

Protect your freezer from fire ... and forklifts.



The Viking ESFR Cold Storage System eliminates in-rack sprinklers in cold storage applications.

Traditionally, cold storage areas have been protected by in-rack sprinklers, increasing expense, limiting racking flexibility, and increasing vulnerability to damage from forklifts. Now, Viking offers a solution that eliminates in-rack sprinklers - and their inherent risks - in environments with temperatures as low as -20°F (-28.9°C).

By utilizing Viking's UL Listed K-25 ESFR sprinklers and a pre-mix of propylene glycol antifreeze, Class II Commodities or less may be stored in buildings up to 40 feet (12.2 m) high with racked storage up to 35 feet (10.7 m). In addition to having a positive impact on total installed cost, the system offers the advantages of a wet system, without the risks associated with in-rack sprinklers.

So, take a closer look and you'll see that the Viking ESFR Cold Storage System is your cold storage solution.

ESFR Cold Storage System

VIKING®

Viking's ESFR Cold Storage System Offers Design Advantages

The Viking ESFR Cold Storage System is fixed fire protection used in refrigerated or cold storage facilities. This system is also appropriate for unheated storage applications in areas subject to freezing.

The piping system is filled with a pressurized, premixed propylene glycol and water solution maintained from a pressure pump system. A Viking Alarm Valve with special trim is utilized to isolate the antifreeze in the system from the water supply.

The Viking ESFR K25.2 Pendent Sprinkler (VK510) is UL Listed for this use with an ordinary temperature rating of 165°F (74°C). Intermediate temperature sprinklers rated 205°F (96°C) that are intended for installation in close proximity to heat sources may be applied as referenced in NFPA 13. With this system, no in-rack sprinklers are needed.

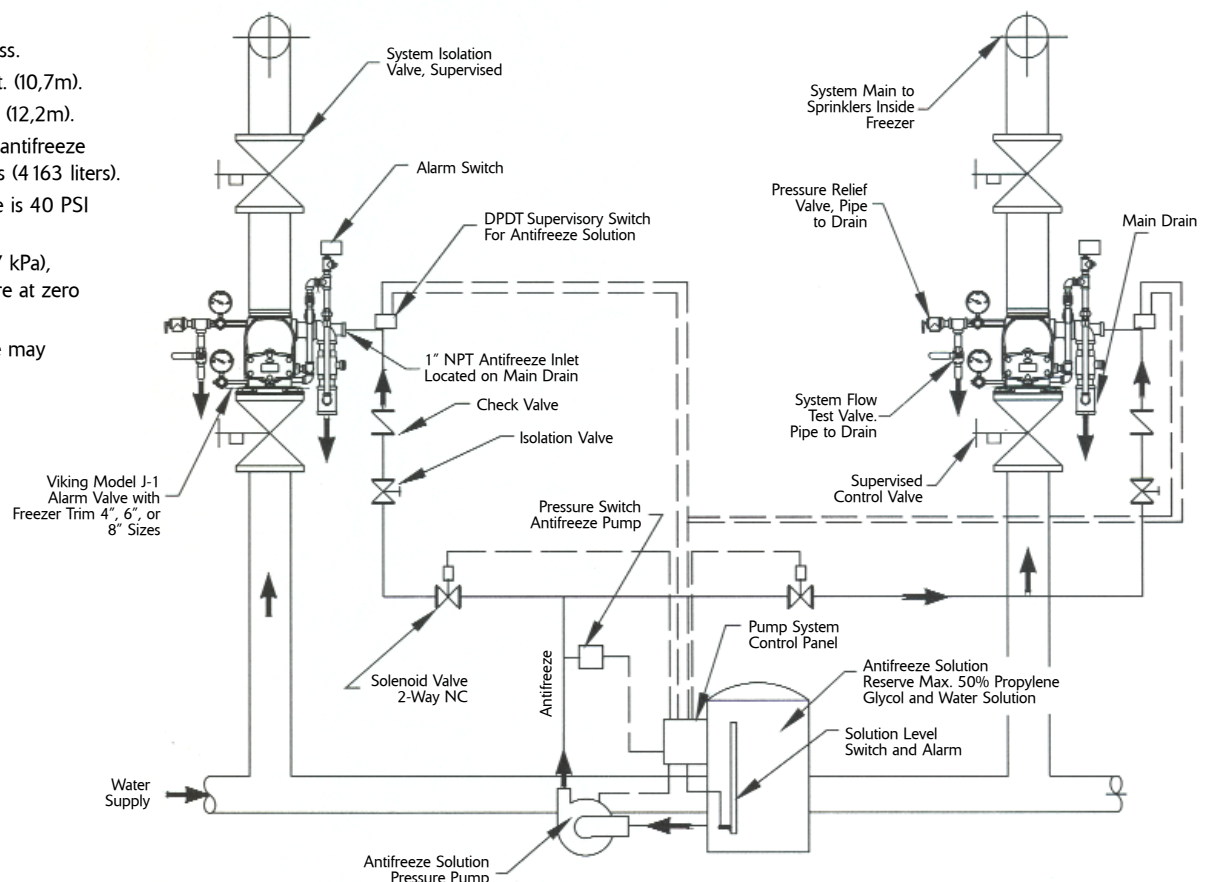
System Features and Benefits

- Eliminates in-rack sprinklers in large freezers, cold storage facilities, or unheated storage environments with temperatures as low as -20°F (-28.9°C). This minimizes the potential for system damage and provides flexibility to reconfigure racking, as needed.
- Two premixed antifreeze solutions are available:
 - Firefighter Eliminator F has a freeze point of -26°F (-32.2°C) and minimum use temperature of -21°F (-29.4°C).
 - Firefighter Eliminator C has a freeze point of 2.4°F (-16.4°C) and minimum use temperature of 8°F (-13.3°C).
- Utilizes Viking's K25.2 ESFR (VK510) Pendent Sprinklers, both 1" NPT and 25mm BSP versions, which are UL Listed for use with this specification. The Listing is based on full-scale fire testing at Underwriter's Laboratories.
- Wet system design:
 - Eliminates need for a detection system, reducing cost and alleviating maintenance concerns.
 - Eliminates possibility of ice plugs associated with air supplies.
 - Eliminates requirement for air-drying apparatus, reducing system cost and maintenance.
 - Eliminates the need for 30% increase in design area (as specified by NFPA for dry systems) and allows the use of gridded piping system.



Technical Data

- Protects Commodity Class II or less.
- Maximum storage height of 35 ft. (10,7m).
- Maximum ceiling height of 40 ft. (12,2m).
- Maximum system volume of the antifreeze and water solution is 1,100 gallons (4 163 liters).
- Minimum system design pressure is 40 PSI (278 kPa).
- System rated up to 175 PSI (1 207 kPa), including fire pump test procedure at zero flow rate.
- Pressure tank and pump package may supply up to six risers.



Contact Viking for complete system specifications and availability.

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