Early Suppression Fast Response Pendent (ESFR)

V4404 FAST RESPONSE

The Model V4404 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 V4404 has a K-Factor of 16.8 imp/24.25S.I. to reduce the required operating pressures and possibly eliminate the need for a fire pump.





V4404

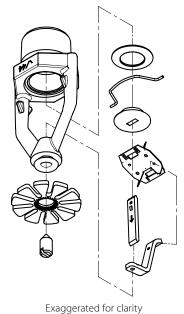
SPRINKLER OPERATION:

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 -40 ft./12.2 m; maximum commodity height -35 ft./10.7 m.

TECHNICAL SPECIFICATIONS:



Models: V4404 Style: Pendent

K-Factor: 16.8 imp./24.25 S.I.^

Nominal Thread Size: ¾" NPT or 20mm BSP Max. Working Pressure: 175psi/1200kPa Factory Hydrostatic Test: 100% @ 500psi/

3450 kPa

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	CONTRACTOR	ENGINEER	
System No	Submitted By	Spec Sect Para	
Location	Date	Approved	
		Date	





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APPROVALS/LISTINGS	Model V4404	
AIT KOVALS/LISTINGS		
Nominal Thread Size (inches)	34" NPT	
Nominal Thread Size (mm)	20 BSP	
Nominal K Factor Imperial	16.8	
Nominal K Factor S.I.^	25	
Response	Fast	
Deflector Type	Pendent	
Approved Temperature Ratings F°/C° by Agency ‡		
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.

RATINGS

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

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

ORDERING INFORMATION

Please specify the following when ordering:

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

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

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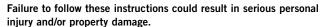




WARNING



- 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.



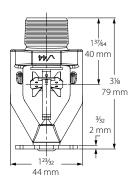


The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to the current National Fire Protection Association pamphlet that describes care and maintenance of sprinkler systems. In addition,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

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 - V4404



AVAILABLE WRENCHES

Sprinkler Type	Open End	
V4404 Pendent	V44	



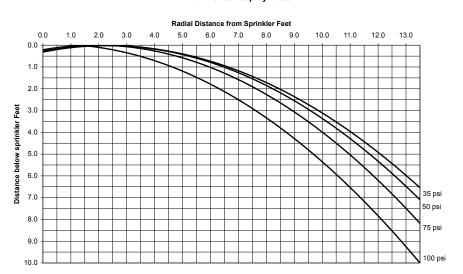
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NOMINAL WETTING PATTERNS

Model V4404 K16.8 pendent

V4404 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.



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