

V34, K11.2



SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS

Extended Coverage/Light Hazard (ECLH) Pendent and Recessed Pendent

V3411 STANDARD RESPONSE
V3412 QUICK RESPONSE

These Model V34 ECLH sprinklers are designed with a larger orifice size to provide added coverage at normal light hazard operating pressures. The design incorporates state-of-the-art, heat responsive, frangible glass bulb design (standard or quick response) for prompt, precise operation.

The die cast frame is more streamlined and attractive than traditional sand cast frames. 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 2) and finishes to meet many design requirements.



PENDENT
V3411 AND V3412



RECESSED PENDENT
V3411 AND V3412

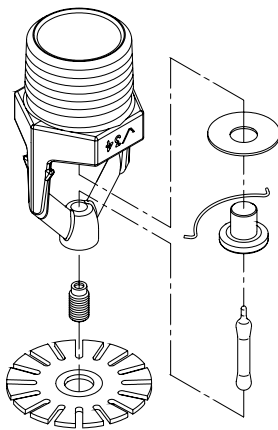
SPRINKLER OPERATION:

The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient temperature rises causing the liquid in the bulb to expand. When the ambient temperature reaches the rated temperature of the sprinkler, the bulb shatters. As a result, the water-way 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 controlling the fire.

COVERAGE:

Extended spray coverage is up to 400 square feet (37.2 sq. m) per NFPA 13.

TECHNICAL SPECIFICATIONS:



Exaggerated for clarity

Models: V3411, V3412

Style: Extended Coverage/ Light Hazard
 - Pendent, Recessed Pendent

Nominal Orifice Size: 5/8" / 16 mm

K-Factor: 11.2 Imp./16.2 S.I.[^]

Nominal Thread Size: 3/4" NPT/20 mm

Max. Working Pressure: 175 psi/1200 kPa

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

Min. Operating Pressure: 5 psi/34 kPa

Temperature Rating: See chart on page 2.

MATERIAL SPECIFICATIONS

Pendent Deflector: Bronze per UNS C51000

Bulb: Glass with glycerin solution.

Bulb Nominal Diameter:

- Standard: 5,0 mm
- Quick Response: 3,0 mm

Load Screw: Bronze per UNS C65100

Pip Cap: Bronze per UNS C65100

Spring: Beryllium nickel

Seal: Teflon* 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 Painted**
- Custom Painted**

For escutcheons, cabinets and other accessories refer to separate sheet

NOTE: Weather resistant recessed escutcheons available upon request.

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

* Teflon is a registered trademark of Dupont Co.

** UL Listed for corrosion resistance in all configurations.

JOB/OWNER

System No. _____

Location _____

CONTRACTOR

Submitted By _____

Date _____

ENGINEER

Spec Sect _____ Para _____

Approved _____

Date _____

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APPROVALS/LISTINGS

Model	Orifice Size	Nominal K-Factor	Response	Deflector Type	Approved Temperature Ratings ‡ @ (Refer to notes below.)		
					Room Size - Feet/meters		
					16 X 16 4.9 X 4.9	18 X 18 5.5 X 5.5	20 X 20 6.1 X 6.1
V3411	5/8 16	11.2 16.2	Standard	Pendent	1, 3, 4, 5 - A 2 - B	1, 3, 4, 5 - A 2 - B	1, 3, 4, 5 - A 2 - B
V3411	5/8 16	11.2 16.2	Standard	Recessed Pendent Up to 1/2" Adjustment	1, 3, 4, 5 - A 2 - D	1, 3, 4, 5 - A 2 - D	1, 3, 4, 5 - A 2 - D
V3411	5/8 16	11.2 16.2	Standard	Recessed Pendent Up to 3/4" Adjustment	1, 3, 4, 5 - A	1, 3, 4, 5 - A	1, 3, 4, 5 - A
V3412	5/8 16	11.2 16.2	Quick	Pendent	1, 3, 4, 5 - A 2 - D	1, 3, 4, 5 - A 2 - D	1, 3, 4, 5 - A 2 - D
V3412	5/8 16	11.2 16.2	Quick	Recessed Pendent Up to 1/2" Adjustment	1, 3, 4, 5 - A 2 - E	1, 3, 4, 5 - A 2 - E	1, 3, 4, 5 - C 2 - E
V3412	5/8 16	11.2 16.2	Quick	Recessed Pendent Up to 3/4" Adjustment	1, 3, 4, 5 - A	1, 3, 4, 5 - A	1, 3, 4, 5 - C

‡ Listings and approval as of printing. Not all temperature rating combinations are Approved or Listed. Check Victaulic for specific combinations.

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

@ Light hazard only.

NOTES	
Approval	Temperature Rating
1 – UL	A – 135°F (57°C), 155°F (68°C), 175°F (79°C), 200°F (93°C)
2 – FM	B – 135°F(57°C), 155°F (68°C), 175°F (79°C)
3 – ULC	C – 135°F (57°C), 175°F (79°C)
4 – NYC/MEA †	D – 135°F (57°C), 155°F (68°C)
5 – CSFM §	E – 135°F (57°C)

† MEA #62-99-E

§ CSFM #7690-0531:112

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RATINGS

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

Sprinkler Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color
		Nominal Temperature Rating	Maximum Ambient Temperature Allowed	
Ordinary	A	135 57	100 38	Orange
Ordinary	C	155 68	100 38	Red
Intermediate	E	175 79	150 65	Yellow
Intermediate	F	200 93	150 65	Green

ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number	
Style	
Temperature Rating	
K-Factor	
Thread Size	
Quantity	
Sprinkler Finish	
Escutcheon Finish	
Wrench Model Number	





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 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>

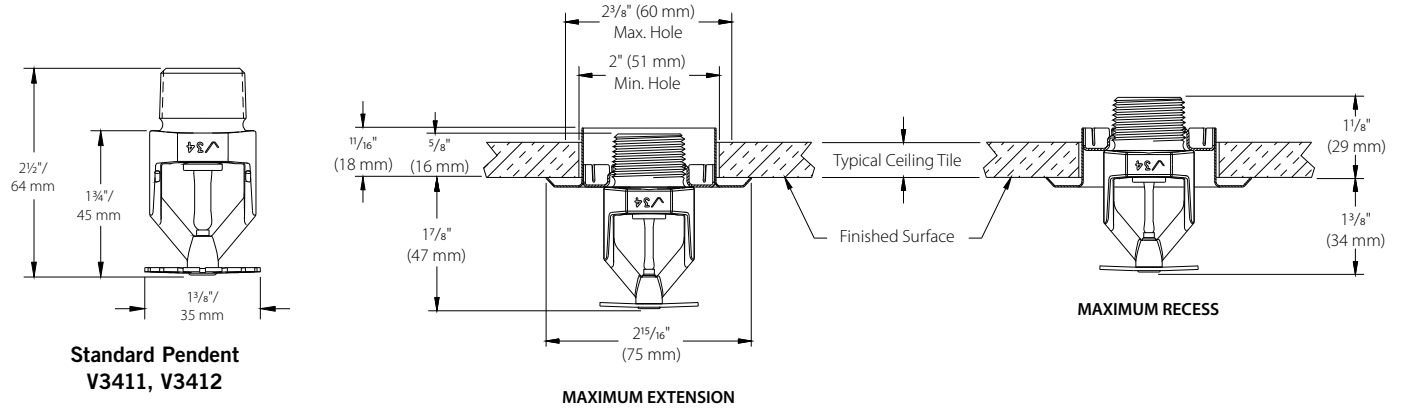
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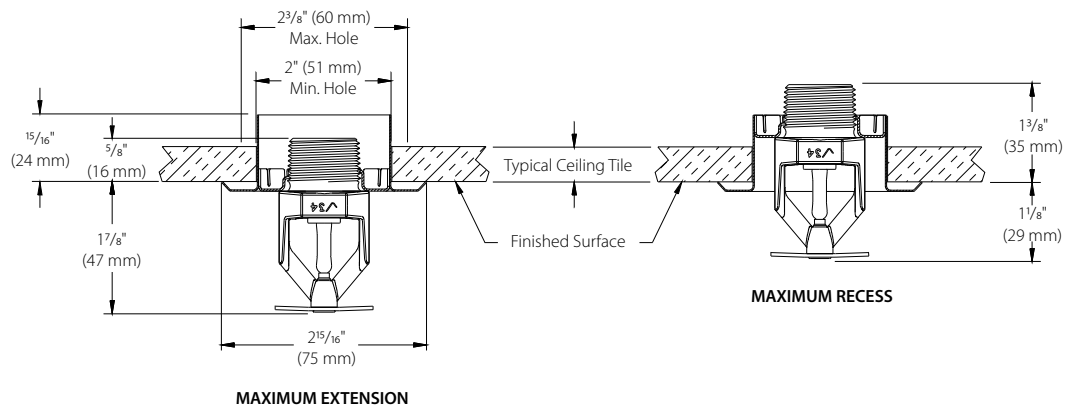
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DIMENSIONS

1/2" Adjustment Recessed – V3411, V3412 (drawings not to scale)



3/4" Adjustment Recessed – V3411, V3412 (drawings not to scale)



AVAILABLE WRENCHES

Sprinkler Type	Open End	Recessed
Pendent	V34	V34
Recessed Pendent	–	V34

ROOM SIZE

SPRINKLER PERFORMANCE FLOW AND PRESSURE (MINIMUM) V3411, V3412				
Room Size	Flow Rate GPML/LPM		End Sprinkler Pressure PSI/kPa	
	FM	UL	FM	UL
16 X 16 4.9 X 4.9	30 115	30 115	7 50	7 50
18 X 18 5.5 X 5.5	33 125	33 125	9 60	9 60
20 X 20 6.1 X 6.1	40 150	40 150	13 90	13 90

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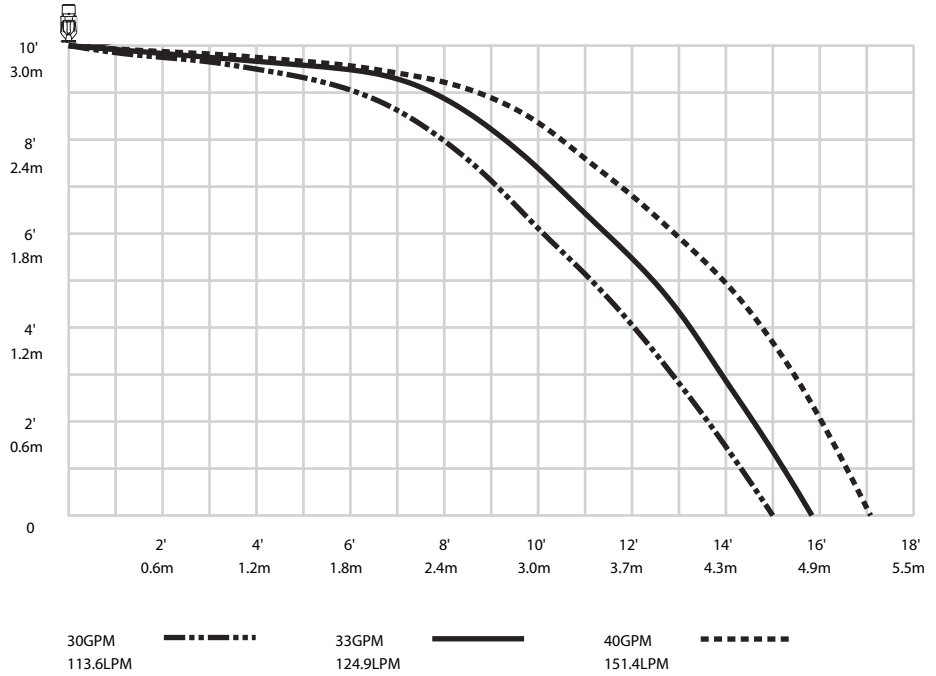
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DISTRIBUTION PATTERNS

Models V3411, V3412

K11.2 ECLH PENDANT AND RECESSED PENDANT DISTRIBUTION PATTERNS – TRAJECTORY



Response	Minimum Installation Spacing Feet/meters
V3411 - Standard	10.0 3.0
V3412 - Quick	8.0 2.4

NOTES:

- 1 Data shown is approximate and can vary due to differences in installation.
- 2 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.
- 3 All patterns are symmetrical to the centerline of 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

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