



## MicroDrop®

*“Safeguarding Offices from the threat of fire and smoke damage”*

### The Challenge

Commercial offices have one thing in common in that they all place a heavy reliance on their electrical infrastructure. The need to protect this infrastructure and the office environment from the threat of fire is vital to their “day to day” business activities.

However, in some cases, the sheer size of the office buildings, especially those within high rise buildings require the fastest possible re-instatement of office areas after the effects of a fire to keep business disruption throughout the entire building to an absolute minimum.

What attracts office fire & safety managers to Tyco’s MicroDrop® High Pressure WaterMist system is the fact that in the event of a fire, the system produces only small amounts of residual water. Rooms and areas involved in fires protected by Tyco’s MicroDrop® system can be put back into service far quicker than those protected by conventional sprinkler systems.

The intelligent use of water...

Working in close partnership with independent Insurance Risk Advisors, Tyco Fire & Integrated Solutions developed a High Pressure Water Mist Bulb Operated System providing protection to Offices and other work institutions. The system design and its functional efficiency witnessed during simulated CEN fire tests, provided insurance providers with a truly viable and economical solution to the protection of Offices from the threat of fire.

Today, following continual product development, the MicroDrop® system has set the benchmark for High Pressure Water Mist protection. However, don’t take our word for it. Our MicroDrop® Office “Fast Facts” illustrated overleaf, speak for themselves.



**tyco**

*Fire & Integrated Solutions*

# MicroDrop®

## MicroDrop® Office Protection “Fast Facts”

- No “Post Fire” contamination or environmental issues. MicroDrop® does not use or require performance enhancing additives (foam etc. to fight fires).
- Specially designed MicroDrop® glass bulb nozzles use less water and requires fewer nozzles than any other HPWM system. This ensures cost efficient system design and reduced installation time.
- MicroDrop’s minimal use of water results in less clean up time and faster re-instatement of the working environment.
- No moving parts in the MicroDrop® nozzles ensure cheaper life cycle maintenance costs and higher reliability.
- MicroDrop® Pump systems have a smaller footprint than other conventionally designed HPWM pumps. This eliminates the need for large tanks and pumps and maximises efficient floor space use.
- The design efficiency of the MicroDrop® Pump system is more economical to maintain than other conventionally designed HPWM pumps and therefore reduces life cycle maintenance costs.

The MicroDrop® nozzles are fitted into a distribution network of stainless steel pipework. In the event of a fire, only the nozzle closest to the seat of the fire operates to discharge high pressure water mist into the fire



in a pre-determined spray pattern.

The water supply to the nozzles is fed from either a high pressure 100-120 bar pump and small water storage tank or a bank of cylinders.

In some cases, MicroDrop open nozzles may be required to be integrated into either an addressable/analogue fire detection system or a VESDA system or in some instances, even both types of system. This highly sophisticated system will not discharge high pressure water mist through the open nozzles unless two or more detector devices detect a

fire in its very early incipient stages and send a fire alarm signal to the main control panel. This provides staff with sufficient time to investigate the cause of the initiated VESDA fire alarm and probably prevent a small fire



from becoming a large one in the first place.

MicroDrop® High pressure water mist has a dramatic effect on fire.

As the size of the water droplets are so small, they are lighter and remain airborne longer than conventional water based systems.

The micro droplets also provide a much larger surface area that enables the discharged water to more effectively cool and knock down the fire to a controllable size.

A very important aspect of hotel garage parking and emergency power generator protection is the ability of MicroDrop® to provide a level of smoke scrubbing removing some of the toxic substances from the combustion of fire. This feature also helps to protect personnel and sensitive equipment close to the fire from contamination.

## MicroDrop® Hotel & Leisure Applications at a glance

- Offices
- Public access areas
- Restaurant kitchens & cafeterias
- Generators, boiler rooms and UPS (Un-interrupted Power Supply) areas
- IT and EDP rooms

For further information contact your local Tyco Fire & Integrated Solutions office on: [tfis.microdrop.uk@tycoint.com](mailto:tfis.microdrop.uk@tycoint.com) or visit our website at [www.tycofis.co.uk](http://www.tycofis.co.uk)

The intelligent use of water...

**tyco**  
Fire & Integrated  
Solutions