


Victaulic® FireLock™ Series FL-ECLH


Extended Coverage, Quick Response

Pendent and Recessed Pendent Sprinklers K5.6 (8.1), K8.0 (11.5), K11.2 (16.2), K14.0 (20.2)



1.0 PRODUCT DESCRIPTION

QUICK RESPONSE EXTENDED COVERAGE PENDENT SPRINKLERS				
SIN	V5614	V3428	V3412	V3414
ORIENTATION	PENDENT	PENDENT	PENDENT	PENDENT
K-FACTOR ¹	5.6 Imp./8.1 S.I.	8.0 Imp./11.5 S.I.	11.2 Imp./16.2 S.I.	14.0 Imp./20.2 S.I.
CONNECTION	½" NPT/15mm BSPT	¾" NPT/ 20mm BSPT/ IGS Grooved	¾" NPT/ 20mm BSPT/ IGS Grooved	¾" NPT/ 20mm BSPT/ IGS Grooved
MAX. WORKING PRESSURE	175 psi (1200 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)
 RE-DESIGNATION	GL5614	-	-	-
GLOBE EQUIVALENT	-	GL8109	GL1112	-

QUICK RESPONSE EXTENDED COVERAGE RECESSED PENDENT SPRINKLERS				
SIN	V5614	V3428	V3412	V3414
ORIENTATION	PENDENT	PENDENT	PENDENT	PENDENT
K-FACTOR ¹	5.6 Imp./8.1 S.I.	8.0 Imp./11.5 S.I.	11.2 Imp./16.2 S.I.	14.0 Imp./20.2 S.I.
CONNECTION	½" NPT/15mm BSPT	¾" NPT/ 20mm BSPT	¾" NPT/ 20mm BSPT	¾" NPT/ 20mm BSPT
MAX. WORKING PRESSURE	175 psi (1200 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)	175 psi (1200 kPa)
ESCUTCHEON	Recessed	Recessed	Recessed	Recessed
 RE-DESIGNATION	GL5614	-	-	-
GLOBE EQUIVALENT	-	GL8109	GL1112	-

AVAILABLE WRENCHES				
SPRINKLER	V56-2 Recessed	V56 Open End	V34 Recessed	V34 Open End
PENDENT	■	■	■	■

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

Factory Hydrostatic Test: 100% @ 500 psi/3447 kPa/34 Bar

Min. Operating Pressure: UL/FM: 7psi/48 kPa/.5 Bar

Temperature Rating: See tables in section 2.0

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

2.0 CERTIFICATION/LISTINGS



SIN		V5614										
Nominal K Factor Imperial		5.6										
Nominal K Factor S.I. ²		8.1										
Installation Type		Pendent					Recessed Pendent					Minimum Spacing Ft. m
Maximum Coverage Area Width x Length Ft. x Ft m x m	Listing Agency	Response	Flow GPM L/min	Pressure PSI kPa	Approved Temperature Ratings F°/C°	Response	Adjustment In mm	Flow GPM L/min	Pressure PSI kPa	Approved Temperature Ratings F°/C°		
16 x 16 4.9 x 4.9	UL	QR	26 98	21.5 148	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	QR	½ and ¾ 15 and 20	26 98	21.5 148	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	8.0 2.4	
18 x 18 5.5 x 5.5	UL	QR	33 125	34.7 239	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	QR	½ and ¾ 15 and 20	33 125	34.7 239	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C		
20 x 20 6.1 x 6.1	UL	QR	40 151	51 352	135°F/57°C	QR	½ and ¾ 15 and 20	40 151	51 352	135°F/57°C		

SIN		V3428										
Nominal K Factor Imperial		8.0										
Nominal K Factor S.I. ²		11.5										
Installation Type		Pendent					Recessed Pendent					Minimum Spacing Ft. m
Maximum Coverage Area Width x Length Ft. x Ft m x m	Listing Agency	Response	Flow GPM L/min	Pressure PSI kPa	Approved Temperature Ratings F°/C°	Response	Adjustment In mm	Flow GPM L/min	Pressure PSI kPa	Approved Temperature Ratings F°/C°		
16 x 16 4.9 x 4.9	UL	QR	26 98	10.6 73.1	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	QR	½ and ¾ 15 and 20	26 98	10.6 73.1	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	8.0 2.4	
18 x 18 5.5 x 5.5	UL	QR	33 125	17.0 117	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	QR	½ and ¾ 15 and 20	33 125	17.0 117	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C		
20 x 20 6.1 x 6.1	UL	QR	40 151	25.0 172	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C	QR	½ and ¾ 15 and 20	40 151	25.0 172	135°F/57°C 155°F/68°C 175°F/79°C 200°F/93°C		

² For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

NOTE

- Reference the specific agency website listings for the most up-to-date certification information.

2.0 CERTIFICATION/LISTINGS (CONTINUED)

SIN		V3412									
Nominal K Factor Imperial		11.2									
Nominal K Factor S.I. ²		16.2									
Installation Type		Pendent				Recessed Pendent					Minimum Spacing Ft. m
Maximum Coverage Area Width x Length Ft. x Ft m x m	Listing Agency	Response	Flow	Pressure	Approved Temperature Ratings	Response	Adjustment	Flow	Pressure	Approved Temperature Ratings	
			GPM L/min	PSI kPa	F°/C°		In mm	GPM L/min	PSI kPa	F°/C°	
16 x 16 4.9 x 4.9	UL	QR	30	7	135°F/57°C	QR	½	30	7	135°F/57°C	8.0 2.4
			115	50	155°F/68°C 175°F/79°C 200°F/93°C		15	115	50	155°F/68°C 175°F/79°C 200°F/93°C	
16 x 16 4.9 x 4.9	FM	QR	30	7	135°F/57°C	QR	½	30	7	135°F/57°C	10.0 3.0
			115	50	155°F/68°C		15	115	50	155°F/68°C	
18 x 18 5.5 x 5.5	UL	QR	33	9	135°F/57°C	QR	½	26	10.6	135°F/57°C	8.0 2.4
			125	60	155°F/68°C 175°F/79°C 200°F/93°C		15	98	73	155°F/68°C 175°F/79°C 200°F/93°C	
18 x 18 5.5 x 5.5	FM	QR	33	9	135°F/57°C	QR	½	33	9	135°F/57°C	10.0 3.0
			125	60	155°F/68°C		15	125	60	155°F/68°C	
20 x 20 6.1 x 6.1	UL	QR	40	13	135°F/57°C	QR	½	40	13	135°F/57°C	8.0 2.4
			150	90	155°F/68°C 175°F/79°C 200°F/93°C		15	150	90	155°F/68°C 175°F/79°C 200°F/93°C	
20 x 20 6.1 x 6.1	FM	QR	40	13	135°F/57°C	QR	½	40	13	135°F/57°C	10.0 3.0
			150	90	155°F/68°C		15	150	90	155°F/68°C	

SIN		V3414									
Nominal K Factor Imperial		14.0									
Nominal K Factor S.I. ²		20.2									
Installation Type		Pendent				Recessed Pendent					Minimum Spacing Ft. m
Maximum Coverage Area Width x Length Ft. x Ft m x m	Listing Agency	Response	Flow	Pressure	Approved Temperature Ratings	Response	Adjustment	Flow	Pressure	Approved Temperature Ratings	
			GPM L/min	PSI kPa	F°/C°		In mm	GPM L/min	PSI kPa	F°/C°	
18 x 18 5.5 x 5.5	UL	QR	37	7	135°F/57°C	QR	½ and ¾	37	7	135°F/57°C	12.0 3.7
			140	50	155°F/68°C 175°F/79°C 200°F/93°C		15 and 20	140	50	155°F/68°C 175°F/79°C 200°F/93°C	
20 x 20 6.1 x 6.1	UL	QR	40	8	135°F/57°C	QR	½ and ¾	40	8	135°F/57°C	12.0 3.7
			150	60	155°F/68°C 175°F/79°C 200°F/93°C		15 and 20	150	60	155°F/68°C 175°F/79°C 200°F/93°C	

² For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.

NOTE

- Reference the specific agency website listings for the most up-to-date certification information.

3.0 SPECIFICATIONS – MATERIAL

Deflector: Bronze

Bulb Nominal Diameter: 3.0 mm

Load Screw: Bronze

Pip Cap: Bronze

Spring Seal Assembly: PTFE coated Beryllium nickel alloy

Frame: Brass

Lodgement Spring: Stainless steel

Installation Wrench: Ductile iron

Sprinkler Frame Finishes:

- Plain brass
- Chrome plated
- White polyester painted^{3, 4}
- Flat black polyester painted^{3, 4}
- Custom polyester painted^{3, 4}
- VC-250⁵

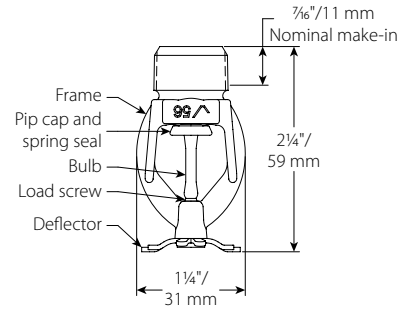
³ Not available on the Intermediate Level Style Pendant.

⁴ UL Listed for corrosion resistance.

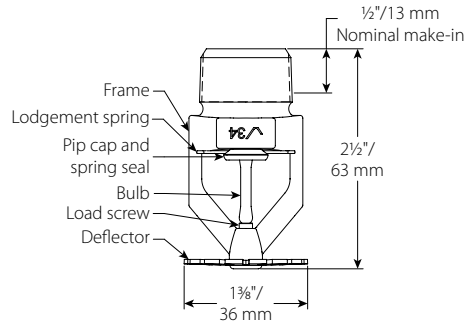
⁵ UL Listed and FM Approved for corrosion resistance.

NOTE

- For cabinets and other accessories, refer to separate sheet.

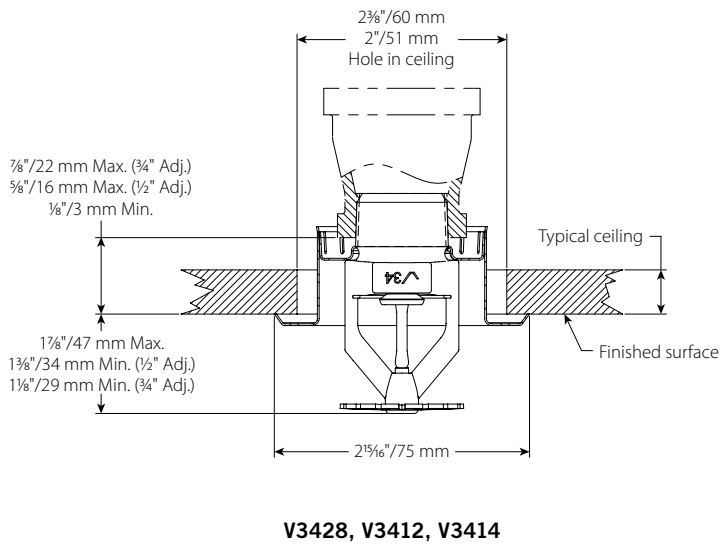
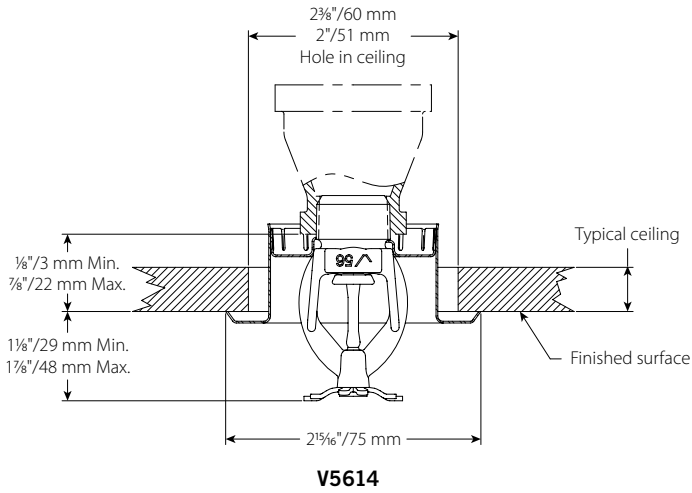


V5614



V3428, V3412, V3414

4.0 DIMENSIONS



5.0 PERFORMANCE

Sprinkler systems are to be designed to and installed per NFPA, FM Datasheets, and any local standards.

6.0 NOTIFICATIONS

⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
 - Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
 - Wear safety glasses, hardhat, and foot protection.
- Failure to follow these instructions could result in death or serious personal injury and property damage.

- These products shall be used only in fire protection systems that are designed and installed in accordance with current, applicable National Fire Protection Association (NFPA) standards, or equivalent standards, and in accordance with applicable building and fire codes. These standards and codes contain important information regarding protection of systems from freezing temperatures, corrosion, mechanical damage, etc.
- The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials to confirm system life will be acceptable for the intended service.

Failure to follow installation requirements and local and national codes and standards could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

Ratings: All glass bulbs are rated for temperatures from -67°F/-55°C.

[1-40: Victaulic FireLock™ Automatic Sprinklers Installation and Maintenance Instructions](#)

[1-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 determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for 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 victaulic.com.

Warranty

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

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Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.