FireLock® V34, K115 Models V3401, V3402, V3423, V3424



Standard Spray Upright and Pendent Standard and Quick Response







V3401¹ (G4020052, Nr1262/2002) and V3402¹ (G4020049, Nr1261/2002) Upright

Approvals/Listings:











See Victaulic Publication 10.01 for more details.

Product Description:

Model V34 standard spray sprinklers are designed to produce large discharge capacity in a hemispherical pattern standard in commercial applications. 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) and finishes to meet many design requirements.

Coverage

For coverage area and sprinkler placement, refer to applicable installation standards.

Technical Specifications:

Models: V3401, V3402, V3423, V3424

Style: Pendent, Upright **K Factor:** 8.0 Imp./115 S.I.²

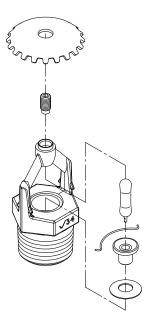
Nominal Thread Size: ¾" NPT/20 mm BSP Max. Working Pressure: 175 psi/12.5 Bar

Factory Hydrostatic Test: 100% @ 500 psi/34.5 Bar

Min. Operating Pressure: 5 psi/0.35 Bar

Temperature Rating: See chart

² 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	

¹ UL, ULC Listed; FM Approved

Material Specifications:

Upright Deflector: Bronze per UNS C22000 **Pendent Deflector:** Bronze per UNS C51000

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: Teflon³ 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

Chrome plated
White painted⁴
Black painted⁴

Custom painted⁴

Proprietary Nickel Teflon³ coating⁴

VC-250⁵



³ Teflon is a registered trademark of Dupont Co.

⁴ UL Listed for corrosion resistance for Models V3401 and V3402 ONLY.

 $^{^{\}rm 5}$ UL Listed and FM Approved for corrosion resistance.

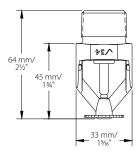
Approvals/Listings:

APPROVALS/LISTINGS	Model			
	V3401	V3423	V3402	V3424
Orifice Size (inches)	17/32"	17/32"	17/32"	17/32"
Orifice Size (mm)	14	14	14	14
Nominal K Factor Imperial	11.5	11.5	11.5	11.5
Nominal K Factor S.I. ⁶	8	8	8	8
Response	Standard	Standard	Quick	Quick
Deflector Type	Upright	Pendent	Upright	Pendent
Approved Temperature Ratings	F°/C°			
VdS/CE ⁷	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 360°F/182°C	None	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None
cULus	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	None	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None
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 360°F/182°C	None	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None
CSFM #7690-0531:112	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	None	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None
LPCB	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°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

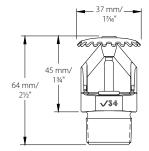
 $^{^{\}rm 6}~$ For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

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

Dimensions:



Standard Pendent - V3423, V3424



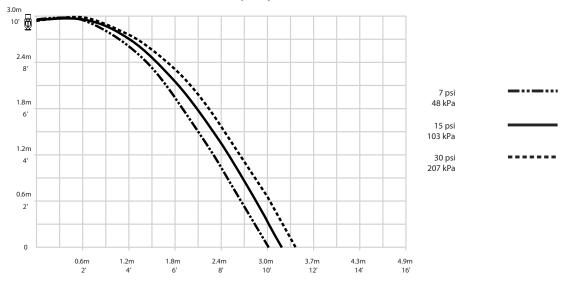
Standard Upright – V3401, V3402



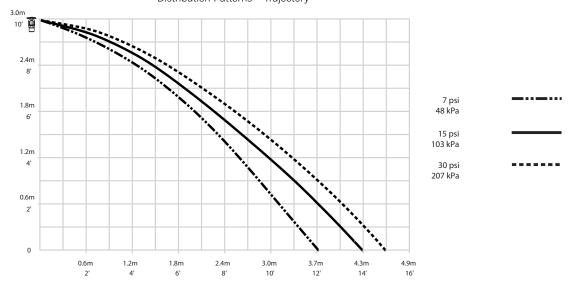
⁷ CE: Tested to EN12259-1 Standards

Distribution Patterns:

Models V3423, V3424 K115 Spray Pendent Distribution Patterns – Trajectory



Models V3401, V3402 K115 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 (-55°C) to those shown in the table below.

		Temperature – °F/°C		
Sprinkler Temperature Classification	Victaulic Part Identification	Nominal Temperature Rating	Maximum Ambient Temperature Allowed	Glass Bulb Color
Ordinary	А	135°F/57°C	100°F/38°C	Orange
Ordinary	С	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 ⁸	К	360°F/182°C	300°F/149°C	Purple
_	М	Open	_	No Bulb

⁸ Standard response only.

Available Wrenches:

	V34 Recessed	V34 Open End
V3401, V402 Upright	_	✓
V3423, V3424 Pendent	1	✓

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.

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

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

