

# FireLock® V34, K11.2

## Models V3411 Standard Response, V3412 Quick Response



40.30

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



V3411/V3412  
Pendent



V3411/V3412  
Recessed Pendent

### 1.0 PRODUCT DESCRIPTION

**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.<sup>1</sup>

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

**Max. Working Pressure:** 175 psi/1200 kPa

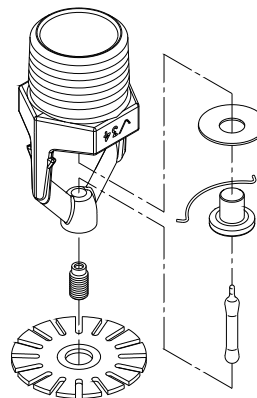
**Factory Hydrostatic Test:** 100% @ 500 psi/3450 kPa

**Min. Operating Pressure:** 7 psi/48kPa

**Temperature Rating:** See chart

**Coverage:** Extended spray coverage is up to 400 square feet (37.2 sq. m) per NFPA 13 and FM Data Sheet 2-0.

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



### 2.0 CERTIFICATION/LISTINGS



**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	

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## 2.0 CERTIFICATION/LISTINGS (Continued)

APPROVALS/LISTINGS		Model					
		V3411	V3411	V3411	V3412	V3412	V3412
Orifice Size (inches)		5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Orifice Size (mm)		16	16	16	16	16	16
Nominal K Factor Imperial		11.2	11.2	11.2	11.2	11.2	11.2
Nominal K Factor S.I. <sup>2</sup>		16.2	16.2	16.2	16.2	16.2	16.2
Response		Standard	Standard	Standard	Quick	Quick	Quick
Deflector Type		Pendent	Recessed Pendent Up to 1/2" Adjustment	Recessed Pendent Up to 3/4" Adjustment	Pendent	Recessed Pendent Up to 1/2" Adjustment	Recessed Pendent Up to 3/4" Adjustment
Room Size Feet/meters		Approved Temperature Ratings F°/C° <sup>3 4</sup>					
16 X 16 4.9 X 4.9	cULus	A	A	A	A	A	A
	FM	B	C	-	C	D	-
	NYC/MEA <sup>5</sup>	A	A	A	A	A	A
	CSFM <sup>6</sup>	A	A	A	A	A	A
18 X 18 5.5 X 5.5	cULus	A	A	A	A	A	A
	FM	B	C	-	C	D	-
	NYC/MEA <sup>5</sup>	A	A	A	A	A	A
	CSFM <sup>6</sup>	A	A	A	A	A	A
20 X 20 6.1 X 6.1	cULus	A	A	A	A	A	A
	FM	B	C	-	C	D	-
	NYC/MEA <sup>5</sup>	A	A	A	A	A	A
	CSFM <sup>6</sup>	A	A	A	A	A	A

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

<sup>3</sup> Listings and approval as of printing. Not all temperature rating combinations are Approved or Listed. Check Victaulic for specific combinations.

<sup>4</sup> Light hazard only.

<sup>5</sup> MEA #62-99-E

<sup>6</sup> CSFM #7690-0531:112

Temperature Rating
A – 135°F (57°C), 155°F (68°C), 175°F (79°C), 200°F (93°C)
B – 135°F(57°C), 155°F (68°C), 175°F (79°C)
C – 135°F (57°C), 155°F (68°C)
D – 135°F (57°C)

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### 3.0 SPECIFICATIONS – MATERIAL

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**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<sup>7</sup> tape

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

**Lodgement Spring:** Stainless steel per UNS S30200

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### 3.1 SPECIFICATIONS – ACCESSORIES

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**Installation Wrench:**

Open End: V34

Recessed: V34

**Sprinkler Finishes:**

Plain Brass

Chrome Plated

White Painted<sup>8</sup>

Custom Painted<sup>8</sup>

VC-250<sup>9</sup>

<sup>7</sup> Teflon is a registered trademark of Dupont Co.

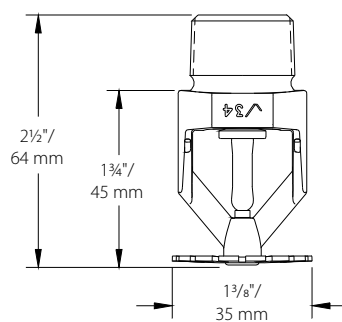
<sup>8</sup> UL Listed for corrosion resistance.

<sup>9</sup> UL Listed and FM Approved for corrosion resistance.

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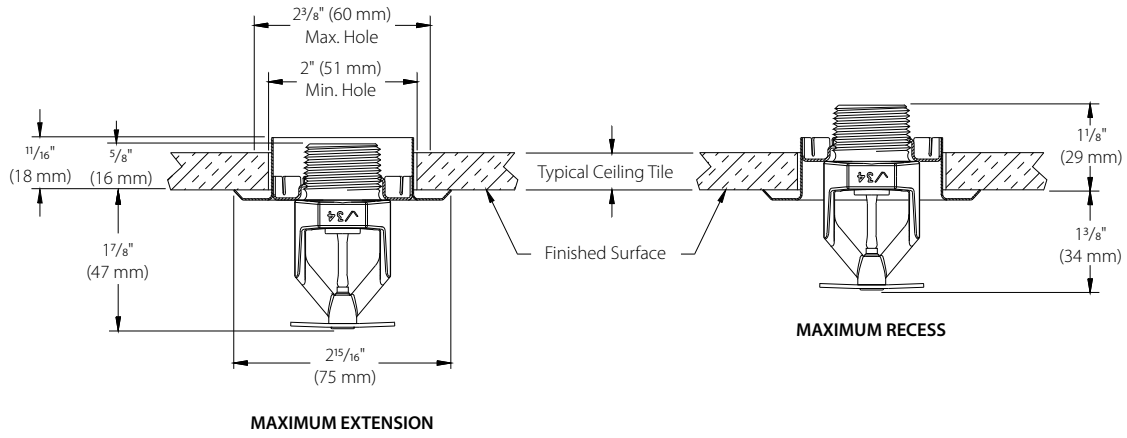
### 4.0 DIMENSIONS

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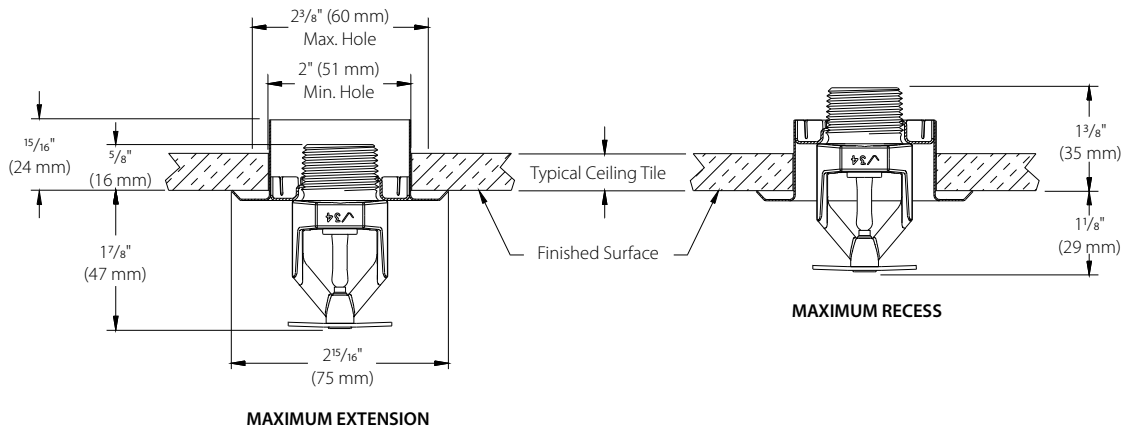


Standard Pendent –  
V3411, V3412

### 4.1 INSTALLATION DIMENSIONS



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



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

## 5.0 PERFORMANCE




### 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

Response	Miniumum Installation Spacing Feet/meters	
	UL	FM
V3411 - Standard	10.0 3.0	no criteria
V3412 - Quick	8.0 2.4	10.0 3.0

## 6.0 NOTIFICATIONS

⚠ **WARNING**

    	<ul style="list-style-type: none"> <li>Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.</li> <li>Always wear safety glasses and foot protection.</li> <li>Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.</li> <li>Installation rules, especially those governing obstruction, must be strictly followed.</li> <li>Painting, plating, or any re-coating of sprinklers (other than that supplied by Victaulic) is not allowed.</li> </ul> <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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## 7.0 REFERENCE MATERIALS

### Ratings

All glass bulbs are rated for temperatures from -65°F (-54°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/65°C	Yellow
Intermediate	F	200°F/93°C	150°F/65°C	Green

### Available Wrenches

	Open End	Recessed
Pendent	V34	V34
Recessed Pendent	–	V34

[I-40: FireLock™ Automatic Sprinklers Installation Manual](#)

[TB-901: Corrosion Resistant Sprinklers Technical Data](#)

[40.88: FireLock™ Sprinkler Escutcheons](#)

#### 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, 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](http://www.victaulic.com).

#### Warranty

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

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