

# FireLock® V34, K8.0

## Models V3417, V3418, V3419, V3420

**Intermediate Level  
Standard Spray  
Pendent and Upright  
Standard and Quick Response**

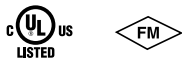


V3419/V3420  
Intermediate  
Pendent



V3417/V3418  
Intermediate Upright  
with Guard

### Approvals/Listings:



See Victaulic Publication 40.01 for more details.

### Product Description:

These Model V34 Intermediate Level sprinklers incorporate a water shield plate to prevent water from higher level sprinklers from interfering with normal operation. These intermediate level sprinklers are designed for use in intermediate levels of rack storage or other open grate storage arrangements, where they may be exposed to upper level or ceiling level sprinklers. They are available with either standard or quick response bulbs. It is cast with a hexshaped 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.

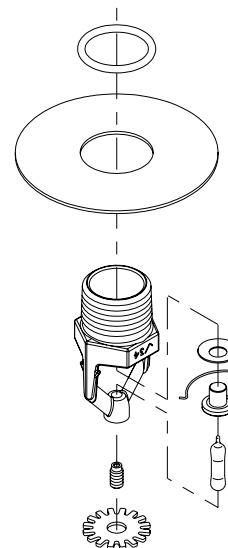
### Coverage

For coverage area and sprinkler placement, refer to NFPA 13 or applicable standard.

### Technical Specifications:

**Models:** V3417, V3418, V3419, V3420  
**Style:** Intermediate Level Pendent or Upright  
**Nominal Orifice Size:** 17/32"/14 mm  
**K Factor:** 8.0 Imp./11,5 S.I.<sup>1</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  
**Temperature Rating:** See chart

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



Exaggerated for clarity

### Job/Owner

System No.	
Location	

### Contractor

Submitted By	
Date	

### Engineer

Spec Section	
Paragraph	
Approved	
Date	

### Material Specifications:

**Upright Deflector:** Bronze per UNS C22000  
**Pendent Deflector:** Bronze per UNS C51000  
**Plate:** Zinc-Plated Steel  
**O-rings:** EPDM<sup>2</sup>  
**Bulb:** Glass with glycerin solution  
**Bulb Nominal Diameter:**  
    Standard Response: 5.0 mm  
    Quick Response: 3.0 mm  
**Load Screw:** Bronze per UNS C65100  
**Pip Cap:** Bronze per UNS C65100  
**Spring:** Beryllium nickel  
**Seal:** Teflon<sup>3</sup> tape  
**Frame:** Die cast brass 65-30  
**Lodgement Spring:** Stainless steel per UNS S30200

### Accessories

#### Installation Wrench:

Open End: V34

Recessed: V34

#### Sprinkler Finishes:

Plain Brass only

Proprietary Nickel Teflon<sup>3</sup> coating<sup>4</sup>

VC-250<sup>4</sup>

<sup>2</sup> O-rings are used to hold the shield in place and do not affect the orifice seal.

<sup>3</sup> Teflon is a registered trademark of Dupont Co.

<sup>4</sup> UL Listed and FM Approved for corrosion resistance.

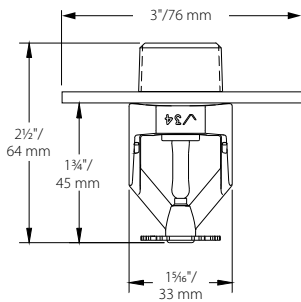
**Approvals/Listings:**

APPROVALS/LISTINGS	Model			
	V3417	V3419	V3418	V3420
Orifice Size (inches)	17/32"	17/32"	17/32"	17/32"
Orifice Size (mm)	14	14	14	14
Nominal K Factor Imperial	8.0	8.0	8.0	8.0
Nominal K Factor S.I. <sup>5</sup>	11.5	11.5	11.5	11.5
Response	Standard	Standard	Quick	Quick
Deflector Type	Intermediate Upright	Intermediate Pendent	Intermediate Upright	Intermediate Pendent
<b>Approved Temperature Ratings</b>	<b>F°/C°</b>			
cULus	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C
FM	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C
NYC/MEA #62-99-E	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C
CSFM	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C	135°F/57°C 286°F/141°C

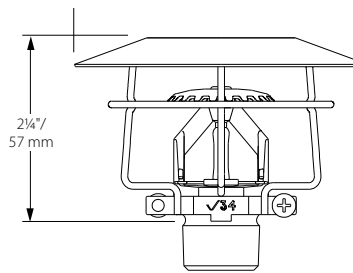
<sup>5</sup> For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

Note: Listings and Approvals as of printing. All are approved open.

**Dimensions:**



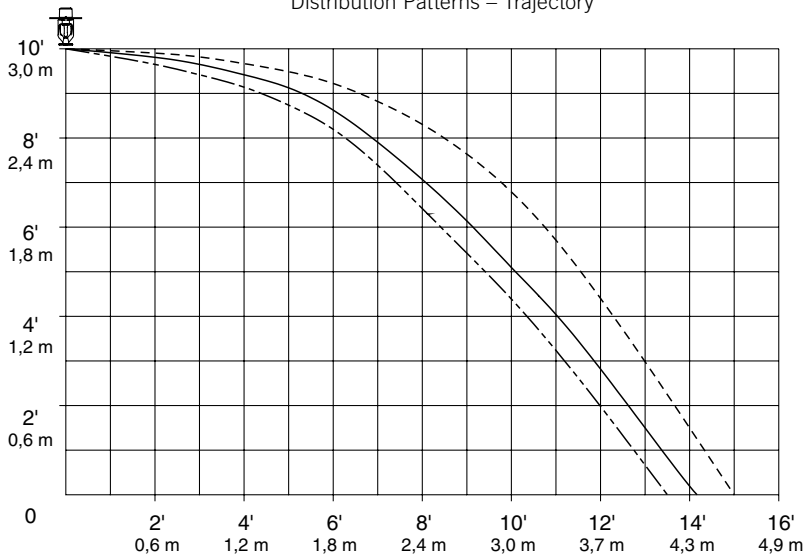
Intermediate Pendent –  
V3419, V3420



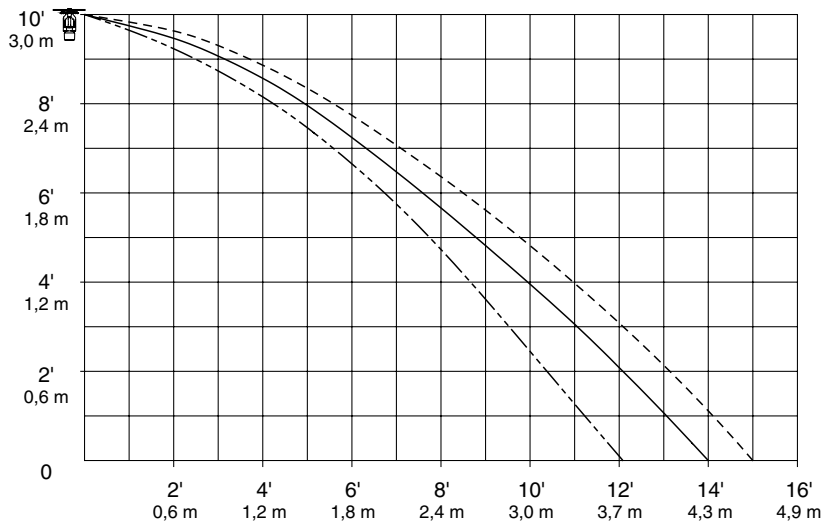
Intermediate Upright with Guard –  
V3417, V3418

**Distribution Patterns:**

Models V3419, V3420  
K8.0 Intermediate Standard Pendent  
Distribution Patterns – Trajectory



Models V3417, V3418  
K8.0 Intermediate 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 -65°F (-54°C) 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	J	286°F/141°C	225°F/107°C	Blue
Extra High <sup>6</sup>	K	360°F/182°C	300°F/149°C	Purple
–	M	Open	–	No Bulb

<sup>6</sup> Standard response only.

**Available Wrenches:**

	V34 Recessed	V34 Open End
V3417, V3418 Intermediate Upright	–	✓
V3419, V3420 Intermediate Pendent	✓	✓

**⚠ 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.