

# V44, K14.0

Early Suppression Fast Response Pendent (ESFR)

## V4402 FAST RESPONSE

The Model V4402 Early Suppression Fast Response (ESFR) Pendent sprinkler is designed, listed, and approved for use in accordance with the ESFR sections of NFPA 13. This sprinkler utilizes a fast response, fusible solder link and is capable of suppressing large storage fires, in most cases, without the need for in-rack sprinklers. This sprinkler is constructed of a robust die cast brass frame with stainless steel operating components to ensure long life and prompt, precise activation. The Teflon coated, Belleville spring seal is a time tested feature which provides excellent resistance to corrosive water supplies, thus ensuring a long term water-tight seal.

The Model V4402 has a K-Factor of 14.0imp/20.2S.I. for use with strong water supplies or existing fire pumps.



V4402

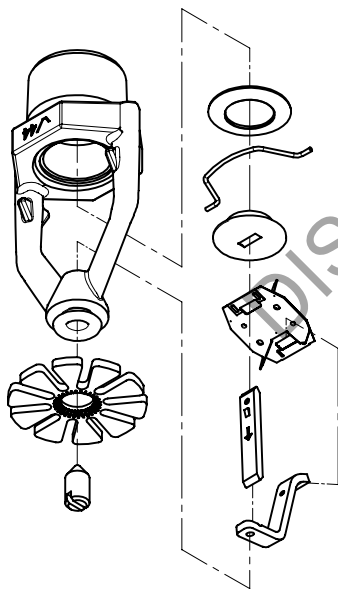
### SPRINKLER OPERATION:

The operating mechanism is a fast response, fusible solder link. During a fire, the ambient temperature rises causing the solder to melt. When the ambient temperature reaches the rated temperature of the sprinkler, the link fuses. As a result, the waterway is cleared of all sealing parts and water is discharged towards the deflector. The deflector is designed to distribute the water in a pattern that is most effective in suppressing rapidly growing storage fires.

### COVERAGE:

See NFPA 13 regarding early suppression fast response sprinklers (ESFR). Maximum ceiling height – 40ft./12.2m; maximum commodity height – 35ft./10.7m.

### TECHNICAL SPECIFICATIONS:



Exaggerated for clarity

- Models:** V4402
- Style:** Pendent
- K-Factor:** 14.0imp./20.25S.I.
- Nominal Thread Size:** ¾" or 20mm BPST
- Max. Working Pressure:** 175psi/1200kPa
- Factory Hydrostatic Test:** 100% @ 500psi/3450kPa
- Min. Operating Pressure:** Application specific
- Temperature Rating:** See chart on page 2.

#### MATERIAL SPECIFICATIONS

- Deflector:** Bronze per UNS C51000
- Link:** Nickel per UNS N02200
- Lever:** Monel per UNS N04400
- Load Screw:** Stainless Steel per UNS S31600
- Cap:** Stainless steel per UNS S31600
- Seal:** Teflon\* tape
- Strutt:** Monel per UNS N04400
- Frame:** Dezincification Resistant Die Cast Brass

#### ACCESSORIES

##### Installation Wrench:

- Open End: V44

##### Sprinkler Finishes:

- Plain brass

For cabinets and other accessories, refer to separate sheet.

^ For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

\* Teflon is a registered trademark of Dupont Co.

#### JOB/OWNER

System No. \_\_\_\_\_  
Location \_\_\_\_\_

#### CONTRACTOR

Submitted By \_\_\_\_\_  
Date \_\_\_\_\_

#### ENGINEER

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_  
Approved \_\_\_\_\_  
Date \_\_\_\_\_

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APPROVALS/LISTINGS	Model
Nominal Thread Size (inches)	V4402
Nominal Thread Size (mm)	¾" NPT
Nominal K Factor Imperial	20 BSP
Nominal K Factor S.I. <sup>^</sup>	14
Response	20.2
Deflector Type	Fast
Approved Temperature Ratings F°/C° by Agency ‡	Pendent
c-UL-us	162°F/72°C 212°F/100°C
FM	162°F/72°C 212°F/100°C

‡ Listings and Approvals as of printing.

^ For K Factor when pressure is measured in Bar, multiply S.I. units by 10.0

### RATINGS

All links are rated for temperatures from -67°F/-55°C to those shown in table below.

Sprinkler Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Color Code Link/Fame
		Nominal Temperature Rating	Maximum Ambient Temperature Allowed	
Ordinary	N	162	100	Black/None
		72	38	
Intermediate	G	212	150	Black with White Dot/ white arms
		100	65	

### ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number	
Temperature Rating	
K-Factor	
Quantity	
Sprinkler Finish	
Wrench Model Number	

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WARNING

**! 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.

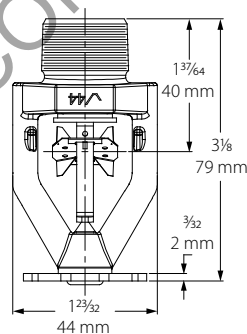
Failure to follow these instructions could result in serious personal injury and/or property damage.

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.

## DIMENSIONS

Standard Pendent – V4402



## AVAILABLE WRENCHES

Sprinkler Type	Open End
V4402 Pendent	V44

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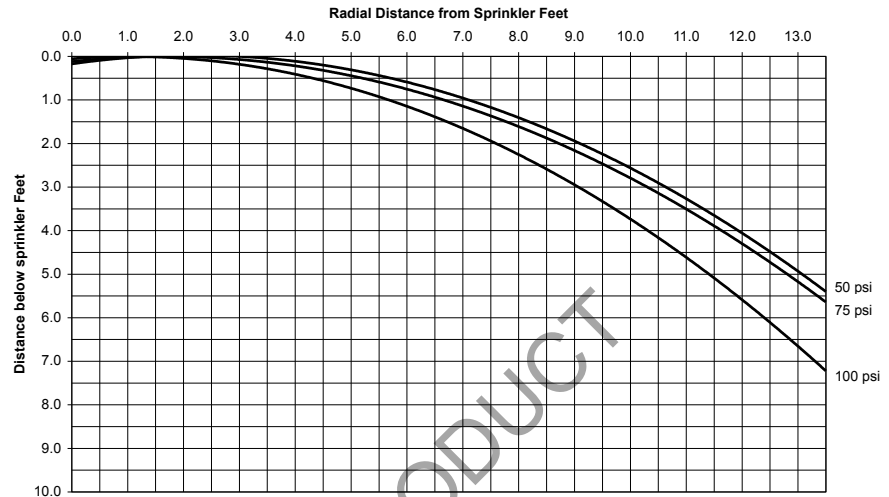
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**NOMINAL WETTING PATTERNS**

**Model V4402  
K14.0 pendent**

**V4402 Pendent Spray Pattern**



**NOTES:**

- 1 Data shown is approximate and can vary due to differences in installation.
- 2 This graph illustrates approximate spray patterns for this specific Victaulic FireLock Automatic Sprinkler. It is provided as information for guidance and should not be used as minimum sprinkler spacing rules for installation. Sprinkler location shall be in accordance with the obstruction rules for ESFR sprinklers in NFPA 13. Failure to follow these guidelines could adversely affect the performance of the sprinkler and will void all Listings, Approvals and Warranties.
- 3 All patterns are symmetrical to the waterway.

**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.



For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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