## WATER MIST SYSTEMS

## PROTECTIONUSING

The typical system is composed of:

- WATER TANK WITH A FILTRATION AND FILL SYSTEM
- RG W-FOG UAP IMPULSE PUMP GROUP.
- PNEUMATIC CONTROL VALVE.
- CLOSED FUSE NOZZLES TO DETECT FIRE.


## DRY PIPING

The operation of the RG W-FOG dry piping water mist system has an operation similar to that of the wet piping with closed sprinklers, with the difference between the systems being that instead of having the discharge tubing constantly filled with pressurised water, IT IS PRESSURISED WITH AIR OR NITROGEN TO AVOID FROZEN PIPES.

## OPERATION DIAGRAM

| REST SYSTEM | ACTIVATED SYSTEM |
| :---: | :---: |



WITH DIRECTIONAL VALVES (ISOLATED HAZARDS)


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Dxtector (OW1)

As is typical when a fire breaks out, the activation of one or multiple nozzles occurs, due to the increase in temperature. The piping between the control valve and the nozzle is usually dry, and pressurised with air or nitrogen. The blow of the fuse because of the fire's heat causes a drop in pressure, releasing the air from the pipe. This causes the control valve to open pneumatically, which initiates the discharge of water mist in the area where the fire has been detected, but only through the nozzles that have been activated.

## APPLICATIONS

In dry piping systems, the water does not come into contact with the installation until the moment that the discharge occurs, which is why it is necessary for all of the air/nitrogen to be released from the pipe when the nozzles are activated before the water is discharged.


This equipment is easy to install in environments where there is a hazard of freezing, such as cold stores, refrigerated warehouses or systems installed outside, since the pressurisation of the piping with air/nitrogen is avoided, compared to a wet system that could be damaged by changes in the volume of water upon freezing (joints, blowing fuses, valves, piping, etc.)


