

V27, K2.8

Models V2701, V2702, V2705 and V2706 Standard Spray Upright, Pendent or Recessed Pendent Standard and Quick Response

PRODUCT DESCRIPTION



These Model V27, K2.8 orifice standard spray sprinklers are designed to produce a hemispherical spray pattern for use in light hazard occupancies which require minimal water discharge, such as bathrooms, closets and other small area applications. The design incorporates 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 V27 recessed escutcheon which provides up to ¾" (19 mm) of adjustments.

Sprinkler Operation

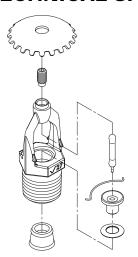
The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient tempera-

ture 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: V2701, V2702, V2705, V2706

Style: Pendent, Upright or Recessed Pendent

Nominal Orifice Size: 3%" (10 mm)

K-Factor: 2.8 Imp. (4,0 S.I.^)

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

Upright Deflector:

Bronze per UNS C22000

Pendent Deflector:

Bronze per UNS C22000

Bulb: Glass with glycerin solu-

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

Bushing: Brass per UNS

C36000

Lodgement Spring: Stainless steel per UNS S30200

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ACCESSORIES Installation Wrench:

- ☐ Open End: V27
- ☐ Recessed: V38, V38-3
- ☐ Socket: V27

Finishes:

- Plain brass
- ☐ Chrome plated
- ☐ White painted**
- ☐ Flat black painted**
- ☐ Custom painted**
- Lead

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
- * Teflon is a registered trademark of Dupont Co.
- ** UL Listed for corrosion resistance in all configurations.

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Victaulic Company of America Phone: 1-800-PICK-VIC (1-800-742-5842) Fax: 610-250-8817 e-mail:pickvic@victaulic.com Victaulic Company of Canada Phone: 905-884-7444 Fax: 905-884-9774 e-mail: viccanada@victaulic.com Victaulic Europe Phone: 32-9-381-1500 Fax: 32-9-380-4438 e-mail: viceuro@victaulic.be Victaulic America Latina Phone: 610-559-3300 Fax: 610-559-3608 e-mail: vical@victaulic.com Victaulic Asia Pacific Phone: 65-6235-3035 Fax: 65-6235-0535 e-mail: vicap@victaulic.com

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APPROVALS/LISTINGS

		Nominal			Approved Temperature Ratings °F/°C ‡ Ω				
Model	Orifice Size Inches/mm	K-Factor Imperial S.I.^	Response	Deflector Type	UL	FM	ULC	NYC/MEA†	CSFM §
V2701	3 /8 10	2.8 4,0	Standard	Upright	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182
V2705	3 /8 10	2.8 4,0	Standard	Pendent	135 - 360 57 - 182	No	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182
V2705	3 /8 10	2.8 4,0	Standard	Recessed Pendent Up to ¾" Adjustment	135 - 360 57 - 182	No	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182
V2702	3 /8 10	2.8 4,0	Quick	Upright	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141
V2706	3 /8 10	2.8 4,0	Quick	Pendent	135 - 286 57 - 141	No	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141
V2706	3 /8 10	2.8 4,0	Quick	Recessed Pendent Up to ¾" Adjustment	135 - 200 57 - 93	No	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93

[^] For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

RATINGS

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

		Tempera		
Sprinkler Temperature Classification	Victaulic Part Identification	Nominal Temperature Rating	Maximum Ambient Temp. Allowed	Glass Bulb Color
Ordinary	А	135 57	100 38	Orange
Ordinary	С	155 68	100 38	Red
Intermediate	Е	175 79	150 65	Yellow
Intermediate	F	200 93	150 65	Green
High	J	286 141	225 ~ 107	Blue
Extra High ‡	К	360 182	300 149	Mauve
- ‡	М	Open	- -	No Bulb

[‡] Standard response only.

ORDERING INFORMATION

Please specify the following when ordering:

☐ Sprinkler Model Number	□ K-Factor	Sprinkler Finish
⊃ Style	Thread Size	Escutcheon Finish
☐ Temperature Rating	Ωuantity	☐ Wrench Model Numbe

A 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.

[‡] Listings and approval as of printing. Ω All are approved open, except for areas designated "No"

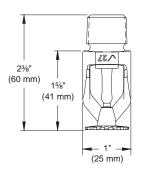
[†] MEA #62-99-E.

[§] CSFM #7690-0531:112

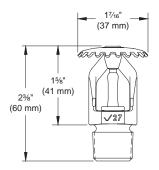
All are approved open, except for areas designated "No".

^{~ 150/65} if wax coated.

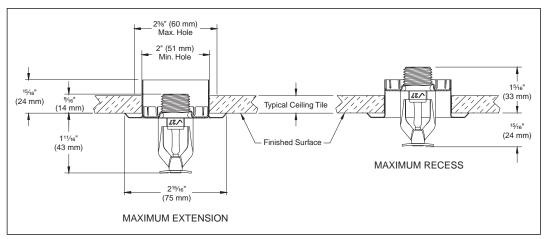
DIMENSIONS







Standard Upright - V2701, V2702

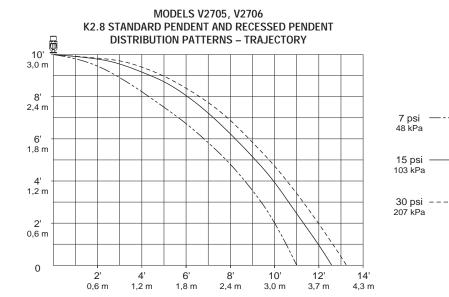


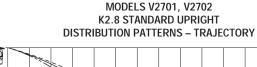
3/4" Adjustment Recessed - V2705, V2706 (Drawing not to scale)

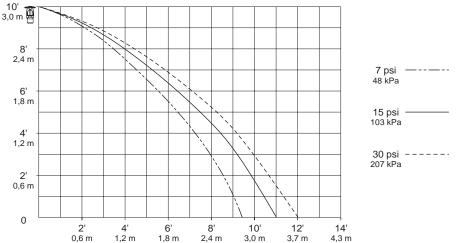
AVAILABLE WRENCHES

	V27 Socket	V38 or V38-3 Recessed	V27 Open End
V2705, V2706 Pendent	1	1	1
V2705, V2706 Recessed Pendent	1	1	-
V2701, V2702 Upright	-	1	1

DISTRIBUTION PATTERNS







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.