June 17, 2011 Sprinkler 130a



# **TECHNICAL DATA**

## SPRINKLER GUARDS

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058

Viking Technical Data may be found on

The Viking Corporation's Web site at

http://www.vikinggroupinc.com.

The Web site may include a more recent

edition of this Technical Data Page.

Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com

#### 1. DESCRIPTION

The Viking Sprinkler Guard is a hard-wire cage designed to encase the sprinkler and protect it from mechanical daZamage. It is recommended for areas where the sprinkler is installed at a low elevation and/or near areas of high human or mechanical activity.

The Model D-1 Sprinkler Guard is for use with Viking standard and large orifice, standard and quick response upright and pendent frame style sprinklers.

The Dry Pendent Sprinkler Guard is for use with Viking standard and large orifice, standard and quick response dry upright, dry vertical sidewall, and dry pendent sprinklers.

## 2. LISTINGS AND APPROVALS

## A. Model D-1 Sprinkler Guard:

**cULus Listed:** Category VFJV **FM Approved:** Class 2091

cULus Listed and/or FM Approved for use with standard and large orifice, standard and quick response upright and pendent frame style sprinklers, including the following: VK001, VK003, VK100, VK102, VK108, VK110, VK122, VK124, VK130, VK132, VK200, VK202, VK204, VK206, VK300, VK301, VK302, VK303, VK350, and VK352.

B. Dry Sprinkler Guard: No Listings or Approvals

## 3. TECHNICAL DATA

## **Specifications:**

# A. Model D-1 Sprinkler Guard

Dimensions: 3-5/8" (90 mm) diameter, 3-1/8" (79 mm) high.

# B. Dry Sprinkler Guard:

Dimensions: 2" (51 mm) diameter, 2-1/8" (54 mm) high.

## **Material Standards:**

#### A. Model D-1 Sprinkler Guard:

Guard: Bright Basic Steel UNS-G10100

Guard Finish: Clear Chromate over Zinc Plating

Screws: Two Self-Tapping 6-32 x 1/2" (Combination Head): Steel

Screw Finish: Zinc Plated

Stainless Steel Model D-1 Sprinkler Guard:

Guard: T302/T304 Electro-Polished Stainless Steel

Screws: Two 6-32 x 1/2" (Combination Head): Stainless Steel UNS-S41000

## B. Dry Sprinkler Guard:

Guard and Ring: Bright Basic Steel UNS-G10100

Finish: Clear Chromate over Zinc Plating

Ordering Information: (Also refer to the current Viking price list.)

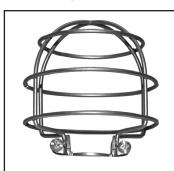
## A. Model D-1 Sprinkler Guard:

The Model D-1 Sprinkler Guard may be ordered separately or factory installed on Viking upright and pendent standard or large orifice, standard or quick response frame style sprinklers.

NOTE: The Model D-1 Sprinkler Guard is NOT designed to be used on sidewall sprinklers, ELO sprinklers, or sprinklers installed in recessed escutcheons.

To order the Model D-1 Sprinkler Guard separately (Figure 1 - Top):

- 1. Order Viking Par t No. 10325 or
- 2. Order Viking Part No. 12198 (Stainless Steel)



Model D-1 Sprinkler Guard
Order Sprinkler Guard Separately
or Factory Installed
(See Ordering Instructions)



Model D-1 Sprinkler Guard on Upright and Pendent Frame-Style Sprinklers\*



\*The standard response sprinklers with 5 mm glass bulb shown above are representative only. The Model D-1 Guard may be used with standard and large orifice, upright or pendent standard response sprinklers with 5 mm glass bulbs; standard response fusible link sprinklers; and quick response sprinklers with 3 mm glass bulbs and QR fusible element sprinklers VK301 and VK303.

Figure 1

Sprinkler 130b June 17, 2011



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## To order the Model D-1 Sprinkler Guard factory installed:

- 1. Refer to the Viking Price Book to select the appropriate base part number (plus appropriate suffixes for temperature and finish) for the sprinkler used.
- 2. To order the Model D-1 Sprinkler Guard factory installed on the sprinkler, add the suffix "G".
- B. To order the Viking Dry Sprinkler Guard (Figure 2 Top): Order Viking Part No. 08954. NOTE: The Dry Sprinkler Guard is NOT Listed or Approved.

**Accessories:** (Also refer to the "Sprinkler Accessories" section of the Viking data book.) **Sprinkler Wrenches:** 

For frame style sprinklers equipped with Model D-1 Sprinkler Guard, use Wrench Part No. 10896W/B (available since 2000) or 05000CW/B (no longer available).

Model E-1 Water Shield for frame style upright sprinklers equipped with Model D-1 Sprinkler Guards: Part No. 10326 (see page 131a-d).

Model F-1 Water Shield for frame style pendent sprinklers equipped with Model D-1 Sprinkler Guards (see page 131a-d):

- For use on 1/2" NPT Sprinklers, order Part No. 10323
- For use on 3/4" NPT Sprinklers (standard and large orifice only, NOT ELO), order Part No. 10324

## 4. INSTALLATION

- A. Installing Model D-1 Sprinkler Guard: Model D-1 Sprinkler Guards can be retrofitted onto sprinklers that have already been installed on the system. However, it is recommended to install the guard onto the sprinkler prior to installing the sprinkler on the system and prior to applying any pipe-joint compound or tape to the external threads of the sprinkler. Consider ordering the guard factory installed on the sprinkler used.
  - a. Loosen the screws in the brackets at the base of the sprinkler guard.
  - b. Spread and hold the two bracket halves (at the base of the sprinkler guard) apart just enough to place the guard over the deflector and wrench boss of the sprinkler.
  - c. With the sprinkler inside the sprinkler guard, position the guard so the two halves of the bracket grip the sprinkler just below the wrench boss, but above the threads. IMPORTANT! Orient the sprinkler guard so the screw openings in the base of the guard are located at the ends of the sprinkler wrench boss (where the sprinkler frame arms contact the wrench boss). See Figure 1.
  - d. Thread both screws into the openings provided in the opposite bracket half and tighten to secure the base of the guard to the sprinkler.
  - e. Apply a small amount of pipe-joint compound or tape to the external threads only, taking care not to allow a build-up of compound in the sprinkler orifice.
  - f. Install the sprinkler on the piping using the special sprinkler wrench. DO NOT use the guard to start or thread the sprinkler into the fitting.
- B. Installing the Dry Sprinkler Guard: Dry sprinklers must be installed on the system prior to installing the guard onto the dry sprinklers. Note: When installing the Dry Sprinkler Guard on recessed Dry Pendent or recessed Vertical Dry Sidewall Sprinklers, the Viking Recessed Escutcheon Cup must be removed and the sprinkler centered in a minimum 2-1/8" (54 mm) diameter hole prior to installation of the Dry Sprinkler Guard.
  - a. Remove the retaining ring from the Dry Sprinkler Guard.
  - b. Spread and hold the two "C" shaped halves of the bracket (at the base of the guard) apart just enough to place the guard over the deflector and wrench boss of the sprinkler.
  - c. With the sprinkler inside the guard, position the guard so the "C" shaped brackett halves of the guard grip the sprinkler in the slot provided just below the wrench boss. **IMPORTANT! Orient the sprinkler guard so two of the four guard wires align with the frame arms of the sprinkler.** See Figure 2.
  - d. Push the retaining ring over the guard toward the base of the sprinkler until the ring snaps firmly into the depression provided on each of the four wire members of the guard.
  - e. For recessed dry pendent or recessed vertical dry sidewall sprinklers, re-install the Viking recessed escutcheon cup.



Dry Sprinkler Guard (Order sprinkler guard separately from sprinklers.)



The standard response dry pendent sprinkler with 5 mm glass bulb shown above is representative only. The Dry Sprinkler Guard may be used with Viking standard or quick response dry upright, dry vertical sidewall, and dry pendent (including adjustable recessed) sprinklers.

Figure 2

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#### **IMPORTANT NOTES**

The Model D-1 Sprinkler Guard is NOT designed to be used on sidewall sprinklers, ELO sprinklers, or sprinklers installed in recessed escutcheons.

The Model D-1 Sprinkler Guard is cULus Listed and/or FM Approved for use with standard and large orifice, standard and quick response upright and pendent frame style sprinklers, including the following: VK001, VK003, VK100, VK102, VK108, VK110, VK122, VK124, VK130, VK132, VK200, VK202, VK204, VK206, VK300, VK301, VK302, VK303, VK350, and VK352.

Model D-1 Sprinkler Guards can be retrofitted onto sprinklers that have already been installed on the system. However, it is recommended to install the guard onto the sprinkler prior to installing the sprinkler on the system and prior to applying any pipe-joint compound or tape to the external threads of the sprinkler. Consider ordering the guard factory installed on the sprinkler used.

WARNING: Viking products are manufactured and tested to meet the rigid requirements of the approving agency. The sprinklers are designed to be installed in accordance with recognized installation standards. Deviation from the standards or any alteration to the sprinkler after it leaves the factory including, but not limited to: painting, plating, coating, or modification, may render the sprinkler inoperative and will nullify the approval and any guarantee made by The Viking Corporation.

The Dry Sprinkler Guard is NOT Listed or Approved.

IMPORTANT: Always refer to Bulletin Form No. F\_091699 - Care and Handling of Sprinklers. Also refer to the appropriate sprinkler data page. Viking sprinklers are designed to be installed in accordance with the latest edition of Viking technical data, the latest 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. The use of certain types of sprinklers may be limited due to occupancy and hazard. Refer to the Authority Having Jurisdiction prior to installation.

## 5. OPERATION

Refer to the sprinkler technical data page for the sprinkler model used. The Sprinkler Guard is a hard-wire cage designed to encase the sprinkler and protect it from mechanical damage.

## 6. INSPECTIONS, TESTS AND MAINTENANCE

Refer to NFPA 25 for Inspection, Testing and Maintenance requirements.

#### 7. AVAILABILITY

Viking sprinklers and sprinkler guards are 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.

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