



## TECHNICAL DATA

## VSH1230 NOZZLES

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The technical data described herein is for components of the Viking VSH200 and VSH1230 Clean Agent Systems.

For design, installation, and operation instructions, refer to the latest edition of the original source documents as outlined below.

VSH1230: Installation and Service Manual (Part No. 932159), Design Manual (Part No. 932157), and Operation Manual (Part No. 932161).

Visit the Viking website for the latest edition of the technical manuals listed above.

### 1. DESCRIPTION

In the VSH1230 Fire Extinguishing System, discharge nozzles are used to apply the extinguishing agent within the calculated flooding time and to distribute it uniformly in the protected enclosure.

Two types of nozzles are available for the VSH1230 Fire Extinguishing System:

- 180° nozzles that spray the extinguishing agent in a semicircle around the discharge nozzles
- 360° nozzles that spray the extinguishing agent in a full circle around the discharge nozzles.



### 2. LISTINGS AND APPROVALS



UL Listed: Clean Agent Extinguishing System Unit



FM Approved: Clean Agent Fire Extinguishing System



**WARNING:** Cancer and Reproductive Harm-  
www.P65Warnings.ca.gov

### 3. TECHNICAL DATA

#### Specifications

- Minimum and Maximum Agent Storage Temperatures: 0°F to 122°F (-18°C to 50°C)
- Minimum and Maximum Temperatures of Protected Spaces per UL and FM: 60°F to 80°F (15.6°C to 26.7°C)
- Minimum Operating Pressure: 111 psi (7.65 bar)
- Maximum Operating Pressure: 870 psi (60 bar)
- Radius 180° Discharge Nozzle: 35'-9" (10.91 m)
- Radius 360° Discharge Nozzle: 22'-7" (6.9 m)
- Maximum Effective Nozzle Height: 14' (4.27 m)
- Extended Maximum Effective Nozzle Height: 17.9' (5.45 m) - with higher design concentration as a prerequisite
- Maximum Extinguishing Agent Quantity per Nozzle: 466 lbs (725 psi) 386.7 lbs (360 psi)
- Nozzle Orifice Diameters: Refer to Table 1 for limits. NOTE: Orifice diameter gradations are in .004 inch increments.
- Thread sizes: 1/2", 1", 1-1/2", and 2" NPT

**NOTE:** The discharge nozzle is identified with the manufacturer, part number, and orifice diameter.

#### Material Standards

Nozzle: Brass UNS-C36000

#### Ordering Information

To order the Viking VSH1230 Fire Extinguishing System Discharge Nozzles, refer to the following part numbers:

**NOTE:** The nozzle base part number is followed by a three-digit number that refers to the orifice diameter.

*Example:* A 1/2" NPT nozzle with a 180° pattern, and an orifice diameter of 0.220" = Part No. 889061-0220.

**TABLE 1: DISCHARGE NOZZLE PART NUMBERS**

Thread Size	Min. Orifice Diameter	Max. Orifice Diameter	Part No. 180° Spray Angle	Part No. 360° Spray Angle
1/2" NPT	0.165" (4 mm)	0.378" (10 mm)	889061	889069
1" NPT	0.268" (7 mm)	0.689" (18 mm)	889062	889070
1-1/2" NPT	0.406" (11 mm)	1.181" (30 mm)	889063	889071
2" NPT	0.512" (13 mm)	1.575" (40 mm)	889064	889073

**NOTE:** Orifice diameter gradations are in 0.004 inch increments.