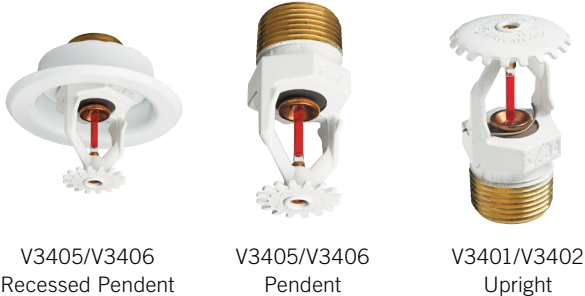


FireLock® V34, K8.0

Models V3401, V3402, V3405, V3406

Standard Spray Upright, Pendent and Recessed Pendent Standard and Quick Response



V3405/V3406
Recessed Pendent

V3405/V3406
Pendent

V3401/V3402
Upright

Approvals/Listings:



[See Victaulic Publication 10.01 for more details.](#)

Product Description:

These Model V34 standard spray sprinklers are designed to provide a large discharge capacity in a hemispherical pattern for use in commercial applications. 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 3) and finishes to meet many design requirements. The recessed pendent may be utilized with a Model V34 recessed escutcheon which provides up to 3/4"/19 mm of adjustments.

Coverage

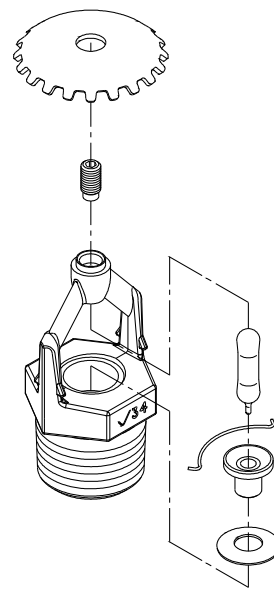
For coverage area and sprinkler placement, refer to NFPA 13 or applicable standard.

Note: Upright models V3401 and V3402 not VNIPO approved

Technical Specifications:

- 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.¹
- 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
 - 0.35 bar/5 psi (VdS for upright only)
- Temperature Rating:** See chart

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



Exaggerated for clarity

Job/Owner

| | |
|------------|--|
| System No. | |
| Location | |

Contractor

| | |
|--------------|--|
| Submitted By | |
| Date | |

Engineer

| | |
|--------------|--|
| Spec Section | |
| Paragraph | |
| Approved | |
| Date | |

Material Specifications:

Upright Deflector: Bronze per UNS C11000

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: Teflon² 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 painted³

Flat black painted³

Custom painted³

Proprietary Nickel Teflon² coating³

VC-250⁴

155, 200, 286SR Only:

Wax³

For cabinets and other accessories refer to separate sheet.

NOTE: Weather resistant recessed escutcheons available upon request.

² Teflon is a registered trademark of Dupont Co.

³ UL Listed for corrosion resistance.

⁴ UL Listed and FM Approved for corrosion resistance

Approvals/Listings:

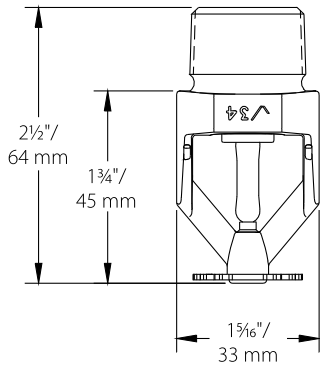
| APPROVALS/LISTINGS | Model | | | | | | |
|-------------------------------------|--|--|---|---|---|---|--|
| | V3401 | V3405 | V3405 | V3402 | V3406 | V3406 | V3406 |
| Orifice Size (inches) | 17/32" | 17/32" | 17/32" | 17/32" | 17/32" | 17/32" | 17/32" |
| Orifice Size (mm) | 14 | 14 | 14 | 14 | 14 | 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. ⁵ | 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 3/4" | | | up to 1/2" | up to 3/4" |
| 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 | 35°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 |
| 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 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 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 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 175°F/79°C 200°F/93°C | 135°F/57°C 175°F/79°C 200°F/93°C |
| VNIIP0 ⁷ | 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 155°F/68°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 175°F/79°C 200°F/93°C | None |
| 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 | None | None | 135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C | 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 | None | None | 135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C | 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 | None | None | 135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C | None | None | None |

⁵ For K Factor when pressure is measured in Bar, multiply S.I. units by 10.0

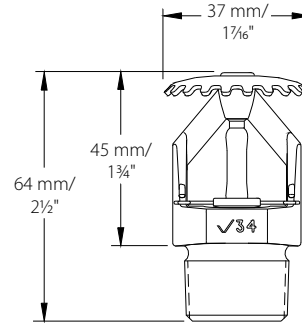
⁶ The density at S = 12m², H = 2.5 m, shall be a minimum of: 0, 014 dm³ / m.s at P = 0,1 MPa; 0,02 dm³ / m.s at P = 0,3 MPa

Note: Listings and Approvals as of printing. All are approved open.

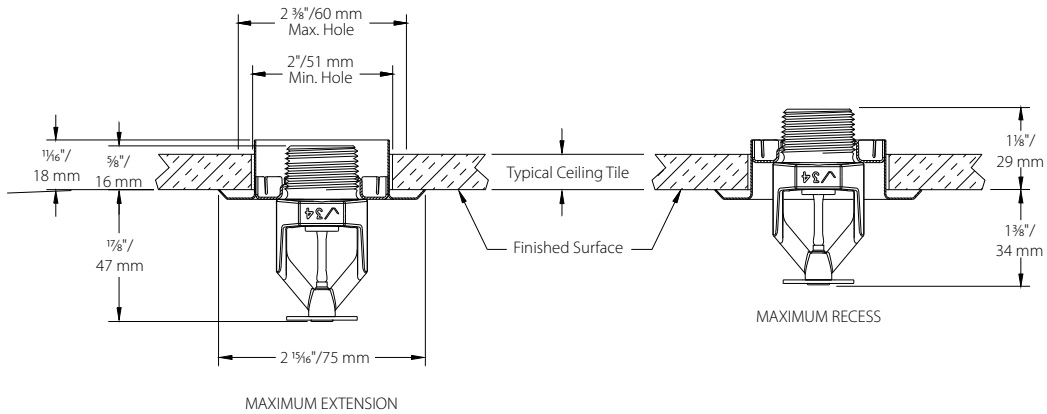
Dimensions:



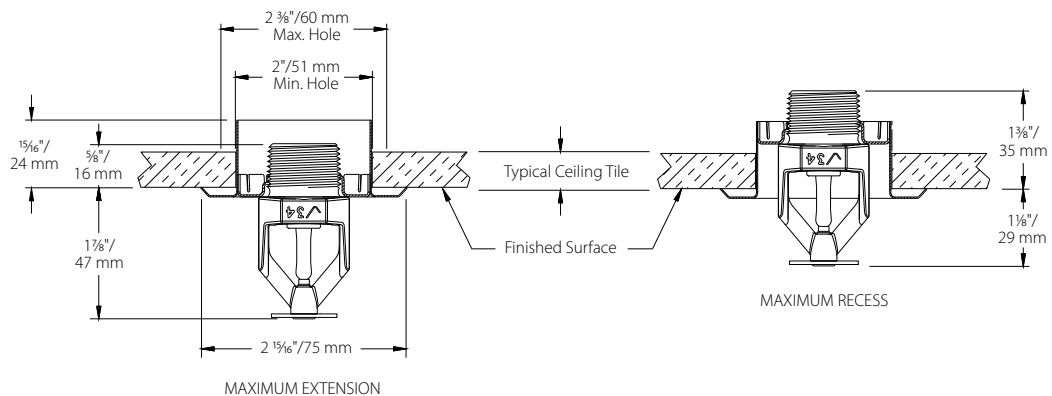
Standard Pendent –
V3405, V3406



Standard Upright –
V3401, V3402



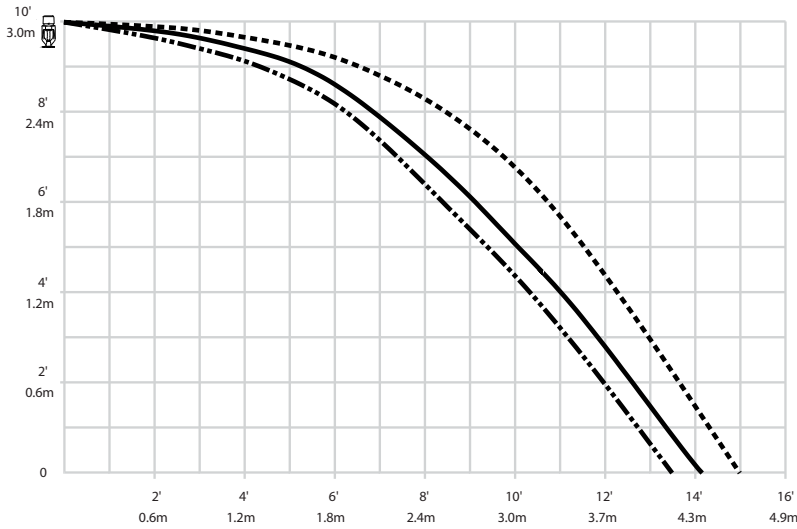
1/2" Adjustment Recessed – V3405, V3406 (drawing not to scale)



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

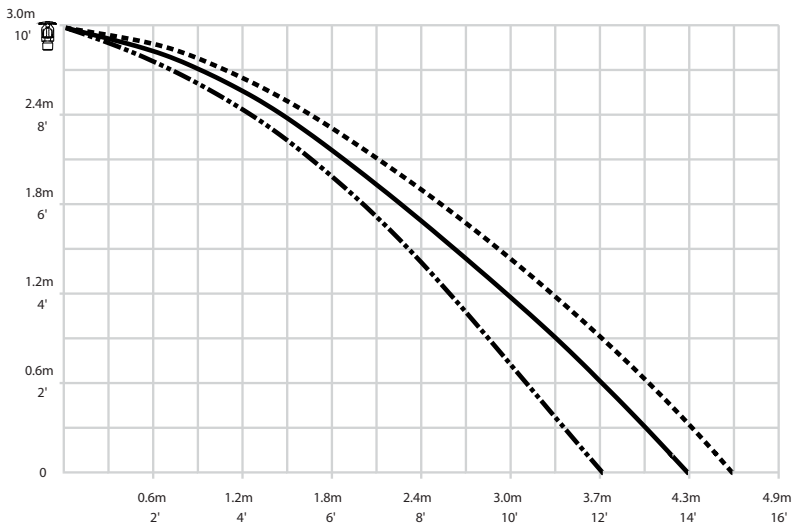
Distribution Patterns:

Models V3405, V3406
K8.0 Standard Pendent and Recessed Pendent
Distribution Patterns – Trajectory



7 psi
48 kPa
15 psi
103 kPa
30 psi
207 kPa

Models V3401, V3402
K8.0 Standard Upright
Distribution Patterns – Trajectory



7 psi
48 kPa
15 psi
103 kPa
30 psi
207 kPa

NOTES:

- A. Data shown is approximate and can vary due to differences in installation.
- B. 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.
- C. All patterns are symmetrical to the centerline of the waterway.

Ratings:

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

| 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 |
| High | J | 286°F/141°C | 225°F ⁸ /107°C | Blue |
| Extra High ⁷ | K | 360°F/182°C | 300°F/149°C | Mauve |
| – | M | Open | – | No Bulb |

⁷ Standard response only.




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

⁸ 150°F/65°C if wax coated.

Available Wrenches:

| | V34 Recessed | V34 Open End |
|-------------------------------|--------------|--------------|
| V3401, V402 Upright | – | ✓ |
| V3405, V3406 Pendent | ✓ | ✓ |
| V3405, V3406 Recessed Pendent | ✓ | – |

⚠ 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.

Installation

Reference should always be made to the I-40 Victaulic FireLock Automatic Sprinklers Installation and Maintenance Sheet for the product you are installing. This installation sheet is included with each shipment of Victaulic products for complete installation and assembly data, and is available in PDF format on our website at victaulic.com.

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.

Trademarks

Victaulic is a registered trademark of Victaulic Company.