

# V38, K5.6

## Models V3801 and V3802 Adjustable Concealed Standard Spray Pendent Standard Response with Sealing Gasket For Clean Room Applications

### PRODUCT DESCRIPTION



V3801  
V3802



See Victaulic publication 10.01 for details.

This concealed, designer style sprinkler allows up to 1/2" (13 mm) adjustment to accommodate concealment needs. The "standard" design provides a consistent hemispherical spray pattern. The separate two-piece mounting cup/cover plate allows easy installation and testing prior to ceiling installation. It also permits removal of suspended ceiling panels without system shutdown. The cover plate ceiling gasket, designed for use in clean rooms, prevents debris from entering the

protected area. The design incorporates state-of-the-art, heat responsive, frangible glass bulb design (standard or quick response) for prompt, precise operation.

This sprinkler is available in various temperature ratings (see chart on page 2) and finishes to meet many design requirements.

#### Sprinkler Operation

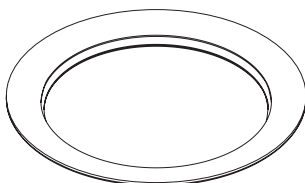
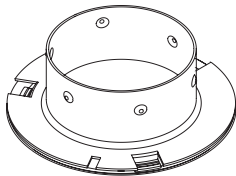
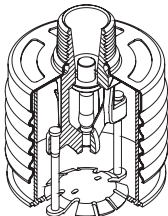
The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient temperature rises causing the liquid

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.

### TECHNICAL SPECIFICATIONS



Exaggerated for clarity

**Models:** V3801, V3802  
**Style:** Adjustable concealed, ordinary hazard, with sealing gasket  
**Nominal Orifice Size:** 1/2" (13 mm)  
**K-Factor:** 5.6 Imp. (8,1 S.I.)<sup>^</sup>  
**Nominal Thread Size:** 1/2" NPT (15 mm)  
**Max. Working Pressure:** 175 psi (1200 kPa)  
**Factory Hydrostatic Test:** 100% @ 500 psi (3450 kPa)  
**Min. Operating Pressure:** 7 psi (48 kPa)  
**Temperature Rating:** See chart on page 2.

#### MATERIAL SPECIFICATIONS

**Deflector:** Bronze per UNS C22000  
**Cover Plate:** Fusible solder  
**Bulb:** Glass with glycerin solution.  
     Bulb Nominal Diameter:  
     □ Standard: 5,0 mm or 3,0 mm  
**Load Screw:** Bronze per UNS C65100  
**Pip Cap:** Bronze per UNS C65100  
**Spring:** Stainless Steel per UNS S30100  
**Seal:** Teflon\* tape  
**Frame:** Die cast brass 65-30  
**Pins:** Stainless Steel per UNS S30400  
**Cup:** Cold rolled steel, zinc chrome plated  
**Cover/Escutcheon:** Bronze per UNS C26000

**Lodgement Spring:** Stainless steel per UNS S30200  
**Protective Cap:** Polyethylene  
**Sealing Gasket:** White nitrile

#### ACCESSORIES

**Installation Wrench:**  
 Concealed: V38-4 or V38-5  
**Sprinkler Finishes:**  
 Plain brass (only)  
**Cover Finishes:**  
 White painted  
**Installation Instructions:**  
 I-40  
 I-V38.SGP

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

\*Teflon is a registered trademark of Dupont Co.

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# APPROVALS/LISTINGS

Model	Orifice Size Inches/mm	Nominal K-Factor Imperial S.I. <sup>^</sup>	Response	Deflector Type	Approvals ‡			
					UL	ULC	NYC/MEA†	CSFM §
V3801	½ 13	5.6 8.1	Standard 5 mm bulb	Concealed Pendent with Gasket	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93
V3802 @	½ 13	5.6 8.1	Standard 3 mm bulb	Concealed Pendent with Gasket	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93

‡ Listings and approval as of printing.

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

@ Recognized as standard response only when gasket is installed.

† MEA #62-99-E.

§ CSFM #7690-0531:112

NOTE: The V3801 and V3802 are both listed as standard response. The V3802 will have a comparatively faster thermal response than the V3801.

# RATINGS

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

Sprinkler Temperature Classification	SPRINKLER – V3801, V3802				COVER – V38		
	Victaulic Part Identification	Sprinkler Temperature – °F/°C		Glass Bulb Color	Victaulic Part Identification	Cover Temperature – °F/°C	
		Nominal Temperature Rating	Maximum Ambient Temp. Allowed			Nominal Temperature Rating	Maximum Ambient Temp. Allowed
Ordinary	A	135 57	100 38	Orange	A*	135 57	100 38
Ordinary	C	155 68	100 38	Red			
Intermediate	E	175 79	150 65	Yellow	D ‡	165 74	150 65
Intermediate	F	200 93	150 65	Green			

\*A For use with V3801 Standard Response Concealed Sprinkler 135°F (57°C) or 155°F(68°C).

‡D For use with V3802 Standard Response Concealed Sprinkler 175°F (79°C) or 200°F (93°C).

Custom Finish – Customer to provide paint specification, allow 4 - 6 weeks for samples.

**I**

- Proper temperature rated cover must be used with the correct sprinkler rating per the Temperature Chart Ratings.
- The plastic shipping cap must be removed for the sprinkler to operate properly.
- If shipping cap is replaced over an installed sprinkler for purposes of painting or plastering, then the fire protection system shall be considered out of service, the Authority Having Jurisdiction notified, and a firewatch is suggested.

Failure to do so may result in failure of sprinkler to operate causing serious personal injury or property damage.

# ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number

K-Factor

Cover Finish

Style


Thread Size

Wrench Model Number

Temperature Rating

Quantity

**! WARNING**



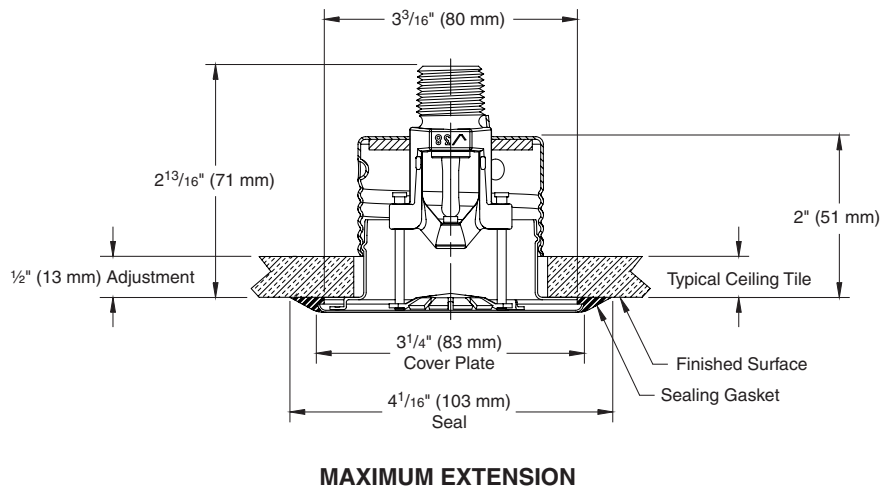
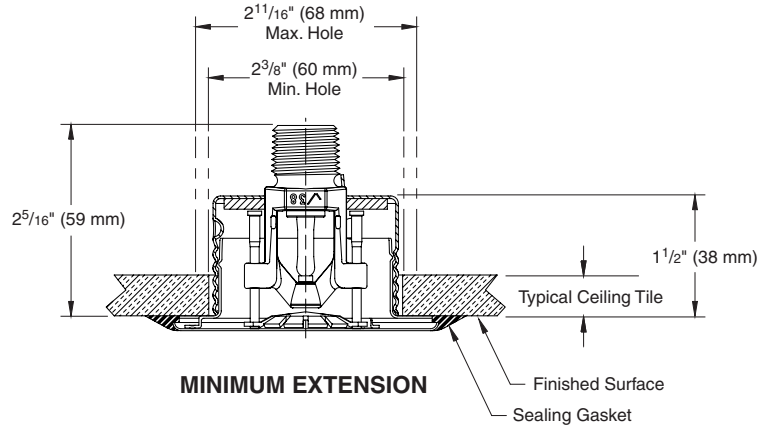
- Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.
- Always wear safety glasses and foot protection.
- Depressurize and drain the piping system before attempting to install, remove, 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, 610-559-3300.

# DIMENSIONS



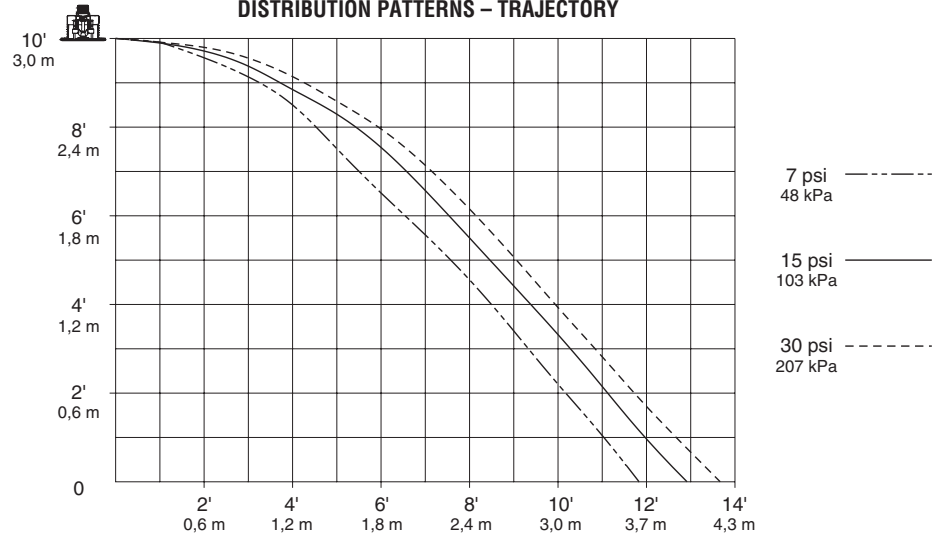
**Models V3801, V3802**  
(Drawings not to scale)

# AVAILABLE WRENCHES

	<b>Recessed</b>
Concealed Pendant – V3801, V3802	V38-4 or V38-5

# DISTRIBUTION PATTERNS

## MODELS V3801, V3802 K5.6 STANDARD CONCEALED PENDENT 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.

# WARRANTY

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