

FireLock® V29, K4.1

Model V2902



40.44

Residential Adjustable Flush Pendent Quick Response



Flush Pendent (V29)



Extended Pendent (V29)

Approvals/Listings:



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

Product Description:

The Model V29 Flush Residential Pendent Sprinkler is a low profile, aesthetically pleasing, flush mounted sprinkler that utilizes a 2.5 mm frangible glass bulb as the thermosensitive element. The combination of the 2.5 mm frangible glass bulb and specially designed deflector make the V29 Flush Residential Sprinkler a necessity in life safety and fire control. The sprinklers have met the strict requirements of Underwriters Laboratories Inc. as described in the Standard for Residential Sprinklers for Fire Protection Service, UL 1626, and should be installed in accordance with the appropriate National Fire Protection Association Standard NFPA 13, 13D or 13R. Model V2902 is UL Listed for use under smooth flat horizontal ceilings.

Coverage:

The Model V2902 spray covers a room size up to 400sq.ft/ 37.0sq.m according to NFPA specifications.

Technical Specifications:

Models: V2902

Style: Residential Flush Pendent

Nominal Orifice Size: 7/16"/12 mm

K-Factor: 4.1 Imp./6.1 S.I.¹

Nominal Thread Size: 1/2" NPT/21.3 mm

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

Min. Operating Pressure: 7psi/48 kPa

Temperature Rating: See chart on page 3

Max. Working Pressure: 175 psi/1200 kPa

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

Job/Owner

System No.	
Location	

Contractor

Submitted By	
Date	

Engineer

Spec Section	
Paragraph	
Approved	
Date	



Material Specifications:

Frame: Bronze per C87400

Deflector: Bronze per UNS C22000

Splitter: Brass per UNS C36000

Belleville Spring: Beryllium nickel

Seal: Teflon²

Drop pin: Bronze per UNS C51000

Lever Arm: Bronze per UNS C51000

Load Bar: Bronze per UNS C22000

Ceiling Cover: Brass per UNS C26000

Load Screw: Stainless Steel per UNS S30400

Bulb: Glass with alcohol based solution, 2.5 mm

Escutcheon: Steel

Dust Cover: Nylon

Pin Cover: Nylon

Accessories:

Installation Wrench:

V29 Flush Wrench fits all V29 Series frames.

Sprinkler Finishes:

Chrome plated

White painted²

Black Painted²

Custom Painted²

VC-250³

For cabinets and other accessories refer to separate sheet.

² UL Listed for corrosion resistance.

³ UL Listed and FM Approved for corrosion resistance.

DISCONTINUED SUBMITTAL:
REFERENCE <https://www.victaulic.com/assets/uploads/sprinklers>
FOR OUR CURRENT OFFERING AND APPLICABLE SUBMITTALS

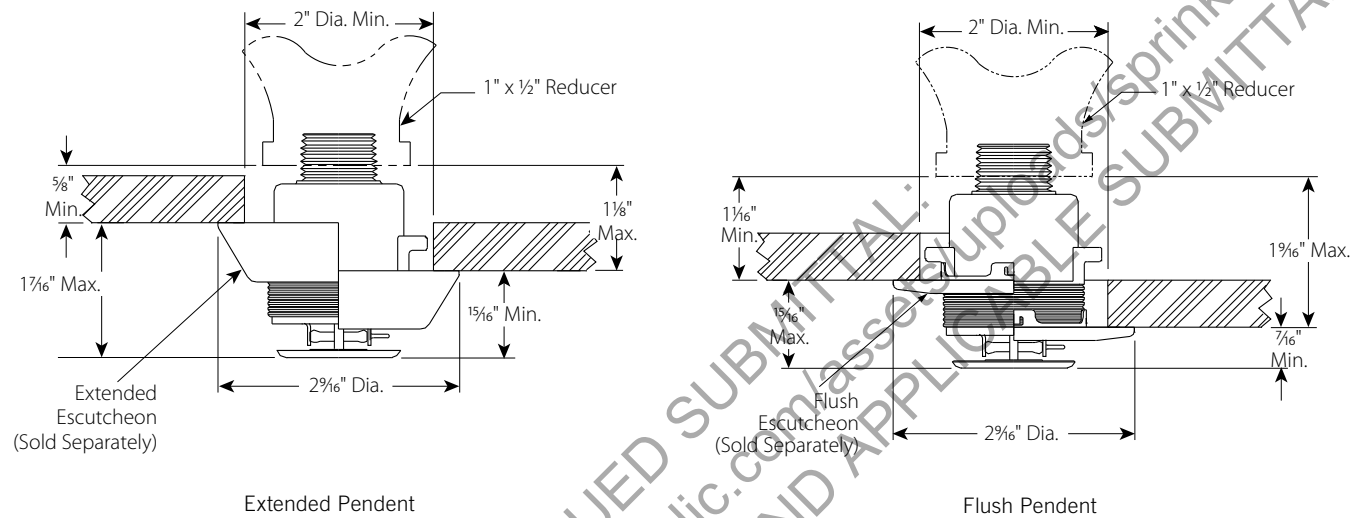
Approval/Listings:

Model	Orifice Size Inches mm	Nominal K-Factor Imperial S.I. ¹	Response Standard or Quick	Deflector Type	Approved Temperature Ratings °F/°C ⁴	
					UL	C-UL
V2902	7/16 12	4.1 6.1	Quick	Flush Pendant	155°F/68°C	155°F/68°C

⁴ Listings and approval as of printing.

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

Dimensions:



Room Size:

Victaulic V2902, 4.1 K-Factor Adjustable Flush Pendant Sprinkler. For Ceiling types refer to NFPA 13, 13R or 13D 2013 Editions

Maximum Coverage Area ⁵ Ft. x Ft. m x m	Maximum Temp Rating 155°F/68°C		Intermediate Temp Rating 175°F/79°C		Deflector to Ceiling	Installation Type	Minimum Spacing Ft. m
	Flow ⁶ GPM L/min	Pressure ⁶ PSI bar	Flow ⁶ GPM L/min	Pressure ⁶ PSI bar			
12 X 12 3.7 X 3.7	11 41.6	7.2 0.5	11 41.6	7.2 0.5	N/A	Extended or Flush Escutcheon	8.0 2.4
14 X 14 4.3 X 4.3	11 41.6	7.2 0.5	11 41.6	7.2 0.5			
16 X 16 4.9 X 4.9	13 49.2	10.1 0.7	13 49.2	10.1 0.7			
18 X 18 5.5 X 5.5	17 64.4	17.2 1.19	17 64.4	17.2 1.19			
20 X 20 6.1 X 6.1	20 75.7	23.8 1.64	20 75.7	23.8 1.64			

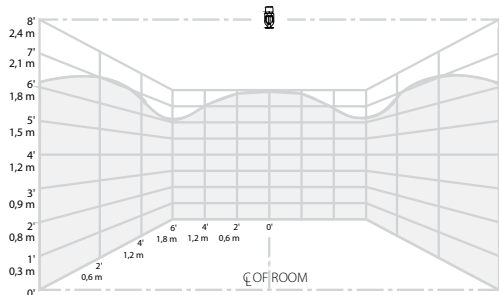
⁵ For coverage area dimensions less than or between those indicated, use the minimum required flow for the next highest coverage area for which hydraulic design criteria are stated.

⁶ For NFPA 13 residential applications, the greater of 0.1gpm/ft2 over the design area of the flow in accordance with the criteria in the table must be used.

Nominal Wetting Patterns:

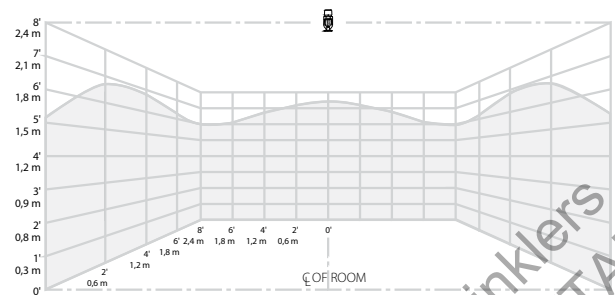
**Model V2902
K4.1 Residential Adjustable Flush Pendent**

11GPM/41.6 LPM – 12' x 12'³/₈' x 3.6 m coverage area



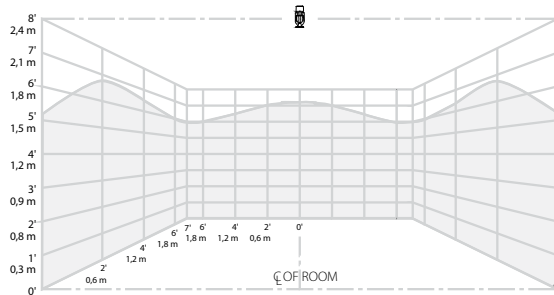
**Model V2902
K4.1 Residential Adjustable Flush Pendent**

13 GPM/49.2 LPM – 16' x 16'⁷/₈' x 4.9 m coverage area



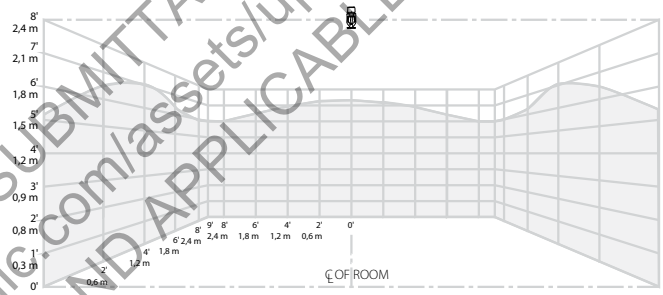
**Model V2902
K4.1 Residential Adjustable Flush Pendent**

11 GPM/41.6 LPM – 14' x 14'³/₈' x 4.3m coverage area



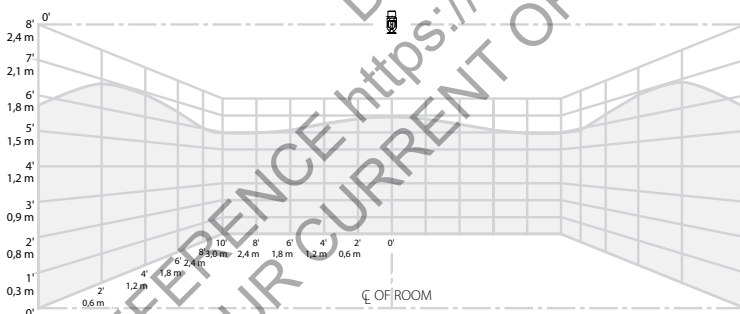
**Model V2902
K4.1 Residential Adjustable Flush Pendent**

17 GPM/64.3 LPM – 18' x 18'⁵/₈' x 5.5m coverage area



**Model V2902
K4.1 Residential Adjustable Flush Pendent**

20 GPM/75.7 LPM – 20' x 20'⁶/₈' x 6.1 m coverage area



NOTES:

- 1 Data shown is approximate and can vary due to differences in installation.
- 2 These graphs illustrate approximate wall-wetting patterns for these specific Victaulic FireLock Automatic Sprinklers. They are provided as information for guidance and should not be used as minimum sprinkler spacing rules for installation. Sprinkler location shall be in accordance with the obstruction rules for residential sprinklers in NFPA 13 (2002 or later revision). Failure to follow these guidelines could adversely affect the performance of the sprinkler and will void all Listings, Approvals and Warranties.
- 3 All patterns are symmetrical to waterway.

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°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 ⁸	K	360°F/182°C	300°F/149°C	Purple
–	M	Open	–	No Bulb

⁸ Standard response only.

Available Wrenches:

Sprinkler Type	Open End	Recessed
V29 Flush Wrench	✓	✓

⚠ 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-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.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

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