

FireLock® V48, K25.2

Model V4802 Early Suppression Fast Response (ESFR)



Pendent Sprinkler V4802

1.0 PRODUCT DESCRIPTION

Style: Pendent

Nominal Orifice Size: 1"/25 mm

Nominal Connection Size: 1"/25 mm IGS™ Grooved, reference [publication 10.65](#).

K-Factor: 25.2 Imp./36.8 S.I.¹

Maximum Operating Pressure: Up to 175 psi/1200 kPa/12 bar

Factory Hydrostatic Test: 100% @ 500 psi/3450 kPa/34 bar

Minimum Working Pressure: Reference NFPA 13 for specific application

Temperature Rating: See "Approved Temperature Ratings F°/C°" table in section 2.0

Application: See "Commodity Selection and Design Criteria Overview" table in section 2.0

Codes and Requirements: For coverage area and sprinkler placement, refer to NFPA 13, or any applicable local requirements

¹ For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

2.0 CERTIFICATION/LISTINGS



APPROVALS/LISTINGS			
Model	V4802		
Orifice Size (inches)	1		
Orifice Size (mm)	25		
Nominal K-Factor Imperial	25.2		
Nominal K-Factor S.I. ²	36.8		
Response	Fast		
Deflector Type	Pendent		
Agency	Approved Temperature Ratings F°/C°	Maximum Exposure Temperature F°/C°	Bulb Color
	155/68	100/38	Red
cULus	200/93	150/65	Green

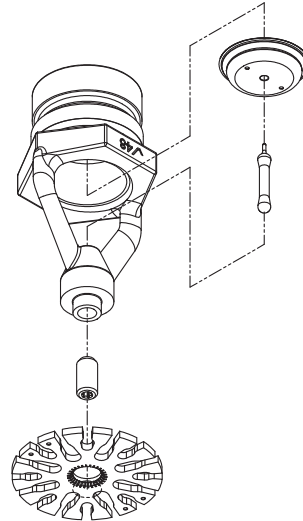
² For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

COMMODITY SELECTION AND DESIGN CRITERIA OVERVIEW FOR MODEL V4802 ESFR PENDENT SPRINKLER	
Storage Type	NFPA
Sprinkler Type	ESFR
Response Type	ESFR
System Type	Wet
Temperature Rating °F (°C)	155 °F (68 °C), 200 °F (93 °C)
Open Frame (that is, no solid shelves) Single, Double, Multiple-Row, or Portable Rack Storage of Class I-IV and Group A or B Plastics	Refer to NFPA 13
Solid Pile or Palletized Storage of Class I-IV and Group A or B Plastics	Refer to NFPA 13
Idle Pallet Storage	Refer to NFPA 13
Rubber Tire Storage	Refer to NFPA 13
Rolled Paper Storage (Refer to the standard.)	Refer to NFPA 13
Flammable Liquid Storage (Refer to the standard.)	Refer to NFPA 30
Aerosol Storage (Refer to the standard.)	Refer to NFPA 30B
Automotive Components in Portable Racks (Control mode only, refer to the standard.)	Refer to NFPA 13

3.0 SPECIFICATIONS – MATERIAL

- Frame:** Cast brass
- Deflector:** Brass
- Bulb:** Glass with glycerin solution
- Bulb Nominal Diameter:**
Quick Response: 3.0mm
- Load Screw:** Brass
- Pip Cap:** Brass
- Spring Seal:** Teflon³ tape
- Sprinkler Finishes:** Plain Brass

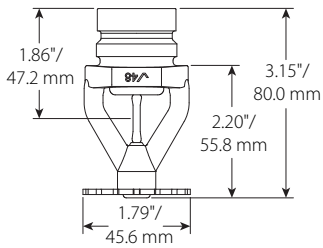
³ Teflon is a registered trademark of Dupont Co.



Exaggerated for clarity

4.0 DIMENSIONS

Model V4802







5.0 PERFORMANCE

COMMODITY SELECTION AND DESIGN CRITERIA OVERVIEW FOR MODEL V4802 ESFR	
Description	Specification UL
Sprinkler Type	ESFR
Temperature Rating °F (°C)	155 °F (68 °C), 200 °F (93 °C)
Response Type	ESFR
Sprinkler Position	Pendent, frame arms aligned with pipe, deflectors parallel with ceiling or roof
System Type	Wet
Maximum Area of Coverage	100 ft ² (9.3 m ²)
Minimum Area of Coverage	64 ft ² (5.95 m ²)
Maximum Slope Ceiling	2 unit rise for 12 unit run
Maximum Spacing	10 ft (3.1 m)
Minimum Spacing	8 ft (2.4 m)
Deflector Distance from Walls	Minimum of 4 (100 mm) inches from walls but no more than 1/2 the allowable distance permitted between sprinklers
Deflector to Top of Storage	Minimum of 36 inches (0.9 m)
Deflector to Ceiling Distance	6 to 14 inches (152 mm to 355 mm)
Maximum Ceiling Height	45 ft (13.7 m)
Maximum Storage Height	40 ft (12.2 m)
Storage Arrangement	Palletized, solid piled, open frame; single row, double row, or multiple row and portable rack arrangement
Commodity	Class I-IV, Cartoned unexpanded plastics, cartoned expanded plastics, uncartoned unexpanded plastics, uncartoned expanded plastics
Sprinkler System Design	12 A.S @ approved pressures
Obstruction Criteria	Reference NFPA 13
Minimum Aisle Width	4 ft (1.2 m)
Hose Stream Allowance and Water Supply Duration	250 gpm for 60 minutes or as determined by the approval (950 lpm for 60 minutes)

5.0 PERFORMANCE (Continued)

COMMODITY SELECTION AND DESIGN CRITERIA OVERVIEW FOR MODEL V4802 SPECIFIC APPLICATION UL LISTING		
Description	Specification UL	Specification UL
Sprinkler Type	ESFR	ESFR
Temperature Rating °F (°C)	155 °F (68 °C)	200 °F (93 °C)
Response Type	ESFR	ESFR
Sprinkler Position	Pendent, frame arms aligned with pipe, deflectors parallel with ceiling or roof	Pendent, frame arms aligned with pipe, deflectors parallel with ceiling or roof
System Type	Wet	Wet
Maximum Area of Coverage	100 ft ² (9.3 m ²)	100 ft ² (9.3 m ²)
Minimum Area of Coverage	64 ft ² (5.95 m ²)	64 ft ² (5.95 m ²)
Maximum Slope Ceiling	2 unit rise for 12 unit run	2 unit rise for 12 unit run
Maximum Spacing	10 ft (3.1 m)	10 ft (3.1 m)
Minimum Spacing	8 ft (2.4 m)	8 ft (2.4 m)
Deflector Distance from Walls	Minimum of 4 (100 mm) inches from walls but no more than 1/2 the allowable distance permitted between sprinklers	Minimum of 4 (100 mm) inches from walls but no more than 1/2 the allowable distance permitted between sprinklers
Deflector to Top of Storage	Minimum of 36 inches (0.9 m)	Minimum of 36 inches (0.9 m)
Deflector to Ceiling Distance	6 to 14 inches (152 mm to 355 mm)	6 to 14 inches (152 mm to 355 mm)
Maximum Ceiling Height	48 ft (14.6 m)	48 ft (14.6 m)
Maximum Storage Height	43 ft (13.1 m)	43 ft (13.1 m)
Storage Arrangement	Palletized, solid piled, open frame; single row, double row, or multiple row and portable rack arrangement	Palletized, solid piled, open frame; single row, double row, and portable rack arrangement
Commodity	Class I-IV, Cartoned unexpanded plastic	Class I-IV, Cartoned unexpanded plastic
Sprinkler System Design	NFPA 13 for ESFR Sprinklers based upon 45 psi (3.1 bar) design pressure 169 gpm (640 lpm) with 12 sprinkler remote area	NFPA 13 for ESFR Sprinklers based upon 45 psi (3.1 bar) design pressure 169 gpm (640 lpm) with 12 sprinkler remote area
Obstruction Criteria	Reference NFPA 13	Reference NFPA 13
Minimum Aisle Width	4 ft (1.2 m)	5 ft (1.5 m)
Hose Stream Allowance and Water Supply Duration	250 gpm for 60 minutes or as determined by the approval (950 lpm for 60 minutes)	250 gpm for 60 minutes or as determined by the approval (950 lpm for 60 minutes)

6.0 NOTIFICATIONS

 WARNING	
  	<ul style="list-style-type: none"> 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. <p>Failure to follow these instructions could result in serious personal injury and/or property damage.</p> <p>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.</p> <p>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.</p>

7.0 REFERENCE MATERIALS

- [10.65: FireLock IGS Installation-Ready Style V9 Sprinkler Coupling](#)
- [25.14: Victaulic IGS Groove Specifications](#)
- [I-40: Victaulic FireLock Automatic Sprinklers Installation and Maintenance Guide](#)
- [I-V9: Style V9 Victaulic FireLock™ IGS™ Installation-Ready™ Sprinkler Coupling](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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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.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

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

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