1. DESCRIPTION
The Viking Microfast® Quick Response Vertical Sidewall Sprinkler VK306 is a small thermo-sensitive glass bulb spray sprinklers designed for installation in either the upright or pendent position. The VK306 is available with finishes and temperature ratings to meet design requirements.

2. LISTINGS AND APPROVALS
- **FM Approved:** Class 2012
  - Refer to the Approval Chart and Design Criteria for FM Approval requirements that must be followed.

3. TECHNICAL DATA
   - **Specifications:**
     - Minimum Operating Pressure: 7 psi (0.5 bar)
     - Rated to 175 psi (12 bar) water working pressure.
     - Factory tested hydrostatically to 500 psi (34.5 bar)
     - Thread size: 1/2” NPT, 15 mm BSP
     - Nominal K-Factor: 5.6 U.S. (80.6 metric**)
     - Glass-bulb fluid temperature rated to -65 °F (-55 °C)
     - Overall Length: 2-1/4” (58 mm)
   - **Material Standards:**
     - Frame Casting: Brass UNS-C84400 or QM Brass
     - Deflector: Brass UNS-C23000
     - Bulb: Glass, nominal 3 mm diameter
     - Belleville Spring Sealing Assembly: Nickel Alloy, coated on both sides with PTFE Tape
     - Screw: Brass UNS-C36000
     - Pip Cap and Insert Assembly: Copper UNS-C11000 and Stainless Steel UNS-S30400
     - For Polyester Coated Sprinklers: Belleville Spring-Exposed
   - **Ordering Information:** (Also refer to the current Viking price list.)
     - Order Quick Response Vertical Sidewall Sprinklers by first adding the appropriate suffix for the sprinkler finish and then the appropriate suffix for the temperature rating to the sprinkler base part number.
     - Finish Suffix: Brass = A, and Chrome = F
     - Temperature Suffix: 135 °F (57 °C) = A, 155 °F (68 °C) = B, 175 °F (79 °C) = D, 200 °F (93 °C) = E, and 286 °F (141 °C) = G
   - **Available Finishes And Temperature Ratings:** Refer to Table 1.
   - **Accessories:** (Also refer to the “Sprinkler Accessories” section of the Viking data book.)
     - Sprinkler Wrench:
     - Sprinkler Cabinets:
       - A. Six-head capacity: Part No. 01724A (available since 1971)
       - B. Twelve-head capacity: Part No. 01725A (available since 1971)

4. INSTALLATION
   - Refer to appropriate NFPA Installation Standards.

5. OPERATION
   - During fire conditions, the heat-sensitive liquid in the glass bulb expands, causing the glass to shatter, releasing the pip cap and sealing spring assembly. Water flowing through the sprinkler orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

6. INSPECTIONS, TESTS AND MAINTENANCE
   - Refer to NFPA 25 for Inspection, Testing and Maintenance requirements.
7. AVAILABILITY
The Viking Microfast® Quick Response Vertical Sidewall Sprinkler VK306 is available through a network of domestic and international distributors. See The Viking Corporation web site for the closest distributor or contact The Viking Corporation.

8. GUARANTEE
For details of warranty, refer to Viking’s current list price schedule or contact Viking directly.

<table>
<thead>
<tr>
<th>Sprinkler Temperature Classification</th>
<th>Sprinkler Nominal Temperature Rating</th>
<th>Maximum Ambient Ceiling Temperature</th>
<th>Bulb Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary</td>
<td>135 °F (57 °C)</td>
<td>100 °F (38 °C)</td>
<td>Orange</td>
</tr>
<tr>
<td>Ordinary</td>
<td>155 °F (68 °C)</td>
<td>100 °F (38 °C)</td>
<td>Red</td>
</tr>
<tr>
<td>Intermediate</td>
<td>175 °F (79 °C)</td>
<td>150 °F (65 °C)</td>
<td>Yellow</td>
</tr>
<tr>
<td>Intermediate</td>
<td>200 °F (93 °C)</td>
<td>150 °F (65 °C)</td>
<td>Green</td>
</tr>
<tr>
<td>High</td>
<td>286 °F (141 °C)</td>
<td>225 °F (107 °C)</td>
<td>Blue</td>
</tr>
</tbody>
</table>

Sprinkler Finishes: Brass, and Chrome

Footnotes
1 The sprinkler temperature rating is stamped on the deflector.
2 Based on NFPA-13. Other limits may apply, depending on fire loading, sprinkler location, and other requirements of the Authority Having Jurisdiction. Refer to specific installation standards.

Figure 1: Standard Sprinkler Wrench 21475M/B
## MICROFAST® QUICK RESPONSE VERTICAL SIDEWALL SPRINKLER
VK306 (K5.6)

### Approval Chart

<table>
<thead>
<tr>
<th>Base Part Number1</th>
<th>SIN</th>
<th>Maximum Pressure</th>
<th>Thread Size</th>
<th>Nominal K-Factor</th>
<th>Overall Length</th>
<th>Listings and Approvals2 (Refer also to Design Criteria below.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>NPT</td>
<td>BSP</td>
<td>U.S.</td>
<td>metric3</td>
</tr>
<tr>
<td>129834</td>
<td></td>
<td>175 psi</td>
<td>1/2&quot;</td>
<td>15 mm</td>
<td>5.6</td>
<td>80.6</td>
</tr>
<tr>
<td>06727B4</td>
<td></td>
<td>175 psi</td>
<td>1/2&quot;</td>
<td>15 mm</td>
<td>5.6</td>
<td>80.6</td>
</tr>
</tbody>
</table>

**NOTICE - Product Below - Limited Availability (Contact Local Viking Office)**

<table>
<thead>
<tr>
<th>Approved Temperature Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - 135 °F (57 °C), 155 °F (68 °C), 175 °F (79 °C), 200 °F (93 °C), and 286 °F (141 °C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approved Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Brass and Chrome</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approved Escutcheons</th>
</tr>
</thead>
<tbody>
<tr>
<td>X - Installed with standard surface-mounted escutcheons</td>
</tr>
</tbody>
</table>

**Footnotes**

1 Base part number shown. For complete part number, refer to Viking’s current price schedule.

2 Metric K-factor measurement shown is when pressure is measured in Bar. When pressure is measured in kPa, divide the metric K-factor shown by 10.0.

3 This table shows the listings and approvals available at the time of printing. Other approvals may be in process.

4 Viking vertical sidewall sprinklers may be installed pendent or upright.

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### DESIGN CRITERIA

(Also refer to the Approval Chart above.)

**FM Approval Requirements:**

Vertical Sidewall Sprinkler VK306 is FM Approved as a Quick response sidewall Non-Storage sprinkler, as indicated in the FM Approval Guide. For specific application and installation requirements, reference the latest applicable FM Loss Prevention Data Sheets (including 2-0) and Technical Advisory Bulletins. FM Global Loss Prevention Data Sheets and Technical Advisory Bulletins contain guidelines relating to, but not limited to: minimum water supply requirements, hydraulic design, ceiling slope and obstructions, minimum and maximum allowable spacing, and deflector distance below the ceiling.

**IMPORTANT:** Always refer to Bulletin Form No. F_091699 - Care and Handling of Sprinklers. Also refer to page SR1-3 for general care, installation, and maintenance information. Viking sprinklers are to be installed in accordance with the latest edition of Viking technical data, the appropriate standards of NFPA, FM Global, LPCB, APSAD, VdS or other similar organizations, and also with the provisions of governmental codes, ordinances, and standards, whenever applicable.