



# TECHNICAL DATA

## STANDARD RESPONSE FUSIBLE LINK UPRIGHT AND PENDENT SPRINKLERS



### 1. PRODUCT NAME

Viking Standard Response Fusible Link Upright and Pendent Sprinklers

### 2. MANUFACTURER

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### 3. PRODUCT DESCRIPTION

Viking Standard Response Fusible Link Upright and Pendent Sprinklers are small thermosensitive solder link spray sprinklers. The sprinklers are available with various finishes, temperature ratings, and K-Factors to meet design requirements. The rugged fusible link is compact and fully contained within the sprinkler frame to provide maximum protection from mechanical damage while still being aesthetically pleasing. Used in conjunction with wax coating for corrosion resistance, the units provide protection against many corrosive environments. The seal at the base of the sprinkler frame is held in place by force transmitted from the compression screw, through the fusible link assembly, onto the pip cap and special sealing spring. During fire conditions, the heat-sensitive fusible link disengages, the pip cap and spring are released, and the waterway is opened. Water flowing through the sprinkle orifice strikes the sprinkler deflector, forming a uniform spray pattern to extinguish or control the fire.

### 4. TECHNICAL DATA

#### LISTINGS AND APPROVALS

Refer to the Approval Chart on pg 18 b.  
Minimum Operating Pressure: 7 psi (48,3 kPa).

Rated 175 psi (1 207 kPa) water working pressure.

Factory tested hydrostatically to 500 psi (3 448 kPa).

#### SPRINKLER MATERIALS

Frame: Brass Castings UNS-C84400  
Deflector: Copper UNS-C19500 for Part Nos. 05506, 05508, 05514, 05516, 05557, 05576, and 05578. Brass UNS-C26000 for all other Part Nos.  
Fusible Link Assembly: Brass UNS-C40500 and UNS-C51000

NOTE: For chrome sprinklers, the fusible link assembly is painted silver for decorative purposes only.

Bushing (for Sprinkler Base Part Nos. 05569, 05570, 05574, and 05575): Brass UNS-C36000

Belleville Spring Sealing Assembly:

Nickel Alloy, coated on both sides with Teflon Tape

Screw: Stainless Steel UNS-S30300

Pip Cap: Copper UNS-C11000

Button: Copper UNS-C19400

#### AVAILABLE FINISHES

Brass, Chrome-Enloy®, White Poly finish, and Black Polyester in all temperature ratings; Wax-Coated Brass for sprinklers with temperature ratings through 286 °F (141 °C).

### 5. ACCESSORIES (order separately)

#### Sprinkler Cabinets:

- A. Six-head capacity: Part No. 01724A
- B. Twelve-head capacity: Part No. 01725A (available since 1971).

#### Sprinkler Wrenches:

- A. Standard Sprinkler Wrench: Part No. 10896W/B (available since 2000) or 05000CW/B (no longer available). Standard wrench is also to be used for wax coated sprinklers.
- B. Wrench for Polyester coated and recessed sprinklers: Part No. 07398W\* (available since 1990).

\* Requires a ½" ratchet (not available from Viking).

Refer to the "Sprinkler Accessories" section of the Viking data book.

Sprinkler Temperature Classification	Sprinkler Nominal Temperature Rating <sup>1</sup>	Maximum Ambient Ceiling Temperature <sup>2</sup>	Frame Paint Color <sup>1</sup>
Ordinary	165 °F (74 °C)	100 °F (38 °C)	None
Intermediate	220 °F (104 °C)	150 °F (65 °C)	White
High	286 °F (141 °C)	225 °F (107 °C)	Blue

**Sprinkler Finishes:** Brass and Chrome-Enloy® (patents pending) (White Poly finish and Black Polyester is available for Part Nos. 05506, 05508, 05514, 05557, and 05576 only.)  
**Corrosion-Resistant Coatings<sup>3</sup>:** White Poly finish and Black Polyester in all temperature ratings for Part Nos. 05506, 05508, 05514, 05557, and 05576 only.  
**Wax-Coated Brass with the following temperature ratings:**  
165 °F (74 °C) Lt. Brown Wax      220 °F (104 °C) Dk. Brown Wax  
286 °F (141 °C) Dk. Brown Wax

#### Footnotes

- <sup>1</sup> Decorative sprinklers may not be color coded. The temperature rating is stamped on the deflector.
  - <sup>2</sup> Based on NFPA. Other limits may apply, depending on fire loading, sprinkler location, and other requirements of the Authority Having Jurisdiction. Refer to specific installation standards.
  - <sup>3</sup> The corrosion-resistant coatings have passed the standard corrosion test required by the approving agencies indicated in the Approval Chart on page 18 b. These tests cannot and do not represent all possible corrosive environments. Prior to installation, verify through the end-user that the coatings are compatible with or suitable for the proposed environment. The coatings indicated are applied to the exposed exterior surfaces only and, therefore, the sprinklers cannot be used as open sprinklers.
- Note:** The spring is exposed on sprinklers with Polyester finishes.

Table 1

	<h1 style="margin: 0;">TECHNICAL DATA</h1>	<h2 style="margin: 0;">STANDARD RESPONSE FUSIBLE LINK UPRIGHT AND PENDENT SPRINKLERS</h2>
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<b>Approval Chart</b> Standard Response Fusible Link Upright and Pendent Sprinklers Maximum 175 PSI WWP													
Base Part Number <sup>1</sup>	SIN	Sprinkler Style	Thread Size		Nominal K-Factor		Overall Length		Listings and Approvals <sup>3</sup>				
			NPT	BSP	U.S.	metric <sup>2</sup>	Inches	mm	cULus <sup>4</sup>	FM	NYC <sup>5</sup>	VdS	LPCB
<b>Standard Orifice</b>													
05557	VK108	Upright	1/2"	15 mm	5.6	8,1	2-3/16	56	A5, C3	B4	A5, C3	--	--
05508	VK110	Pendent	1/2"	15 mm	5.6	8,1	2-3/16	56	A5, C3, C5X	B4	A5, C3, C5X	A1, C1X	--
05506	VK108	Upright	--	15 mm	5.6	8,1	2-1/4	58	A5, C3	B4	A5, C3		
<b>Large Orifice</b>													
05514	VK204	Upright	3/4"	20 mm	8.0	11,5	2-5/16	59	A5, C3	B4	A1, C3	A1	--
05516	VK206	Pendent	3/4"	20 mm	8.0	11,5	2-5/16	59	A1, C3, C1X	--	A1, C3, C1X	A1, C1X	--
05578	VK206	Pendent	1/2"	15 mm	8.0	11,5	2-5/16	59	A1, C3, C1X	--	A1, C3, C1X	A1, C1X	--
05576	VK204	Upright	1/2"	15 mm	8.0	11,5	2-5/16	59	A5, C3	--	A1, C3	--	--
<b>Small Orifice<sup>6</sup></b>													
05570 <sup>7</sup>	VK007	Pendent	1/2"	15 mm	2.8	4,0	2-1/4	59	A1, C3, C1X	D2	A1, C3, C1X	--	--
05569 <sup>7</sup>	VK005	Upright	1/2"	15 mm	2.8	4,0	2-1/4	58	A1, C3	D2	A1, C3	--	--
05574 <sup>7</sup>	VK006	Upright	1/2"	15 mm	4.2	6,0	2-1/4	58	A1, C3	--	A1, C3	--	--
05575 <sup>7</sup>	VK008	Pendent	1/2"	15 mm	4.2	6,0	2-5/16	59	A1, C3, C1X	--	A1, C3, C1X	--	--
05510	VK006	Upright	--	10 mm	4.2	6,0	2-3/16	56	--	--	--	A1	--
05512	VK008	Pendent	--	10 mm	4.2	6,0	2-3/16	56	--	--	--	A1, C1X	--
<b>Approved Temperature Ratings</b>					<b>Approved Finishes</b>					<b>Approved Escutcheons</b>			
A - 165 °F (74 °C), 220 °F (104 °C), and 286 °F (141 °C) B - 165 °F (74 °C) and 286 °F (141 °C) C - 165 °F (74 °C) and 220 °F (104 °C) D - 165 °F (74 °C)					1 - Brass and Chrome-Enloy® 2 - Brass 3 - Wax-Coated Brass (corrosion resistant) 4 - Brass and White Poly Finish 5 - Brass, Chrome-Enloy®, White Poly Finish <sup>8</sup> , and Black Polyester <sup>8</sup>					X - Standard surface-mounted escutcheons or the Microfast® Model F-1 Adjustable Escutcheon, or Recessed with the Micromatic® Model E-1 or E-2 Recessed Escutcheon			
<b>Footnotes</b>													
<sup>1</sup> Base part number is shown. For complete part number, refer to Viking's current price schedule. <sup>2</sup> Metric K-Factor shown is for use when pressure is measured in kPa. When pressure is measured in BAR, multiply the metric K-Factor shown by 10.0. <sup>3</sup> This chart shows the listings and approvals available at the time of printing. Other approvals may be in process. Check with the manufacturer for any addition approvals. <sup>4</sup> Listed by Underwriters Laboratories Inc. for use in the U.S. and Canada. <sup>5</sup> Accepted for use, City of New York Department of Buildings, MEA Number 89-92-E, Vol. 3. <sup>6</sup> Listings and Approvals are limited to Light-Hazard Occupancies where allowed by the installation standards being applied, with hydraulically calculated wet systems only. <sup>7</sup> The sprinkler orifice is bushed. <sup>8</sup> cULus Listed as corrosion-resistant.													