

# SmartMist **DOME**<sup>™</sup>



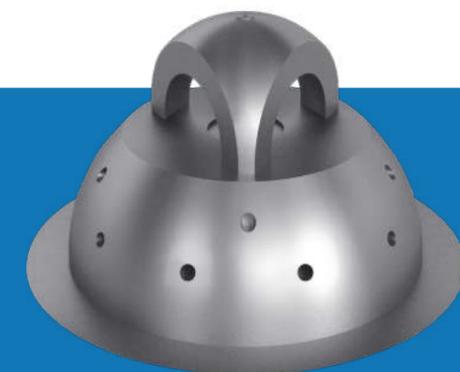
## **Introducing the SmartMist Dome**

Ultra-Compact Design • Certified Excellence • Cutting-Edge Performance

## SmartMist Elevating Fire Safety with the New Dome System

### Experience the Future of Fire Suppression

Welcome to SmartMist, where innovation meets excellence. We are thrilled to introduce our latest advancement in fire safety - the Dome system. Designed to redefine standards in both domestic and residential sectors, the Dome system epitomises our commitment to premium quality and cutting-edge technology.



### The Wonders of Mist Technology

SmartMist harnesses the power of advanced mist technology, offering numerous benefits:

- **Superior Suppression Performance:** Mist technology uses fine water droplets to suppress fires more effectively than traditional systems.
- **Environmentally Friendly:** Our system uses significantly less water, reducing environmental impact and minimising water damage.
- **Efficient and Reliable:** Proven to control fires quickly, helping to protect lives and property.



## Unmatched Features and Compliance

The Dome system is engineered to meet the highest standards, ensuring it is Building Control Compliant and tested to BS8458 for 80m<sup>2</sup> at a UKAS British Test Centre. Manufactured in the UK under stringent ISO standards, the Dome system includes:

-  **Text Messaging Notifications:** Stay informed with real-time alerts.
-  **Automatic Cut-Off:** Conserve water with an automatic shut-off after 35 minutes.
-  **Service Notifications:** Receive reminders for scheduled maintenance.
-  **Priority Demand Function:** Directs all water to the system during a fire, ensuring maximum suppression.
-  **No Water Tank Required:** Seamlessly integrates with existing water supplies, simplifying installation and maintenance.

## Revolutionary Mist Head Technology

Our innovative mist head, small enough to fit on your thumbnail, utilises NanoStream Technology to deliver exceptional fire suppression capabilities. This discreet yet powerful component ensures rapid response and efficient fire control, making it a game-changer in fire safety.

## Versatile Applications

The Dome system is perfect for a variety of settings, including:

- Private Homes
- HMOs (Houses in Multiple Occupation)
- Barn Conversions
- Residential and Nursing Homes
- Hotels
- Social Housing
- Multiple Apartments

## Transforming Fire Safety with Unmatched Elegance and Performance

Designed for Style and Excellence

- **Aesthetic Integration:** Our system seamlessly blends with your interior design, ensuring safety without compromising style.
- **Sleek Design:** With a discreet drop of only 25mm from the ceiling, about the size of a coin, it maintains a minimalist look.
- **Versatile Installation:** The SmartMist Dome pendant nozzle is suitable for both standard recessed installations with concealed pipework, surface-mounted applications with exposed steel pipework, and within ceiling voids where required.

## Advanced Firefighting Technology

- **Cooling Effect:** Our cutting-edge mist technology maximises heat absorption, rapidly cooling the fire and surrounding area.
- **Oxygen Displacement:** Rapid evaporation effectively displaces oxygen around the fire, helping to suffocate flames.
- **Radiant Heat Attenuation:** Provides superior protection from radiant heat, safeguarding people and property.
- **Precision Activation:** Only the nearest mist nozzle activates, directly targeting the fire for maximum efficiency and minimal water usage.

## Water Efficiency and Environmental Benefits

- **Minimal Water Usage:** Consumes significantly less water than traditional sprinkler systems.
- **Direct Mains Connection:** Eliminates the need for water storage, simplifying installation and maintenance.
- **Innovative Cut-Off System:** Minimises water damage by automatically shutting off after 30 minutes.

## Comprehensive Certification and Approval

- **UKAS Accredited:** Passed the rigorous FPA's UKAS accredited BS 8458 Annex C test, securing a unique market position.
- **Building Control Approved:** Fully compliant with the latest building regulations.
- **British Made:** Proudly designed and manufactured in the UK, ensuring top-quality craftsmanship and reliability.

## Intelligent Monitoring and Notifications

- **Smart Notifications:** Receive SMS alerts for monthly tests, faults, activation, and servicing notifications, keeping you informed and your system in top condition.

## Rigorous Quality Assurance

Before shipping, each Dome mist head undergoes rigorous testing in our clinical assembly unit. We ensure optimal performance by checking pressure and flow and verifying the integrity of the frangible bulb in a specialist oven. This meticulous process guarantees that every Dome mist head is fully prepared to provide superior fire protection, reflecting our commitment to premium quality and reliability.

## Installation Guidelines

The SmartMist Dome should be carefully handled between delivery and installation. Upon installation, all nozzles should be inspected for damages, such as damaged bulbs, and SmartMist Systems should be contacted if there are any concerns. The system should only be installed by certified, approved SmartMist Dome system installers.

## Enhanced Precision and Safety

**Selective Activation:** Activated only by fire-level heat, ensuring no false alarms from hot ovens or burning toasters.

**Smoke and Gas Reduction:** Significantly reduces dangerous smoke and gases in the event of a fire, enhancing safety and visibility for occupants.

**Reliable Activation:** In a fire, the frangible bulb activates at a pre-defined temperature (57°C). The bulb expands, shattering the glass, and releasing water into the main body of the nozzle to control and suppress the fire.

## Optional Priority Demand Valve (PDV)

**Maximum Suppression:** Directs all water to the mist system during a fire for maximum suppression, ensuring rapid and effective fire control.



# Dome Mist Head

## DATA

Parameter	Details
<b>Part Number:</b>	<b>SMS-DOME-001</b>
Dimensions:	Ø30mm x 25mm
Weight:	87 gram
Weight: Dome nozzle holder	115 grams
Material:	316 Stainless Steel
Colour/Finish:	Polished Stainless Steel – Natural Colour
Standard Operating Pressure:	90 bar
Minimum Operating Pressure:	40 bar
K Factor:	1.3
Activation Temperature:	57° Celsius
Bulb Response Type:	Super-Fast Response Bulb
Applicable Standard(s):	BS8458:2015 – Residential and Domestic
Minimum Spacing:	2m center spacings, 300mm from obstructions
Maximum Spacing:	4m x 4m
Maximum Coverage Area:	16m <sup>2</sup>
Fixing Method:	SmartMist Secure Thread System





# Dome Pump System DATA

## Pump System Requirements

### Pump

Door opens right hand side, please allow for swing room

Pump Weight – appx. 52kg

Length A – Depth – 270mm      Length C – Height – 700mm

Length B – Width – 600mm      Length D – Height Above Box – 450mm Minimum

If mounting the system on a shelf, please ensure that it is designed to withstand a minimum of 55kg and must be adequate for the entire footprint of the pump system. It must remain fully accessible for servicing works throughout its life and should not be shielded behind any bulkhead.



### Electrical

20Amp 'Type C' breaker to be installed on an independent MCB. This can be adjacent to, but not switched from, the main Main Consumer Board.

2.5mm dedicated FP200 or Similar spec fire-rated cable to be used from consumer unit to 20amp 2-pole lockable rotary isolator switch.

Rotary Isolator Switch must be installed within 1m of final agreed location.

Must come from a constant power supply, and this must not be used with pre-payment meters.

For areas prone to power loss or using prepaid electric meters, we highly recommend installing our 30-minute Uninterruptible Power Supply (UPS) system to ensure continuous operation of the Dome system



Type C Breaker



20 Amp Rotary Switch

### Plumbing

15mm cold water mains feed – must be the first branch immediately after the incoming water supply enters the building.

Must be terminated with a 15mm compression fitting lever ball valve.



15mm Compression Lever Valve



Normally Open PDV

**NOTE** – If incoming water supply is over 12l/min but under 37l/min, you must provide a priority demand valve (pdv). The pdv must be a 230v (mains powered), normally open (no) type valve. This must be installed after the branch for the water mist feed. This must be wired back to the same location as the electrical feed, using a dedicated 1.5mm fp200 or similar spec fire-rated cabling.

# SmartMist **DOM****ME**™

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Certified Excellence  
Cutting-Edge Performance