

# FireLock® V27, K5.6

## Models V2709,V2710

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



V2709/V2710  
Standard Horizontal  
Sidewall



V2709/V2710  
Recessed Horizontal  
Sidewall

### Approvals/Listings:



See Victaulic Publication [10.01](#) for more details.

### Product Description:

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. 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 3) and finishes to meet many design requirements. The recessed pendant should be utilized with a Model V27 recessed escutcheon which provides up to 3/4"/19 mm of adjustments.

### Coverage

For coverage area and sprinkler placement, refer to NFPA 13 or applicable standard.

### Technical Specifications:

**Models:** V2709, V2710

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

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

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

**Nominal Thread Size:** 1/2"/15 mm

**Max. Working Pressure:**

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

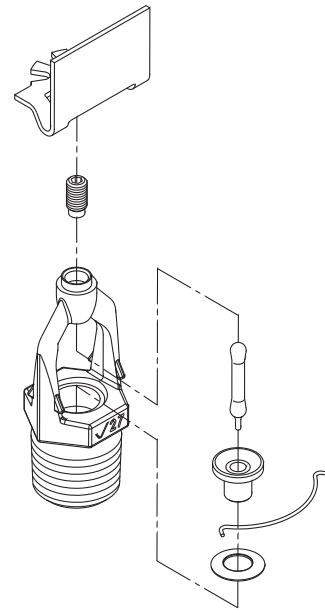
**Factory Hydrostatic Test:** 100% @ 500 psi/3450 kPa

**Min. Operating Pressure:**

- 7 psi/48 kPa

**Temperature Rating:** See chart on page 3

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



Exaggerated for clarity

### Job/Owner

System No.	
Location	

### Contractor

Submitted By	
Date	

### Engineer

Spec Section	
Paragraph	
Approved	
Date	

### 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

**Spring:** Beryllium nickel

**Seal:** Teflon<sup>2</sup> tape

**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 polyester coated<sup>3</sup>

Flat black painted<sup>3</sup>

Custom painted<sup>3</sup>

Proprietary Nickel/Teflon<sup>2</sup> coating<sup>3</sup>

VC-250<sup>4</sup>

**155, 200, 286 SR Only:**

Wax<sup>3</sup>

For cabinets and other accessories refer to separate sheet.

NOTE: Weather resistant recessed escutcheon available upon request.

<sup>2</sup> Teflon is a registered trademark of Dupont Co.

<sup>3</sup> UL Listed for corrosion resistance.

<sup>4</sup> UL Listed and FM Approved for corrosion resistance.

**Approvals/Listings:**

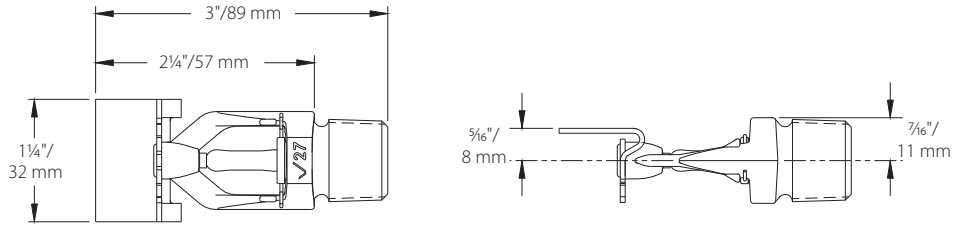
APPROVALS/LISTINGS	Model				
	V2709	V2709 Recessed	V2710	V2710 Recessed	V2710 Recessed
Orifice Size (inches)	1/2"	1/2"	1/2"	1/2"	1/2"
Orifice Size (mm)	13	13	13	13	13
Nominal K Factor Imperial	5.6	5.6	5.6	5.6	5.6
Nominal K Factor S.I. <sup>5</sup>	8.1	8.1	8.1	8.1	8.1
Response	Standard	Standard	Quick	Quick	Quick
Deflector Type	Horizontal Sidewall	Recessed Horizontal Sidewall*	Horizontal Sidewall	Recessed Horizontal Sidewall (up to 1/2" adjustment)	Recessed Horizontal Sidewall (up to 3/4" adjustment)
<b>Approved Temperature Ratings</b>	<b>F°/C°</b>				
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	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 <sup>6</sup>	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 <sup>6</sup> #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 <sup>6</sup> #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 <sup>6</sup> 104b/01 <sup>6</sup> 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

<sup>5</sup> For K Factor when pressure is measured in Bar, multiply S.I. units by 10.0

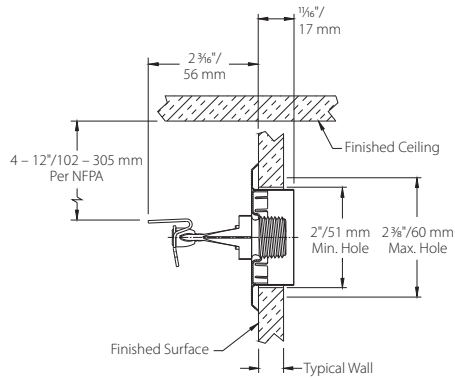
<sup>6</sup> Light Hazard ONLY

Note: Listings and Approvals as of printing. All are approved open.

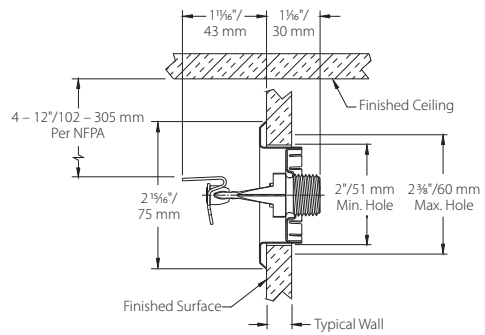
**Dimensions:**



Standard HSW – V2709, V2710

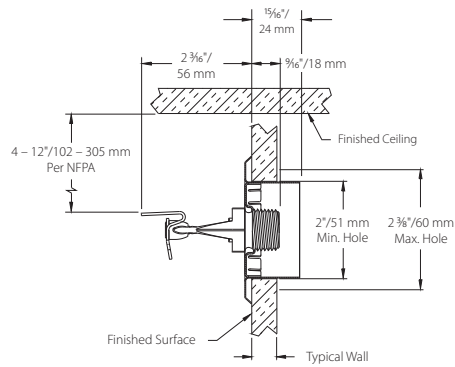


**MAXIMUM EXTENSION**

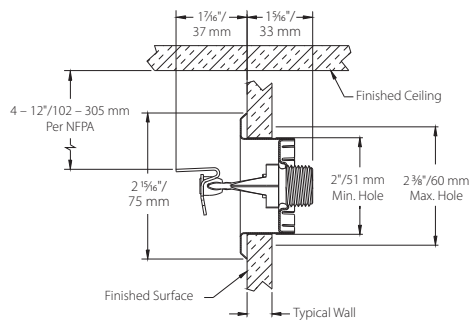


**MAXIMUM RECESS**

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



**MAXIMUM EXTENSION**

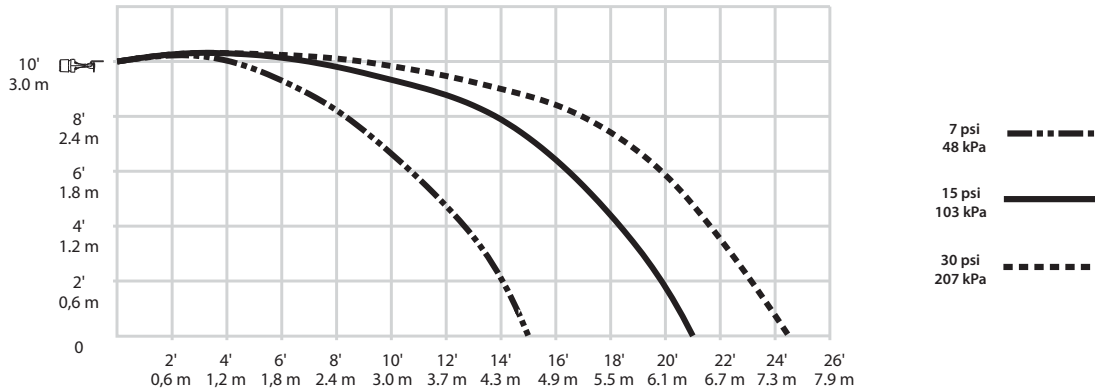


**MAXIMUM RECESS**

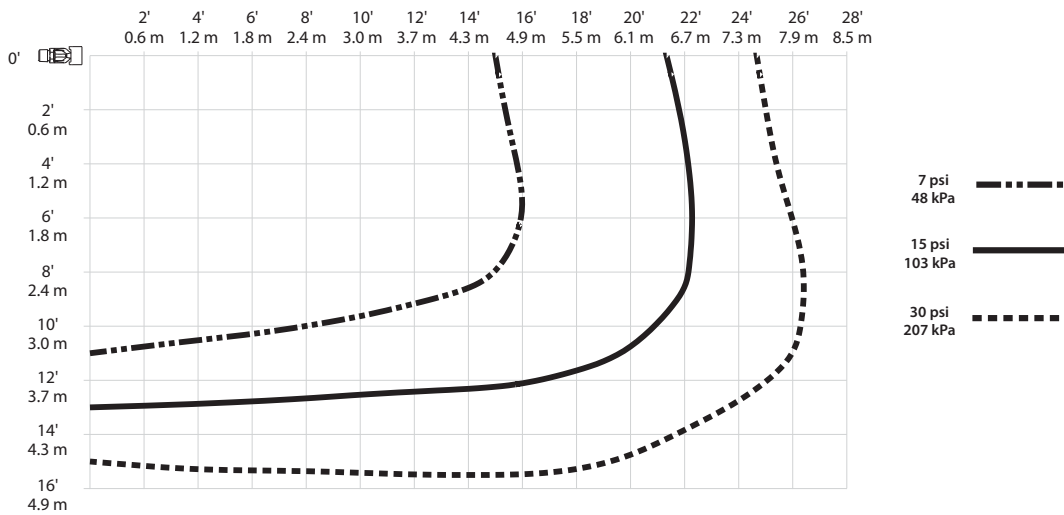
3/4" Adjustment Recessed – V2709, V2710 (drawing not to scale)

**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



**NOTES:**

- A. Data shown is approximate and can vary due to differences in installation.
- B. 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.

**Ratings:**

All glass bulbs are rated for temperatures from -67°F (-55°C) to those shown in the 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/107°C	Blue
Extra High <sup>7</sup>	K	360°F/182°C	300°F/149°C	Purple
–	M	Open	–	No Bulb

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

**Available Wrenches:**

	V27-2 Recessed	V27 Open End
No escutcheon	✓	✓
With escutcheon	✓	–

**⚠ 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.

**Installation**

Reference should always be made to the I-40 Victaulic FireLock Automatic Sprinklers Installation and Maintenance Sheet for the product you are installing. This installation sheet is included with each shipment of Victaulic products for complete installation and assembly data, and is available in PDF format on our website at victaulic.com.

**Warranty**

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

**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.

**Trademarks**

Victaulic is a registered trademark of Victaulic Company.