Standard Spray/Pendent and Upright

MODELS V2401, V2402, V2403, V2404 STANDARD AND QUICK RESPONSE

These Model V24 standard spray sprinklers are designed to produce a hemispherical spray pattern for standard commercial applications. They are available with either standard or quick response bulbs. The design incorporates a 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.

#### **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 applicable installation standards.

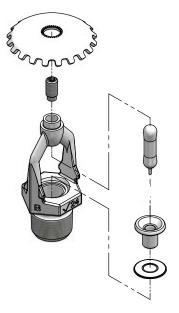






PENDENT V2403, V2404

### **TECHNICAL SPECIFICATIONS**



Models: V2401, V2402, V2403, V2404

Style: Pendent or Upright

Nominal K-Factor: 61S.I. (Bar)/4.2 Imp. Nominal Thread Size: 3/8 BSPT (10mm) Max. Working Pressure: 12.5 Bar/175 psi Factory Hydrostatic Test:

100% @ 34.5 Bar/500 psi

Min. Operating Pressure: .5 Bar/7 psi

Temperature Ratings: See chart on page 2

#### MATERIAL SPECIFICATIONS

**Upright Deflector:** Bronze per UNS C22000 **Pendent Deflector:** Bronze per UNS C51000 **Bulb:** Glass with glycerin solution.

Bulb Nominal Diameter:

- V2401 and V2403 Standard Response 5.0mm
- V2402 and V2404 Quick Response 3.0mm

**Load Screw:** Bronze per UNS C65100 **Pip Cap:** Bronze per UNS C65100

Seal: Teflon\* tape Spring: Beryllium nickel Frame: Die cast brass 65-30

### **ACCESSORIES**

#### Installation Wrench:

- Open End: V27
- Recessed: V27-2

### Sprinkler Finishes:

- Plain brass
- Chrome plated
- RAL 9010 White painted
- RAL 9001 Off-white
- Custom painted
- Nickel/Teflon\* coated†

For cabinets and other accessories refer to separate sheet.

- ^ For K-Factor when pressure is measured in kPa, divide K-Factor in (S.I.) Bar units by 10.0.
- \* Teflon is a registered trademark of Dupont Co.

Exaggerated for clarity

JOB/OWNER	CONTRACTOR	ENGINEER
System No	Submitted By	Spec Sect Para
Location	Date	Approved
		Date

40.87 1

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#### **RATINGS**

All glass bulbs are rated for temperatures from -67°F/-55°C to those shown in table below.

	Victaulic	Temperature – °F/°C		
Sprinkler Temperature Classification	Part Identification	Nominal Temperature Rating	Maximum Ambient Temperature Allowed	Glass Bulb Color
Ordinary	А	57 135	38 100	Orange
Ordinary	С	68 155	38 100	Red
Intermediate	Е	79 175	35 150	Yellow
Intermediate	F	93 200	35 150	Green
High	J	141 286	107 225	Blue
- ‡	М	Open	_	No Bulb

<sup>‡</sup> Standard response only.

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

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#### ORDERING INFORMATION

Please specify the following when ordering:

Sprinkler Model Number	
Style	
Temperature Rating	
K-Factor	
Thread Size	
Quantity	
Sprinkler Finish	
Wrench Model Number	







- 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.



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.

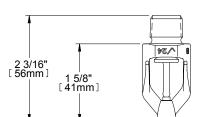
If you need additional copies of this publication, or if you have any questions about the safe installation of this product, contact Victaulic Europe, Prijkelstraat 36, 9810 Nazareth Belgium, Phone: 32-93-811500.

Standard Spray/Pendent and Upright

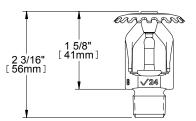
MODELS V2401, V2402, V2403, V2404 STANDARD AND QUICK RESPONSE

#### **DIMENSIONS**

#### Standard Pendent - V2403, V2404



### Standard Upright - V2401, V2402



#### **AVAILABLE WRENCHES**

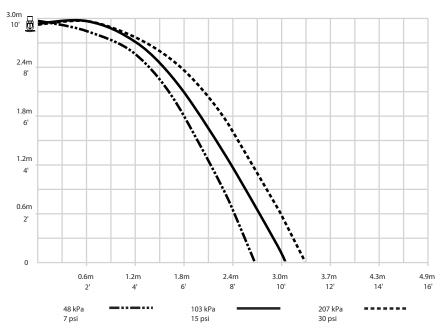
Sprinkler Type	V27-2	V27 Open End
V2401, V2402, V2403, V2404	yes	yes

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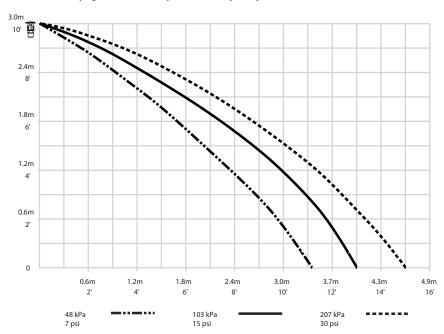
#### **DISTRIBUTION PATTERNS**

Models V2403, V2404 K61 spray pendent distribution patterns – trajectory



Refer to notes on page 7.

Models V2401, V2402 K61 standard upright distribution patterns – trajectory



Refer to notes on page 7.



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#### **DISTRIBUTION PATTERNS**

#### NOTES:

- 1 Data shown is approximate and can vary due to differences in installation.
- 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 Fire Code and 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.
- 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.

#### 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.



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