

# FireLock® V40, K11.2

## Model V4001, V4002

### Dry Type Pendent – Standard and Quick Response



Sleeve and Skirt



Recessed



Flush

## 1.0 PRODUCT DESCRIPTION

**Style:** Pendent

**Escutcheon Styles:** Recessed, flush, sleeve and skirt

**Nominal Orifice Size:** 3/4"/20 mm

**Nominal Connection Size:** 1" NPT/25 mm BSPT, 1"/DN25 FireLock™ IGS™ (IGS joining method for the dry sprinkler is for wet systems or when the dry systems branchlines and inlets are maintained at 40°F or above)

**K-Factor:** 11.2/16.1 S.I.

**Maximum Working Pressure:** Up to 175 psi/1200 kPa/12 bar

**Factory Hydrostatic Test:** 100% @ 500 psi/3450 kPa/34 bar

**Temperature Rating:** See "Approved Temperature Ratings F°/C°" table in section 2.0

**Codes and Requirements:** For coverage area and sprinkler placement, refer to NFPA 13, or any applicable local requirements

## 2.0 CERTIFICATION/LISTINGS



APPROVALS/LISTINGS	Model	
	V4001	V4002
Orifice Size (inches)	3/4	3/4
Orifice Size (mm)	20	20
Nominal K Factor Imperial	11.2	11.2
Nominal K Factor S.I. <sup>1</sup>	16.1	16.1
Response	Standard	Quick
Deflector Type	Pendent	Pendent
<b>Approved Temperature Ratings F°/C°</b>		
cULus	155/68	155/68
	200/93	200/93
	286/141	286/141

<sup>1</sup> For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

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

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

### 3.0 SPECIFICATIONS – MATERIAL

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**Frame:** Brass

**Deflector:** Brass

**Bulb:** Glass with glycerin solution

**Bulb Nominal Diameter:**

Quick Response: 3.0mm

Standard Response: 5.0mm

**Load Screw:** Brass

**Pip Cap:** Stainless steel

**Split Spacers:** Stainless steel

**Bushing:** Stainless steel

**Barrel:** Carbon steel, zinc-plated

**Inlet fitting:** Brass

**Spring Seal Assembly:** Teflon<sup>2</sup> tape coated beryllium nickel and stainless steel

**Sprinkler Finishes**

White (White Escutcheons)

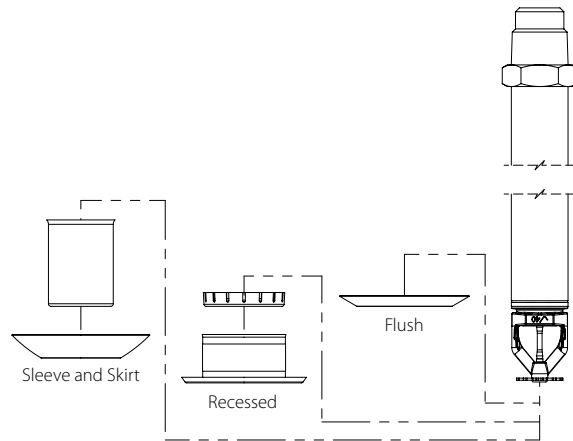
VC-250 (Stainless Escutcheons)

Chrome (Chrome Escutcheons)

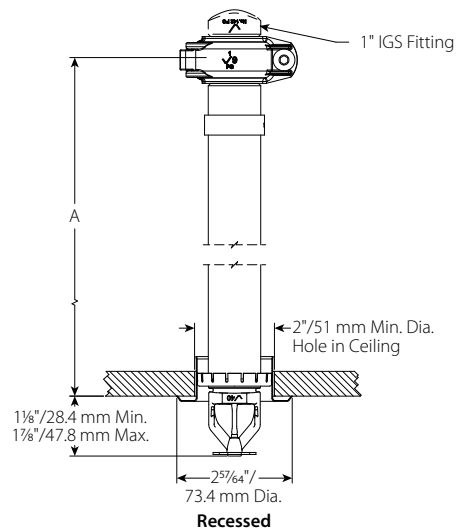
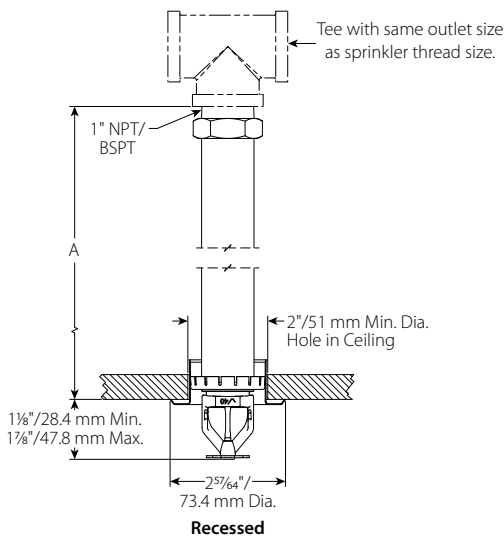
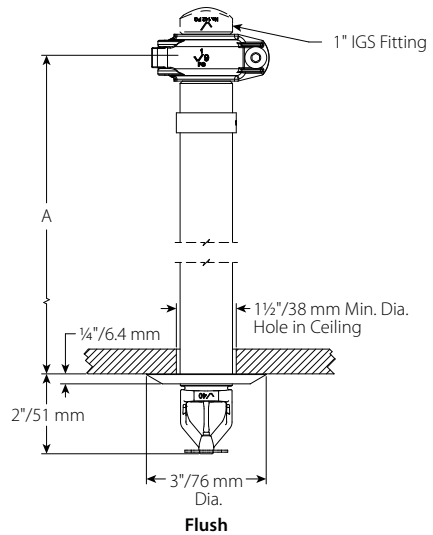
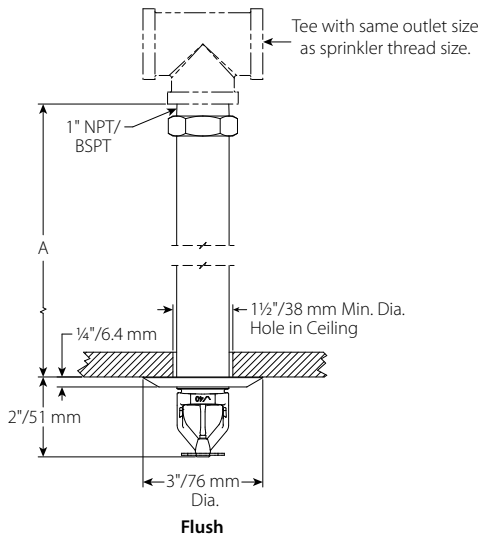
<sup>2</sup> Teflon is a registered trademark of Dupont Co.

## 4.0 DIMENSIONS

### Model V4001, V4002

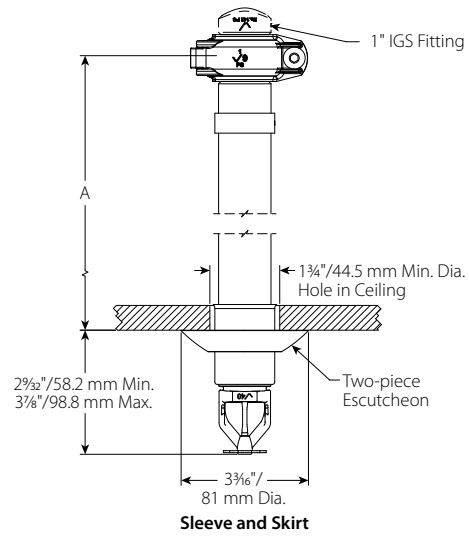
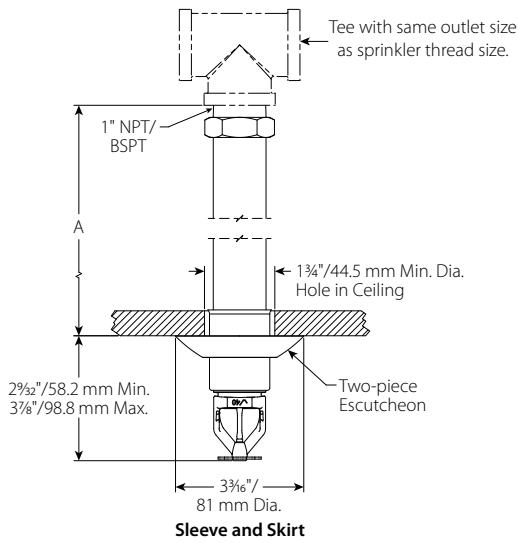


Included Escutcheon Options



## 4.0 DIMENSIONS (CONTINUED)

### Model V4001, V4002



Length inches DN	Dry Sprinkler Take Out Dimensions "A"					
	Flush		Recessed		Sleeve & Skirt	
	1"NPT/1"BSPT	1" IGS Groove	1"NPT/1"BSPT	1" IGS Groove	1"NPT/1"BSPT	1" IGS Groove
12	12	13.14	12.5	13.64	10.89	12.03
DN300	304.8	333.8	317.5	364.4	276.6	305.6
18	18	19.14	18.5	19.64	16.89	18.03
DN450	457.2	486.1	469.9	498.8	429.0	458.0
24	24	25.14	24.5	25.64	22.89	24.03
DN600	609.6	613.2	622.3	651.3	581.4	610.4
30	30	31.14	30.5	31.64	28.89	30.03
DN750	762.0	791.0	774.7	803.7	733.8	762.8
36	36	37.14	36.5	37.64	34.89	36.03
DN900	914.4	943.4	927.1	956.1	866.2	915.2

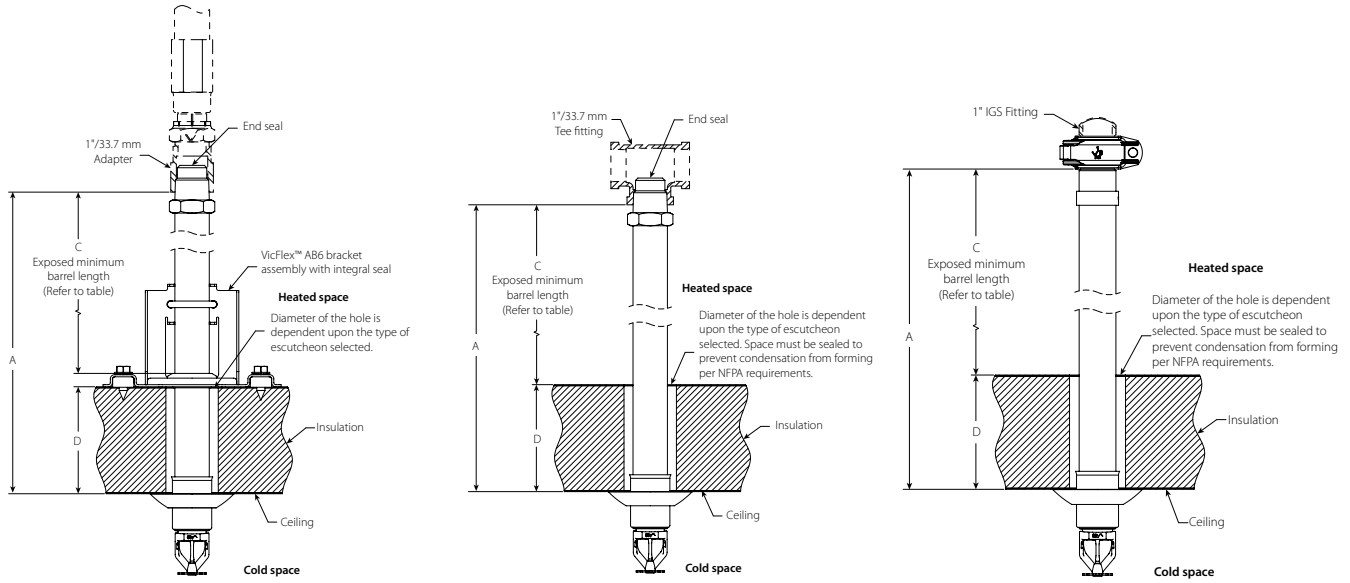
**NOTE**

- IGS "A" dimensions are measured to the end of the pipe.
- All three escutcheon options of the matching finish will be included with each sprinkler (see sprinkler finishes).

## 5.0 PERFORMANCE

Commodity Selection and Design Criteria Overview For Model V4001/V4002	
Description	Specification
Sprinkler Type	CMDA
Temperature Rating	155°F/68°C, 200°F/93°C, and 286°F/14°C
K-Factor/S.I.	K11.2/16.1 S.I
Sprinkler Position	Pendent
System Type	Reference NFPA 13
Maximum Area of Coverage	Reference NFPA 13
Minimum Area of Coverage	Reference NFPA 13
Maximum Slope Ceiling	Reference NFPA 13
Maximum Spacing	Reference NFPA 13
Minimum Spacing	Reference NFPA 13
Deflector Distance from Walls	Reference NFPA 13
Deflector to Top of Storage	Reference NFPA 13
Deflector to Ceiling Distance	Reference NFPA 13
Maximum Ceiling Height	Reference NFPA 13
Maximum Storage Height	Reference NFPA 13
Storage Arrangement	Reference NFPA 13
Commodity	Reference NFPA 13
Sprinkler System Design	Reference NFPA 13
Obstruction Criteria	Reference NFPA 13
Minimum Aisle Width	Reference NFPA 13
Hose Stream allowance and Water Supply Duration	Reference NFPA 13

## 5.0 PERFORMANCE (CONTINUED)






Ambient Temperature Exposed to Discharge End of Sprinkler	Exposed Minimum Barrel Length "C"		
	inches mm		
	40°F/4°C	50°F/10°C	60°F/16°C
40 4	0	0	0
30 -1	0	0	0
20 -7	4 100	0 0	0 0
10 -12	8 200	1 25	0 0
0 -18	12 300	3 75	0 0
-10 -23	14 350	4 100	1 25
-20 -29	14 350	6 150	3 75
-30 -34	16 400	8 200	4 100
-40 -40	18 450	8 200	4 100
-50 -46	20 500	10 250	6 150
-60 -51	20 500	10 250	6 150

**NOTE**

- The minimum required barrel length complies with NFPA 13 Standard for the Installation of Sprinkler Systems. For additional guidance please refer to the Dry Sprinkler section of NFPA 13.

## 6.0 NOTIFICATIONS

**⚠ 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.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic 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.

## 7.0 REFERENCE MATERIALS

### Ratings

All glass bulbs are rated for temperatures from -67°F/-57°C up 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	C	155°F/68°C	100°F/38°C	Red
Intermediate	F	200°F/93°C	150°F/65°C	Green
High	J	286°F/141°C	225°F/107°C	Blue

### Available Wrenches:

Sprinkler Type	V34 Open End	V34 Recessed
Pendent	✓	✓

- [10.65: Victaulic® FireLock™ IGS Installation-Ready Style V9 Sprinkler Coupling](#)
- [40.80: FireLock® Automatic Sprinkler Wrenches](#)
- [I-40: Victaulic FireLock Automatic Sprinklers Installation and Maintenance Guide](#)
- [I-V9: Style V9 Victaulic® FireLock™ IGS™ Installation-Ready™ Sprinkler Coupling](#)
- [I-VICFLEX-AB6: Bracket Assembly for Wet Systems Only](#)

### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning 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, installation guide, or this disclaimer.

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### 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.

### Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of 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 [www.victaulic.com](http://www.victaulic.com).

### Warranty

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

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