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Prev2exp AUTOMATIC LOW PRESSURE WATER MIST NOZZLE

PREVENT SYSTEMS WHEN SAFETY IS TAKEN SERIOUSLY



Prev2exp

AUTOMATIC LOW PRESSURE WATER MIST NOZZLE

Part 1

General description

The Prevent Systems low pressure water mist nozzle Prev2exp 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 Pendant

Nozzle size Total length = 55mm, Max. diameter = 24mm

Length under finished ceiling = 35mm

SIN Prev2exp

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

Installation

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

- The temperature bulb must be checked for damage prior to installing the nozzle into the nozzle fitting. A small air bubble in the bulb should easily slide back and forth when tilting the nozzle.
 There should be no loss of liquid or cracks in the bulb.
- Slide the cover plate onto the nozzle, where applicable.
- · Apply appropriate sealant to the nozzle threading before hand tightening it into the nozzle fittinng.
- Use an extended 23 mm socket wrench and carefully tighten the nozzle.

Operation

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





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Maintenance

The nozzles must be handled carefully before, -under and -after installation. Nozzles that are damaged in any way, must be replaced. The nozzles should 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.



AUTOMATIC LOW PRESSURE WATER MIST NOZZLE

Part 2

The Prev2exp is designed and tested for fixed fire protection systems in Public space applications, according IMO 265 (84) Public Space and for parking car garages according to CEN Test Protocol Parking, V1. Applications for this nozzle would include protection of office buildings, schools, kindergartens, retail and general 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 must meet the design requirements specified by the Authorities Having Jurisdiction (AHJ).

Max coverage area Public Space 4 x $4m = 16 \text{ m}^2$

Parking car garages 3.5 x 3.5m or 3 x 4m = $max 12.25m^2$

Spacing between nozzles Maksimum 4m, minimum 2m

 $3,5m \times 3,5m = 12,25 \text{ m}^2 \text{ for parkeringsgarasjer}$

Distance to wall Maksimum 1,75m, minimum 0,3m

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, PrevPex, RedPipe, CPVC, subject to approval in

each case..

Fire test standard IMO 265(84) Public Space and CEN Test Protocol Parking, V1.





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

10-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 10 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 please contact us at post@prevent-systems.no or via our web-site www.prevent-systems.com

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