

# Victaulic® FireLock™ Series FL-QR/ST/INT

## Storage, Quick Response, and ESFR

### Upright and Pendent Sprinklers

#### K5.6 (8.1), K8.0 (11.5), K11.2 (16.0), K16.8 (24.25)



## 1.0 PRODUCT DESCRIPTION

QUICK RESPONSE INTERMEDIATE UPRIGHT SPRINKLERS						
SIN	V2704		V3402		V3404	
ORIENTATION	Intermediate Upright	Upright with Guard and Shield	Intermediate Upright	Upright with Guard and Shield	Intermediate Upright	Upright with Guard and Shield
K-FACTOR <sup>1</sup>	5.6 Imp./8.1 S.I.	5.6 Imp./8.1 S.I.	8.0 Imp./11.5 S.I.		11.2 Imp./16.0 S.I.	
CONNECTION	½" NPT/15 mm BSPT/IGS	½" NPT/15 mm BSPT/IGS	¾" NPT/20 mm BSPT/IGS		¾" NPT/20 mm BSPT/IGS	
MAX. WORKING PRESSURE	175 psi (1200 kPa) cULus 250 psi (1725 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)		175 psi (1200 kPa)	

QUICK RESPONSE AND ESFR INTERMEDIATE PENDENT SPRINKLERS				
SIN	V2708	V3406	V3408	V4702
ORIENTATION	Pendent	Pendent	Pendent	Pendent
K-FACTOR <sup>1</sup>	5.6 Imp./8.1 S.I.	8.0 Imp./11.5 S.I.	11.2 Imp./16.0 S.I.	16.8 Imp./24.25 S.I.
CONNECTION	½" NPT/15 mm BSPT/IGS	¾" NPT/20 mm BSPT/IGS	¾" NPT/20 mm BSPT/IGS	¾" NPT/20 mm BSPT/IGS
MAX. WORKING PRESSURE	175 psi (1200 kPa) cULus 250 psi (1725 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)

AVAILABLE GUARDS/SHIELDS		
SPRINKLER	V27	V34
UPRIGHT	■	■
PENDENT	■	■

AVAILABLE WRENCHES				
SPRINKLER	V27 Open End	V34 Open End	⅜ Hex-Bit (V9)	V47 Open End
UPRIGHT	■	■	■	
PENDENT	■	■	■	■

**Factory Hydrostatic Test:** 100% @ 500 psi/3447 kPa/34 bar

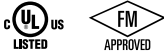
**Min. Operating Pressure:** UL/FM: 7 psi/48 kPa/.5 bar

**Temperature Rating:** See tables in [Section 2.0](#)

<sup>1</sup> For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

## 2.0 CERTIFICATIONS/LISTINGS



INTERMEDIATE UPRIGHT APPROVALS/LISTINGS						
SIN	V2704		V3402		V3404	
Nominal K Factor Imperial	5.6		8.0		11.2	11.2
Nominal K Factor S.I. <sup>2</sup>	8.1		11.5	11.5	16.0	16.0
Orientation	Intermediate Upright	Upright with Guard and Shield	Intermediate Upright	Upright with Guard and Shield	Intermediate Upright	Upright with Guard and Shield
<b>Approved Temperature Ratings F°/C°</b>						
cULus	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C		135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C		135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	
FM	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C		135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C		135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	

<sup>2</sup> For K-Factor when pressure is measured in bar, multiply S.I. units by 10.

INTERMEDIATE PENDENT APPROVALS/LISTINGS				
SIN	V2708	V3406	V3408	V4702
Nominal K Factor Imperial	5.6	8.0	11.2	16.8
Nominal K Factor S.I. <sup>2</sup>	8.1	11.5	16.0	24.25
Orientation	Intermediate Pendent	Intermediate Pendent	Intermediate Pendent	Intermediate Pendent
<b>Approved Temperature Ratings F°/C°</b>				
cULus	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	155°F/68°C   200°F/93°C
FM	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	155°F/68°C   200°F/93°C

<sup>2</sup> For K-Factor when pressure is measured in bar, multiply S.I. units by 10.

**NOTES**

- Reference the specific agency website listings for the most up-to-date certification information.

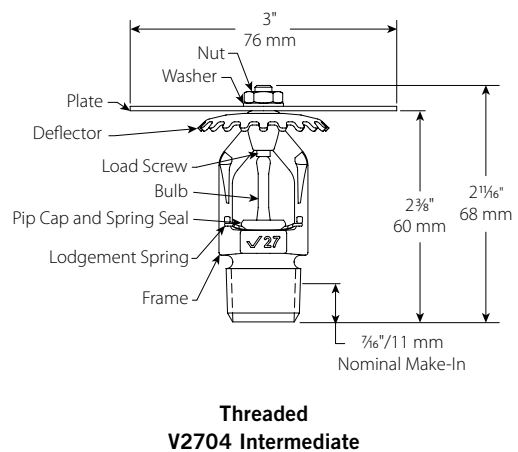
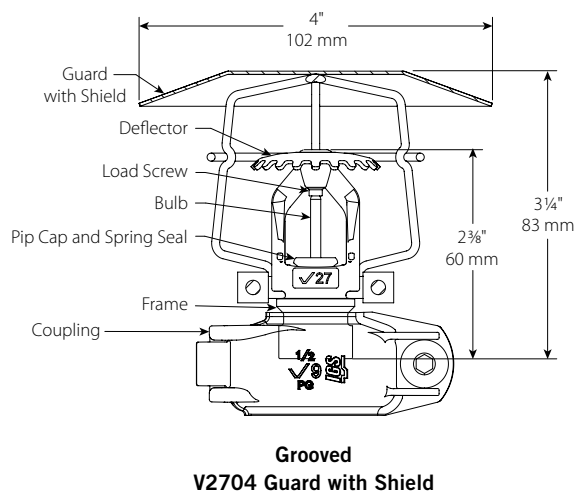
### 3.0 SPECIFICATIONS – MATERIAL

- Deflector:** Bronze
- Bulb Nominal Diameter:** 3.0 mm
- Load Screw:** Bronze
- Pip Cap:** Bronze
- Spring Seal Assembly:** PTFE Coated Beryllium Nickel Alloy
- Frame:** Brass
- Lodgement Spring:** Stainless Steel
- Nut:** Stainless Steel
- Washer:** Nylon
- Guard:** Steel
- Plate:** Steel or Brass
- O-Ring:** EPDM
- Coupling:** Refer to Victaulic [Publication 10.65](#)
- Installation Wrench:** Ductile Iron
- Sprinkler Frame Finishes:** Plain Brass

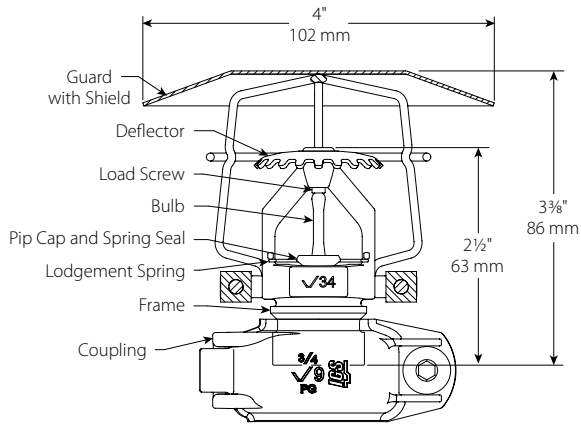
**NOTE**

- For cabinets and other accessories refer to separate sheet.

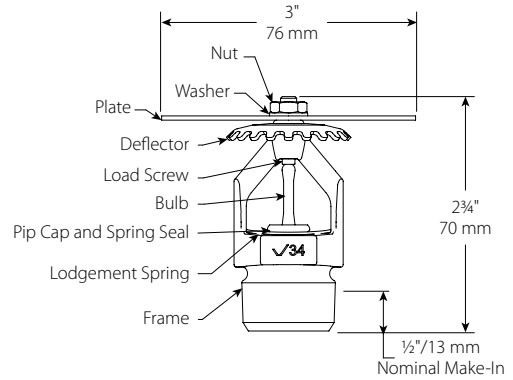
### 4.0 DIMENSIONS



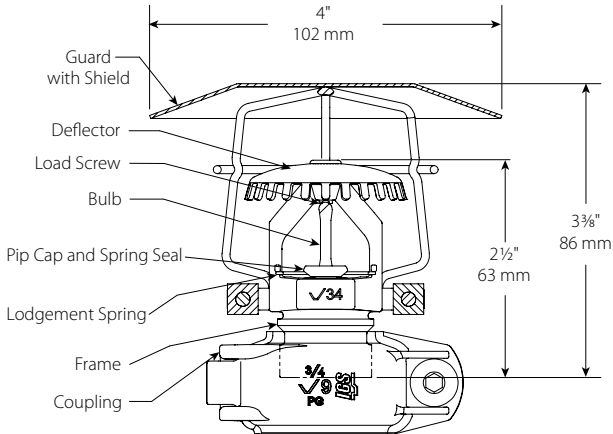
4.0 DIMENSIONS (CONTINUED)



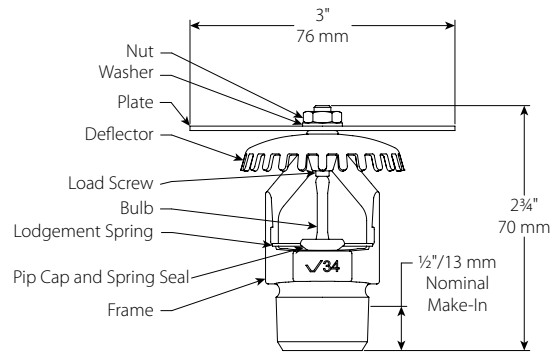
**Grooved  
V3402 Guard with Shield**



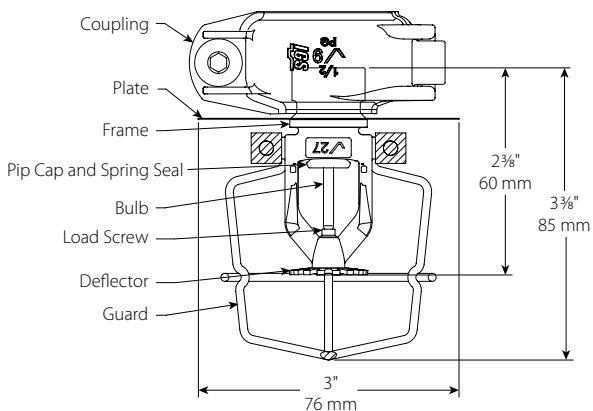
**Threaded  
V3402 Intermediate**



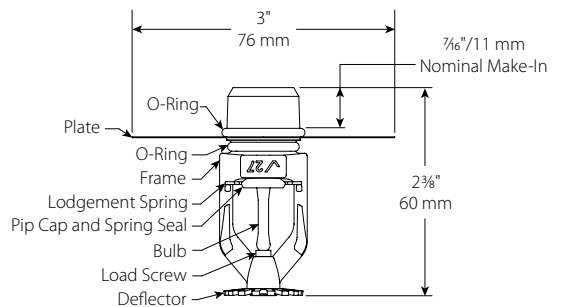
**Grooved  
V3404 Guard with Shield**



**Threaded  
V3404 Intermediate**

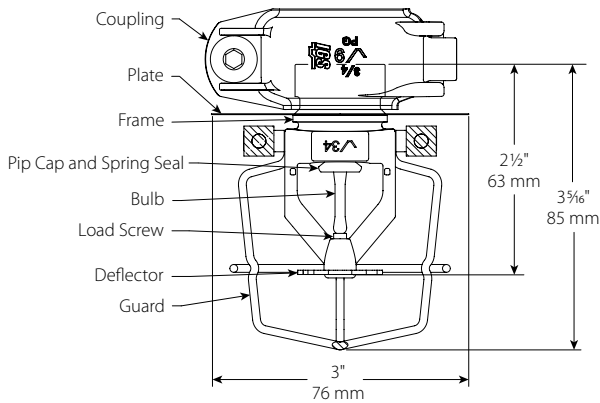


**Grooved  
V2708 Intermediate with Guard**

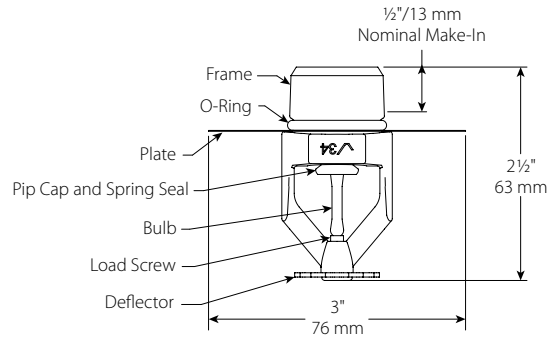


**Threaded  
V2708 Intermediate**

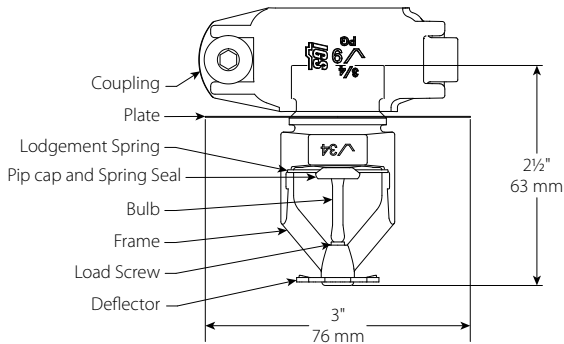
4.0 DIMENSIONS (CONTINUED)



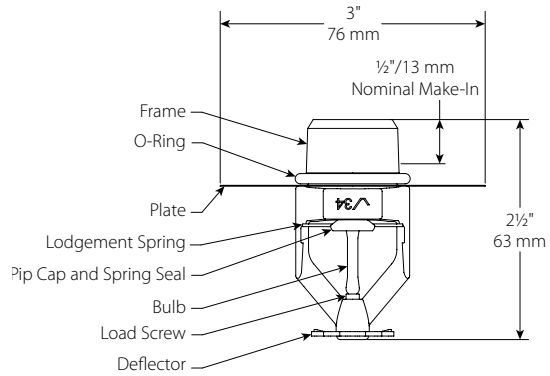
**Grooved  
V3406 Intermediate with Guard**



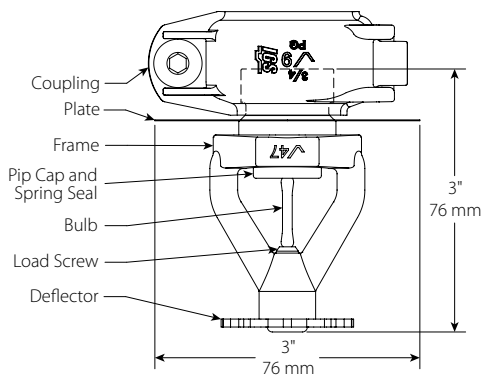
**Threaded  
V3406 Intermediate**



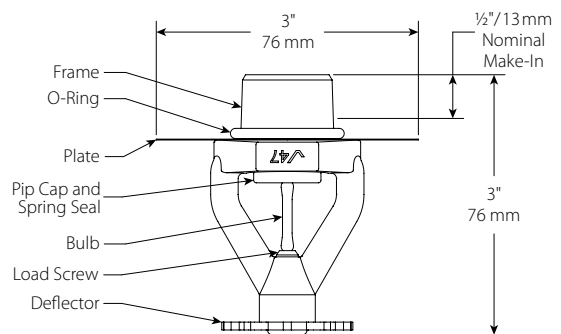
**Grooved  
V3408 Intermediate**



**Threaded  
V3408 Intermediate**



**Grooved  
V4702 Intermediate**



**Threaded  
V4702 Intermediate**

## 5.0 PERFORMANCE

Sprinkler systems are to be designed to and installed per NFPA, FM Datasheets, and any local standards.

## 6.0 NOTIFICATIONS

### ⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

- These products shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

## 7.0 REFERENCE MATERIALS

**Ratings:** All glass bulbs are rated for temperatures from -67°F/-55°C.

[1-40: Victaulic® FireLock™ Automatic Sprinklers Installation and Maintenance Instructions](#)

[I-V9: Style V9 Victaulic® FireLock™ IGS™ Installation-Ready™ Sprinkler Coupling Installation Instructions](#)

### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, warranty, installation instructions, or this disclaimer.

### Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at [victaulic.com](#).

### Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

### Intellectual Property Rights

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### Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.