

## V27, K5.6

Standard Spray Horizontal Sidewall and Recessed Horizontal Sidewall Standard and Quick Response

### MODELS/S.I.N. V2709 AND V2710

These Model V27, standard spray horizontal sidewall sprinklers are designed for up to ordinary Hazard per NFPA 13, and can be used for standard or recessed installations. The design provides a crescent-shaped water discharge pattern for installation along a wall or under a beam or ceiling. 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 3/4"/19 mm of adjustments.



STANDARD HORIZONTAL SIDEWALL  
(V2709, V2710)



RECESSED HORIZONTAL SIDEWALL  
(V2709, V2710)

### 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.

### JOB/OWNER

System No. \_\_\_\_\_

Location \_\_\_\_\_

### CONTRACTOR

Submitted By \_\_\_\_\_

Date \_\_\_\_\_

### ENGINEER

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_

Approved \_\_\_\_\_

Date \_\_\_\_\_

[www.victaulic.com](http://www.victaulic.com)

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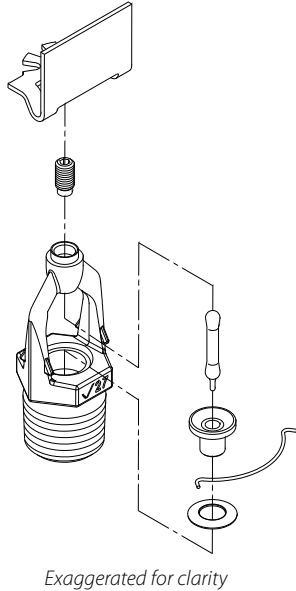
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### MODELS V2709 AND V2710

#### TECHNICAL SPECIFICATIONS:



**Models/S.I.N.:** V2709, V2710

**Style:** Horizontal Sidewall or Recessed  
Horizontal Sidewall

**Nominal Orifice Size:** ½"/13 mm

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

**Nominal Thread Size:** ½"/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

**Horizontal Deflector:** Commercial bronze per  
UNS C22000

**Bulb:** Glass with glycerin solution.

**Bulb Nominal Diameter:**

- Standard: 5.0 mm
- Quick Response: 3.0 mm

**Load Screw:** Low Silicon bronze per  
UNS C65100

**Pip Cap:** Low Silicon bronze per UNS C65100

**Seal:** Teflon\* tape

**Spring:** Beryllium nickel

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

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

#### ACCESSORIES

##### Installation Wrench:

- Open End: V27
- Recessed: V27-2

##### Sprinkler Finishes:

- Plain brass
- Chrome plated
- White painted\*\*
- Flat black painted\*\*
- Custom painted\*\*
- Proprietary Nickel/Teflon\* Coating\*\*

For cabinets and other accessories refer to  
separate sheet.

NOTE: Weather resistant recessed escutcheon  
available upon request.

<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.

\*\* Also, UL Listed for corrosion resistance in all  
configurations.

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### MODELS V2709 AND V2710

APPROVALS/LISTINGS	Model				
	V2709	V2709 Recessed	V2710	V2710 Recessed	V2710 Recessed
Orifice Size (inches)	½"	½"	½"	½"	½"
Orifice Size (mm)	13	13	13	13	13
Nominal K Factor Imperial	5.6	5.6	5.6	5.6	5.6
Nominal K Factor S.I. <sup>^</sup>	8.1	8.1	8.1	8.1	8.1
Response	Standard	Standard	Quick	Quick	Quick
Deflector Type	Horizontal Sidewall	Recessed Horizontal Sidewall*	Horizontal Sidewall	Recessed Horizontal Sidewall (up to ½" adjustment)	Recessed Horizontal Sidewall (up to ¾" adjustment)
Approved Temperature Ratings F°C° by Agency‡	Model				
UL	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C
ULC	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	135°F/57°C 155°F/68°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	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	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	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	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	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C
LPCB # 104b/01 # 104b/02	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	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C 286°F/141°C	None	None
VNIPO	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	None
CCCf	ZSTBS 155°F/68°C	None	None	None	None

‡ Listings and Approvals as of printing. All standard responses are approved open.

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

# Light Hazard ONLY

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Models V2709 and V2710

## RATINGS

All glass bulbs are rated for temperatures from –67°F/–55°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 57	100 38	Orange
Ordinary	C	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
– ‡	M	Open	—	No Bulb

‡ Standard response only.

All standard responses are approved open.

## ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number	
Style	
Temperature Rating	
K-Factor	
Thread Size	
Quantity	
Sprinkler Finish	
Escutcheon Finish	
Wrench Model Number	

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MODELS V2709 AND V2710

WARNING



### 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.

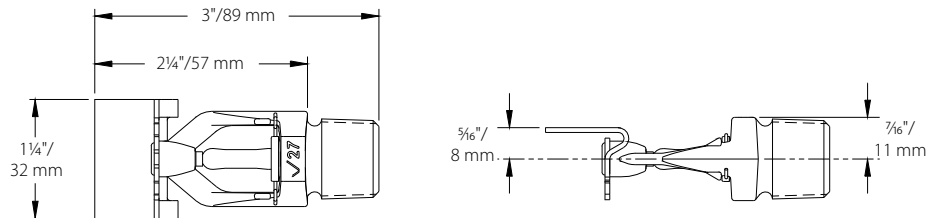
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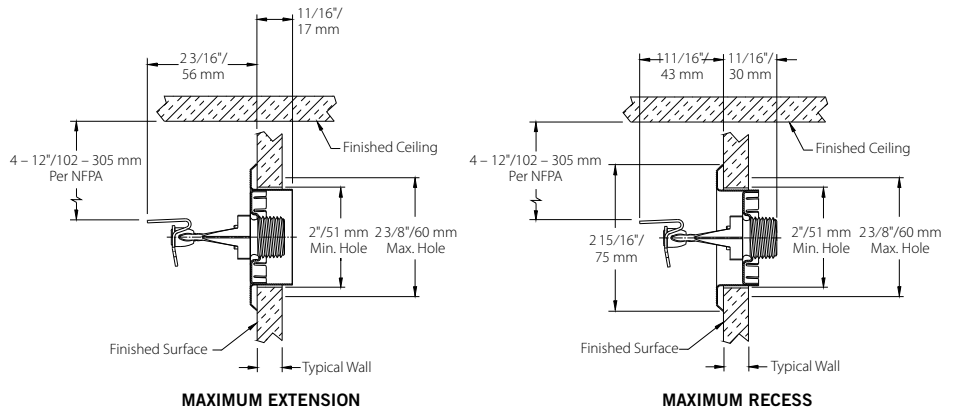
### MODELS V2709 AND V2710

#### DIMENSIONS

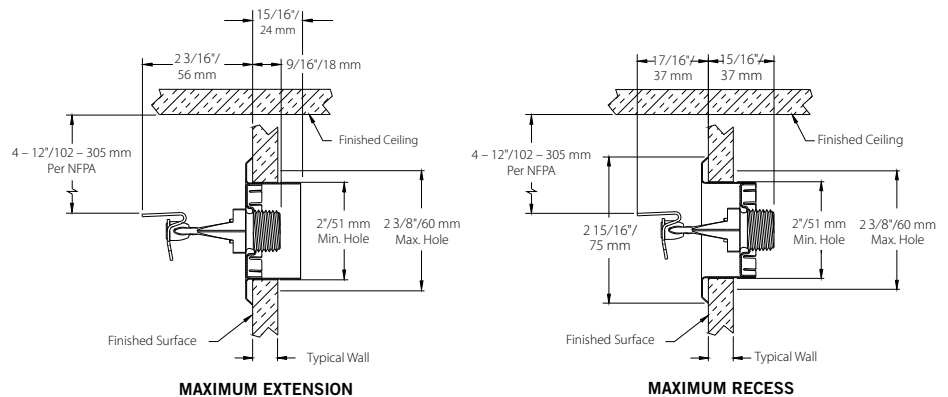
##### Standard HSW – V2709, V2710



##### 1/2" Adjustment Recessed – V2709, V2710 (drawing not to scale)



##### 3/4" Adjustment Recessed – V2709, V2710 (drawing not to scale)



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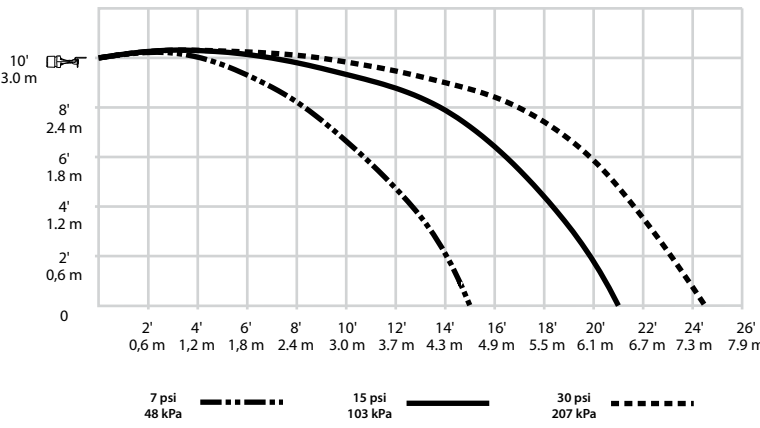
## MODELS V2709 AND V2710

### AVAILABLE WRENCHES

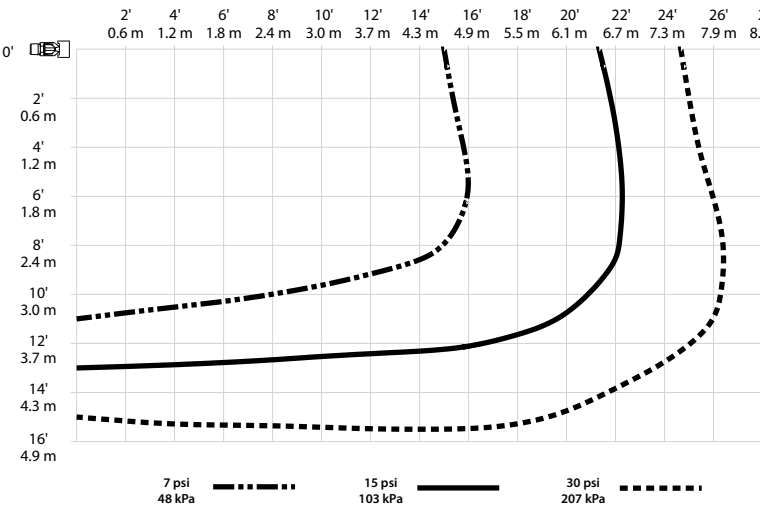
Sprinkler Type	V27-2 Recessed	V27 Open End
No escutcheon	yes	yes
With escutcheon	yes	—

### DISTRIBUTION PATTERNS

#### Models V2709, V2710 K5.6 Standard Horizontal Sidewall and Recessed Horizontal Sidewall Distribution Patterns – Trajectory



#### Models V2709, V2710 K5.6 Standard and Recessed Horizontal Sidewall Distribution Patterns – Plan View



## V27, K5.6

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### MODELS V2709 AND V2710

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#### WARRANTY

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

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#### NOTE

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.

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For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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