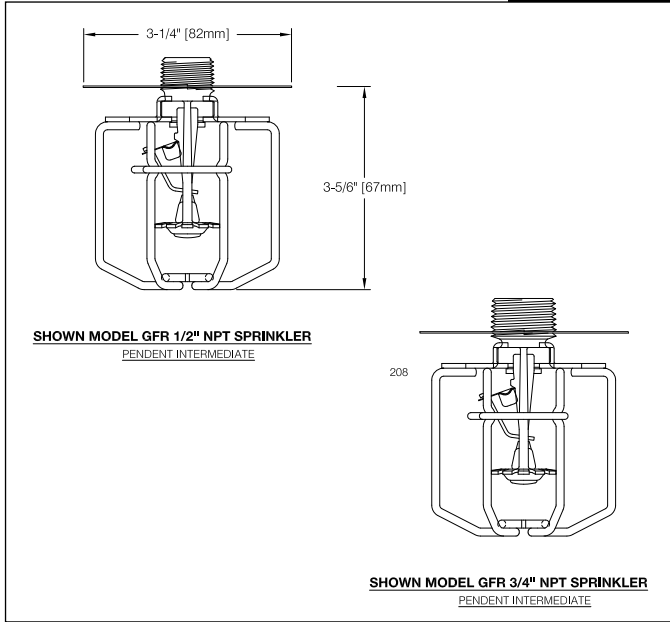
**Model D-3 Guards and Water Shield**

**Figure 6**



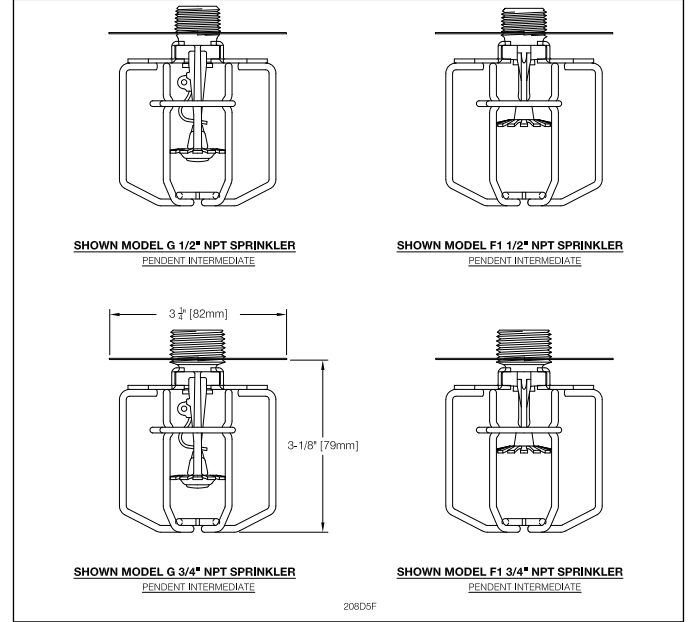
**Model D-4 Guards and Water Shield**

**Figure 7**



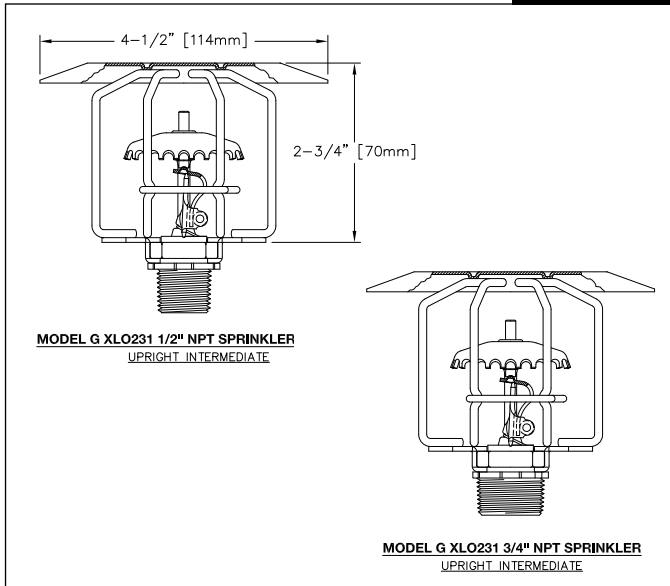
**Model D-5 Guards and Water Shield**

**Figure 8**



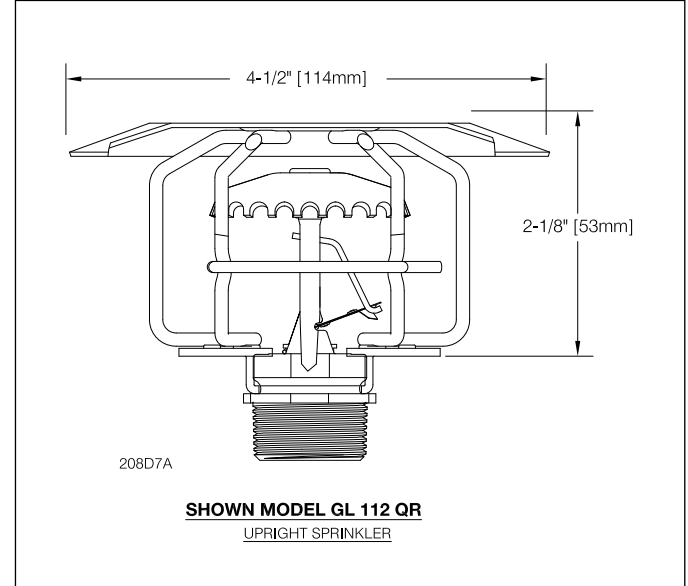
**Model D-6 Guards and Water Shield**

**Figure 9**



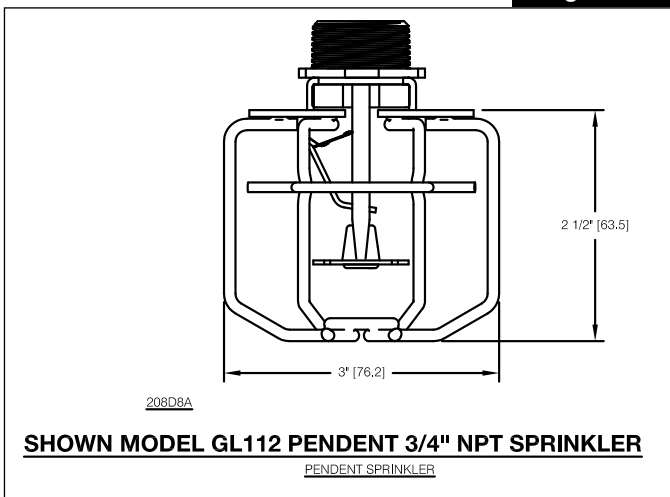
**Model D-7 Guards and Water Shield**

**Figure 10**



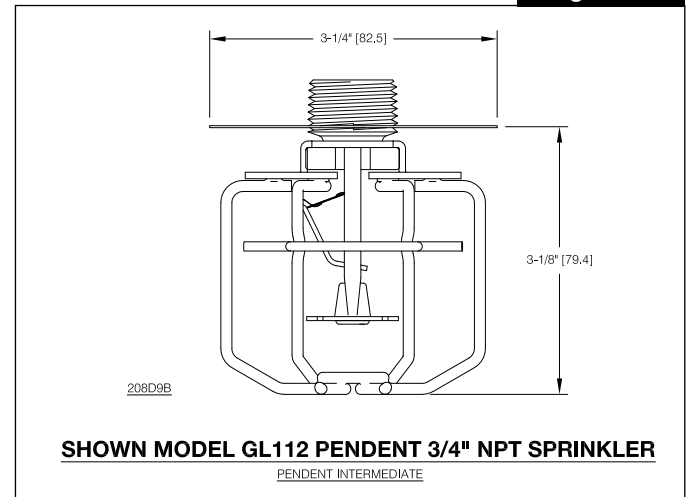
**Model D-8 Guard**

**Figure 11**



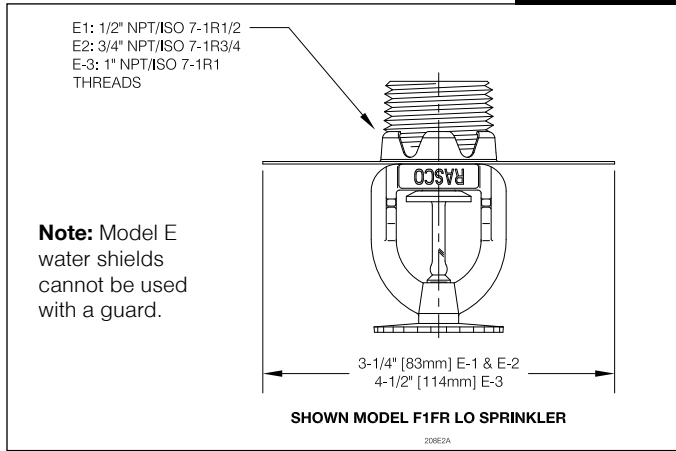
**Model D-9 Guard and Water Shield**

**Figure 12**



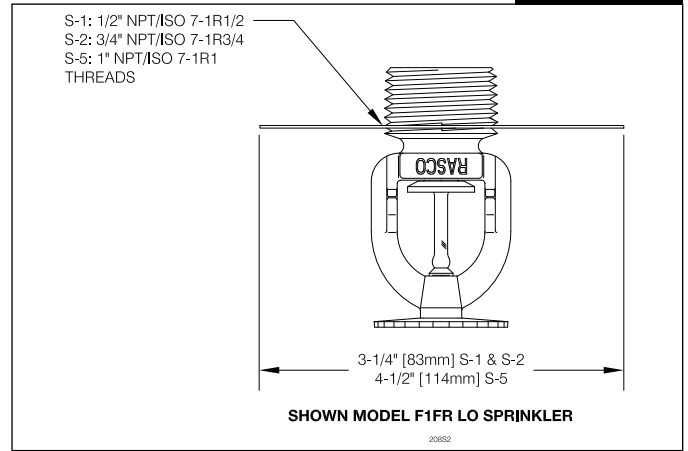
**Model E Water Shield**

**Figure 13**



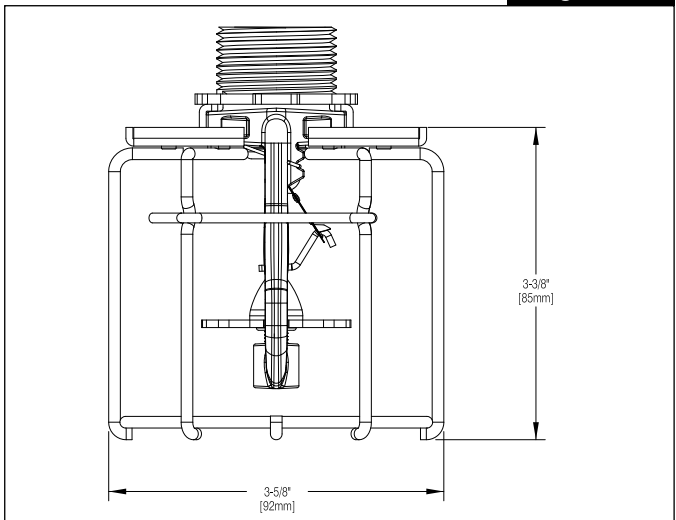
**Model S Water Shield**

**Figure 14**



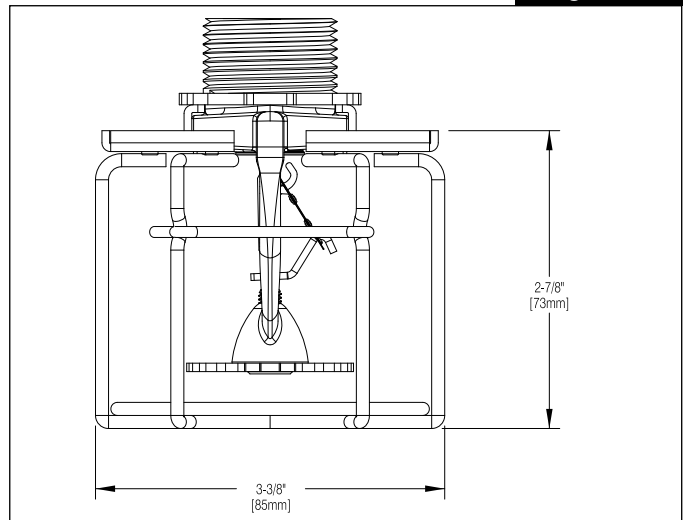
**Model 22 Guard**

**Figure 15**



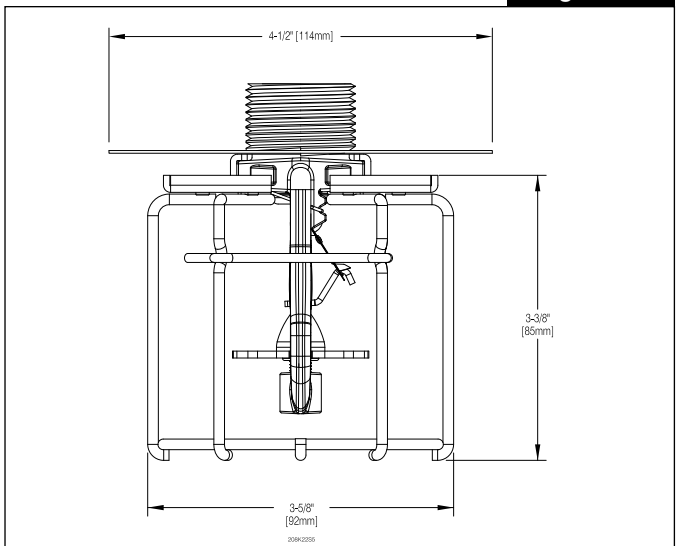
**Model 25 Guard**

**Figure 16**



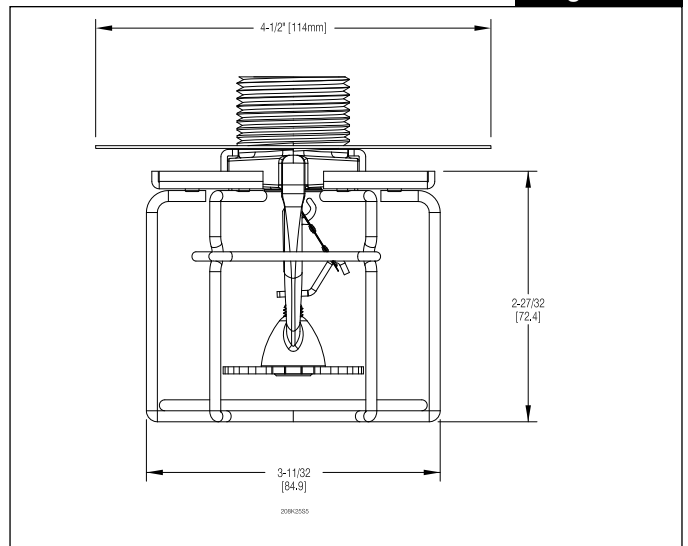
**Model 22 Guard w/ S-5 Shield**

**Figure 17**



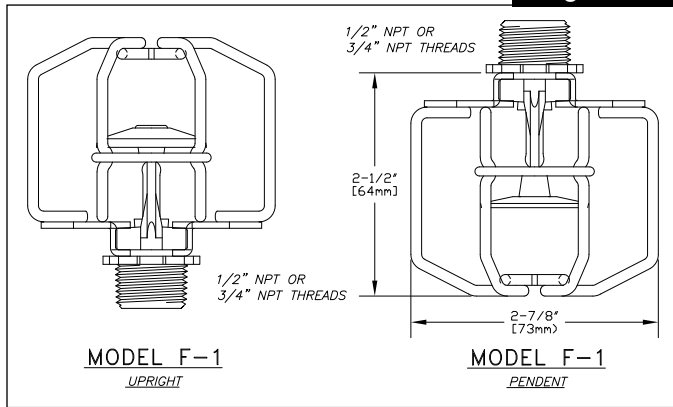
**Model 25 Guard w/ S-5 Shield**

**Figure 18**



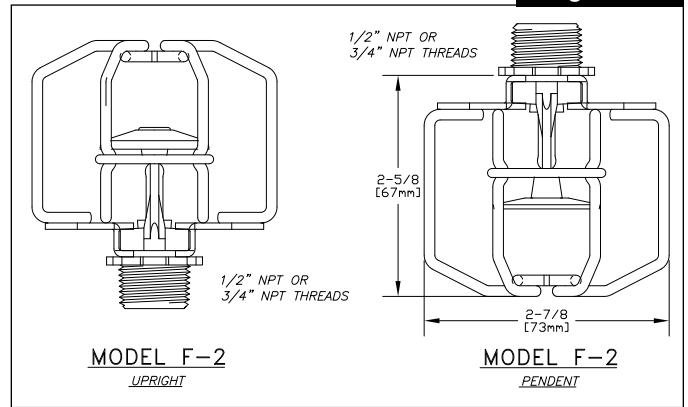
Model F-1 Guard

Figure 19



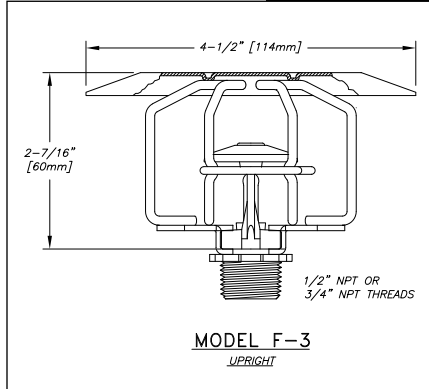
Model F-2 Guard

Figure 20



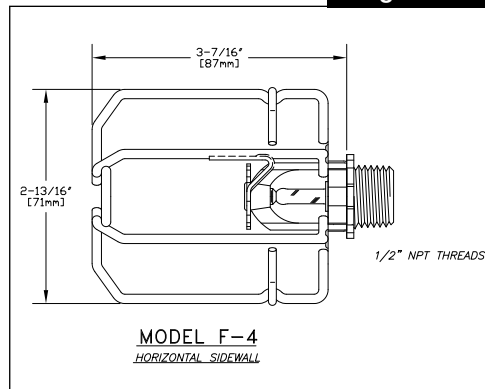
Model F-3 Guard and Water Shield

Figure 21



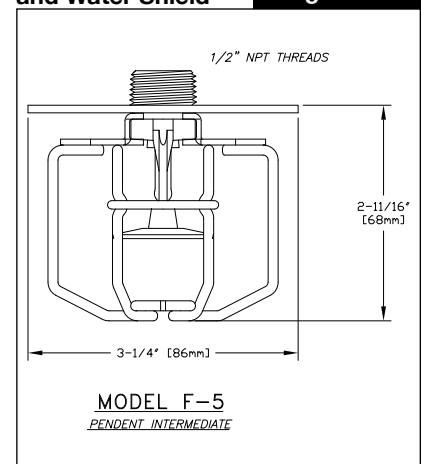
Model F-4 Guard

Figure 22



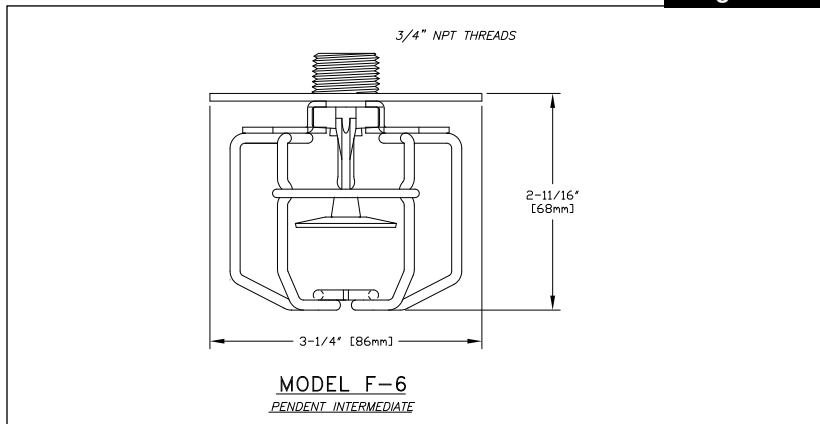
Model F-5 Guard and Water Shield

Figure 23



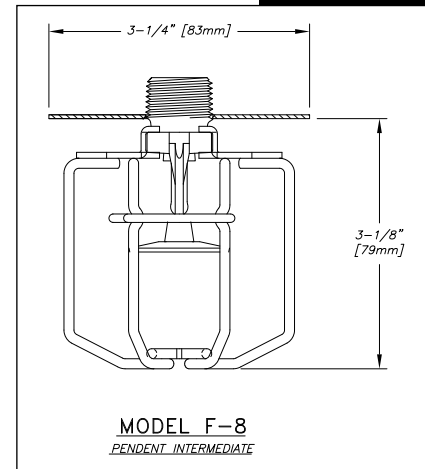
Model F-6 Guard and Water Shield

Figure 24



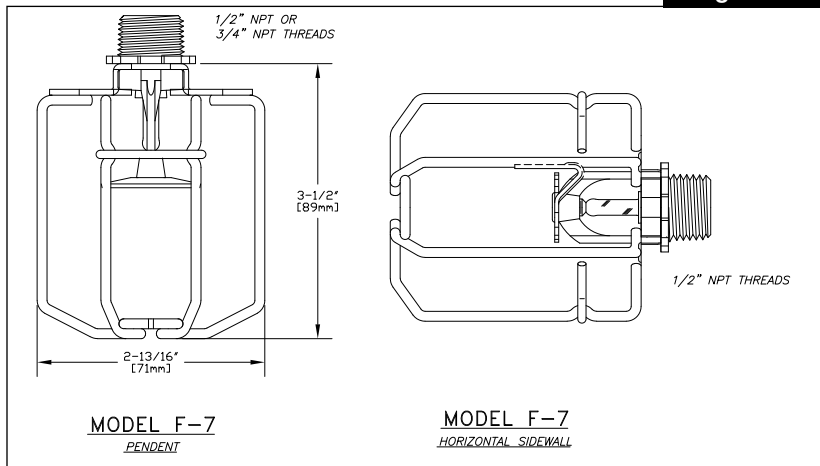
Model F-8 Guard and Water Shield

Figure 25



Model F-7 Guard

Figure 26



Listed and Approved Sprinkler, Guard, and Water Shield Combinations

**Table A**

Sprinkler Model <sup>(1)</sup>	Type <sup>(2)</sup>	Sprinkler Identification Number (SIN)	Nominal K-Factor gpm/psi <sup>1/2</sup> (L/min/bar <sup>1/2</sup> )	Sensitivity <sup>(3)</sup>	Threads NPT or ISO7-1	Sprinkler and Guard or Water Shield Approvals <sup>(4)</sup>	Guard or Water Shield Model
F1LO	Pendent	R1712	8.0 (115)	SR	3/4	cULus	D-1 Guard D-5 Guard and Shield S-2 Shield
	Upright	R1722	8.0 (115)	SR	3/4	FM	C-1 Guard C-5 Guard and Shield E-2 Shield S-2 Shield
F128	Pendent	RA1311	2.8 (40)	SR	1/2	cULus	D-1 Guard
	Upright	RA1321	2.8 (40)	SR	1/2	cULus	D-1 Guard
F142	Pendent	RA1313	4.2 (60)	SR	1/2	cULus	D-1 Guard
	Upright	RA1323	4.2 (60)	SR	1/2	cULus	D-1 Guard
F156	HSW	RA1335	5.6 (80)	SR	1/2	cULus	D-1 Guard
						FM	C-1 Guard
	Pendent	RA1314	5.6 (80)	SR	1/2	cULus	D-1 Guard D-5 Guard and Shield S-1 Shield
						FM	C-1 Guard C-5 Guard and Shield D-1 Guard D-4 Guard and Shield D-5 Guard and Shield E-1 Shield S-1 Shield
	Upright	RA1325	5.6 (80)	SR	1/2	cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield
						FM	C-1 Guard C-3 Guard and Shield
VSW	RA1385	5.6 (80)	SR	1/2	FM	C-1 Guard	
F1-56SS	Pendent	RA6414	5.6 (80)	SR	1/2	cULus	D-1 Guard D-5 Guard and Shield S-1 Shield
						FM	C-1 Guard C-5 Guard and Shield D-1 Guard D-4 Guard and Shield D-5 Guard and Shield E-1 Shield S-1 Shield
	Upright	RA6424	5.6 (80)	SR	1/2	cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield
						FM	C-1 Guard C-3 Guard and Shield
F1-80SS	Pendent	RA6412	8.0 (115)	SR	3/4	cULus	D-1 Guard D-5 Guard and Shield S-2 Shield
	Upright	RA6422	8.0 (115)	SR	3/4	FM	C-1 Guard C-5 Guard and Shield E-2 Shield S-2 Shield
						cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield

**Note:** see table notes on page 11.

**Table A cont.**

Sprinkler Model <sup>(1)</sup>	Type <sup>(2)</sup>	Sprinkler Identification Number (SIN)	Nominal K-Factor gpm/psi <sup>1/2</sup> (L/min/bar <sup>1/2</sup> )	Sensitivity <sup>(3)</sup>	Threads NPT or ISO7-1	Sprinkler and Guard or Water Shield Approvals <sup>(4)</sup>	Guard or Water Shield Model
F1FRLO	Pendent	R3612	8.0 (115)	QR	3/4	cULus	D-1 Guard D-5 Guard and Shield S-2 Shield
						FM	C-1 Guard C-5 Guard and Shield E-2 Shield S-2 Shield
	Upright	R3622	8.0 (115)	QR	3/4	cULus	C-1 Guard C-3 Guard and Shield
						FM	C-1 Guard
F1FR28	Pendent	RA1411	2.8 (40)	QR	1/2	cULus	D-1 Guard
	Upright	RA1421	2.8 (40)	QR	1/2	cULus	D-1 Guard
F1FR-300	Pendent	R5612	8.0 (115)	QR	3/4	cULus	D-1 Guard D-5 Guard and Shield S-2 Shield
	Upright	R5622	8.0 (115)	QR	3/4	cULus	D-1 Guard
F1FR42	Pendent	RA1413	4.2 (60)	QR	1/2	cULus	D-1 Guard
	Upright	RA1423	4.2 (60)	QR	1/2	cULus	D-1 Guard
F1FR56	HSW	RA1435	5.6 (80)	QR	1/2	cULus	D-1 Guard
						FM	C-1 Guard
	Pendent	RA1414	5.6 (80)	QR	1/2	cULus	D-1 Guard D-5 Guard and Shield S-1 Shield
						FM	C-1 Guard C-5 Guard and Shield D-1 Guard D4 Guard and Shield D-5 Guard and Shield E-1 Shield S-1 Shield
	Upright	RA1425	5.6 (80)	QR	1/2	cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield
						FM	C-1 Guard C-3 Guard and Shield
	VSW	RA1485	5.6 (80)	QR	1/2	FM	C-1 Guard
	F1FR56-300	HSW	RA2634	5.6 (80)	QR	1/2	cULus
FM							C-1 Guard
Pendent		RA2614	5.6 (80)	QR	1/2	FM	C-1 Guard C-5 Guard and Shield D-1 Guard D4 Guard and Shield D-5 Guard and Shield E-1 Shield S-1 Shield
						cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield
Upright		RA2625	5.6 (80)	QR	1/2	FM	C-1 Guard C-3 Guard and Shield
						cULus	C-3 Guard and Shield
F1FR56SS	Pendent	RA6514	5.6 (80)	QR	1/2	cULus	D-1 Guard D-5 Guard and Shield
						FM	C-1 Guard C-5 Guard and Shield D-1 Guard D-4 Guard and Shield D-5 Guard and Shield
	Upright	RA6524	5.6 (80)	QR	1/2	cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield
						FM	C-1 Guard C-3 Guard and Shield

**Note:** see table notes on page 11.



**Table A cont.**

Sprinkler Model <sup>(1)</sup>	Type <sup>(2)</sup>	Sprinkler Identification Number (SIN)	Nominal K-Factor gpm/psi <sup>1/2</sup> (L/min/bar <sup>1/2</sup> )	Sensitivity <sup>(3)</sup>	Threads NPT or ISO7-1	Sprinkler and Guard or Water Shield Approvals <sup>(4)</sup>	Guard or Water Shield Model	
F1FR80SS	Pendent	RA6412	8.0 (115)	QR	3/4	cULus	D-1 Guard D-5 Guard and Shield S-2 Shield	
						FM	C-1 Guard C-5 Guard and Shield E-2 Shield S-2 Shield	
	Upright	RA6422	8.0 (115)	QR	3/4	cULus	C-1 Guard C-3 Guard and Shield	
						FM	C-1 Guard	
F3-56 Dry	Pendent	R5314	5.6 (80)	SR	1	cULus, FM	C-2 Guard <sup>(5)</sup>	
F3QR56 Dry	Pendent	R5714	5.6 (80)	QR	1	cULus, FM	C-2 Guard <sup>(5)</sup>	
G	HSW	R1231	2.8 (40)	SR	1/2	cULus	D-1 Guard	
		R1233	4.2 (60)	SR	1/2	cULus	D-1 Guard	
		R1235	5.6 (80)	SR	1/2	cULus	D-1 Guard	
						FM	C-1 Guard	
		R1236	8.0 (115)	SR	1/2	cULus	D-1 Guard	
		R1237	8.0 (115)	SR	3/4	cULus	D-1 Guard	
	Pendent	R1011	2.8 (40)	SR	1/2	cULus	D-1 Guard	
						FM	C-1 Guard	
		R1013	4.2 (60)	SR	1/2	cULus	D-1 Guard	
						cULus	D-1 Guard D-5 Guard and Shield S-1 Shield	
		R1015	5.6 (80)	SR	1/2	FM	C-1 Guard C-5 Guard and Shield S-1 Shield	
						cULus	D-1 Guard D-5 Guard and Shield	
		R1016	8.0 (115)	SR	1/2	cULus	D-1 Guard D-5 Guard and Shield	
						FM	C-1 Guard	
		R1017	8.0 (115)	SR	3/4	cULus	D-1 Guard D-5 Guard and Shield S-2 Shield	
						FM	C-1 Guard C-5 Guard and Shield S-2 Shield	
		Upright	R1021	2.8 (40)	SR	1/2	cULus	D-1 Guard
							FM	C-1 Guard
	R1023		4.2 (60)	SR	1/2	cULus	D-1 Guard	
						cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield	
	R1025		5.6 (80)	SR	1/2	FM	C-1 Guard C-3 Guard and Shield	
						cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield	
	R1026		8.0 (115)	SR	3/4	cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield	
						FM	C-1 Guard	
R1027	8.0 (115)	SR	3/4	cULus	D-1 Guard C-3 Guard and Shield D-3 Guard and Shield			
				FM	C-1 Guard C-3 Guard and Shield			
VSW	R1285	5.6 (80)	SR	1/2	FM	C-1 Guard		

**Note:** see table notes on page 11.

**Table A cont.**

<b>Sprinkler Model<sup>(1)</sup></b>	<b>Type<sup>(2)</sup></b>	<b>Sprinkler Identification Number (SIN)</b>	<b>Nominal K-Factor gpm/psi<sup>1/2</sup> (L/min/bar<sup>1/2</sup>)</b>	<b>Sensitivity<sup>(3)</sup></b>	<b>Threads NPT or ISO7-1</b>	<b>Sprinkler and Guard or Water Shield Approvals<sup>(4)</sup></b>	<b>Guard or Water Shield Model</b>
GFR	HSW	R3131	2.8 (40)	QR	1/2	cULus	D-1 Guard
		R3133	4.2 (60)	QR	1/2	cULus	D-1 Guard
		R3135	5.6 (80)	QR	1/2	cULus	D-1 Guard
		R3137	8.0 (115)	QR	3/4	cULus	D-1 Guard
	Pendent	R3111	2.8 (40)	QR	1/2	cULus	D-1 Guard
		R3113	4.2 (60)	QR	1/2	cULus	D-1 Guard
		R3115	5.6 (80)	QR	1/2	cULus	D-1 Guard D-4 Guard and Shield S-1 Shield
		R3117	8.0 (115)	QR	3/4	cULus	D-1 Guard D-4 Guard and Shield S-2 Shield
						FM	C-5 Guard and Shield
	Upright	R3121	2.8 (40)	QR	1/2	cULus	D-1 Guard
		R3123	4.2 (60)	QR	1/2	cULus	D-1 Guard
		R3125	5.6 (80)	QR	1/2	cULus	C-3 Guard and Shield D-1 Guard D-3 Guard and Shield
		R3127	8.0 (115)	QR	3/4	cULus	C-3 Guard and Shield D-1 Guard D-3 Guard and Shield
						FM	C-3 Guard and Shield
GL112	Pendent	R3216	11.2 (160)	QR	3/4	FM	D-8 Guard D-9 Guard and Shield S-2 Shield
	Upright	R3226	11.2 (160)	QR	3/4	FM	D-7 Guard and Shield
GXLO	Pendent	R2916	11.2 (160)	SR	3/4	FM	D-8 Guard D-9 Guard and Shield S-2 Shield
	Upright	R2921	11.2 (160)	SR	3/4	cULus FM	D-6 Guard and Shield D-7 Guard and Shield
HL-22	Pendent	RA1011	22.4 (320)	ESFR	1	FM	22 Guard <sup>(6)</sup> E-3 Shield <sup>(6)(7)</sup> S-5 Shield <sup>(6)(8)</sup>
KFR56	Pendent	RA3614	5.6 (80)	QR	1/2	cULus	F-7 Guard F-8 Guard and Shield S-1 Shield
						FM	F-1 Guard F-5 Guard and Shield S-1 Shield
	Upright	RA3624	5.6 (80)	QR	1/2	cULus	F-1 Guard F-3 Guard and Shield
						FM	F-1 Guard F-3 Guard and Shield
	HSW	RA3634	5.6 (80)	QR	1/2	cULus FM	F-7 Guard F-4 Guard
KFR56-300	Pendent	RA3914	5.6 (80)	QR	1/2	cULus	F-7 Guard F-8 Guard/Water Shield S-1 Water Shield
	Upright	RA3924					F-1 Guard F-3 Guard/Water Shield
	HSW	RA3934					F-7 Guard
KFR80	Pendent	RA5412	8.0 (115)	QR	3/4	cULus	F-7 Guard F-8 Guard and Shield S-2 Shield
						FM	F-2 Guard F-6 Guard and Shield S-2 Shield
	Upright	RA5422	8.0 (115)	QR	3/4	cULus	F-1 Guard F-3 Guard and Shield
						FM	F-2 Guard F-3 Guard and Shield
N25	Pendent	RA0912	25.2 (360)	ESFR	1	FM	25 Guard <sup>(6)</sup> E-3 Shield <sup>(6)(7)</sup> S-5 Shield <sup>(6)(8)</sup>

**Note:** see table notes on page 11.

Sprinkler Model <sup>(1)</sup>	Type <sup>(2)</sup>	Sprinkler Identification Number (SIN)	Nominal K-Factor gpm/psi <sup>1/2</sup> (L/min/bar <sup>1/2</sup> )	Sensitivity <sup>(3)</sup>	Threads NPT or ISO7-1	Sprinkler and Guard or Water Shield Approvals <sup>(4)</sup>	Guard or Water Shield Model
N252EC	Pendent	RA0842	25.2 (360)	SR	1	cULus	25 Guard <sup>(6)</sup>
				QR		FM	

**Notes:**

- <sup>(1)</sup> Sprinkler guards and water shields are listed and approved only for use with specific sprinklers. The use of any other guards or water shields on these sprinklers may impede their operation or distribution and negate all approvals and warranties.
- <sup>(2)</sup> HSW: Horizontal Sidewall; VSW: Vertical Sidewall
- <sup>(3)</sup> QR: Quick-response; SR: Standard-response; ESFR: Early Suppression Fast Response.
- <sup>(4)</sup> In addition, NYC MEA Approvals for C-2, C-3, D-1, D-3, D-4, and D-5 guards and water shields. All UL Listed guards and water shields are approved for use in New York City in accordance with Local Law 33/2007. SSL Approval for C-1, C-2, and C-3 guards and water shields.
- <sup>(5)</sup> Model C-2 guards are listed and work only with standard and HB type escutcheons. Model C-2 guards cannot be used with FP or F1 recessed escutcheons
- <sup>(6)</sup> FM Approved for in-rack use only.
- <sup>(7)</sup> Cannot be used in combination with the 22 or 25 Guard.
- <sup>(8)</sup> When used in combination with the 22 or 25 Guard, the S-5 Shield replaces the 1" lock washer provided with the guard.

**Listings & Approvals**

Refer to Table A. Listed and Approved Sprinkler, Guard, and Water Shield Combinations for information on Listings and Approvals applicable to each guard and water shield.

1. Listed by Underwriters Laboratories, Inc. and UL certified for Canada (cULus)
2. Certified by FM Approvals
3. NYC MEA 258-93-E
4. Scientific Services Laboratories (SSL, Australia)\*  
\* For Models C1, C2, C3 guards.

**Installation**

**Model C-1, C-2, and C-3 Guards**

Install the sprinkler in accordance with the applicable sprinkler installation instructions prior to installing the Model C guard. With both clips unhooked, slightly spread open the guard. Insert steel plate into the installed sprinkler between the threads and the wrench flats. The steel plate tabs should face the sprinkler wrench flats and four contact points engage the sprinkler neck.

For Model C-2, the steel plate fits into the groove in each wrench flat and the guard is located by the notch in both steel plates. Snap the upper locking clip into place, then close the near clip. The guard is now securely installed in place. If locking clip requires too much force to snap closed or open, slightly flex the wires on both sides of the clip and either close or open the clip.

**Model C-5 Guard/Shield Assembly**

Prior to installing sprinkler into fitting, thread the Model S-1 (1/2") or S-2 (3/4") water shield onto the sprinkler. After installing sprinkler into fitting, install the Model C-1 Guard per the instructions above.

**Model D Guards**

Model D series guards and water shields are designed to be installed on the sprinkler prior to sprinkler installation.

Assemble the guard on the sprinklers using the following technique:

With both cups unhooked, slightly spread open the guard. Insert steel plate into the installed sprinkler between the threads and the wrench flats. The steel plate tabs should face the sprinkler wrench flats and four contact points should engage the sprinkler neck.

Snap the upper locking clip (steel plates) into place. Close the lower clip at the top of the guard and slide it down to the notch. After installing the guard, thread EITHER a 1/2" or 3/4" lock nut (for guard only) OR an S-1 (1/2") or S-2 (3/4") water shield (for guard/shield assembly) onto the sprinkler threads. The final assembly can then be installed into a fitting using only the wrench indicated in Table B "Wrench for Installation of Guard, Water Shield, and Sprinkler Assembly." The guard is more securely installed. Install the lock nut on to the NPT threads until the nut is securely against the guard.

**Model E Water Shields**

Model E series water shields are designed to be installed on the sprinkler prior to sprinkler installation. The water shield and sprinkler assembly must be installed with the wrench indicated in Table B. Wrench for Installation of Guard, Water Shield, and Sprinkler Assembly.

Thread the Model E water shield onto the sprinkler by hand until the water shield is securely against the sprinkler's wrench boss. The flat side of the water shield must face towards the sprinkler's wrench boss.

**Note:** Model E water shields cannot be used with a guard.

**Model F Guards**

Model F series guards and guards with shields are designed to be installed on the sprinkler prior to installation. The assembly is then installed with the wrench indicated in Table B, Wrench for Installation of Guard, Water Shield, and Sprinkler Assembly.

**Models F-1, F-2, F-3, F-4 & F-7**

Assemble the guard on the sprinklers using the technique described for the Model D-1, then install a 1/2" or 3/4" locking nut on the NPT threads until the nut is tight against the guard.

**Models F-5, F-6, & F-8**

Assemble the guard on the sprinklers using the technique described for the Model D-1, then install a 1/2" or 3/4" threaded water shield on the NPT threads until the shield is tight against the guard.

### Model 22 & 25 Guards

Install the provided locknut on the sprinkler threads prior to installation of the sprinkler. Install the sprinkler in accordance with the applicable sprinkler installation instructions. With both clips unhooked, slightly spread open the guard. Insert the guard over the installed sprinkler so that the base plate of the guard attaches to the wrench flats of the sprinkler. Connect both locking clips to the adjacent tines of the guard. Tighten the locknut against the base plate of the guard.

### Model S Water Shields

Model S water shields are designed to be installed on the sprinkler prior to installation. Thread the Model S water shield onto the sprinkler by hand, making sure that the shield does not pass by the end of the threads near the wrench boss. Install the sprinkler/shield assembly with the wrench indicated in the appropriate Technical Bulletin for the sprinkler.

**Note:** For all products incorporating a lock-nut feature, the lock-nut is part of the listed assembly. Failure to install the lock-nut will void the listing of the product and may lower the impact tolerance of the device.

### Finish

Standard Finish—Zinc with chromate dip.  
Other finishes quoted on request.

### Ordering Information

**Specify:**

- Guard or Water Shield Model
- Finish (Standard or other)
- Sprinkler Thread Size (Model D-4 & D-5 Only).
- Installation Type: Kit or Factory Installed (Model D and F series only).
- Wrench: Model J, JD, JV , or GFR2 wrench (See Table B - Model D, E, and F series only).

**Wrench for Installation of Guard, Water Shield, and Sprinkler Assembly**

**Table B**

Guard/ Water Shield	Sprinklers*	Required Wrench for Installation of Guard, Water Shield, and Sprinkler Assembly
D-1	Approved 5.6 (80 metric) and smaller Nominal K-factor sprinklers	Model JD
D-3		
D-4		
D-5		
D-1	Approved 8.0 (115 metric) Nominal K-factor sprinklers	Model J
D-3		
D-4		
D-5		
D-6	All Approved Sprinklers	Model JV
D-7		
D-8		
D-9		
E-1	All Approved Sprinklers	Model GFR2
E-2		
F	All Approved Sprinklers	Model J

\* See Table A. Listed and Approved Sprinkler, Guard, and Water Shield Combinations for information on sprinklers approved with each guard and water shield.