

# V34, K8.0

Standard Spray/Pendent, Upright and Recessed Pendent

## MODELS V3401, V3402, V3405 AND V3406 STANDARD AND QUICK RESPONSE

These Model V34 standard spray sprinklers are designed to produce large discharge capacity in a hemispherical pattern standard in commercial applications. The design incorporates a 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.

The recessed pendent should be utilized with a Model V34 recessed escutcheon which provides up to 3/4"/19mm of adjustments.

### 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 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 controlling the fire.

### Coverage

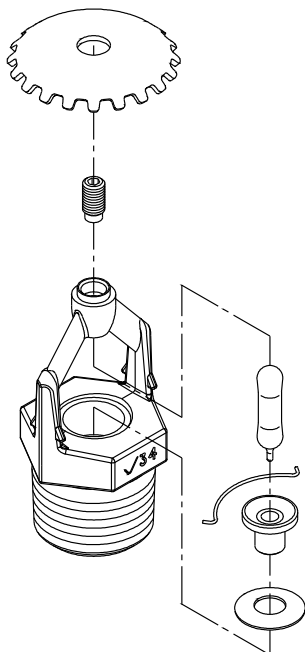
For coverage area and sprinkler placement, refer to NFPA 13 standards.

### Agency Note:

Upright models V3401 and V3402 not VNIPO approved



### TECHNICAL SPECIFICATIONS



Exaggerated for clarity

**Models:** V3401, V3402, V3405, V3406  
**Style:** Pendent, Upright or Recessed Pendent  
**Nominal Orifice Size:** 17/32"/14 mm  
**K-Factor:** 8.0 Imp./11.5 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:** 7 psi/48 kPa  
**Temperature Ratings:** See chart on page 2

**Material Specifications**  
**Upright Deflector:** Bronze per UNS C22000  
**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  
**Seal:** Teflon\* tape  
**Spring:** Beryllium nickel  
**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\*\*
- Flat black painted\*\*
- Custom painted\*\*
- Lead
- Proprietary Nickel Teflon\* coating\*\*

#### 155, 200, 286SR Only:

- Wax
- Wax over lead

For 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.  
 \*\* Also, UL Listed for corrosion resistance.

<b>JOB/OWNER</b>	<b>CONTRACTOR</b>	<b>ENGINEER</b>
System No. _____	Submitted By _____	Spec Sect _____ Para _____
Location _____	Date _____	Approved _____
		Date _____

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APPROVALS/LISTINGS	Model							
	V3401	V3405	V3405	V3402	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>^</sup>	11.5	11.5	11.5	11.5	11.5	11.5	11.5	
Response	Standard	Standard	Standard	Quick	Quick	Quick	Quick	
Deflector Type	Upright	Pendent	Recessed Pendent	Upright	Pendent	Recessed Pendent	Recessed Pendent	
Adjustment						up to ½"	up to ¾"	
Approved Temperature Ratings F°/C° by Agency‡	Model							
UL	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 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 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
ULC	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 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 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 360°F/182°C	135°F/57°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 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	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 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 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 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 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
VNIPO	None	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 175°F/79°C 200°F/93°C	None	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	None

‡ Listings and Approvals of printing. All are approved open, except for areas designated "No".

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

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## RATINGS

All glass bulbs are rated for temperatures from -65°F/-54°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
High	J	286 141	225 ~ 107	Blue
Extra High ‡	K	360 182	300 149	Mauve
– ‡	M	Open	—	No Bulb

‡ Standard response only.

All are approved open, except for areas designated “No.”

~ 150/65 if wax coated.

## 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

! 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.

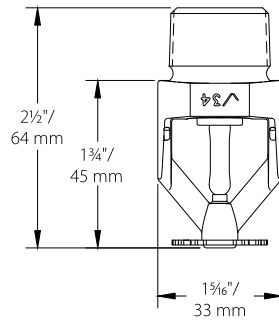
Failure to follow these instructions could result in serious personal injury and/or property damage.

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.

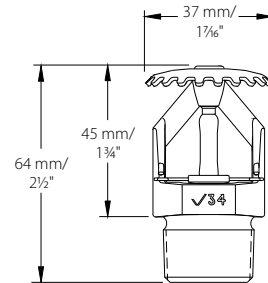
If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic World Headquarters: P.O. Box 31, Easton, Pennsylvania 18044-0031 USA, Telephone: 001-610-559-3300.

## DIMENSIONS

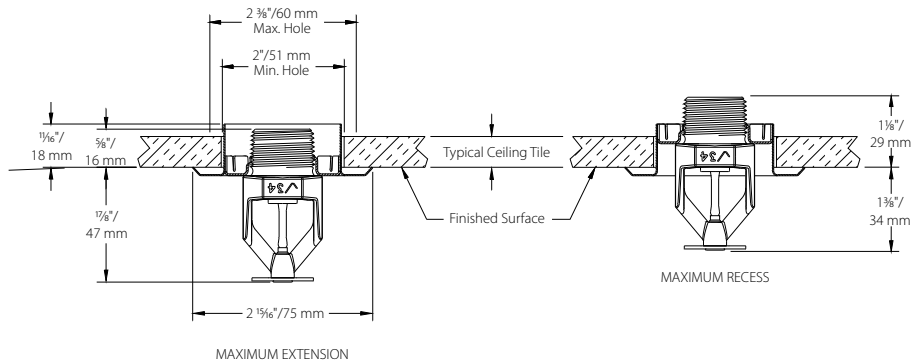
Standard Pendent – V3405, V3406



Standard Upright – V3401, V3402



1/2" Adjustment Recessed – V3405, V3406 (drawing not to scale)



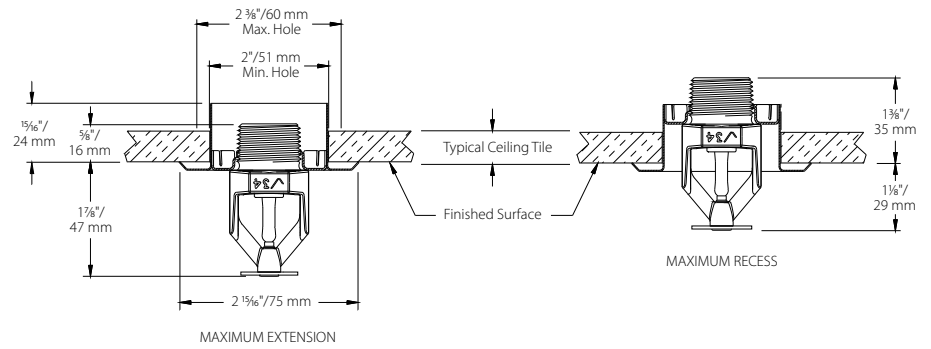
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## DIMENSIONS

3/4" Adjustment Recessed – V3405, V3406 (drawing not to scale)

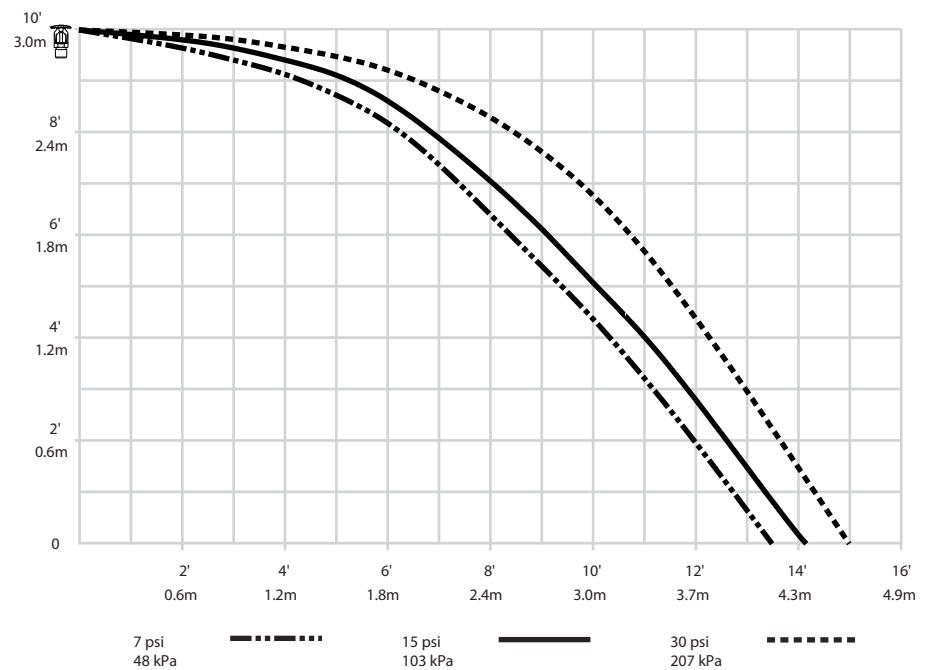


## AVAILABLE WRENCHES

Sprinkler Type	V34 Recessed	V34 Open End
V3401, V402 Upright	yes	yes
V3405, V3406 Pendent	yes	yes
V3405, V3406 Recessed Pendent	yes	—

## DISTRIBUTION PATTERNS

**Models V3405, V3406**  
K8.0 standard pendent and recessed pendent distribution patterns – trajectory



Refer to notes on page 6.

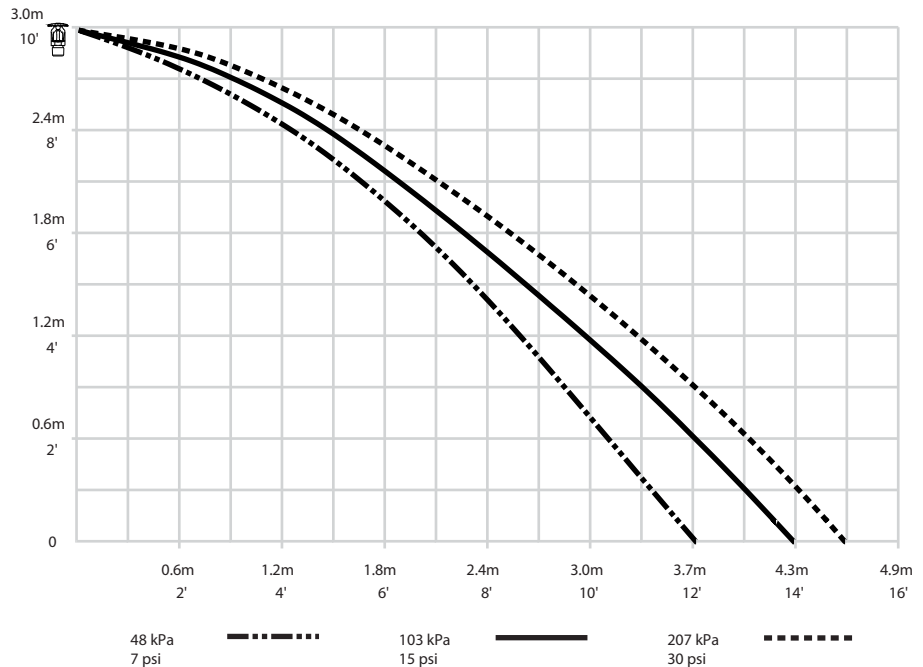
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**MODELS V3401, V3402, V3405 AND V3406 STANDARD AND QUICK RESPONSE**

## DISTRIBUTION PATTERNS

**Models V3401, V3402**  
**K8.0 standard upright distribution patterns – trajectory**



**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.

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**WARRANTY**

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

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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.

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For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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