# Victaulic® FireLock™ Series FL-QR/DRY/ST Dry, Quick Response Pendent and Recessed Pendent, K11.2 (16.0)





# 1.0 PRODUCT DESCRIPTION

QUICK RESPONSE PENDENT DRY SPRINKLERS				
SIN V4002				
ORIENTATION	Pendent			
K-FACTOR <sup>1</sup>	11.2 lmp./16.1 S.I.			
CONNECTION	1" NPT/25mm BSPT/1" IGS			
MAX. WORKING PRESSURE	175 psi (1200 kPa)			
ESCUTCHEON	Plain/Flush/Sleeve and Skirt			

QUICK RESPONSE RECESSED PENDENT DRY SPRINKLERS				
SIN V4002				
ORIENTATION	PENDENT			
K-FACTOR <sup>1</sup>	11.2 lmp./16.1 S.I.			
CONNECTION	1" NPT/25mm BSPT/1" IGS			
MAX. WORKING PRESSURE	175 psi (1200 kPa)			
ESCUTCHEON	Recessed			

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

**Min. Operating Pressure:** UL: 7 psi/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.



 $<sup>^{\, 1}</sup>$   $\,$  For K-Factor when pressure is measured in bar, multiply S.I. units by 10.0.

# 2.0 CERTIFICATION/LISTINGS



APPROVALS/LISTINGS							
SIN	V4002	V4002					
Nominal K Factor Imperial	11.2	11.2					
Nominal K Factor S.I. <sup>2</sup>	16.1	16.1					
Orientation	Pendent	Pendent					
Escutcheon	Plain/Flush/Slv & Skt	Recessed					
	Approved Temperature Ratings F°/C°						
cULus	155°F/68°C	155°F/68°C					
	175°F/79°C	175°F/79°C					
	200°F/93°C	200°F/93°C					
	286°F/141°C	286°F/141°C					

 $<sup>^{\,2}</sup>$   $\,\,$  For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.

## NOTE

• Listings and approval as of printing.

COMMODITY SELECTION AND DESIGN CRITERIA OVERVIEW FOR MODEL V4002					
Storage Type	NFPA				
Open Frame (that is, no solid shelves) Single, Double, Multiple-Row, or Portable Rack Storage of Class I-IV and Group A or B Plastics	NFPA 13				
Solid Pile or Palletized Storage of Class I-IV and Group A or B Plastics	NFPA 13				
Idle Pallet Storage	NFPA 13				
Rubber Tire Storage	NFPA 13				
Rolled Paper Storage (Refer to the standard.)	NFPA 13				
Flammable Liquid Storage (Refer to the standard.)	NFPA 30				
Aerosol Storage (Refer to the standard.)	NFPA 30B				



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## 3.0 SPECIFICATIONS - MATERIAL

**Deflector:** Brass or Stainless Steel **Bulb Nominal Diameter:** 3.0mm **Split Spacer:** Stainless Steel

**Load Screw:** Brass **Pip Cap:** Stainless Steel

Spring Seal Assembly: PTFE coated Beryllium nickel

alloy and stainless steel

Frame: Brass
Inlet Fitting: Brass

Outer Tube: Galvanized steel pipe

Inner Tube: Stainless Steel
Orifice Insert: Stainless Steel
Escutcheon/Plate: Stainless steel

Torsion Spring: SST wire

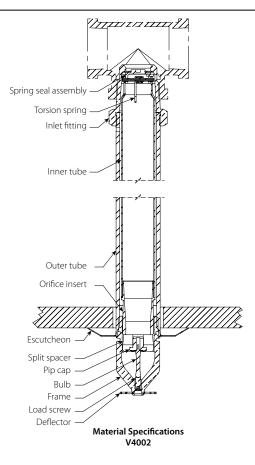
Installation Wrench: Ductile iron

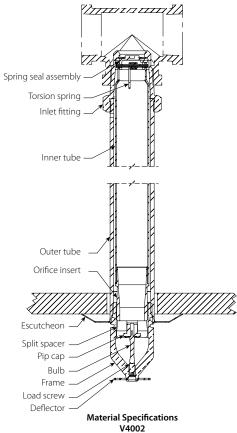
# **Sprinkler Frame Finishes:**

- Plain brass
- Chrome plated
- White polyester painted<sup>3, 4</sup>
- Bright White polyester painted<sup>3, 4</sup>
- Flat black polyester painted<sup>3, 4</sup>
- Custom polyester painted<sup>3, 4</sup>
- VC-250<sup>5</sup>
- <sup>3</sup> Not available on the Intermediate Level Style Pendent.
- <sup>4</sup> UL Listed for corrosion resistance.
- 5 UL Listed and FM Approved for corrosion resistance.

#### NOTE

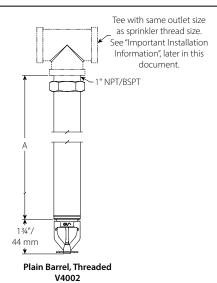
- Weather resistant escutcheon available upon request.
- For cabinets and other accessories refer to separate sheet.

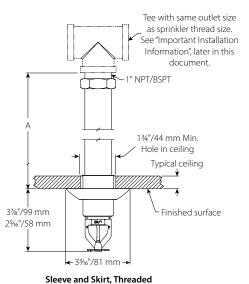






#### 4.0 **DIMENSIONS**





V4002

1" Weld outlet. See 'Important Installation Information" within (O) this document. 13/4"/ 44 mm Plain Barrel, Grooved

1" Weld outlet. See "Important Installation Information within this document. 1¾"/44 mm Min. Hole in ceiling Typical ceiling 3%"/99 mm Finished surface 25/6"/58 mm - 3¾6"/81 mm

Sleeve and Skirt, Grooved

V4002

866.2

V4002

Dry Sprinkler Take Out Dimensions "A" Flush Recessed Sleeve & Skirt 1" NPT/1"BSPT 1"NPT/1"BSPT IGS Grooved 1"NPT/1"BSPT Length IGS Grooved **IGS Grooved** inches inches inches inches inches inches inches mm mm mm mm mm mm mm 12 12.00 13.14 12.50 13.64 10.98 12.03 300 304.8 333.8 317.5 364.4 276.6 305.6 18 18.00 19.14 16.89 18.03 18.50 19.64 469.9 450 457.2 486.1 498.8 429.0 458.0 24 24.00 25.14 24.50 25.64 22.89 24.03 600 609.6 613.2 622.3 651.3 518.4 610.4 28.89 30.03 30 30.00 31.14 30.50 31.64 750 762.0 791.0 774.7 803.7 733.8 762.8 36.00 37.14 36.50 37.64 34.89 36.03 36 900 914.4

927.1

4

956.1

NOTE

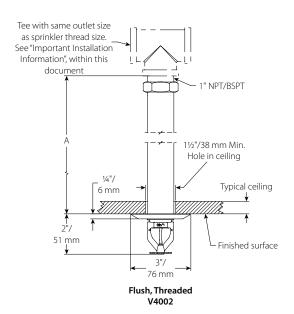
- IGS "A" dimensions are measured to the end of the pipe.
- All three escutcheon options of the matching finish will be included with each sprinkler (see sprinkler finishes).

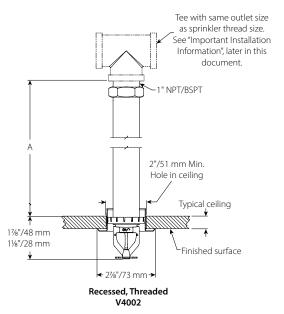
943.4

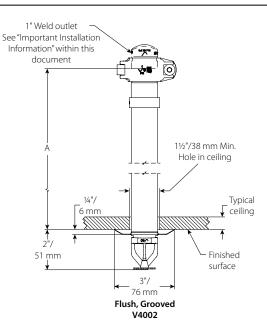
915.2

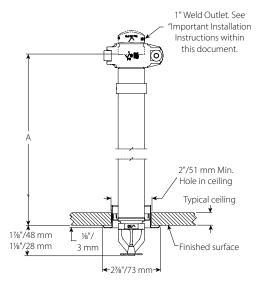
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# 4.0 DIMENSIONS (CONTINUED)









Recessed, Grooved V4002

Dry Sprinkler Take Out Dimensions "A"						
	Flush		Recessed		Sleeve & Skirt	
Length	1" NPT/1"BSPT	IGS Grooved	I 1"NPT/1"BSPT IGS (	IGS Grooved	1"NPT/1"BSPT	IGS Grooved
inches	inches	inches	inches	inches	inches	inches
mm	mm	mm	mm	mm	mm	mm
12	12.00	13.14	12.50	13.64	10.98	12.03
300	304.8	333.8	317.5	364.4	276.6	305.6
18	18.00	19.14	18.50	19.64	16.89	18.03
450	457.2	486.1	469.9	498.8	429.0	458.0
24	24.00	25.14	24.50	25.64	22.89	24.03
600	609.6	613.2	622.3	651.3	518.4	610.4
30	30.00	31.14	30.50	31.64	28.89	30.03
750	762.0	791.0	774.7	803.7	733.8	762.8
36	36.00	37.14	36.50	37.64	34.89	36.03
900	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).

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# 5.0 PERFORMANCE

Sprinkler is to be installed and designed as per NFPA, FM Datasheets, or 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 13, 13D, 13R, etc.) 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
I-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 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.

# Warranty

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

#### Trademarks

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