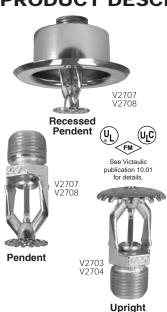


V27, K5.6

# Models V2703, V2704, V2707 and V2708 Standard Spray Upright, Pendent and Recessed Pendent Standard and Quick Response

### PRODUCT DESCRIPTION



These Model V27 standard spray sprinklers are designed to produce a hemispherical spray pattern for standard commercial applications. They are available with either standard or quick response bulbs. 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**

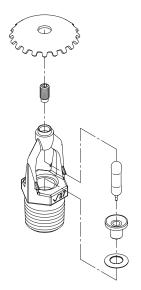
The operating mechanism is a frangible glass bulb which contains a heat responsive liquid. During a fire, the ambient tempera-

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**



**Models:** V2703, V2704, V2707, V2708

**Style:** Pendent, Upright or Recessed Pendent

Nominal Orifice Size: ½" (13 mm)

**K-Factor:** 5.6 Imp. (8,1 S.I.^) **Nominal Thread Size:** 

Nominal Thread 1/2" NPT (15 mm)

**Max. Working Pressure:** 175 psi (1200 kPa) FM Global 250 psi (1725 kPa) UL

**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 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

**Spring:** Beryllium nickel

Seal: Teflon\* tape

Frame: Die cast brass 65-30 Lodgement Spring:

**Lodgement Spring:** Stainless steel per UNS S30200

#### ACCESSORIES Installation Wrench:

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

#### Finishes:

- Plain brass
- ☐ Chrome plated
- White painted\*\*
- ☐ Custom painted\*\*
- ☐ Lead\*\*
- ☐ Proprietary nickel Teflon\* coating\*\*

# 155, 200, 286 Standard Response 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.

#### **VICTAULIC® IS AN ISO 9001 CERTIFIED COMPANY**

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### APPROVALS/LISTINGS

		Nominal			Approved Temperature Ratings °F/°C ‡ Ω				
Model	Orifice Size Inches millimeters	K-Factor Imperial S.I.^	Response	Deflector Type	UL	FM	ULC	NYC/MEA†	CSFM §
V2703	½ 13	5.6 8,1	Standard	Upright	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182
V2707	½ 13	5.6 8,1	Standard	Pendent	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182
V2707	½ 13	5.6 8,1	Standard	Recessed Pendent Up to ¾" Adjustment	135 - 286 57 - 141	135 - 200 57 - 93	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141
V2704	½ 13	5.6 8,1	Quick	Upright	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141
V2708	½ 13	5.6 8,1	Quick	Pendent	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141
V2708	½ 13	5.6 8,1	Quick	Recessed Pendent Up to 1/2" Adjustment	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93
V2708	½ 13	5.6 8,1	Quick	Recessed Pendent Up to ¾" Adjustment	135 - 200 57 - 93	No	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93

<sup>‡</sup> Listings and approval as of printing.

# **RATINGS**

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

		Temperat		
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	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	Purple
- ‡	М	Open	_ _	No Bulb

<sup>‡</sup> Standard response only.

# ORDERING INFORMATION

Please specify the following when ordering:

■ Sprinkler Model Number	□ K-Factor	Sprinkler Finish
<b>□</b> Style	Thread Size	Escutcheon Finish
☐ Temperature Rating	Quantity	Wrench Model Numbe

# **A** WARNING



- Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation
- · 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.

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

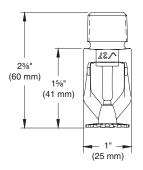
<sup>^</sup> For K-Factor when pressure is measured in Bar, multiply S.I. units by 10. † MEA #62-99-E.

<sup>§</sup> CSFM #7690-0531:112

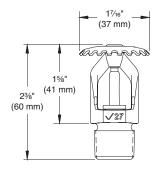
All are approved open, except for areas designated "No".

<sup>~ 150/65</sup> if wax coated.

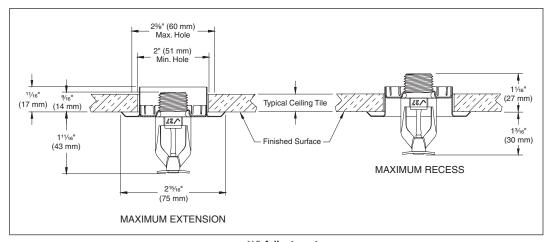
# **DIMENSIONS**



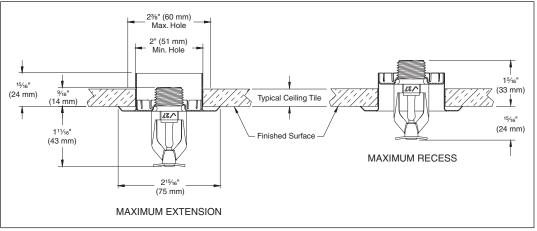




Standard Upright - V2703, V2704



1/2" Adjustment Recessed - V2707, V2708 (Drawing not to scale)

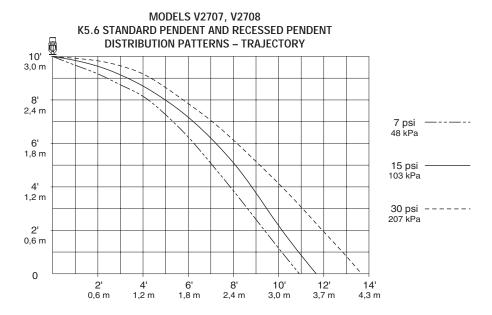


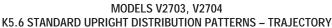
3/4" Adjustment Recessed - V2707, V2708 (Drawing not to scale)

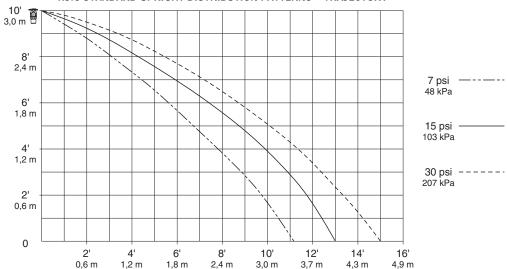
# **AVAILABLE WRENCHES**

	V27 Socket	V38 or V38-3 Recessed	V27 Open End
V2707, V2708 Pendent	✓	1	1
V2707, V2708 Recessed Pendent	1	1	_
V2703, V2704 Upright	_	1	1

# **DISTRIBUTION PATTERNS**







#### NOTES:

- $\textbf{1.}\ \mathsf{Data}\ \mathsf{shown}\ \mathsf{is}\ \mathsf{approximate}\ \mathsf{and}\ \mathsf{can}\ \mathsf{vary}\ \mathsf{due}\ \mathsf{to}\ \mathsf{differences}\ \mathsf{in}\ \mathsf{installation}.$
- 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 and 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.
- ${\bf 3.}$  All patterns are symmetrical to the centerline of the waterway.



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