V27, K4.9
Residential Pendent and Recessed Pendent
V2740 QUICK RESPONSE

This Model V27 residential sprinkler is designed to meet the requirements of NFPA 13, 13D and 13R for residential use in a variety of room sizes, depending upon available operating pressure and room configuration. The design incorporates state-of-the-art, heat responsive, frangible glass bulb design (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 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:
Residential spray coverage up to 20 feet x 20 feet/6.1 m x 6.1 m room sizes per NFPA.

TECHNICAL SPECIFICATIONS:

ACCESSORIES
Installation Wrench:
• Open End: V27
• Recessed: V27-1
Sprinkler Finishes:
• Plain brass
• Chrome plated
• White painted**
• Custom painted**
For escutcheons, cabinets and other accessories refer to separate sheet.

For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.
*Teflon is a registered trademark of Dupont Co.
**UL Listed for corrosion resistance in all configurations.

NOTE: Weather resistant recessed escutcheon available upon request.

MATERIAL SPECIFICATIONS
Pendent Deflector: Bronze per UNS C51000
Bulb: Glass with glycerin solution
Bulb Nominal Diameter:
• Quick Response: 3.0 mm
Load Screw: Bronze per UNS C65100
Pip Cap: Bronze per UNS C65100
Seal: Teflon* tape
Frame: Die cast brass 65-30
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APPROVALS/LISTINGS

<table>
<thead>
<tr>
<th>Model</th>
<th>Orifice Size</th>
<th>Nominal K-Factor</th>
<th>Response</th>
<th>Deflector Type</th>
<th>Approved Temperature Ratings °F/°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>V2740</td>
<td>7/16 12</td>
<td>4.9 71</td>
<td>Quick</td>
<td>Pendent</td>
<td>cULus 155, 175 68, 79</td>
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<tr>
<td>V2740</td>
<td>7/16 12</td>
<td>4.9 71</td>
<td>Quick</td>
<td>Recessed Pendent</td>
<td>Up to 1/2&quot; Adjustment *</td>
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<tr>
<td>V2740</td>
<td>7/16 12</td>
<td>4.9 71</td>
<td>Quick</td>
<td>Recessed Pendent</td>
<td>Up to 3/4&quot; Adjustment #</td>
</tr>
</tbody>
</table>

† Listings and approval as of printing.
^ For K-Factor when pressure is measured in Bar, multiply S.I. units by 10.0.
* For 12’ x 12’ to 20’ x 20’ rooms
# For 12’ x 12’ to 18’ x 18’ rooms

RATINGS

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

<table>
<thead>
<tr>
<th>Sprinkler Temperature Classification</th>
<th>Victaulic Part Identification</th>
<th>Temperature – °F/°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal Temperature Rating</td>
<td>Maximum Ambient Temperature Allowed</td>
</tr>
<tr>
<td></td>
<td>Nominal Temperature Rating</td>
<td>Maximum Ambient Temperature Allowed</td>
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<tr>
<td></td>
<td>Temperature Rating</td>
<td>Temperature Allowed</td>
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<tr>
<td>Ordinary</td>
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<td>155 68</td>
</tr>
<tr>
<td>Intermediate</td>
<td>E</td>
<td>175 79</td>
</tr>
</tbody>
</table>

Glass Bulb Color

- Red
- Yellow

ORDERING INFORMATION

Please specify the following when ordering:

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

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V2740 QUICK RESPONSE

**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.

### AVAILABLE WRENCHES

<table>
<thead>
<tr>
<th>Sprinkler Type</th>
<th>Open End</th>
<th>Recessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>V2740 Pendent</td>
<td>V27</td>
<td>V27-2</td>
</tr>
<tr>
<td>V2740 Recessed Pendent</td>
<td>—</td>
<td>V27-2</td>
</tr>
</tbody>
</table>
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Residential Pendent and Recessed Pendent
V2740 QUICK RESPONSE

DIMENSIONS

**Standard Pendent – V2740**

- Max. Hole: 2"/51 mm
- Min. Hole: 1/one.numerator/one.numerator⁄/one.denominator/six.denominator”/ 43 mm
- Typical Ceiling Tile
- Finished Surface

**Maximum Recess – ½” Adjustment Recessed – V2740** (drawing not to scale)

- MAXIMUM EXTENSION: 1/seven.numerator⁄/one.denominator/six.denominator”/ 37 mm
- MAXIMUM RECESS: 1/one.numerator/five.numerator⁄/one.denominator/six.denominator”/ 24 mm

**Maximum Recess – ¾” Adjustment Recessed – V2740** (drawing not to scale)

- MAXIMUM EXTENSION: 1/three.numerator⁄/one.denominator/six.denominator”/30 mm
- MAXIMUM RECESS: 1/one.numerator/one.numerator⁄/one.denominator/six.denominator”/ 17 mm

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40.47.4
<table>
<thead>
<tr>
<th>Max. Coverage Area</th>
<th>Ordinary Temp Rating 159°F/70°C</th>
<th>Intermediate Temp Rating 179°F/79°C</th>
<th>Deflector to Ceiling</th>
<th>Installation Type</th>
<th>Minimum Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ft. x Ft. m x m</td>
<td>Flow GPM L/min</td>
<td>Pressure PSI bar</td>
<td>Flow GPM L/min</td>
<td>Pressure PSI bar</td>
<td>1 ⅛ to 4 inch</td>
</tr>
<tr>
<td>12 X 12 3.7 X 3.7</td>
<td>13 49.2 0.48</td>
<td>13 49.2 0.48</td>
<td>8.0 2.4</td>
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</tr>
<tr>
<td>14 X 14 4.3 X 4.3</td>
<td>13 49.2 0.48</td>
<td>13 49.2 0.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 X 16 4.9 X 4.9</td>
<td>13 49.2 0.48</td>
<td>13 49.2 0.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 X 18 5.5 X 5.5</td>
<td>17 64.3 0.83</td>
<td>17 64.3 0.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 X 20 6.1 X 6.1</td>
<td>20 75.7 1.15</td>
<td>20 75.7 1.15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) 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.
(b) For NFPA 13 residential applications, the greater of 0.1 gpm/ft² over the design area of the flow in accordance with the criteria in the table must be used.
(c) For 20 x 20 Coverage Area- ½" Maximum Recess.
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NOMINAL WETTING PATTERNS

Model V2740
K4.9 residential pendent and recessed pendent (3/4")
13 GPM/49.2 LPM – 16' x 16'/4.9 x 4.9 m coverage area

Model V2740
K4.9 residential pendent and recessed pendent (1/2")
17 GPM/64.3 LPM – 18' x 18'/5.5 x 5.5 m coverage area

See notes on next page.
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Residential Pendent and Recessed Pendent

**V2740 QUICK RESPONSE**

**NOMINAL WETTING PATTERNS**

Model V2740
K4.9 residential pendent and recessed pendent (1/2")
20 GPM/75.7 LPM – 20’ x 20’/6.1 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 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 NFPA National Fire Code or 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.
3. 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.