

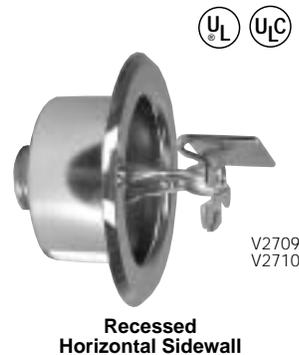
## V27, K5.6

Models V2709 and V2710  
 High Pressure Standard Spray  
 Horizontal Sidewall and  
 Recessed Horizontal Sidewall  
 Standard and Quick Response

### PRODUCT DESCRIPTION



V2709  
V2710



V2709  
V2710

These Model V27 high pressure standard spray sprinklers are designed to produce a hemispherical spray pattern for standard commercial applications up to ordinary hazard, excluding storage applications. They have a rated working pressure of 250 psi (1725 kPa). 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 3/4" (19 mm) of adjustments.

#### Sprinkler Operation

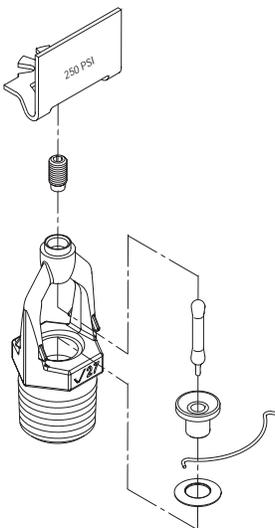
The operating mechanism is a frangible glass bulb which contains a heat

responsive liquid. During a fire, the ambient 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.

### TECHNICAL SPECIFICATIONS



(Exaggerated for clarity)

**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. ^)  
**Nominal Thread Size:** 1/2" NPT (15 mm)  
**Max. Working Pressure:** 250 psi (1725 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

**Horizontal Deflector:** Bronze per UNS C22000  
**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 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: 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 10.0.

\* Teflon is a registered trademark of Dupont Co.

\*\* UL Listed for corrosion resistance.

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# APPROVALS/LISTINGS

Model	Orifice Size Inches/mm	Nominal K-Factor Imperial S.I. <sup>^</sup>	Response	Deflector Type	Approved Temperature Ratings °F/°C ‡ Ω			
					UL	ULC	NYC/MEA	CSFM §
V2709	½ 13	5.6 8,1	Standard	Horizontal Sidewall	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182	135 - 360 57 - 182
V2709	½ 13	5.6 8,1	Standard	Recessed HSW Up to ¾" Adjustment	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93
V2710	½ 13	5.6 8,1	Quick	Horizontal Sidewall	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141	135 - 286 57 - 141
V2710	½ 13	5.6 8,1	Quick	Recessed HSW Up to ¾" Adjustment	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93	135 - 200 57 - 93

‡ Listings and approval as of printing. 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 10.0.

† MEA #62-99-E.

§ CSFM #7690-0531:112

## RATINGS

All glass bulbs are rated for temperatures from -65°F (-54°C) up to those shown in adjacent table.

Sprinkler Temperature Classification	Victaulic Part Identification	Temperature – °F/°C		Glass Bulb Color
		Nominal Temperature Rating	Maximum Ambient Temp. 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	Mauve
- ‡	M	Open	-	No Bulb

‡ Standard response only.

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

- 150/65 if wax coated.

## 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

### ⚠ WARNING

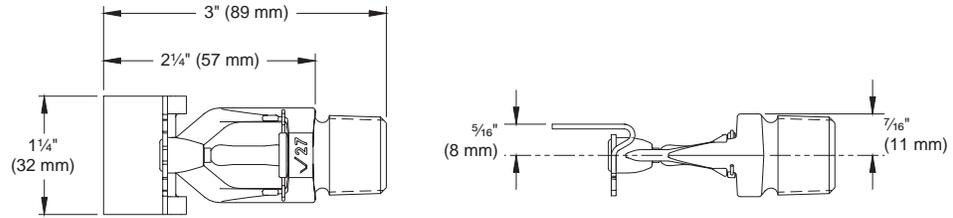


- Always read and understand installation, care, and maintenance instructions, supplied with each box of sprinklers, before proceeding with installation of any sprinklers.
  - Always wear safety glasses and foot protection.
  - Depressurize and drain the piping system before attempting to install, remove, 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.

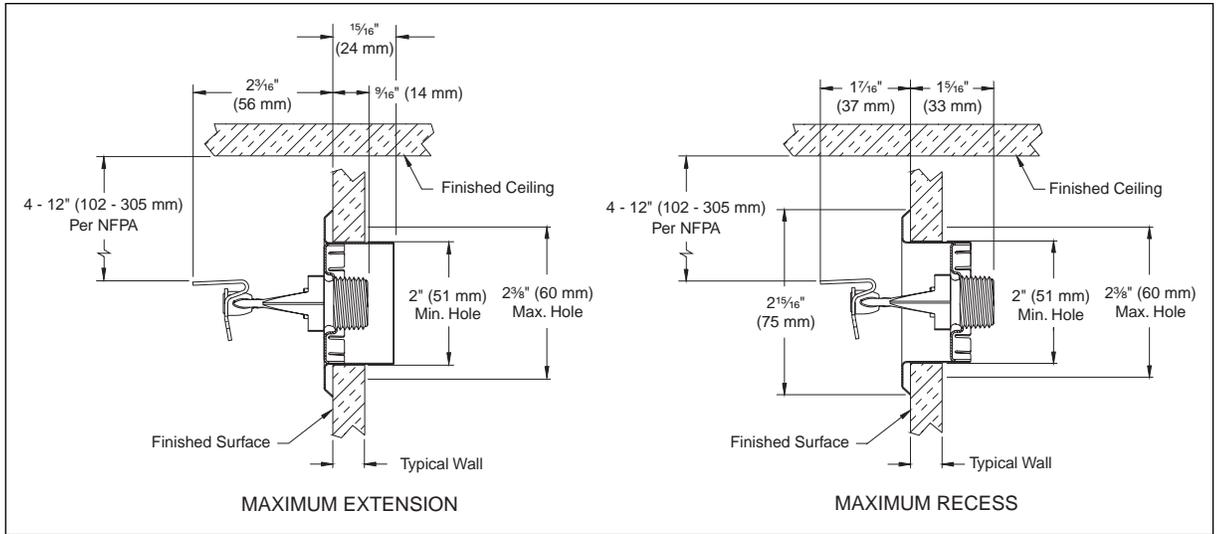
The owner is responsible for maintaining the fire protection system and devices in proper operating condition. For minimum maintenance and inspection requirements, refer to the current National Fire Protection Association pamphlet that describes care and maintenance of sprinkler systems. In addition, 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.

# DIMENSIONS



**Standard HSW – V2709, V2710**



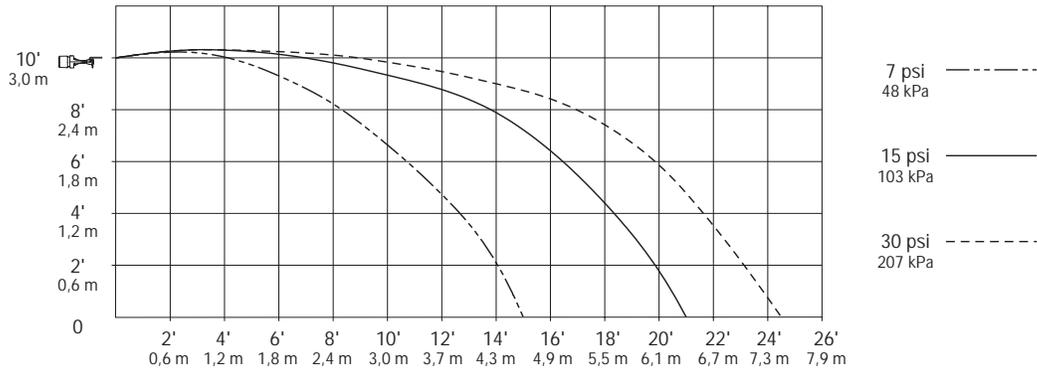
**3/4" Adjustment  
Recessed – V2709, V2710  
(Drawing not to scale)**

# AVAILABLE WRENCHES

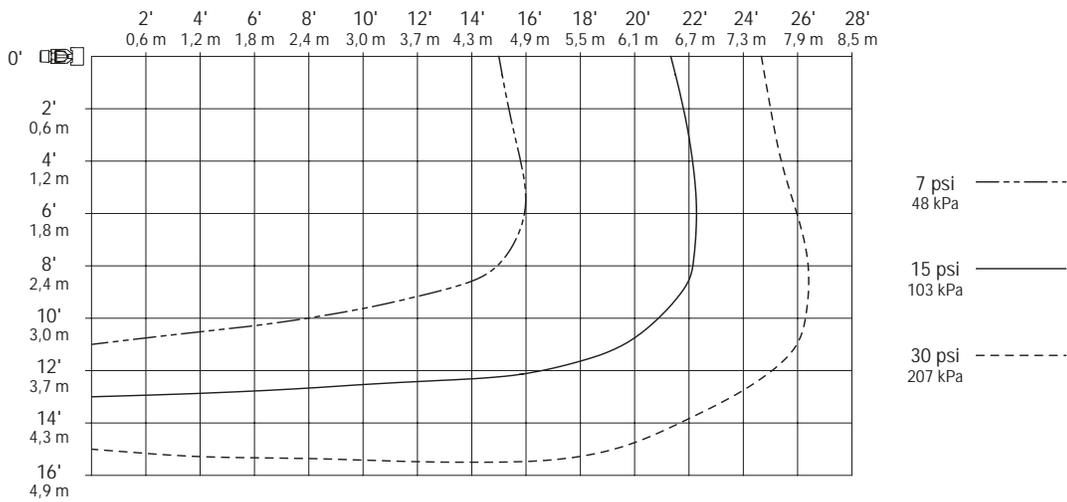
	<b>V38-3 Recessed</b>	<b>V27 Open End</b>
No escutcheon	✓	✓
With escutcheon	✓	-

# DISTRIBUTION PATTERNS

MODELS V2709, V2710  
K5.6 STANDARD HORIZONTAL SIDEWALL AND RECESSED HORIZONTAL SIDEWALL  
DISTRIBUTION PATTERNS – TRAJECTORY



MODELS V2709, V2710  
K5.6 STANDARD HORIZONTAL SIDEWALL  
DISTRIBUTION PATTERNS – PLAN VIEW



**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.
4. 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.

This product shall be manufactured by Victaulic Company. 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.