DATASHEET

WWW.PREVENT-SYSTEMS.COM

Prev4sw - w/o Rosette
AUTOMATIC LOW PRESSURE
WATER MIST NOZZLE

PREVENT SYSTEMS

WHEN SAFETY IS TAKEN SERIOUSLY

PREVENT SYSTEMS

Prev4sw - w/o Rosette

AUTOMATIC LOW PRESSURE WATER MIST NOZZLES

Part 1

General description

The Prev4sw is designed and successfully tested for fixed fire protection systems in Residential and Domestic applications, according to BS 9252. This would include protection of homes, care institutions, apartment buildings, and sleeping areas in hospitals, hotels etc.

Technical Data

Minimum operating pressure	8 bar
Maximum operating pressure	16 bar
Maximum standby pressure	12 bar
K-factor	12,4
Minimum flow rate	35 lpm
Nozzle material	Brass (CW602N)
Thread size	1/2” straight BSP, NPT
Strainer	0.24mm Stainless steel
Thermally actuated bulb	Fast response 3 x 16, RTI 36 (ms)1/2
Release temp.	57˚C, 68˚C
Nozzle position	Sidewall
Nozzle size	Total length = 32 mm, Max. diameter = 39 mm
Piping (non corrosive)	Stainless steel, PrevPex, RedPipe, CPVC, subject to approval in each case.
SIN	Prev4sw

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

Installation

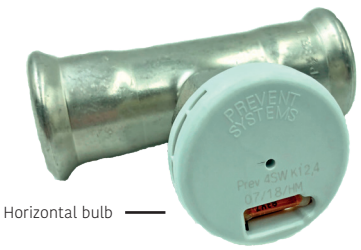
The nozzles must be handled carefully before, -under and -after installation. Nozzles that are damaged in any way, must be replaced. Follow these installation steps:

1. The temperature bulb must be checked for damage prior to installing the nozzle into the nozzl 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.

2. Apply appropriate sealant to the nozzle threading before hand-tightening it into the nozzle fitting.

3. Use a 22 mm wrench on the 6-sided edge behind the release cap, and carefully tighten the nozzle.

4. The nozzle shall be positioned so that the temperature bulb is horizontally positioned at the bottom half of the nozzle, see picture below.



PREVENT SYSTEMS

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.

Maintenance
The nozzles must be handled carefully before, -under and -after installation. Nozzles that are damaged in any way, must 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. Prevent Systems is ISO 9001 certified and the water mist nozzles are produced and tested to stringent in-house quality standards.

Prev4sw - w/o Rosette
AUTOMATIC LOW PRESSURE WATER MIST NOZZLE

Part 2

The Prev4sw nozzle is designed and successfully tested for fixed fire protection systems in Residential and Domestic applications, according to BS 9252. This would include protection of homes, care institutions, apartment buildings, and sleeping areas in hospitals, hotels etc.

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).

Application	Residential and domestic
Max coverage area	4m x 4m = 16 m^2
Spacing between nozzles	Maximum 4m, minimum 2m
Distance to wall*	Maximum 2m, minimum 0.1m
Maximum ceiling height**	3.5m
Piping (non-corrosive)	Stainless steel, PrevPex, RedPipe, CPVC, subject to approval in each case.
Fire test standard	BS 9252

*The maximum spacing between nozzles is 4m and up to 2m from the wall. Distance from walls can be exceeded in one direction by up to 20% if the other direction is reduced correspondingly, so that the maximum coverage area per nozzle does not exceed 16m^2 or 56m^3 volume.

**The Prev4sw nozzle can be installed up to a 3.5m ceiling height. Ceiling heights exceeding 3.5m are subject to approval in each case. (The Prev2exp or the Prev5exp are both options for higher ceilings.)

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 NOZZLE

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

Prevent Systems AS
Fåberggaten 126
N-2615, Lillehammer
Norway