

# FireLock® V27, K5.6

## Models V2703, V2707, V2704, V2708



V2703/V2704  
Upright



V2707/V2708  
Pendent



V2707/V2708  
Recessed Pendent



V2707/V2708  
Pendent w/V9



V2703/V2704  
Upright w/V9

### 1.0 PRODUCT DESCRIPTION

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

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

**Nominal Orifice Size:** 1/2"/13 mm

**K Factor:** 5.6 Imp./8.1 S.I.<sup>1</sup>

**Nominal Connection Size:** 1/2" NPT/20 mm BSPT/IGS Grooved

**Max. Working Pressure:**

- 175 psi/1200 kPa (FM)
- 250 psi/1725 kPa (UL)

**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

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

### 2.0 CERTIFICATION/LISTINGS



Threaded and IGS connections have different approvals/listings. See tables on pages 2 and 3.

**ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.**

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

## 2.0 CERTIFICATION/LISTINGS (CONTINUED)

### Threaded Sprinkler Approvals/Listings:

APPROVALS/LISTINGS	Model					
	V2703	V2707	V2707	V2704	V2708	V2708 <sup>3</sup>
Orifice Size (inches)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Orifice Size (mm)	13	13	13	13	13	13
Nominal K Factor Imperial	5.6	5.6	5.6	5.6	5.6	5.6
Nominal K Factor S.I. <sup>2</sup>	8.1	8.1	8.1	8.1	8.1	8.1
Response	Standard	Standard	Standard	Quick	Quick	Quick
Deflector Type	Upright	Pendent	Recessed Pendent	Upright	Pendent	Recessed Pendent
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 500°F/260°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 500°F/260°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
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 155°F/68°C 175°F/79°C 200°F/93°C
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
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
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	None	None
CCC	ZSTZ 155°F/68°C 200°F/93°C	ZSTX 155°F/68°C 200°F/93°C	None	K-ZSTZ 155°F/68°C 200°F/93°C	K-ZSTZ 155°F/68°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
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

<sup>2</sup> For K Factor when pressure is measured in Bar, multiply S.I. units by 10.0

<sup>3</sup> FM Approved with 1/2" adjustment escutcheon only - quick response

**NOTE**

- Listings and Approvals as of printing. All are approved open.

## 2.0 CERTIFICATION/LISTINGS (CONTINUED)

### IGS Sprinkler Approvals/Listings

APPROVALS/LISTINGS	Model			
	V2703	V2707	V2704	V2708
Orifice Size (inches)	1/2"	1/2"	1/2"	1/2"
Orifice Size (mm)	13	13	13	13
Nominal K-Factor Imperial	5.6	5.6	5.6	5.6
Nominal K-Factor S.I. <sup>2</sup>	8.1	8.1	8.1	8.1
Response	Standard	Standard	Quick	Quick
Deflector Type	Upright	Pendent	Upright	Pendent
Adjustment				
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 500°F/260°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 500°F/260°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
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 286°F/141°C	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C

<sup>2</sup> For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0

**NOTE**

- Listings and Approvals as of printing. All are approved open.

### 3.0 SPECIFICATIONS – MATERIAL

**Upright Deflector:** Bronze

**Pendent Deflector:** Bronze

**Bulb:** Glass with glycerin solution

**Bulb Nominal Diameter:**

Standard: 5.0 mm

Quick Response: 3.0 mm

**Load Screw:** Bronze

**Pip Cap:** Bronze

**Spring:** Beryllium nickel

**Seal:** PTFE tape

**Frame:** Die cast brass

**Lodgement Spring:** Stainless steel

**Installation Wrench:**

Open End: V27

Recessed: V27-2

$\frac{3}{16}$  Hex Bit: V9 coupling

**Sprinkler Finishes:**

Plain Brass<sup>4</sup>

Chrome plated

White polyester coated<sup>5</sup>

Black painted<sup>5</sup>

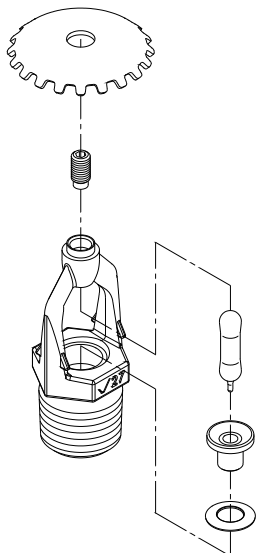
Custom painted<sup>5</sup>

VC-250<sup>6</sup>

<sup>4</sup> Plain Brass is only available for the V9 coupling.

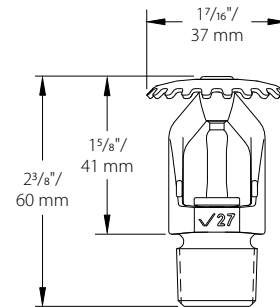
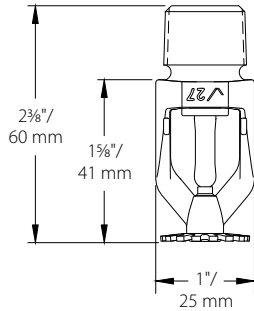
<sup>5</sup> UL Listed for corrosion resistance.

<sup>6</sup> UL Listed and FM Approved for corrosion resistance.



Exaggerated for clarity

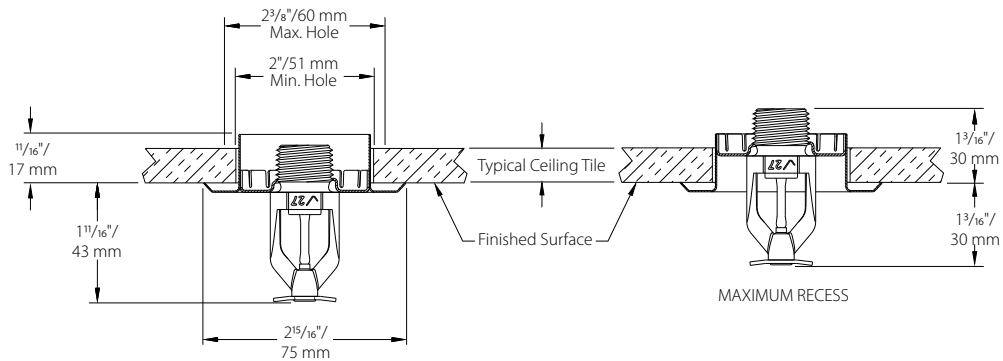
## 4.0 DIMENSIONS



Standard Pendant with/without standard V9 coupling – V2707, V2708      Standard Upright with/without standard V9 coupling – V2703, V2704

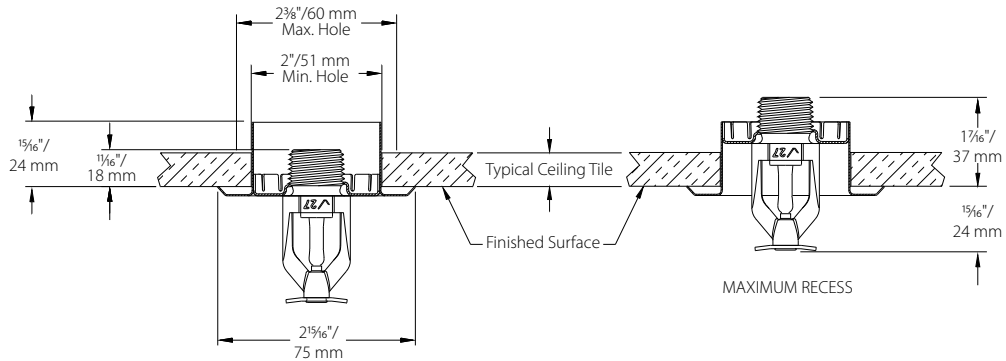
**NOTE:**

- V27, K5.6 sprinklers with Style V9 coupling dimensions are the same as threaded sprinkler dimensions.



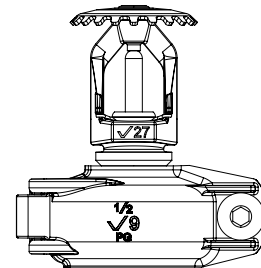
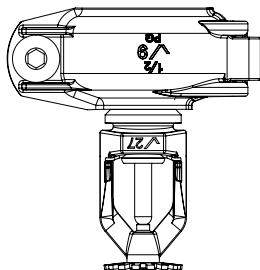
MAXIMUM EXTENSION

1/2" Adjustment Recessed – V2707, V2708 (drawing not to scale)



MAXIMUM EXTENSION

3/4" Adjustment Recessed – V2707, V2708 (drawing not to scale)



Standard Pendant with V9 Sprinkler Coupling – V2707, V2708

Standard Upright with V9 Sprinkler Coupling – V2703, V2704

**NOTE:**

- IGS options are not available for recessed applications.

## 5.0 PERFORMANCE

Sprinkler is to be installed and designed as per NFPA, FM Datasheets, or any local standards.

## 6.0 NOTIFICATIONS

### 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.

## 7.0 REFERENCE MATERIALS

### 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°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 <sup>7</sup> /107°C	Blue
Extra High <sup>7</sup>	K	360°F/182°C	300°F/149°C	Purple
–	M	Open	–	No bulb
Ultra High <sup>7</sup>	N	500°F/260°C	475°F/246°C	Black

<sup>7</sup> Standard response only.

### Available Wrenches:

Sprinkler Type	V27-2 Recessed	V27 Open End	Hex-Bit
V2707, V2708 Pendent	✓	✓	–
V2707, V2708 Recessed Pendent	✓	–	–
V2703, V2704 Upright	–	✓	–
V2703, V2704 Upright w/V9	–	–	✓
V2707, V2708 Pendent w/V9	–	–	✓

#### NOTE

- <sup>3</sup>/<sub>16</sub>-inch hex bit provided with V9 coupling shipment.

[29.01: Victaulic Terms and Conditions of Sale](#)

[I-40: Victaulic FireLock™ Automatic Sprinklers](#)

[I-V9: Style V9 Victaulic FireLock™ IGS™ Installation-Ready™ Sprinkler Coupling Installation Instructions](#)

#### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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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.

#### Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

#### Warranty

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

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