

# FireLock® V24, K61(S.I.)/4.2 Imp Models V2401, V2402, V2403, V2404 Standard and Quick Response

## Standard Spray Upright Pendent and Recessed Pendent



V2401, V2402  
Upright



V2403, V2404  
Pendent

## Approvals/Listings:



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

## Product Description:

These Model V24 standard spray sprinklers are designed to produce a hemispherical spray pattern for standard commercial applications. They are available with either standard or quick response bulbs. 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 NFPA 13 standards or applicable standards.

## Technical Specifications:

**Models:** V2401, V2402, V2403, V2404

**Style:** Pendent or Upright

**Nominal K Factor:** 4.2 Imp./61.0 S.I. (Bar)<sup>1</sup>

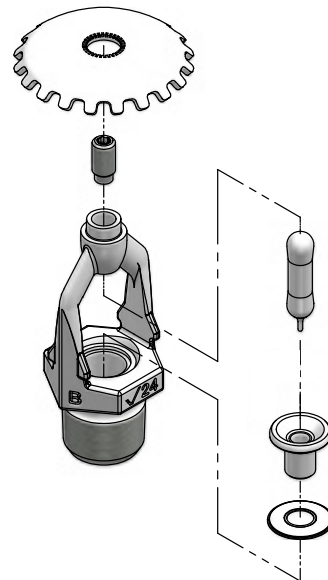
**Nominal Thread Size:** 3/8" BSPT/10 mm

**Max. Working Pressure:** 12.5 Bar/175 psi

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

**Min. Operating Pressure:** .5 Bar/7 psi

**Temperature Rating:** See chart



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 C11000

**Pendent Deflector:** Bronze per UNS C51000

**Bulb:** Glass with glycerin solution

**Bulb Nominal Diameter:**

V2401 and V2403 Standard Response 5.0mm

V2402 and V2404 Quick Response 3.0mm

**Load Screw:** Bronze per UNS C65100

**Pip Cap:** Bronze per UNS C65100

**Seal:** Teflon<sup>2</sup> tape

**Spring:** Beryllium nickel

**Frame:** Die cast brass 65-30

**Accessories:**

**Installation Wrench:**

Open End: V27

Recessed: V27-2

**Sprinkler Finishes:**

Plain Brass

Chrome Plated

RAL 9010 White painted<sup>3</sup>

RAL 9001 Off-white<sup>3</sup>

Black Painted<sup>3</sup>

Custom Painted<sup>3</sup>

Proprietary Nickel Teflon<sup>2</sup> Coated<sup>3</sup>

VC-250<sup>4</sup>

For cabinets and other accessories refer to separate sheet.

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

<sup>2</sup> Teflon is a registered trademark of Dupont Co.

<sup>3</sup> UL Listed for corrosion resistance.

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

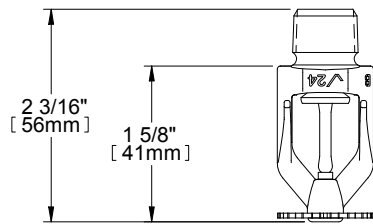
**Approvals/Listings:**

APPROVALS/LISTINGS	Model			
	V2401	V2402	V2403	V2404
Orifice Size (inches)	7/16"	7/16"	7/16"	7/16"
Orifice Size (mm)	11	11	11	11
Nominal K Factor Imperial	4.2	4.2	4.2	4.2
Nominal K Factor S.I. <sup>5</sup>	61	61	61	61
Response	Standard	Quick	Standard	Quick
Deflector Type	Upright	Upright	Recessed Pendent	Recessed Pendent
Adjustment			up to 3/4"	up to 3/4"
<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 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 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C

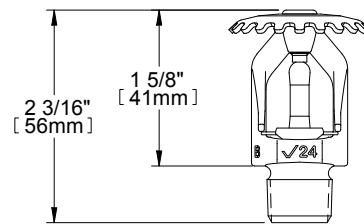
<sup>5</sup> For K Factor when pressure is measured in Kpa, divide S.I. units by 10.0.

Note: Listings and Approvals as of printing. All are approved open. FM Approved with 1/2" adjustment escutcheon only - quick response.

**Dimensions:**



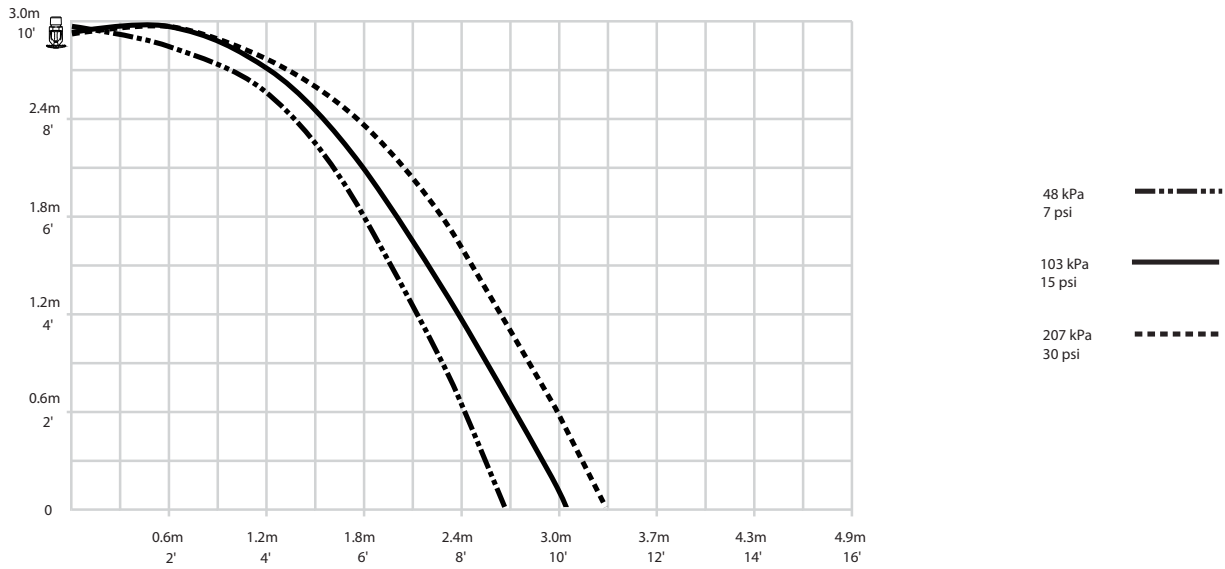
Standard Pendent –  
V2403, V2404



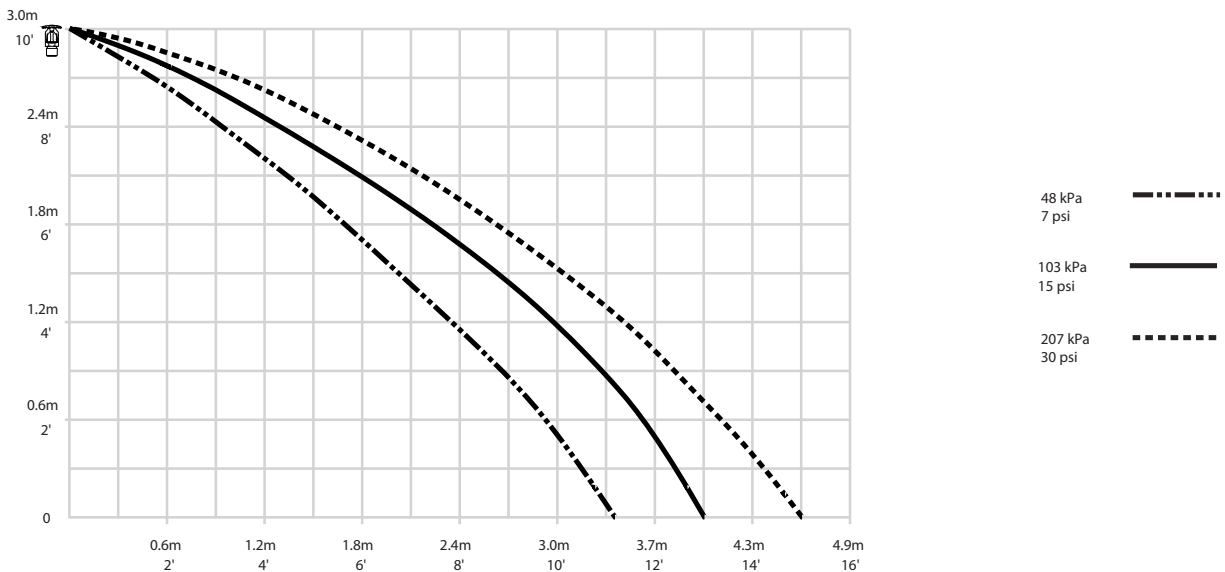
Standard Upright –  
V2401, V2402

**Distribution Patterns:**

Models V2403, V2404  
K61 Spray Pendent  
Distribution Patterns – Trajectory



Models V2401, V2402  
K61 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) 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/35°C	Yellow
Intermediate	F	200°F/93°C	150°F/35°C	Green
High	J	286°F/141°C	225°F/107°C	Blue
-	M	Open	-	No Bulb
Extra High	K	360°F/182°C	300°F/149°C	Purple

**Available Wrenches:**

	V272	V27 Open End
V2401, V2402, V2403, V2404	✓	✓

**⚠ 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.