

Description

The FIRE KILL™ system for protection of Data Processing Equipment Rooms/Halls Above Raised Floors is unique as it requires very low water pressures and water flow rates.

The system utilized the Automatic Low-Pressure Water Mist Nozzles Model OH-DC1 which are patented automatic, fine water spray nozzles.

The OH-DC1 nozzle create a homogenous fine water mist, which absorbs heat, reduces radiant heat and causes oxygen depletion near the fire, which in turn controls and suppresses the fire. This homogenous mist consists of a high concentration of very small droplets. Because of the small mass of the droplets, the nozzle creates a large coverage, further minimizing the water expenditures and hydrating nearby combustibles.



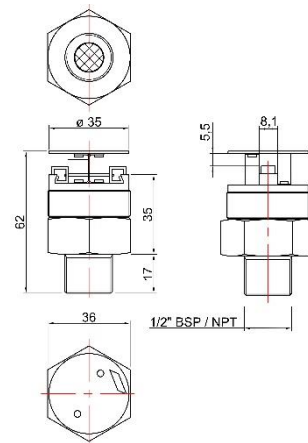
Approvals

The FIRE KILL™ OH- nozzle has been successfully tested to the FM5560 Appendix M, standard for FM Data Processing Equipment Rooms/Halls Above Raised Floors.

Technical data

General Description	
Minimum water pressure	8 bar ≈116 psi
Maximum working pressure	16 bar ≈232 psi
K-factor (metric)	13,4 (l/min/√bar)
K-factor (US)	≈0.93 (gal/min/√psi)
FM approved nominal release temp.	57°C
Other nominal release temperatures	68°C, 79°C, 93°C
Time Response Index (metric)	RTI < 50 Fast Response Class
Drop size	DV90 < 300 µm
Application	
Spacing (max)	3,6m x 3,6m (≈11'8" x 11'8")
Distance to wall (max)	1,80 m (6'0" to walls)
Minimum distance between nozzles	1,80 m (≈6'0")
Hot aisle with open ceiling to plenum	Max 1,2 meter (≈4'0")
Height (max)	5,00 m ≈16'5"
Min. clearance to cable tray	1,07 m ≈3'51"
Max air velocity through raised floor	1,7 m/sec
Max air velocity through cabinets	1,4 m/sec
Nozzle Min distance from ceiling	0,010 m ≈0'03"
Nozzle maximum distance from ceiling	0,135 m ≈0'44"
Hydraulic System	
Water capacity design	6 nozzles
Pump capacity min.	228 l/min (60,2 gpm)
Minimum system operation time	60 minutes
Minimum design area	Unlimited
Pre-action min air pressure	5,50 Bar ≈80 psi to 8 Bar ≈116 psi

Dimension



Specific Description	
Weight	0.211 kg (≈0'465 lbs)
Housing	Brass
Coating	NiSn
Strainer	Stainless Steel
Thread	½" BSP/BSP-T/NPT
Standard Finish	Chrome, White RAL 9010
Other Finish	Other RAL colors
Other Products FM approved in the system	
Name	Model
Alarm Check Valve	WAC
Pre-Action valve	C-EL PA
OH Rosette	OH-R(2)-T / OH-R(2)-TH
OH Pipe Spanner	OH-S42

Installations

The OH-DC1 nozzle is installed either in open pipe work or recessed into the ceiling, with the rosette (escutcheon) flush to the ceiling surface or below with the nozzle cover plate 10 mm to 135 mm below the ceiling. The nozzles can be rendered further nonvisible through customization of the Cover Plate and Rosette; this involves changing the color-finish from the standard Chrome or White RAL 9010 to any other RAL colors.

The FIRE KILL™ OH-DC1 should only be installed in clean, non-corrosive pipe systems, which do not cause galvanic corrosion to the nozzle, the system components and pipe hangers, and with clean rinsed internal surfaces free of impurities. The water quality should be free of chlorides and impurities. After successful installation of the nozzle, the OH-R(2)-T or OH-R(2)-TH rosette is to be screwed on to the nozzle, thus completing the installation process. The nozzle may also be surface mounted into open pipe work. The system should be installed using materials found acceptable by the authorities having jurisdiction.

Caution

The FIRE KILL™ OH-DC1 is a fragile component, containing a glass release element under pressure. Only VID OH-spanners should be used in the installation of the FIRE KILL™ OH-DC1 nozzle.

Dropped or otherwise damaged nozzles should not be reinstalled.

Contact

For further information on FIRE KILL™ products, please contact our sales department at Sales@vidfirekill.com

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