

# FireLock® V34, K11.2

## Models V3403, V3404, V3407, V3408

**Standard Spray Pendent and Upright  
Standard and Quick Response  
Storage Protection (density/area)  
Sprinklers Standard Response**



V3407/V3408  
Pendent



V3403/V3404  
Upright

### Approvals/Listings:



[See Victaulic Publication 10.01 for more details.](#)

### Product Description:

The Models V3403, V3404, V3407 and V3408 Standard Spray Sprinklers are designed to protect any hazard defined within NFPA 13 where Standard Spray Sprinklers are allowed as fire protection. The Models V3403 and V3407 standard response sprinklers are also special sprinklers designed, tested and Listed for "Storage Protection" utilizing the density/area criteria per NFPA 13. These sprinklers are also approved by FM Global as storage and non-storage sprinklers and are to be designed and installed according to FM Global Loss Prevention Data Sheets when required. The discharge rates for Model V34 (ELO) sprinklers are twice that of standard 1/2" (15 mm) sprinklers and up to 60 percent higher than 3/4" (20mm) orifice sprinklers. It is cast with a hex-shaped wrench boss to allow easy tightening from many angles, reducing assembly effort. This sprinkler is available in various temperature ratings (see chart on page 3) to meet many design requirements.

### Coverage

For coverage area and sprinkler placement, refer to NFPA 13 standards, the FM Global Approval Guide and Loss Prevention Data Sheets where applicable.

### Technical Specifications:

**Models:** V3403, V3404, V3407, V3408

**Style:** Pendent or Upright

**Nominal Orifice Size:** 5/8"/16 mm

**K Factor:** 11.2 Imp./16.1 S.I.<sup>2</sup>

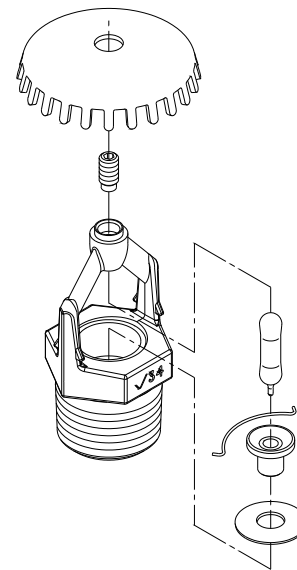
**Nominal Thread Size:** 3/4" NPT/20 mm

**Max. Working Pressure:** 175 psi/1200 kPa

**Factory Hydrostatic Test:** 100% @ 500 psi/3450 kPa

**Min. Operating Pressure:** 7 psi/48 kPa, NFPA applications; 10 psi/69 kPa FM Global applications.

**Temperature Rating:** See chart on page 3



Exaggerated for clarity

### Job/Owner

System No.	
Location	

### Contractor

Submitted By	
Date	

### Engineer

Spec Section	
Paragraph	
Approved	
Date	

**Material Specifications:**

**Upright Deflector:** Brass per UNS C22000

**Pendent Deflector:** Bronze per UNS C51000

**Bulb:** Glass with glycerin solution

**Bulb Nominal Diameter:**

Standard: 5.0 mm

Quick Response: 3.0 mm

**Load Screw:** Brass per UNS C65100

**Pip Cap:** Brass per UNS C65100

**Seal:** Teflon<sup>4</sup> tape

**Spring:** Beryllium nickel

**Frame:** Die cast brass

**Lodgement Spring:** Stainless steel per UNS S30200

**Accessories:**

**Installation Wrench:**

Open End: V34

Recessed: V34

**Sprinkler Finishes:**

Plain Brass

Chrome Plated

White<sup>3</sup> Painted<sup>5</sup>

Black Painted<sup>5</sup>

Custom<sup>3</sup> Painted<sup>5</sup>

Proprietary Nickel Teflon<sup>4</sup> coating<sup>6</sup>

VC-250<sup>6</sup>

<sup>2</sup> For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

<sup>3</sup> Not FM approved.

<sup>4</sup> Teflon is a registered trademark of Dupont Co.

<sup>5</sup> cULus Listed for corrosion resistance.

<sup>6</sup> UL Listed and FM Approved for corrosion resistance.

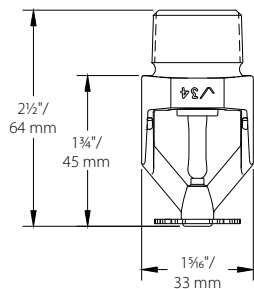
**Approvals/Listings:**

APPROVALS/LISTINGS	Model			
	V3407	V3403	V3408	V3404
Orifice Size (inches)	5/8"	5/8"	5/8"	5/8"
Orifice Size (mm)	16	16	16	16
Nominal K Factor Imperial	11.2	11.2	11.2	11.2
Nominal K Factor S.I. <sup>7</sup>	16.1	16.1	16.1	16.1
Response	Standard	Standard	Quick	Quick
Deflector Type	Pendent	Upright	Pendent	Upright
<b>Approved Temperature Ratings</b>	<b>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	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C
NYC/MEA #62-99-E	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C
CSFM #7690-0531:112	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C
VNIPO	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C

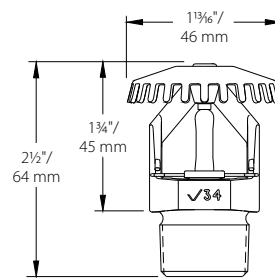
Note: Listings and approval as of printing. Not all temperature rating combinations are Approved or Listed. Check Victaulic for specific combinations.

<sup>7</sup> For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

**Dimensions:**



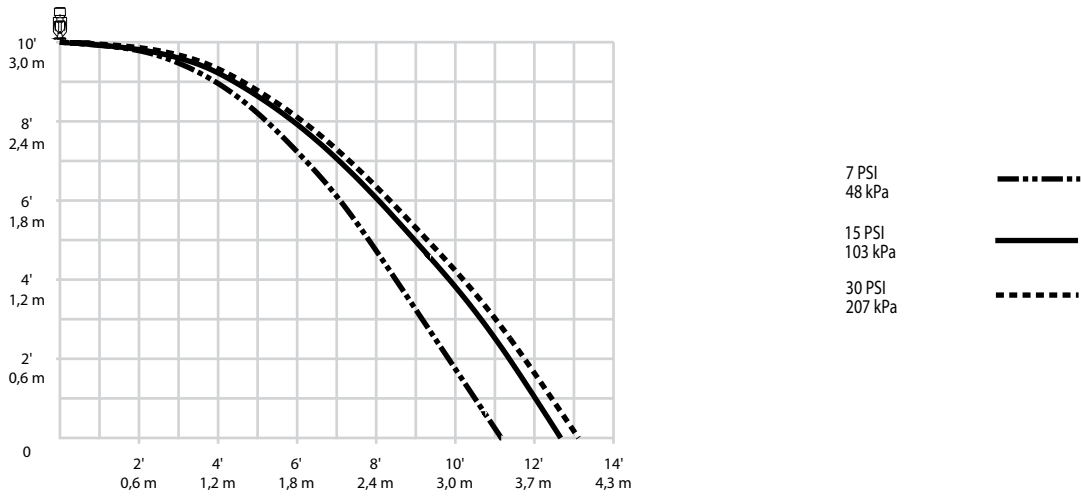
Standard Pendent –  
V3407, V3408



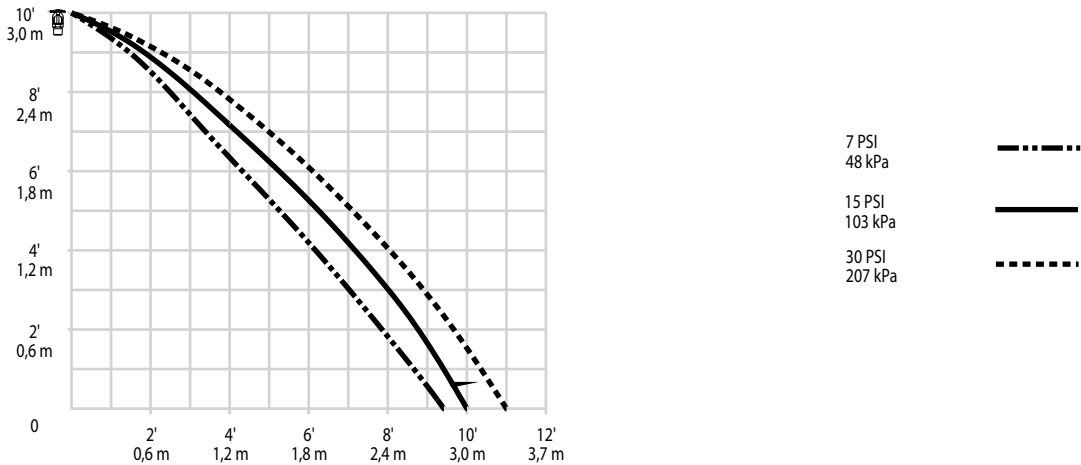
Standard Upright –  
V3403, V3404

**Distribution Patterns:**

Models /S.I.N. V3407, V3408  
K11.2 Standard Pendent  
Distribution Patterns – Trajectory



Models /S.I.N. V3403, V3404  
K11.2 Standard Upright  
Distribution Patterns – Trajectory



NOTES:

A. Data shown is approximate and can vary due to differences in installation.

B. These graphs illustrate approximate trajectories, floor-wetting, and wall-wetting patterns for these specific Victaulic FireLock Automatic Sprinklers. They are provided as information for guidance in avoiding obstructions to sprinklers and should not be used as minimum sprinkler spacing rules for installation. **Refer to the appropriate NFPA National Fire Code or the Authority Having Jurisdiction for specific information regarding obstructions, spacing limitations and area of coverage requirements.** Failure to follow these guidelines could adversely affect the performance of the sprinkler and will void all Listings, Approvals and Warranties.

C. All patterns are symmetrical to the centerline of the waterway.

**Ratings:**

All glass bulbs are rated for temperatures from -67°F (-57°C) up to those shown in adjacent table.

Sprinkler Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color
		Nominal Temperature Rating	Maximum Ambient Temperature Allowed	
Ordinary	A	135°F/57°C	100°F/38°C	Orange
Ordinary	C	155°F/68°C	100°F/38°C	Red
Intermediate	E	175°F/79°C	150°F/65°C	Yellow
Intermediate	F	200°F/93°C	150°F/65°C	Green
High <sup>8</sup>	J	286°F/141°C	225°F <sup>9</sup> /107°C	Blue
–	M	Open	–	No Bulb




<sup>8</sup> Standard response only.

<sup>9</sup> 150/65 if wax coated.

**Available Wrenches:**

Sprinkler Type	V34 Recessed	V34 Open End
Pendent and Upright	✓	✓

**⚠ WARNING**

- Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.
- Always wear safety glasses and foot protection.
- Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.
- Installation rules, especially those governing obstruction, must be strictly followed.
- Painting, plating, or any re-coating of sprinklers (other than that supplied by Victaulic) is not allowed.

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

The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to the current National Fire Protection Association pamphlet that describes care and maintenance of sprinkler systems. In addition, the authority having jurisdiction may have additional maintenance, testing, and inspection requirements that must be followed.

If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic World Headquarters: P.O. Box 31, Easton, Pennsylvania 18044-0031 USA, Telephone: 001-610-559-3300.

**Installation**

Reference should always be made to the I-40 Victaulic FireLock Automatic Sprinklers Installation and Maintenance Sheet for the product you are installing. This installation sheet is included with each shipment of Victaulic products for complete installation and assembly data, and is 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.

**Note**

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

**Trademarks**

Victaulic is a registered trademark of Victaulic Company.