



MIST SPRINKLER SPECIALISTS

## iCO<sup>®</sup> Misting Nozzles

Technical Datasheet





## Technical Data - iCO<sup>®</sup> Misting Nozzles

Part No:	PU002-02
Dimensions:	Ø72mm x 19mm
Weight:	200g
K Factor:	1.71
Temperature Rating:	57°C
Max Pressure:	1020 psi (70 bar)
Response Type:	Fast (Residential)
Occupancy Type:	Domestic
Connection Size:	3/8" BSP
Minimum Spacing:	2m (6.5ft)
Maximum Spacing:	4m x 4m (13.2 x 13.2ft)
Colour:	White as standard.
Material:	316 Stainless Steel
Fixing method:	Torsion Springs

### TESTING & CERTIFICATION

iCO<sup>®</sup> is ISO9001 accredited for the design, manufacture and supply of water mist fire suppression systems.

iCO<sup>®</sup> has been independently tested by Exova Warrington Fire, a UKAS accredited laboratory and meets the performance requirements of BS:8458 Residential Water Mist Standards and BS:9252 Sprinkler Standards, as validated by the BSI Verification Certificate.

All test reports are available upon request.

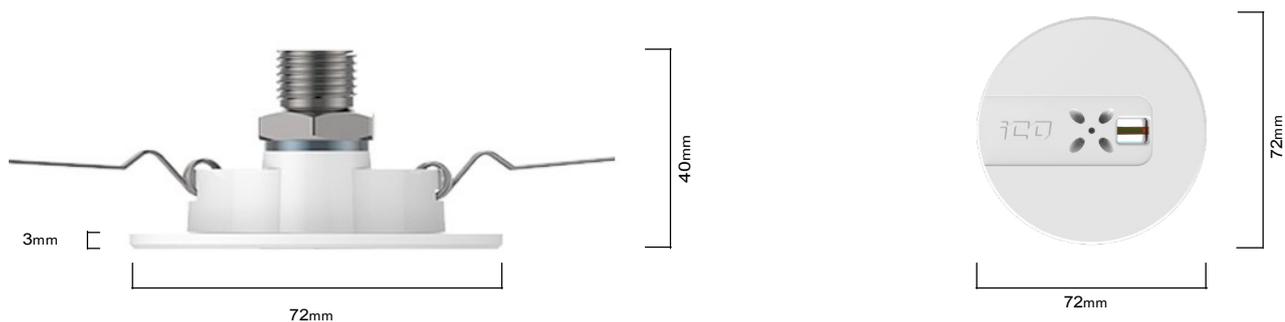


### ACCREDITATION



### DIMENSIONS (MM)

The iCO<sup>®</sup> easy fit nozzles are extremely low profile. Sitting just 3mm below the ceiling they are the most discreet misting water mist nozzles on the market.



### ACCREDITED PARTNERS

Our cost efficient and easy to install solution is designed specifically for the residential and domestic markets, offering design flexibility whilst providing faster and more reliable fire suppression.

As a leading manufacturer of fire suppression systems, iCO<sup>®</sup> sell through a network of accredited distributors in the UK and overseas.

iCO<sup>®</sup> systems must be designed, installed and commissioned by an accredited installer. On-going systems should be also maintained annually by an accredited installer.



\* iCO® Misting Nozzle in situ

## KEY BENEFITS



HIGHLY ADAPTABLE



DISCREET DESIGN



RAPID RESPONSE



ECONOMICAL



REAL-TIME ALERTS



SIGNIFICANT SAVINGS



EASY INSTALLATION



HIGH PERFORMANCE



MINIMAL DAMAGE



LOW MAINTENANCE

## KEY FEATURES

### Excellent Quality Assured

iCO® is independently tested in line with automatic water fire suppression systems standards.

### Discreet Nozzle Design

The iCO® easy fit nozzles are extremely low profile and can be colour matched to any colour using the RAL colour code system.

### Rapid Response

iCO® eliminates the two combustion elements of a fire by cooling and reducing the oxygen level at the base of a fire.

### Reliable Activation

iCO® nozzles are highly reliable and can be activated by a double knock trigger: as an option to reduce the risk of false activation.

### Localised Suppression

Only the nozzle nearest the fire will operate: protecting other areas of the property from water damage.

### Minimal Water Damage

On average iCO® uses 80% less water than traditional sprinklers: minimising water damage whilst providing the same performance.

### Minimal Smoke

iCO® uses very small droplets of water as a fine mist: quickly reducing the harmful smoke and toxic gases caused by a fire.

### Environmentally Friendly

The iCO® system only uses water from the mains when needed: saving vast amounts of water.

### Outstanding Durability

The iCO® nozzles are made from stainless steel and capable of withstanding extreme temperatures in the event of a fire.

### Highly Adaptable

iCO® adaptability means the system can be installed in almost any residential or domestic category project.

### Easy Installation

iCO® simple design and flexible hoses make installation a breeze when compared to conventional sprinkler systems.

### Ceiling Mounted Nozzles

The iCO® misting nozzles are situated in the ceiling: attacking the fire from above without obstruction from furniture.

### Battery Backup

Battery back-up to provide audible alarm in the event of power loss or system failure.

### External Power Out

12V power out for powering 3rd party equipment such as GSM alarm diallers for remote monitoring or external relays.

### Additional Relay Connections

iCO® provides 2 fault & 2 alarm relays as standard for connection to 3rd party equipment such as fire alarms and AOV's.

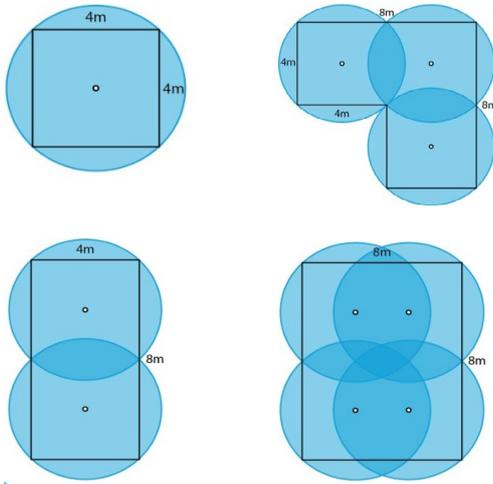
### Real Time Monitoring and Alerts

iCO® System GSM Monitoring provides real time alerts to your smart phone in case of emergency or fault.

# Technical Data - iCO<sup>®</sup> Misting Nozzles

## INSTALLATION

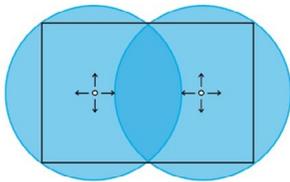
### NOZZLE SPACING: FLAT CEILING



#### Installation Notes:

- <sup>1</sup> 4x4m Grid (16m<sup>2</sup>)
- <sup>2</sup> Max 2m from wall
- <sup>3</sup> 2m minimum distance between nozzles

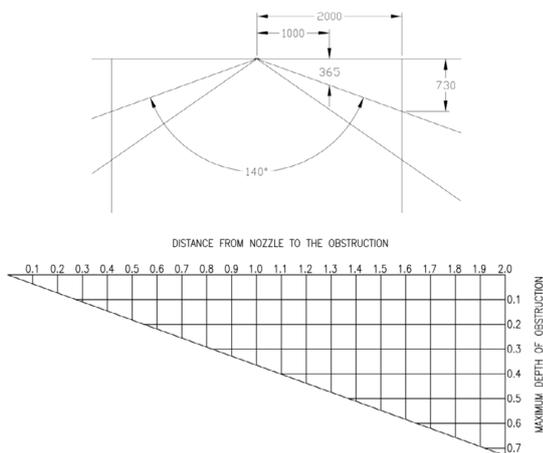
### NOZZLE ORIENTATION



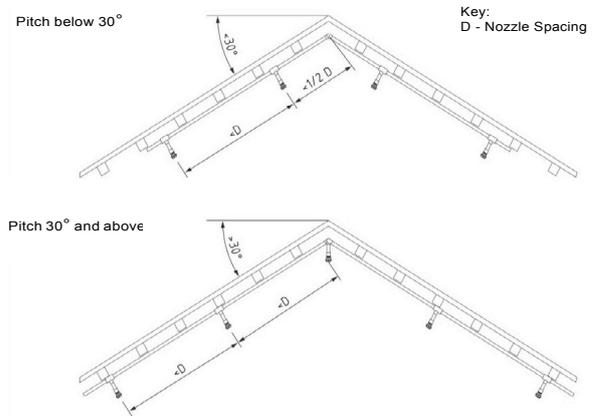
#### Installation Notes:

- <sup>1</sup> The preferred nozzle outlet orientation is perpendicular to the walls of a room.
- <sup>2</sup> Nozzles should be positioned away from obstructions to allow a 140° spray pattern.

### DISTANCE FROM OBSTRUCTIONS



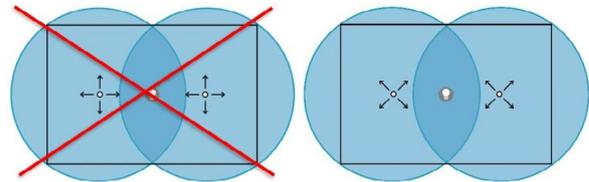
### NOZZLE SPACING: SLOPED CEILING



#### Installation Notes:

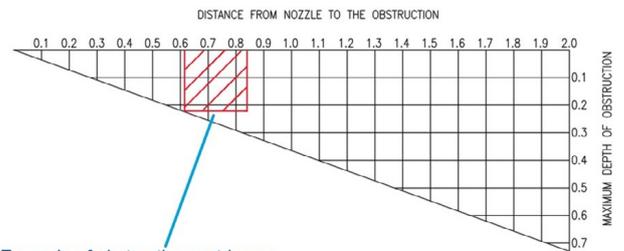
- <sup>1</sup> When installing iCO<sup>®</sup> misting nozzles on sloped ceilings, the position of the nozzle should be determined by the pitch of the ceiling.
- <sup>2</sup> Where the pitch is below 30° iCO<sup>®</sup> nozzles should be mounted at standard spacing when measured in line with the pitch of the ceiling.
- <sup>3</sup> Where the pitch is 30° and above, the first row of iCO<sup>®</sup> nozzles should be mounted within 300mm radially from the apex of the ceiling.
- <sup>4</sup> All nozzles should be mounted perpendicular to the ceiling as shown below.

### NOZZLE ORIENTATION: PENDANT LIGHT FITTINGS



#### Installation Notes:

- <sup>1</sup> Nozzle spray angles should not be directed at pendant light fittings.
- <sup>2</sup> The spray direction can be rotated 45° to spray into the corners of a room to avoid pendant light fittings. Nozzles should be at least 500mm away from a pendant light fitting.



Example of obstruction matrix use.

If obstruction fits wholly inside matrix, nozzle positioning is unaffected.