

DuraQuench™ OH-DPD DRY NOZZLE UNIT



Description

The Dry Nozzle Unit (OH-DPD) is a series of units consisting of a ½" wet pipe connection (NPT or BSP) with a stop-valve, on which a dry-pipe is connected. At the end of the dry-pipe an OH series low pressure water mist nozzle is connected. The units are available in five standard lengths and are delivered as one fully assembled and factory tested unit.

The OH-DPD unit is typically installed on wet pipe systems where pipe connections are exposed to temperature below 32°F (0°C) such as low-pressure water mist drops from wet pipe systems into freezers or horizontal piping extensions to protected unheated areas.

When the OH series low pressure water mist nozzle activates, the unit's water stop-valve automatically opens to allow water to flow from the wet pipe system through the dry-pipe and out through the OH water mist nozzle.

The OH-DPD has gone through an extensive component test in accordance with the requirements for low pressure water mist nozzles as described in IMO Re. A.800. The test is carried out in an ISO 17025 accredited laboratory.

CAUTION: The OH-DPD unit shall not be used in locations where vibrations may occur.

Specifications

General	
Minimum water pressure	59 psi (4 bar)
Maximum water pressure	232 psi (16 bar)
K-factor	Depends on nozzle fitted
Mounting	Pendent or horizontal
Applications	Freezer, cold storage, garages, loading areas, other areas where frost may occur
Specific Description	
Housing	Stainless Steel
Inlet	Naval brass with NiSn plating
Inlet Threads	½" NPT or BSP (wet pipe connection)
Inlet Strainer	Stainless steel
Internal Valve	Brass with NiSn plating
Finish brass parts	NiSn plating
Finish SS part	Natural

Compatible Nozzles

The following OH series nozzles can be ordered with the Dry Nozzle Unit. Selected nozzle is factory installed onto the unit.

Nozzle Data				
Nozzle Type	K factor	Min. pressure ¹	Max. height	Approval
02-14870	1.16 (16.7)	116 psi (8 bar)	16'-5" (5 m)	FM
02-16844	0.93 (12.5)	87 psi (6 bar)	9'-10" (3 m)	DnV-GL
¹ Minimum pressure defined for the nozzle. When supplied in conjunction with an OH-DPD unit, the minimum pressure at the OH-DPD inlet shall be 7.25 psi (0.5 bar) higher due to the pressure drop in the OH-DPD.				

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Ordering

The selected drop pipe length must include the thickness of the insulation and the exposure length. The Dry Nozzle Unit is ordered as an optional component of the selected compatible nozzle using the following ordering format. Refer to data sheets W.1.07.01 and W.1.27.01 for nozzle details.

02-XXXXX-A-B-C-D-E

A (Material): 1 = Brass; 2 = SST

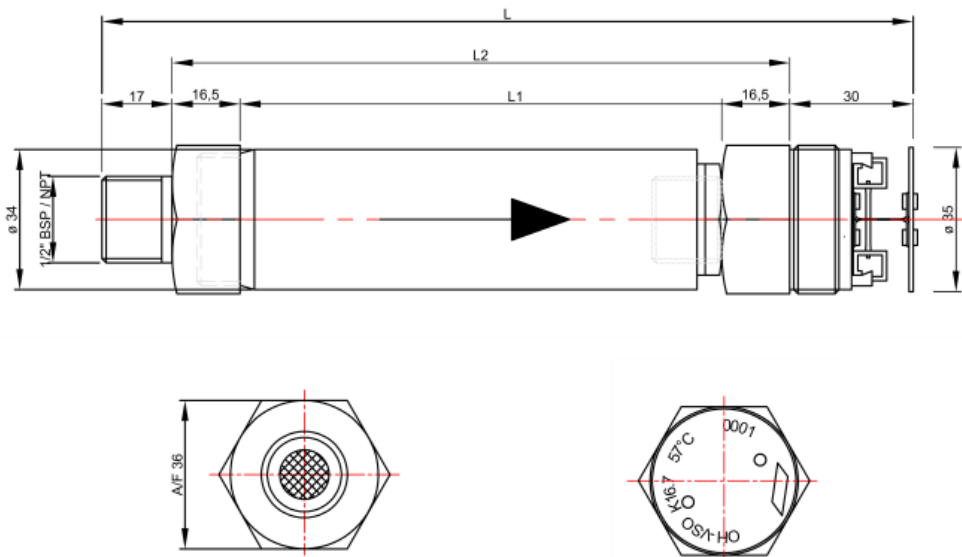
B (Threads): 1 = ½ NPT; 2 = ½ BSP

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

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

E (Drop Pipe Length): 1 = 5.9" (150 mm); 2 = 11.8" (300 mm); 3 = 17.7" (450 mm); 4 = 23.6" (600 mm); 5 = 29.5" (750 mm)

Dimensions and Weight



Type	L in. (mm)	L1 in. (mm)	L2 in. (mm)	Weight ¹ lb. (kg.)
OH-DPD-150	7.7 (197)	4.6 (117)	5.9 (150)	1.5 (0.70)
OH-DPD-300	13.7 (347)	10.5 (267)	11.8 (300)	2.5 (1.15)
OH-DPD-450	19.6 (497)	16.4 (417)	17.7 (450)	3.3 (1.50)
OH-DPD-600	25.5 (647)	22.3 (567)	23.6 (600)	4.1 (1.85)
OH-DPD-750	31.4 (797)	28.2 (717)	29.5 (750)	4.8 (2.20)

¹ Weight includes the OH nozzle.

Installation

The OH-DPD unit shall be installed and maintained in compliance with the relevant OH nozzle type DIOM manual, OH-DPD installation instructions P/N 06-926, as well as the applicable standards of the authority having jurisdiction (AHJ). Failure to do so may impair the performance of these devices and invalidate the operation of the fire suppression system.

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