# FireLock<sup>™</sup> V34, K8.0 Models V3401, V3402, V3405, V3406









V3405/V3406 Pendent



V3401/V3402 Upright



V3401/V3402 Upright w/V9



V3405/V3406 Pendent w/V9

### 1.0 PRODUCT DESCRIPTION

Models: V3401, V3402, V3405, V3406

Style: Pendent, Upright or Recessed Pendent

**K-Factor:** 8.0 Imp./11.5 S.I.<sup>1</sup>

Nominal Connection Size: 3/4" NPT/20 mm BSPT/IGS Grooved

Max. Working Pressure: 175 psi/1207 kPa/12 bar

Factory Hydrostatic Test: 100% @ 500 psi/3447 kPa/34 bar

Min. Operating Pressure:

• 7 psi/48 kPa

• 0.35 bar/5 psi (VdS for upright only)

Temperature Rating: See chart

 $^{\rm 1}$  For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0.

### 2.0 CERTIFICATION/LISTINGS













#### NOTE

• Threaded and IGS connections have different approvals/listings. See tables on pages 2 and 3.

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

System No.	Location		Spec Section	Paragraph
Submitted By	Date		Approved	Date

# 2.0 CERTIFICATION/LISTINGS (CONTINUED)

# **Threaded Sprinkler Approvals/Listings**

ADDDOVALC/LICTINGS	Model						
APPROVALS/LISTINGS	V3401	V3402	V3405	V3405	V3406	V3406	V3406
Orifice Size (inches)	17/32"	17/32"	17/32"	17/32"	17/32"	17/32"	17/32"
Orifice Size (mm)	14	14	14	14	14	14	14
Nominal K-Factor Imperial	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Nominal K-Factor S.I. <sup>2</sup>	11.5	11.5	11.5	11.5	11.5	11.5	11.5
Response	Standard	Quick	Standard	Standard	Quick	Quick	Quick
Deflector Type	Upright	Upright	Pendent	Recessed Pendent	Pendent	Recessed Pendent	Recessed Pendent
Adjustment				up to ¾"		up to ½"	up to ¾"
Approved Temperature Ratings			F	°/C°			
cULus	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 175°F/79°C 200°F/93°C	135°F/57°C 175°F/79°C 200°F/93°C
FM	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 175°F/79°C 200°F/93°C	None
NYC/MEA # 62-99-E	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 175°F/79°C 200°F/93°C	135°F/57°C 175°F/79°C 200°F/93°C
CSFM # 7690-0531:112	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 175°F/79°C 200°F/93°C	135°F/57°C 175°F/79°C 200°F/93°C
VdS	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None	None	None	None	None
CE	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None	None	None	None	None
LPCB	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None	None	None	None	None
CCC	155°F/68°C 286°F/141°C	155°F/68°C 286°F/141°C	155°F/68°C 286°F/141°C	155°F/68°C 286°F/141°C	155°F/68°C 286°F/141°C	155°F/68°C 286°F/141°C	155°F/68°C 286°F/141°C

 $<sup>^{\,2}</sup>$   $\,\,$  For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0  $\,$ 

# NOTE



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<sup>•</sup> Listings and Approvals as of printing. All are approved open.

# 2.0 CERTIFICATION/LISTINGS (CONTINUED)

# **IGS Sprinkler Approvals/Listings**

ADDDOVALC/LICTINGS	Model					
APPROVALS/LISTINGS	V3401	V3402	V3405	V3406		
Orifice Size (inches)	17/32"	17/32"	17/32"	17/32"		
Orifice Size (mm)	14	14	14	14		
Nominal K-Factor Imperial	8.0	8.0	8.0	8.0		
Nominal K-Factor S.I. <sup>2</sup>	11.5	11.5	11.5	11.5		
Response	Standard	Quick	Standard	Quick		
Deflector Type	Upright	Upright	Pendent	Pendent		
Adjustment						
Approved Temperature Ratings	F°/C°					
cULus	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C		
FM	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C 360°F/182°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C		

 $<sup>^{2}\,\,</sup>$  For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0

#### NOTE

• Listings and Approvals as of printing. All are approved open.



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# 3.0 SPECIFICATIONS - MATERIAL

**Upright Deflector:** Bronze **Pendent Deflector:** Bronze

Bulb: Glass with glycerin solution

**Bulb Nominal Diameter:** Standard: 5.0 mm

Quick Response: 3.0 mm

**Load Screw:** Bronze **Pip Cap:** Bronze

Spring: Beryllium nickel

Seal: PTFE tape

Frame: Die cast brass

Lodgement Spring: Stainless steel

Installation Wrench: Open End: V34 Recessed: V34

3/16" hex bit: V9 coupling

# **Sprinkler Finishes:**

Plain Brass

Chrome plated

White polyester coated<sup>3</sup>

Flat black painted<sup>3</sup>

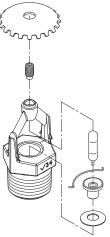
Custom painted<sup>3</sup>

VC-250<sup>4</sup>

- <sup>3</sup> UL Listed for corrosion resistance.
- <sup>4</sup> UL Listed and FM Approved for corrosion resistance.

#### NOTES

- Weather resistant recessed escutcheons available upon request.
- Plain Brass is only available for the V9 coupling.



Exaggerated for Clarity

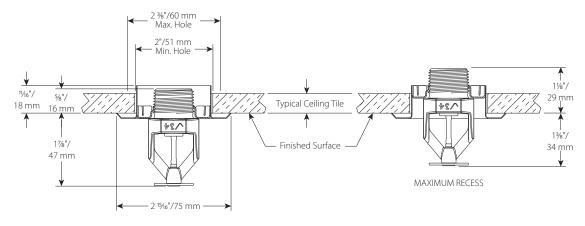


### 4.0 DIMENSIONS



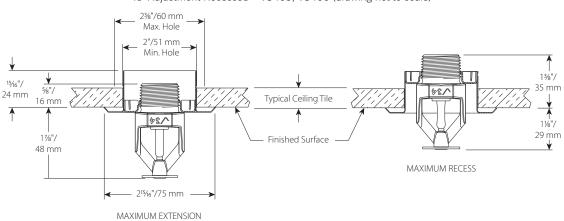
Standard Upright – V3401, V3402

Standard Pendent - V3405, V3406



MAXIMUM EXTENSION

½" Adjustment Recessed – V3405, V3406 (drawing not to scale)



34" Adjustment Recessed - V3405, V3406 (drawing not to scale)

#### NOTE

• V34, K8.0 sprinklers with Style V9 couplings have the same dimensions as threaded V34, K8.0 sprinklers.

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#### 5.0 PERFORMANCE

Sprinkler is to be installed and designed as per NFPA, FM Datasheets, or any local standards.

#### 6.0 NOTIFICATIONS



# **WARNING**

- Read and understand all instructions before attempting to install any Victaulic products
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- · Wear safety glasses, hardhat, and foot protection.

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

- These products shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA 13, 13D, 13R, etc.) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- The installer shall understand the use of this product and why it was specified for the particular application.
- . The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.



#### 7.0 REFERENCE MATERIALS

#### **Ratings**

All glass bulbs are rated for temperatures from -65°F/-54°C to those shown in table below.

		Temperatu	Temperature – °F/°C		
Sprinkler Temperature Classification	Victaulic Part Identification	Nominal Temperature Rating	Maximum Ambient Temperature Allowed	Glass Bulb Color	
Ordinary	А	135°F/57°C	100°F/38°C	Orange	
Ordinary	С	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	
High	J	286°F/141°C	225°F8/107°C	Blue	
Extra High <sup>6</sup>	К	360°F/182°C	300°F/149°C	Mauve	
-	M	Open	-	No bulb	

<sup>&</sup>lt;sup>6</sup> Standard response only

#### **Available Wrenches**

Sprinkler Type	V34 Recessed	V34 Open End	Hex-Bit
V3401, V3402 Upright	_	✓	-
V3405, V3406 Pendent	✓	✓	_
V3405, V3406 Recessed Pendent	✓	-	_
V3401,V3402 Upright w/V9	-	-	1
V3405,V3406 Pendent w/V9	-	-	1

<sup>\* 3/16&</sup>quot; hex bit provided with V9 coupling shipment.

29.01: Victaulic Terms and Conditions of Sale

I-40: Victaulic FireLock™ Automatic Sprinklers

I-V9: Style V9 Victaulic FireLock™ IGS™ Installation-Ready™ Sprinkler Coupling Installation Instructions

#### 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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