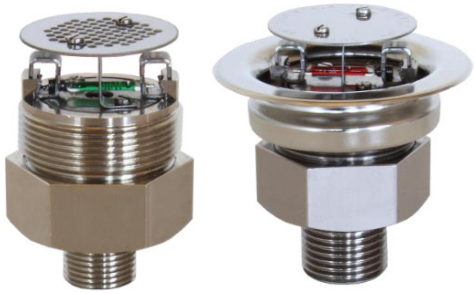
DuraQuench™ OH-DC2 NOZZLE



Description

The OH-DC2 nozzle is an upright, automatic, closed head, low pressure water mist nozzle used in the Fike DuraQuench water mist system for protection of data processing equipment rooms/halls - below raised floors.

The nozzle is unique as it requires very low water pressures and water flow rates to create a homogeneous fine water spray with a high concentration of very small droplets, which absorbs heat, reduces radiant heat and causes oxygen depletion near the fire, which in turn controls and suppresses the fire. Because of the small mass of droplets, the nozzle creates a large coverage area, further minimizing water output while hydrating nearby combustibles.

Approvals

The 135°F (57° C) OH-DC2 nozzle is FM approved and has been successfully tested to FM5560 (2016), Appendix N.

For exact certification listings, reference the respective agency website.

Specifications

Minimum water pressure	116 psi (8 bar)
Maximum water pressure	232 psi (16 bar)
K-factor	0.96 gal/min/√psi (13.85 l/min/√bar)
Nominal flow rate	10.35 gal/min (39.20 l/min)
FM Approved Release Temperature	135°F (57°C) nominal
Time Response Index (metric)	Fast Response RTI < 50 m/√s
Droplet Size	DV_{90} < 300 µm
Weight	0.47 lbs. (0.211 kg)
Housing	Brass
Coating	NiSn
Strainer	Stainless Steel
Thread Type	½" NPT / ½" BSP-T
Standard Finish	Chrome, White RAL 9010 (other RAL colors available)

Ordering

02-16776-A-B-C

A (Threads): 1 = ½ NPT; 2 = ½ BSP

B (Cover Plate): 1 = Chrome Plated; 2 = White (RAL 9010)

C (Temperature): 1 = 57°C (135°F); 2 = 68°C (154°F); 3 = 79°C (174°F); 4 = 93°C (199°F)

Related Products	
02-14879-1	OH-Trim Ring, Stainless Steel Plating
02-14879-2	OH Trim Ring, RAL 9010 (white)
02-14879-3	OH Trim Ring, Stainless Steel Plating, lock screws
02-14879-4	OH Trim Ring, RAL 9010 (white), lock screws
02-15267	OH-S36 Pipe Spanner, Stainless Steel

This document is only intended to be a guideline and is not applicable to all situations.
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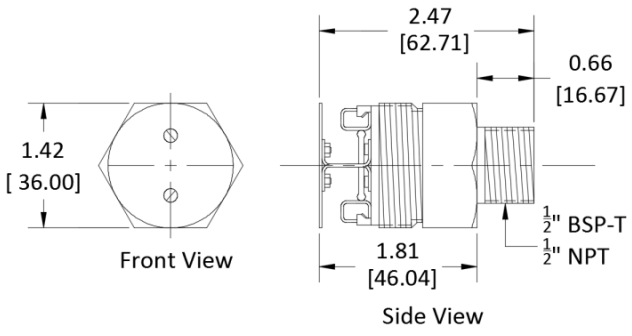
Application

General	
Maximum raised floor height	3.3 ft. (1 m)
Maximum nozzle distance below false floor	3.9 in. (100 mm)
Minimum distance between nozzles	5.9 ft. (1.8 m)
Maximum upward air velocity[1]	5.6 ft./sec (1.7 m/sec)
System demand duration	60 minutes
Maximum water delivery delay	30 seconds
Maximum preaction air pressure	80 psi (5.5 bar) minimum to 116 psi (8 bar)
Type of cable tray	Single-tier only
Area of Coverage	
Maximum nozzle spacing	11.8 ft. x 11.8 ft. (3.6 m x 3.6 m)
Maximum spacing from nozzle to walls	5.9 ft. (1.8 m)
Minimum system demand area	6 nozzles
Maximum protected area	Unlimited
Minimum pump capacity	62 gpm (235 l/min)
Local Application	
Maximum nozzle spacing[2]	11.8 ft. x 11.8 ft. (3.6 m x 3.6 m)
Offset to cable tray edge	0-7.9 in (0-200 mm)
Minimum system demand area	4 nozzles
Minimum pump capacity	41.5 gpm (157 l/min)

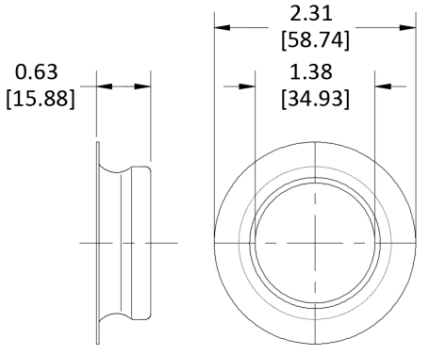
[1] Through perforated floor openings. Where ventilation rates exceed these limits an automatic interlock for the shutdown of ventilation must be provided.

[2] Applied linearly along cable tray length.

Dimensions

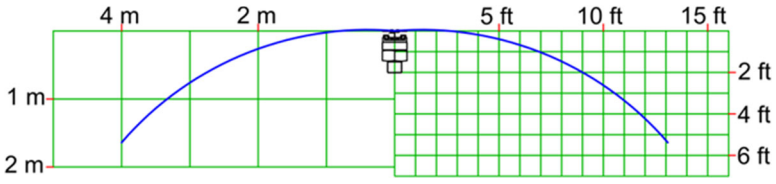


OH-DC2 Nozzle



OH Trim Ring

Spray Pattern



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