DATASHEET

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Prev2up
AUTOMATIC LOW PRESSURE
WATER MIST NOZZLE

PREVENT SYSTEMS

WHEN SAFETY IS TAKEN SERIOUSLY

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AUTOMATIC LOW PRESSURE WATER MIST NOZZLE

Part 1

General description
The Prevent Systems low-pressure water mist nozzle Prev2up with fast response thermally actuated release element, is approved by the Loss Prevention Certification Board (LPCB), and listed in the “Red Book”, which can be viewed at RedBookLive.com.

Technical Data

Approvals	LPCB
Minimum operating pressure	8,4 bar
Maximum operating pressure	16 bar
Maximum standby pressure*	12 bar
K-factor	13,4
Flow rate	39 lpm
Nozzle material	Stainless Steel 304
Thread size	1/2” BSP or NPT
Strainer	0.24mm Stainless steel
Release temp.	57˚C, 68˚C, 79˚C, 93˚C, 141˚C
Nozzle position	Upright
Nozzle size	Total length = 50,3mm, max. diameter = 24mm
SIN	Prev2up

*The jockey-pump shall be set to maintain the standby pressure in the system, up to a maximum of 12 bar.

Installation
The nozzles shall be handled carefully before, -under and -after installation. Nozzles that are damaged in any way, shall be replaced. Follow these installation steps:

- The temperature bulb shall be checked for damage prior to installing the nozzle into the nozzle fitting. A small air bubble in the bulb shall easily slide back and forth when tilting the nozzle. There shall be no loss of liquid or cracks in the bulb.
- Apply appropriate sealant to the nozzle threading before hand-tightening it into the nozzle fitting in the upright position, on top of the pipe.
- Use a 20 mm wrench to carefully tighten the nozzle into the fitting.

Operation
During a fire, the fluid in the fast response thermally actuated glass bulb will expand and shatter. The nozzle valve would then open, allowing the water to flow through the nozzle and suppress or extinguish the fire.

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Part 1

Maintenance

The nozzles shall be handled carefully before, -under and -after installation. Nozzles that are damaged in any way, shall be replaced. The nozzles shall not be painted, coated or otherwise altered after leaving the factory.

Notes

For a full description, please refer to the Design, Installation, Operation and Maintenance manual (DIOM). A full training course is offered for the appropriate design, installation, operation and maintenance of Prevent Systems low-pressure water mist automatic fire suppression systems. Contact us for details.

Prevent Systems water mist nozzles are produced and tested to stringent in-house quality standards according to ISO 9001.

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Part 2

The Prev2up is designed and tested for fixed fire protection systems in Parking car garages according to CEN Test Protocol Parking, V1. It has identical spray pattern and k-factor to Prev2exp which has been tested for Public space applications, according to IMO 265 (84) Public Space.

Applications for this nozzle would include protection of office buildings, schools, kindergartens, retail and public space areas in hospitals, hotels, care home institutions, etc. up to 5m ceiling height, and parking car garages up to 3m ceiling height.

Design

Each system shall be hydraulically designed according to the minimum water flows and water pressure, as specified in the Technical Data section, and the maximum allowable coverage area for the nozzles, as described below. The system shall meet the design requirements specified by the Authorities Having Jurisdiction (AHJ).

Max coverage area	Public Space 4 x 4m = 16 m^2
	Parking car garages 3.5 x 3.5m or 3 x 4m = max 12.25m^2
Spacing between nozzles	Maximum 4m, minimum 2m
Distance to wall	Maximum 1.75m, minimum 0.1m
Distance to ceiling	0 – 150mm
Maximum ceiling heights	5m for Public space.
	3m for Parking car garages.
	Ceiling heights exceeding these heights are subject to approval in each case.
Piping (non-corrosive)	Stainless steel, RedPipe, CPVC, subject to approval in each case.
Fire test standard	IMO 265(84) Public Space and CEN Test Protocol Parking, V1.

*In commercial low hazard rooms smaller than 40m², the maximum distance in one direction can be exceeded by up to 20 % if the other direction is reduced correspondingly, so that the maximum coverage area for the nozzle is not exceeded.

Section 4 of the DIOM describes in detail the design requirements and limitations, along with design sheets, nozzle spacing, positioning with respect to obstacles, ceiling slopes, etc.
Section 5 covers hydraulic calculations.

LIMITED WARRANTY

5-YEAR LIMITED PRODUCT WARRANTY ON PREVENT SYSTEMS LOW PRESSURE WATER MIST NOZZLES

The warranty shall cover:
This warranty applies to the full extent permitted by law. The warranty applies to the original buyer for 5 years from date of purchase against defects in material or production workmanship, and only if the nozzles are paid for in full, installed and maintained pursuant to Prevent Systems directions for installation and maintenance.
Nozzles found to be defective shall be repaired or replaced by Prevent Systems. Prevent Systems will not cover any costs or obligations in connection with the sale, repair, or replacement without prior written agreement.

The warranty rights shall follow the building and shall apply to the person who can document that he/she owns the building.

The warranty does not cover:
The warranty does not cover incorrect handling, storage, design or installation of the water mist nozzles. Prevent Systems shall not be liable for any indirect or consequential damages, including labor charges, and the liability shall not exceed the amount of the sales price.

Notification of claim:
Notification of claims which falls under this warranty shall be reported to Prevent Systems in writing without delay, so that immediate action to remedy the issue can be taken.

The rights of this warranty is a supplement to the additional rights of the buyer on the basis of the legislation.

Contact
For further information or for signing up for a training course, please contact us at post@prevent-systems.no or via our web-site www.prevent-systems.com.

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