

CEASEFIRE

# THE SMART RANGE

Watermist Suppression Systems

[www.ceasefire.in](http://www.ceasefire.in)



Bringing World  
Class Firefighting  
Capabilities  
to India.



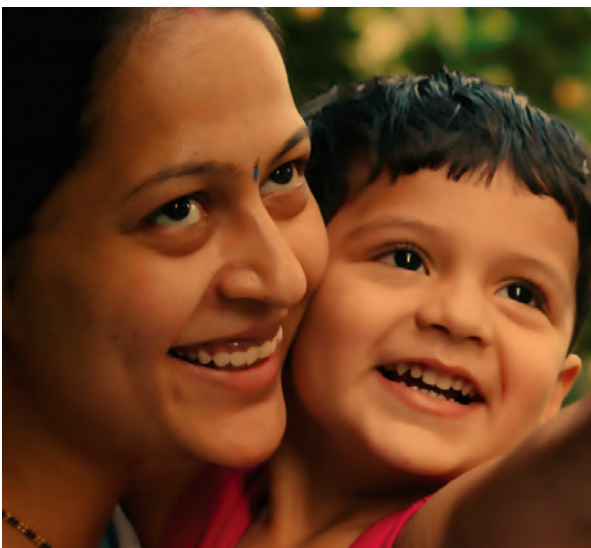




## CEASEFIRE, A NAME SYNONYMOUS WITH FIRE SAFETY IN INDIA

Ceasefire, the name that pioneered fire safety in India, is today a fast emerging global brand that protects millions of people across the world every single day.

For decades now we've developed revolutionary fire safety technologies in India, through our extinguishers and fire fighting systems that are unique to Ceasefire and built at the very forefront of new-age technology.



Today, a Ceasefire product is sold every 60 seconds, and used in a real life fire emergency every 5 minutes. We've never let anyone down.



## A FULL SPECTRUM OF FIRE SAFETY SOLUTIONS

Ceasefire, the most trusted Fire Safety brand in India has today evolved into 360 degree holistically integrated lifesaving fire safety solutions conglomerate. Adding on the brilliant brand recall and

the company's leadership position in the domain, Ceasefire continues to invest heavily in R&D and churns out next gen technologically advanced solutions to retain its cutting edge.



The company today has a range of over 400 lifesaving solutions spanning from Fire Extinguishers, Special Application Extinguishers, Total Flooding Systems, Specialised Kitchen Fire Suppression Systems, Micro Environment Suppression, Hydrant Systems and Ceasefire's Revolutionary Watermist based Fire Suppression Systems. These products are manufactured at the company's state-of-the-art manufacturing facility in India.

Ceasefire also undertakes fire projects on an end-to-end planning, execution and maintenance basis. The company has till date successfully delivered over 250 projects across industry verticals including Power, IT, Healthcare, Telecom, Real Estate, Chemicals and more.





Ceasefire is today a team of over 2000 professionals who collectively work from over 100 Ceasefire branches in the country to bring in 3000 new customers each month.

Ceasefire is today uniquely positioned to offer its customers a one-stop-shop, single window service offering, having evolved fully on the three aspects of-

**One**, a full range of fire safety products,

**Two**, end-to-end solutions for the customers, starting from Design to Manufacturing to Commissioning and Maintenance, and

**Three**, a dynamic distribution model that ensures Ceasefire products are available where the customer needs them making us an omnipresent brand in India.

Today the Ceasefire customers are a family of over 500,000 and include the best names from across industry

verticals. At the core of the Ceasefire's evolution is the company's commitment to its product quality.

Every Ceasefire product conforms to the highest global standards and carry a host of national & international certifications including BIS, EN3, EN1866, PED, ISO 9001 and OHSAS.

Behind our robust distribution are

**100** Branches  
Covering

**300** towns with **1500+**  
trained professionals

**This distribution helps us**

Add **3000** new customers every month

Sell a product every **61 seconds**

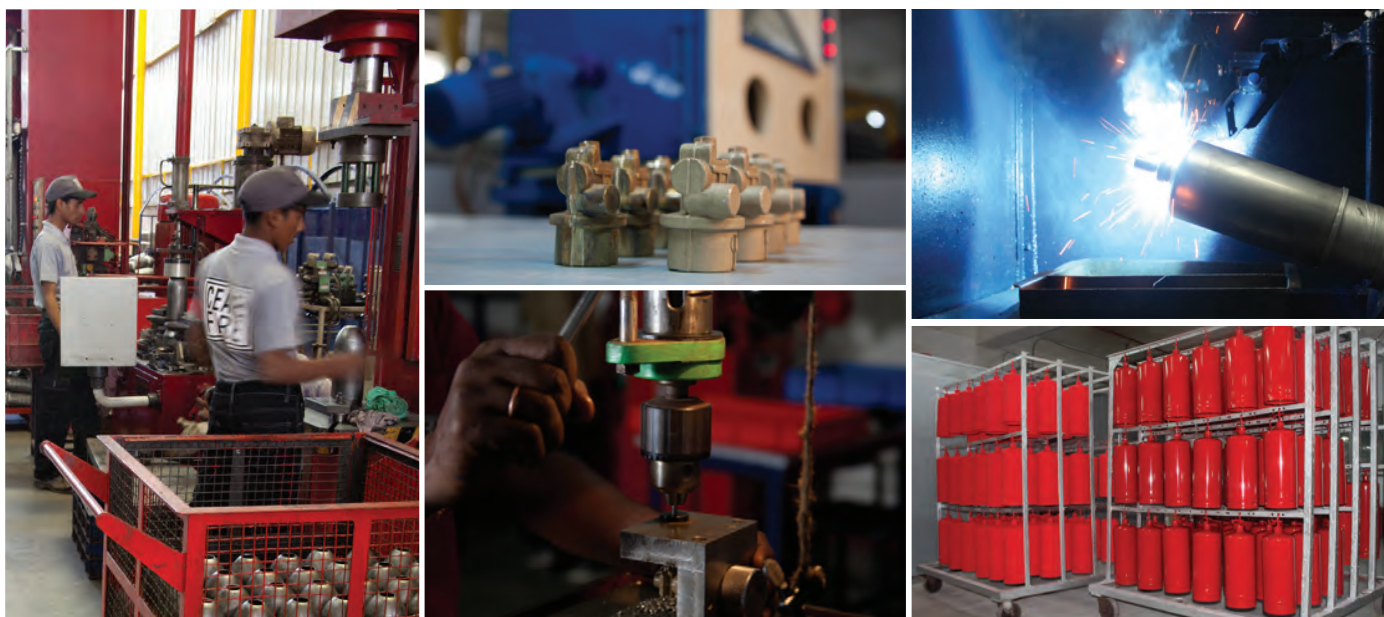
Save a life every **5 minutes**



## THE MANUFACTURING EDGE

In a market where many manufacturing units are little more than assembly operations, Ceasefire's Products are deeply researched, quality-tested and engineered to perform to the highest standards. Manned by over 200 skilled and semi-skilled employees, our manufacturing unit is equipped for backward integration on virtually every component of an extinguisher, from its

outer body to the tiniest valve. This means a greater cost to us, but the resulting quality is faultless. As a result, Ceasefire products Command a premium in the Indian market; and many of them are so unique in function and Application, they have no competition in the market at all.



**Ceasefire's products aren't just assembled; they are engineered to perfection and tested ruthlessly.**



Deep investments in research and development help Ceasefire design products at the in-house Design Centre; and produce critical components at the hi-tech Ceasefire manufacturing unit in Dehradun, India.



The facility has an in-house valve manufacturing unit, and a world class deep draw machine equipped with an advanced hydraulics system.



There's also an advanced MIG CO<sub>2</sub> welding station with motorised technology that creates the strongest, smoothest seam joints.



A state-of-the-art paint shop for weather protection and seamless finish ensures no cracks, rusting or flaking.



And a testing lab where a battery of the most stringent in-ward and out-ward tests determine that only the best quality products are sold.



With a total production capacity of 4.8 lakh product per annum, this ISO 9001 certified facility complies to OHSAS, and has PED approval for pressure filling.



Finally, tie-ups with the world's leading OEMs to customise components to our exact specifications ensure nothing but the best products.



Products that guarantee quality. Products that comply with EN3, MED, EN1866, PED and FPC requirements. Products that are ready for the world.



## EXPORTS TO MARKETS AROUND THE GLOBE

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Ceasefire products are tested and certified to the most stringent, globally accepted safety standards by world's most reputed certification agencies. These include EN3, EN1866, PED, LPCB, BSI, ISO and OHSAS.

With these certifications in place, the company's cutting edge fire safety products are exported around the world

are being very well received in the markets of countries including UK, UAE, Sri Lanka, Nepal, Bangladesh and more.

In some of these markets Ceasefire products sell in their maiden brand name, whereas for some markets the company contract-manufactures for leading brands in these countries under OEM agreements.





## 360 DEGREE HOLISTICALLY INTERGRATED EXPERTISE & SKILL SETS

### THE TECHNOLOGY SUPPORT TEAM



The Technology Support Division at Ceasefire is a truly dynamic team with multi-faceted skill sets. The skill matrix comprises of 200 technology experts who are specialists in the field of Design, Supply Chain Management, Finance, Costing & Estimation, Project Management, Project Execution and after sales. The team has delivered successfully, small to large projects in varied industry sectors including Power, Telecom, Chemicals, Real estate, IT and infrastructure.



### THE DESIGN CELL



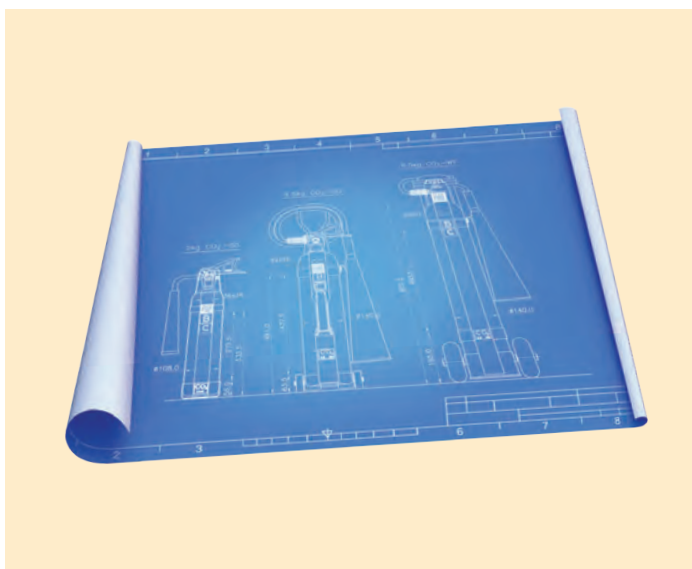
A key part of the product offerings from Ceasefire comes from the company's in-house Design Cell. The cell comprises of Fire Experts, Engineers and draftsmen who:

Design Ceasefire Systems to meet the customers objectives.

Based out of multiple geographical locations of Delhi, Mumbai and Bengaluru.

Work closely with customers to ensure that the fire fighting systems are designed considering the risks associated with the premise and to comply with the statutory requirements meeting the national and state fire codes.

Use the very latest in technology, working with online tools and softwares like pipenet, Autocad, Caesar and Room Integrated Testing Softwares.



## THE SUPPLY CHAIN MANAGEMENT TEAM



Ceasefire Supply Chain team comprises of procurement experts who are well versed with various product standards in the fire industry and ensure smooth supply of quality inputs into any project that the company may have taken up for execution.

This team is based out of Delhi, Mumbai and Bangalore and coordinates for their respective territories covering the entire length and breadth of the country. This team coordinates with all departments and teams internally to deliver the project successfully.



The team holds complete responsibility of smooth and efficient completion of projects and has an impeccable track record of timely and successful handling of over 250 projects till date.

## THE PROJECT EXECUTION TEAM



Ceasefire's Project Execution team comprises of 125 highly qualified and experienced project managers, engineers and skilled technicians.

These professionals execute a diverse variety of projects, spread across business segments and are experts in commissioning systems for holistic fire safety.

The professionals drive teams to deliver projects in the most challenging and demanding conditions and environments without compromising of quality, safety and timelines of project delivery.

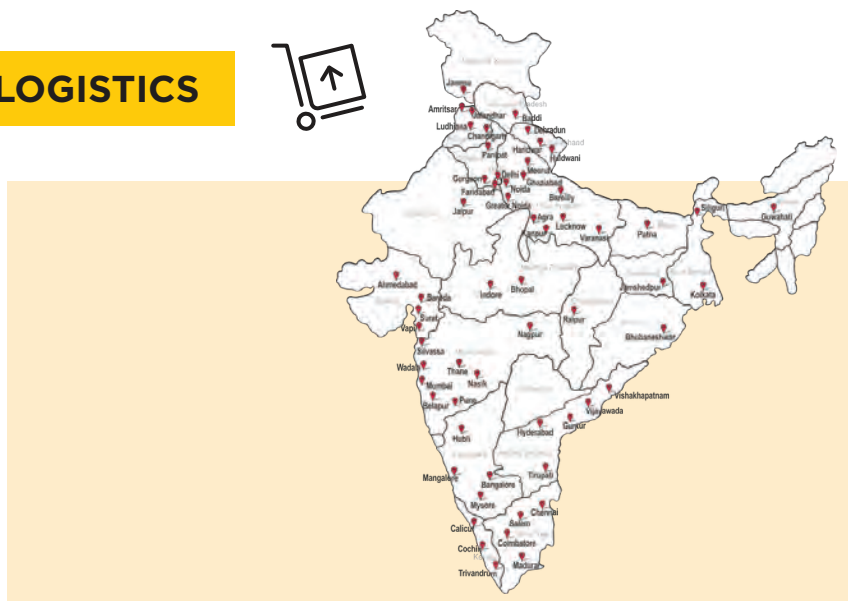
The team is capable of executing Factory Mutual (FM) approved projects and familiar with all fire safety standards like the National Building Code (NBC).





## SEAMLESS NETWORK OF LOGISTICS

Ceasefire's network of company owned and company managed regional warehouses in Delhi, Mumbai and Bangalore ensure that our customers receive the products promptly and the Technology support teams gets all the stock it needs to deliver projects on time, without any roadblocks.



## OUR TAKE ON HEALTH, SAFETY AND ENVIRONMENT



The role of a leader is to be a path breaker, to show others the way forward and contribute towards building a better world. Ceasefire as a pioneer in fire safety takes this role seriously and invests heavily in the occupational health and safety of its employees, ensuring that all our business activities are carried out in an environmentally responsible way.

Every quarter, the teams undergo comprehensive

training to keep themselves updated on the latest HSE best practices and operational procedures.

Every Ceasefire Technology Team member is fully equipped and experienced to train the staff at the client's premises on usage and upkeep of the fire safety products and systems installed at their premises, using the standard best practices and procedures.





## CEASEFIRE AND THE INDIAN SUBCONTINENT

Ceasefire is today ranked as the top fire safety brand in the Indian subcontinent.

From Hospitals to Airports, To Schools and Malls, To Indian Army, Navy & Airforce, To Indian Railways and Ordnance Factory and DRDO labs,

Ceasefire is safeguarding the assets of the nation everywhere like an omnipresent brand.

And of course millions of Indians who use these facilities.





## THE PROMISE THAT FORMS THE FOUNDATION OF CEASEFIRE: OUR PRODUCTS WILL DELIVER AT THE TIME OF NEED, EVERY SINGLE TIME.

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At Ceasefire being in the business of saving lives and property, we understand there is no second chance in the fight against fire. Our products are not just manufactured but are engineered to perfection to become the lifesaving solutions that they are.

Our confidence on quality stems from our robust Research & Development cell which continuously researches for enhancing quality & performance, and every new learning or development is provided as input to our state-of-art manufacturing facility, which in itself drives on a comprehensive quality control eco system.



## THE BIGGEST PROBLEM WE FACED: THE QUALITY AGENCIES WERE PUTTING US IN THE SAME LEAGUE AS THE MEDIOCRE PLAYERS

At Ceasefire we know our products have zero room for error and have always pushed the envelope when it comes to quality. We incorporated such high manufacturing standards into our practice that we not just met, but in many cases surpassed the best laid out in the world.

However unfortunately, the Certification agencies in India would put us in the same league as other small mediocre players in the industry. The standards laid out do not have enough stringent quality test criteria to differentiate superior quality over what is mediocre.



### THE GRIM REALITY

Worldwide, a set of standards determine whether a fire safety product is reliable enough to be a life saver and fit to be sold. While Europe has EN standards, America has UL/FM. Most nations for lack of resources and infrastructure to develop their own standards simply follow either of these two clubs in their markets.

However in India, where certifications like BIS (ISI) are standard now for almost every product, and while it's great that certain quality checks are in place, the honest truth is many companies consider it as a one-time effort.

Certifications are obtained basis only on a few samples submitted for tests. Hence implying profoundly that, the approved prototype and the one protecting your premises could very well be different in terms of quality. Products, once certified, don't go through checks and testing again. Also, there is no factory production control measure down the assembly line for an ISI certification. Nor is there a requirement for the

suppliers of the various components to be approved by the certifying body.

The Indian quality certifications have no provision for the certified product to be periodically audited from the market samples to check if the product is continuously being manufactured at the approved standards.

Therefore from a quality-endorsement-by-the-certification agencies point of view, we as a large reputed manufacturer which has made massive investments in the manufacturing facility, R&D, Customer Service and Support, too had the same certification that was granted to a small player which is not even a manufacturer in the true sense.

We strongly felt the need for superior quality standards and certifications which could actually differentiate the superior quality of our products over the mediocre run-of the-mill, local products.



## WE WANTED STANDARDS TO TESTIFY OUR QUALITY: AN ENDORSEMENT FROM THE BEST IN THE WORLD

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At Ceasefire, We wanted the best quality agencies in the world to test and validate our quality. And that is exactly what we did. We put our products for quality certifications from not just one, but multiple quality agencies. These agencies and standards including EN3, EN1866, LPCB, BSI, PED, MED, ISO and Ohsas are simply the best and most reputed in the global fire industry.

Each of these agencies epitomise safety and performance criteria in their own unique way. The agencies have laid out some of the most brutal test and standards criteria that they are actually programmed to eliminate anything that is mediocre right at the initial scanning stage.

Ceasefire quality standards not just meet these stringent quality parameters, but in most cases surpassed the expectations.

Today the Ceasefire product range is certified for performance and dependability by all the above, leading certification agencies and standards in the world including EN3, EN 1866, LPCB, BSI, PED, MED, ISO and OHSAS.

These quality certifications have yet again endorsed our promise to our customers – Our live saving extinguishers and fire safety systems will deliver at the time of need.



## WHAT REALLY ARE THESE QUALITY STANDARDS AND CERTIFICATIONS?

Each quality standard and the certification agency has laid out its own unique process of testing the fire safety products against given test conditions. Each agency specialises in its unique area of product application. These are..



### **EN3**

This certification for small, portable extinguishers comprises of 10 progressively tough tests.



### **EN1866**

This test is for bigger size extinguishers like trolley-mounted extinguishers.



### **MED (Marine Equipment Directive)**

This benchmark certifies the product to be used on ships, offshore oil rigs and other marine industries. This difficult certification guarantees that the extinguisher is capable of withstanding high salt and humidity.



### **PED (Pressure Equipment Directive)**

PED is one of the biggest European standards. It involves a specialised test that checks the extinguisher pressure, welding, documentation and the manufacturing process of the product.



### **FPC (Factory production Control)**

Product manufacturing and quality check. Even the spare parts dealer's quality is checked.



### **Horseshoe Mark**

This is LPCB's main certification mark awarded to products. It involves a highly comprehensive quality audit.



### **Kite Mark**

This certification by BSI (British Standards Institution) is awarded to products that have the EN3, EN1866 and FPC certifications.



### **OHSAS**

Occupational Health and Safety Assessment Series is an internationally applied British Standard for occupational health and safety management systems.



### **ISO**

The International Organization for Standardisation promotes global standardization for specifications and requirements for materials, products, procedures, formats, information and quality management.



## WHAT MAKES THESE CERTIFICATIONS A TRUE ENDORSEMENT OF QUALITY?

The European standards certifications (EN3, EN1866, PED) are considered best in the world because their scope of audit and tests is all inclusive in nature. The certification doesn't just depend upon the finished product; the certification audit begins with how the raw materials are procured, suppliers audit, inward quality audit, production quality control and outward quality audit.

The scope of the audit does not only end at the production facility but also takes into account checks of products installed at the customers' premises and the audit of the entire after sales services system.

A single change anywhere in the process requires the product to go through the certification process all over again. This guarantees the best product for the customer every single time, meeting exacting quality standards.



## WHAT DO THESE CERTIFICATIONS ACTUALLY ENTAIL?

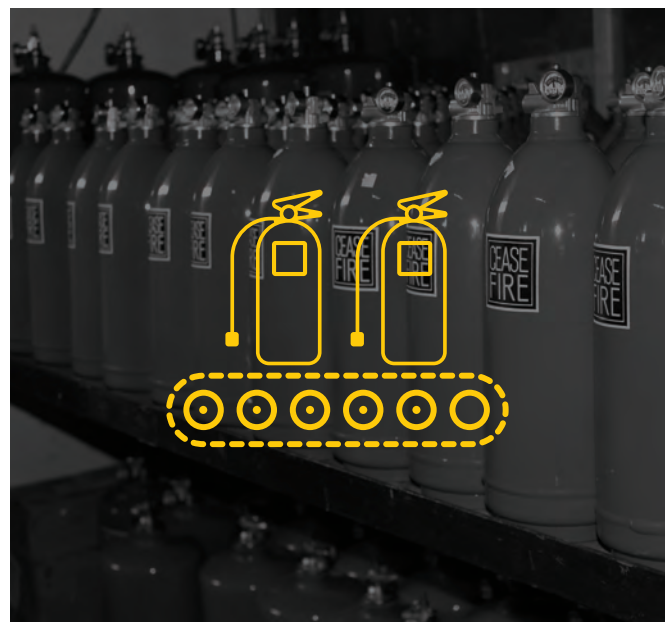


### TESTS AT EUROPEAN UNION-CERTIFIED LABS

Where for ISI certification 7-8 private labs in India conduct the tests, for EN 3/ EN 1866 (LPCB) certification only EU certified international state-of-the-art lab tests ensure that standards are never compromised.

### FACTORY PRODUCTION CONTROL (FPC)

Besides the test of finished product, every individual component in the extinguisher or a fire fighting system is also subject to production line quality checks and checks on raw material suppliers. Having achieved these certifications mean that Ceasefire's manufacturing facility complies with all FPC requirements for international certifications such as LPCB; EN; PED and MED for manufacturing its products. It is the same certified production facility that manufactures the extinguishers & systems that we sell to you in the Indian market as well.



### AUDITS ON AFTER SALES SERVICES & MARKET CHECKS

EN standards are not restricted to rigorous product examination alone. Along with the product and all its components, the after sales services are also audited to examine all the support the manufacturer will provide around the product. Our products are called from our client's premises and checked randomly on a continuous basis. This is a primary requirement to keep our certifications valid.



# INTERNATIONAL CERTIFICATIONS: WHAT DO THEY MEAN FOR YOU?

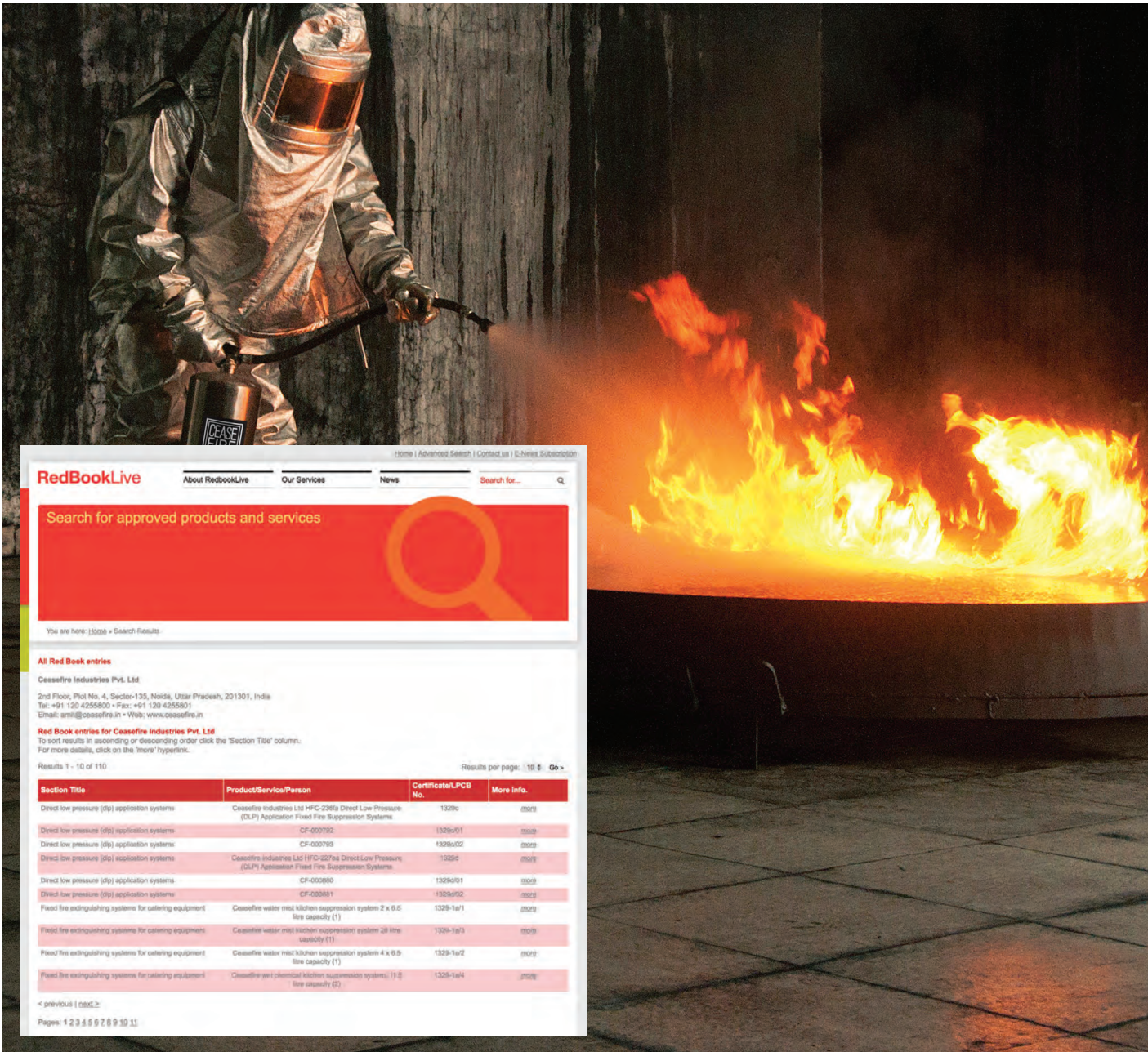
**More Firefighting Power:** For the two products of the same size with the same agent, the one with EN ratings has greater fire fighting potential as it has passed a battery of stringent tests and higher benchmark standards for approval.

**Superior Quality:** An EN certification guarantees that the product you have is absolutely top-notch; ready to protect at all times. Being a lifesaving product that it is, quality plays the utmost important role in Ceasefire production standards. Internal routine audits and external inspections assure that our quality systems are

consistent with international industry standards at all times.

**Globally Recognised:** We have an in-depth understanding of the specific requirements of international certifying agencies and have worked our way to have certified products that are accepted by MNCs and other companies worldwide.

**Transparent Online Verification:** All products certified by LPCB are up on the website [redbooklive.com](http://redbooklive.com) for anyone to check and verify.



## THE CEASEFIRE ECO-SYSTEM

Ceasefire today is one of the world's very few original manufacturing companies in the fire safety domain that has multiple product lines under the same roof. These span from fire extinguishers to In-panel fire suppression systems to Server rack protection system, Kitchen hood fire suppression systems, Hydrant Systems and Watermist and Gas based total flooding systems.

Each of these product categories require specialized manufacturing, design, installation and maintenance capabilities. The company has over the period of time, evolved into this 360 degree fire safety solutions provider, to become a truly rare example in the category.



### Wide range of Portable & Wheeled Fire Extinguishers

ABC Powder, Water & CO<sub>2</sub>-based extinguishers. Certified to EN3 / EN1866 standards.



### Portable & Wheeled Watermist-based Extinguishers

Exclusive range of Watermist-based portable and wheeled fire extinguishers, ready to fight large fires without any collateral damage.



### Special Application Fire Extinguishers

Feature-full Clean Agent, Wet Chemical and Special Agent for Class B and Metal Fire-based fire extinguishers.



### Designer Series Home & Car Fire Extinguishers

ABC Powder & Clean Agent-based fire extinguishers that come in aesthetically pleasing designs and colours.



### In-Panel Tube-based Fire Suppression System

Certified by LPCB for LPS1666 Standard Certification for 2 and 4 kg HFC227ea and HFC236fa gas variants.



### Kitchen Hood Fire Suppression Systems

Watermist and Wet Chemical-based Systems. Certified by LPCB for LPS1223 Standard Certification.





#### Watermist-based Suppression Systems

Watermist-based Systems for exclusive application in offices, warehouses, factories, generator and transformer areas.



#### Specialised Gas-based Suppression Systems

HFC227ea-based System, available in both Engineered and Pre-engineered variants, are certified to LPS1230.



#### Hydrant Systems

Completely Stand-alone Watermist-based Hydrant Systems.



#### Special Firefighting Systems

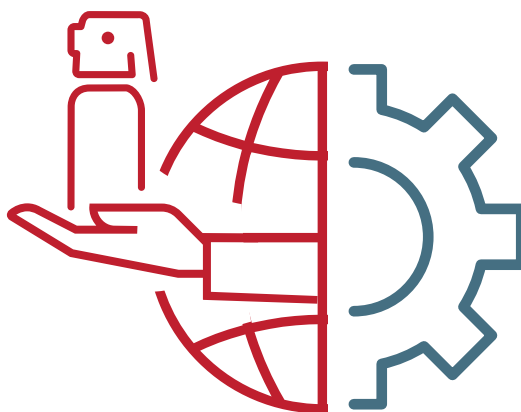
Advanced firefighting systems that are the first of their kind in the world.

## TECHNOLOGICAL LEADER. DEMAND GENERATOR.

As technology leader and continuous product innovator, Ceasefire plays a dual role.

# 1

As a demand fulfiller in existing markets, with superior quality products that command a premium of over 20%.



# 2

As a demand generator, we introduce new products in new proprietary markets to create demand.



THE SMART RANGE

# WATERMIST SUPPRESSION SYSTEM







Today, the fire safety industry across the world is witnessing revolutionary advancements in technology. However, an enormous number of buildings still deploy old-fashioned water-based suppression systems. Even though water, as we know, is the oldest and most natural of all extinguishing agents with a massive cooling power, it still has its own set of limitations.

## ARE YOU HARNESSING THE ENORMOUS POTENTIAL OF WATER?

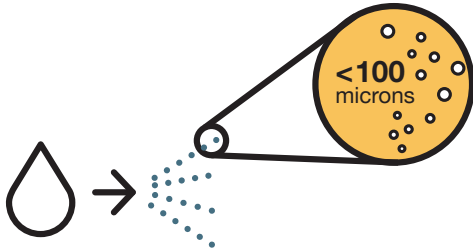
Despite its firefighting prowess, water has its limitations when used in its natural form. The first and foremost limitation of a water-based suppression system is that it is not designed to protect the property. It's built to kill the fire with total flooding and stop it from spreading to the neighbouring building. Total flooding in turn causes huge collateral damages and total loss of assets. To recover from this loss and to get the business functional again takes a much longer time and affects the business in a harsh way.

The flooding in process also leads to a large amount of wastage as only a small percentage of the water discharged actually comes in contact with the fire. In addition to this, to have such

quantity of water available at the time of fire accident requires large water resources or storage tanks. To make matters worse, water in its natural form is not compatible with all types of fire. Like using water on oil fire or an electrically started blaze can be catastrophic. The need of the hour today is cutting-edge technology that causes the least collateral damage whilst maintaining the green benefits of water as an extinguishing agent.

**Ceasefire brings to you its pioneer Watermist-based Suppression System that is fully equipped to detect and suppress fires automatically, without any collateral damage.**

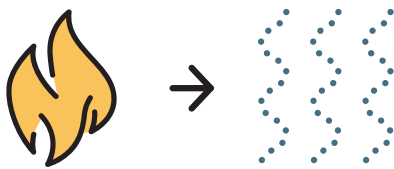
## WATERMIST - THE PARADIGM TECHNOLOGY



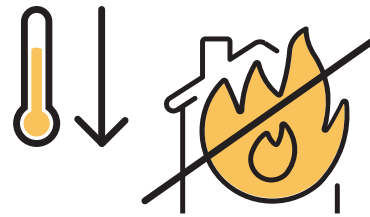
This pioneering technology breaks water down into a fine mist of less than 100 microns.



This mist is then thrown at the fire with an optimal kinetic force, covering a large surface area.



As soon as the mist comes in contact with the fire, it instantly turns into steam, increasing its volume 1600 times over.



The steam envelops the flames, cutting off the oxygen supply and reducing the temperature to below combustion level. This ensures that even the largest fire succumbs to Watermist technology in seconds.

### EVAPORATION SURFACE AREA & SHIELDING SURFACE AREA

Various parameters like the force with which water is discharged, the droplet size of water and the nozzle coverage area make the Watermist system ultra effective on fires. Conventional water-based suppression systems work on the principle of cooling the combustible surface with large droplets of water and hence totally drenching assets.

However, research has shown that the droplet size plays a vital role in killing the fire while protecting assets from collateral damage. When these fine droplets of water enter a fire zone, there is a rapid exchange of heat which cools the fire and converts the droplets into steam. The smaller the size of the droplet, the

larger is the surface area that it can cover for heat absorption and evaporation, thus resulting in lesser consumption of water to suppress the fire.





## CEASEFIRE WATERMIST SUPPRESSION SYSTEM

Ceasefire's revolutionary Watermist-based Suppression System is fully equipped to detect and suppress fires automatically without leaving any collateral damage.

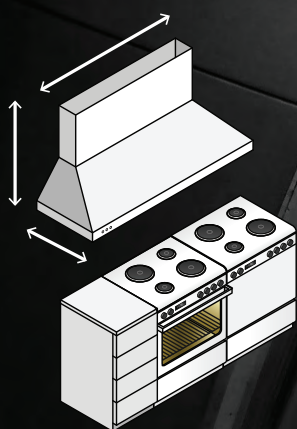
A network of detection devices, special Watermist nozzles, pumps, filters and water tank connectors are installed indoors. In the event of a fire, the system kicks into action in seconds. The specially designed nozzles dispense Watermist, made up of microscopic droplets of water (below 100 microns), onto the fire affected area, quickly putting out the flames as well as bringing the temperature down to non-combustion levels. Entirely self-activated and requiring no human intervention, this integrated system provides a complete detection and suppression solution, working quickly to save property and lives.

What's more, since it is Watermist-based, it has no long-term effect on the work environment and operations can resume with no time lost.

Besides being 100% green, Watermist causes no damage to equipment or the Earth. Making it absolutely safe to use on electronics, sensitive equipment and, above all else, human lives.



### CUSTOMISATION FOR COMPLETE PROTECTION



We believe that no two premises are alike and there is a need for custom-made configuration for each requirement. Ceasefire's Watermist-based Suppression System comes to rescue with an array of key component variants that can be assembled in various configurations

based on the customised requirement of the premises. This unique suppression system will comprise the detection sensors, mist generation technology and Watermist nozzles best suited for that premise.



## WATERMIST GENERATION TECHNOLOGY

Watermist can only be generated when water is passed through the nozzles at a very high pressure. Ceasefire uses three technologies by which water can be converted to be a more potent fire extinguishing agent:

### PUMP-BASED SYSTEM



A large area where higher quantities of Watermist may be required to curb a fire needs a bigger source of water. In such cases, the water is stored in a local tank/reservoir which is connected to a pump and in the event of a fire, the high-powered pump propels water from the reservoir/tank efficiently to the pipes and specially designed nozzles.

### ROTOR-BASED SYSTEM



In cases where suppression systems protect smaller areas, a self-contained pulse mist-based system is used. Water is stored in nitrogen pressurised cylinders connected with detectors, pipes and nozzles. In an event of fire, the pressurised water is pushed through the specialised rotor and a little propellant (nitrogen) is also released into the water pipe via an air tube to create a bubbled mixture of water and nitrogen which arrives at the nozzle.

### LARGE QUANTITY OF STORED COMPRESSED AIR



In this system, compressed air is stored separately to be mixed with water only at the time of activation. When the system gets activated, water and compressed air mix together from two different sources to spray Watermist through the specialized nozzle.



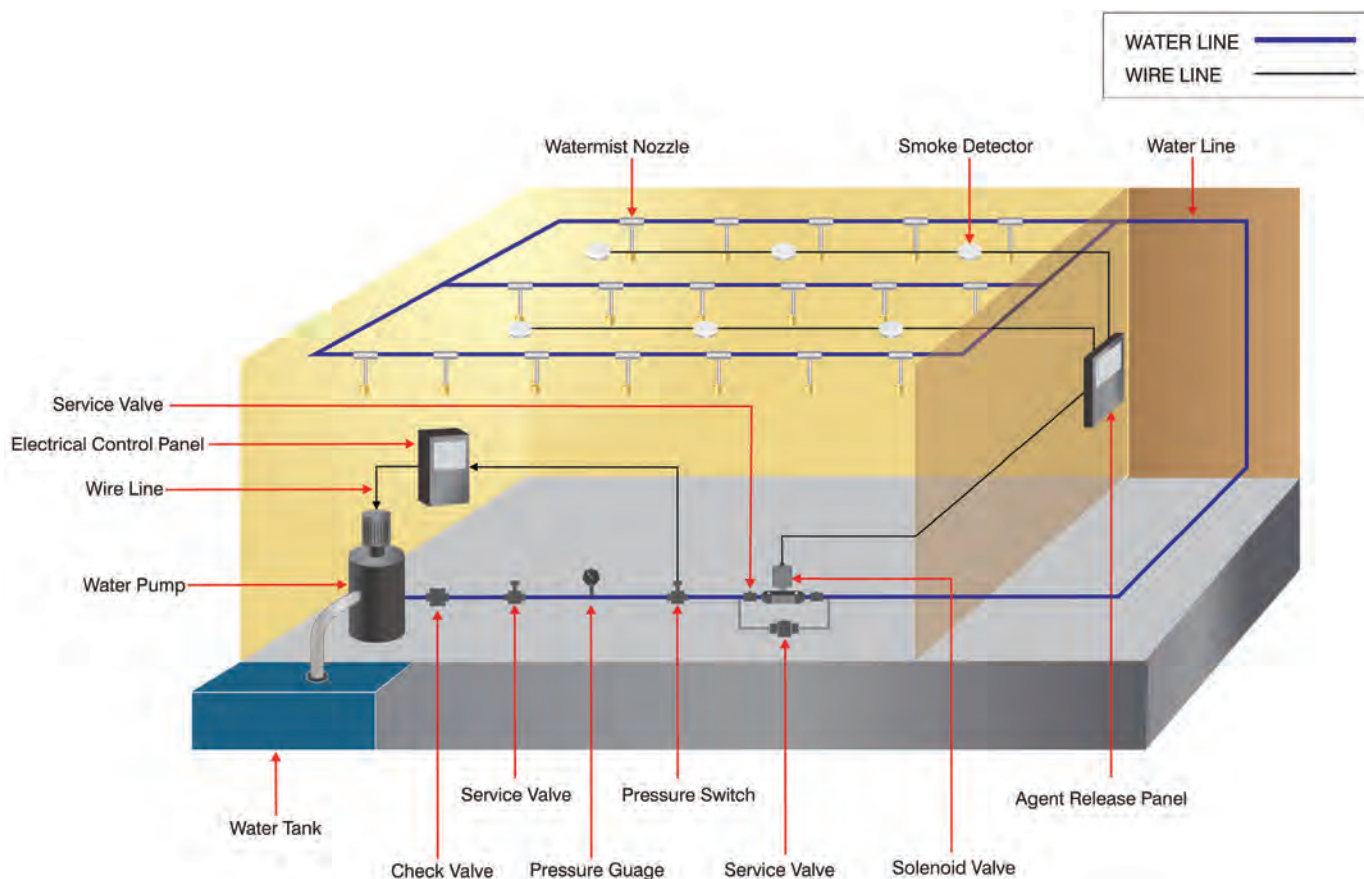
## PUMP-BASED SYSTEM

A fire in a commercial or industrial enterprise can be catastrophic. While preventive measures are a necessity, ensuring you have the right arsenal to fight fire is what's essential.

The Ceasefire Pump-based System is a revolutionary, all-purpose detection and fire suppression system. A network of detection devices, special Watermist nozzles and a connection to a water tank is installed indoors. In the event of a fire, the system kicks into action in seconds. The specially designed nozzles dispense Watermist, made up of microscopic droplets of water (below 120 microns), onto the fire affected area, quickly putting out the flames as well as bringing the temperature down to non-combustion levels. Entirely self-activated and requiring no human intervention, this integrated system provides a complete detection and suppression solution, working quickly to save property and lives. What's more, since it's a Watermist-based System, it has no long-term

effect on the work environment and operations can resume with no time lost.

The Pump Driven System adds cutting edge technology to traditional sprinkler systems by harnessing Watermist for maximum extinguishing efficiency. Not only is it an economical replacement for traditional sprinkler systems in offices and buildings, it's also suitable for large-scale applications, or areas where the fire hazard is likely to be in an enclosed space (such as a large-scale food production unit, hangar, manufacturing unit). Water, the main component of this extinguishing system is stored in a reservoir/tank that is connected to a pump. On receiving a signal from the control panel, a high-powered pump propels water from the water reservoir/tank quickly and efficiently to the pipes and nozzles. This system generates high volumes of Watermist, ensuring higher firefighting effectiveness without using much water.

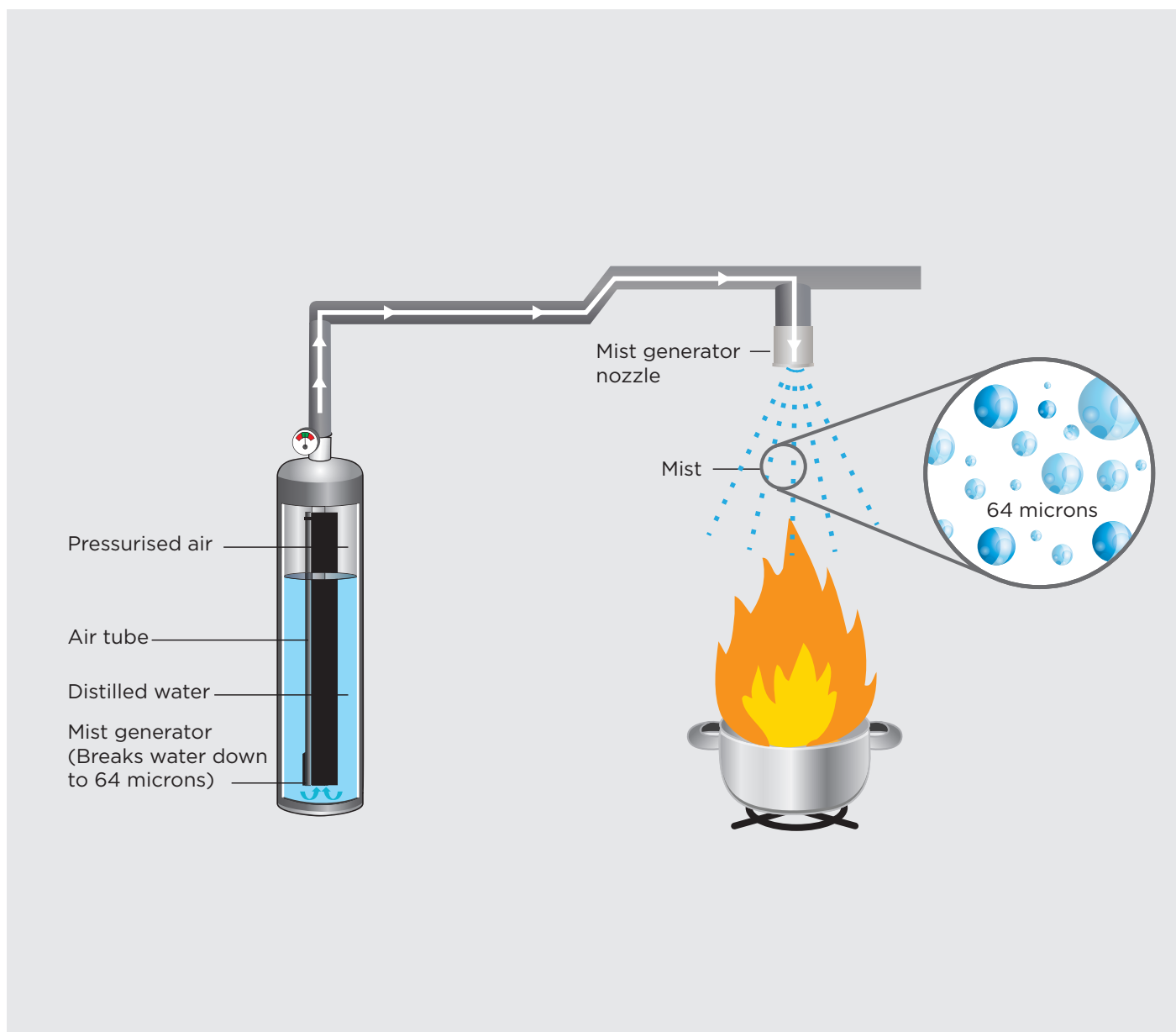


## ROTOR-BASED SYSTEM

A fire in an indoor-based commercial or industrial enterprise can be catastrophic. Not only can it potentially destroy expensive equipment, gut the building and halt your operations indefinitely, it can also result in the loss of precious human life. While preventive measures are a necessity in any establishment, ensuring you have the right arsenal to fight fire is what's essential.

In large hotel chains with hectic, time bound meal services keeping the staff rushing around, these accidents are just waiting to happen. Such an accident can shut down your operations for several days, causing a substantial loss of business revenue. Not to mention the irreversible damage to the reputation of the brand you've carefully built over the years... gone in minutes. The Rotor-based System has been specially

designed for micro-environments, or for areas where the fire hazard is likely to be in an enclosed space (such as in a food production unit, a machinery room, commercial kitchen, office or storage space). The extinguishing agent for the application is stored in cylinders attached to the network of pipes and detection devices. This system also comprises of pressurised cylinders filled with water, available in sizes, rigged to the system via a manifold. A Multi-Rotor System propels water into the tubes. And a Single Hood Schrader Valve and a Multi Hood Pneumatic Spring Ball Valve release the water from the cylinder as soon as a drop in pressure is detected. This water is converted to Watermist in the nozzle, before being thrown at the flames, putting them out in seconds.



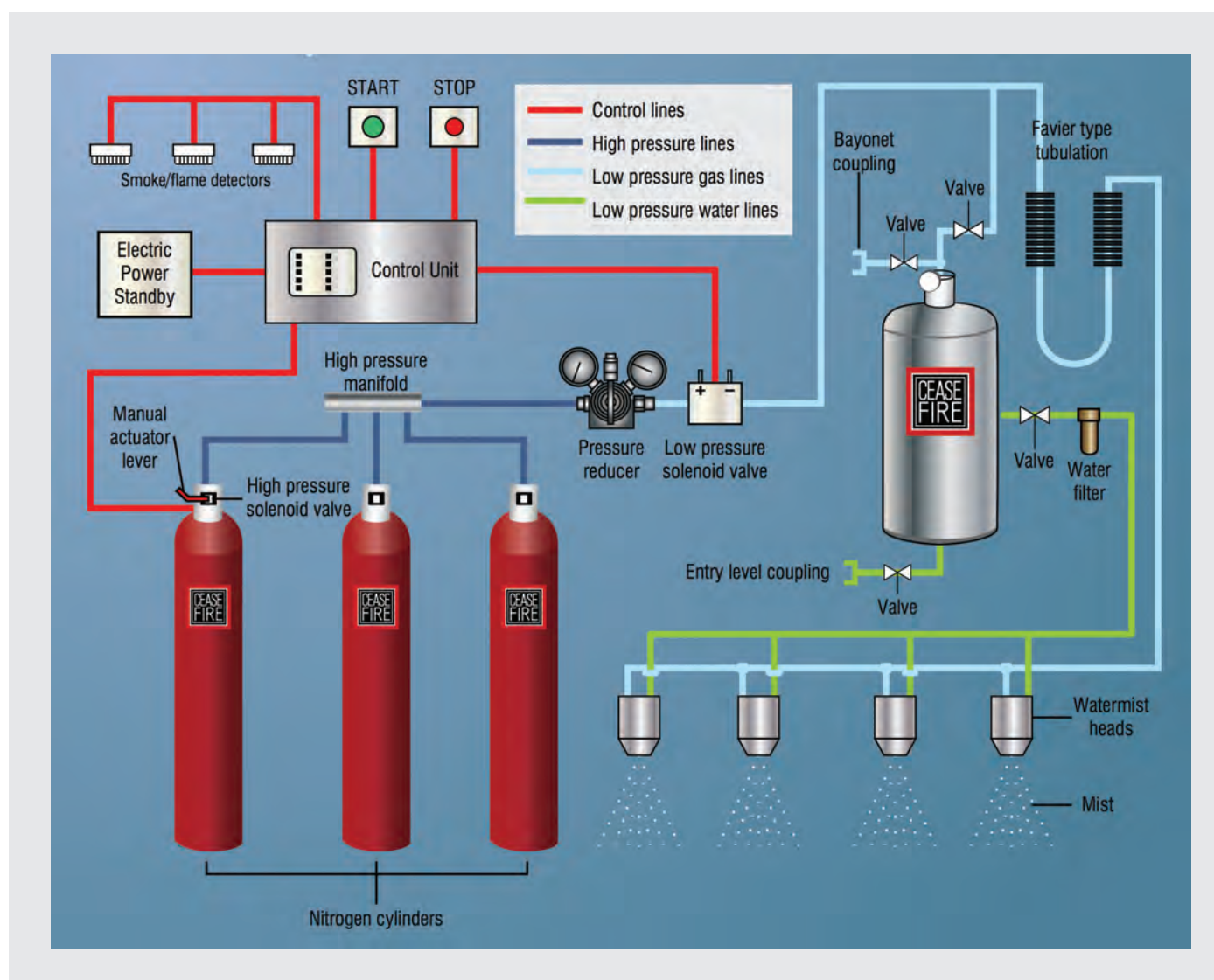


## STORED COMPRESSED AIR SYSTEM

Business hubs such as offices, call centres and remote data sites are packed with expensive, critical equipment and intricate wiring. Enough to not only spark a fire, but fuel it till it becomes a raging inferno. Unfortunately, safeguarding these premises against fires is a challenge. Spread over such a large area, it is difficult to place firefighting equipment everywhere.

The Ceasefire Compressed Air System is a Watermist-based, low-pressure, two-phase flooding system, that achieves extensive coverage with a combination of compressed air or nitrogen and a minimal amount of water. The system uses advanced technology to achieve maximum extinguishing efficiency. When the system's detectors (heat, smoke & flames) sense a rise above normal levels, a signal is immediately sent out to the Control Panel and the system automatically gets activated.

Once activated, the compressed gas from the cylinders enters the reducer via flexible high pressure tubes. At the same time, water from a pipe connected to a cylinder rushes through to the reducer. An integrated nozzle accelerates the gas to a supersonic velocity to achieve extensive throw, and shock-rarefaction waves disperse the water into miniscule droplets of 25 microns to produce a homogenous stream of mist. When thrown at the flames, this mist battles the fire and brings the temperature down to below combustion levels, preventing the fire from reigniting.



## DETECTION SENSORS

The detectors guarantee a first line of safety. Ceasefire's detection range is the result of extensive hardware and software product design and development. Our stringent standards extend to all our products, including detectors. These detection devices communicate with the control panel, sending a signal that activates the system the very second a fire is detected.



**The extensive range of detectors provides flexibility of solutions and application-specific support :**



### **Conventional Heat Detector:**

There are two variants in heat detectors –

**Fixed Temperature Detector:** Heat detection is achieved by the sensor continually measuring the ambient temperature of an area using Thermistor and acknowledging when the temperature exceeds the fixed point.

**Rate of Rise Detector:** Here heat detection is achieved by the sensor measuring not only the temperature rise but also the speed at which it's rising.



### **Conventional Smoke Detector:**

This detection technology works either by the photoelectric method or the ionization method. In both, the sensor continuously analyses the air for the presence of smoke particles.



### **Aspiration Detection System:**

It consists of a central detection unit which draws air through a network of pipes to detect smoke. It may also require a fan unit to draw in a sample of air from the protected area through its network of pipes.



### **Flame Detector:**

This is an optical equipment for the detection of flames.



### **Linear Heat Sensing Cable:**

A line-type form of fixed temperature heat detection cable that detects fire right where it occurs.



### **Heat Sensing Tube:**

The heat sensing tube is a pneumatic polymer tube that is designed to burst at a specific temperature point and actuate the system.



## NOZZLES

The minimal water usage, combined with the fact that Ceasefire nozzles generate super fine Watermist droplets, means the mist quickly vapourises in the fire zone and surrounding atmosphere and causes no harm to delicate equipment. By adjusting the nozzle variant, water volume and air pressure parameters, we can control the qualities of the mists it generates. Droplets can range in size from 10 microns to 150 microns while mist streams may be limited to several centimetres or extended up to 12 metres. This unique flexibility allows Ceasefire to create optimal mist solutions for a broad range of applications.

All the products at Ceasefire are extensively tested in the world's largest, purpose-built, state-of-art fire test laboratories to guarantee that even the largest scale designs are fully proven in real fire conditions.



**Our all-new range of Watermist Nozzles is broadly classified into:**

### SINGLE FLUID-BASED SYSTEM

Here water and air have a single inlet and outlet. Under this application we have two types of nozzles -

**Open Nozzles** are those that are pressurised with water till the deluge or solenoid valve, and

**Closed Nozzles** are those that are pressurised with the water up till the nozzle.



### TWIN FLUID TECHNOLOGY

Here there are two separate inlets and outlets for water and air to form Watermist. Only open nozzles can be utilised in this application.



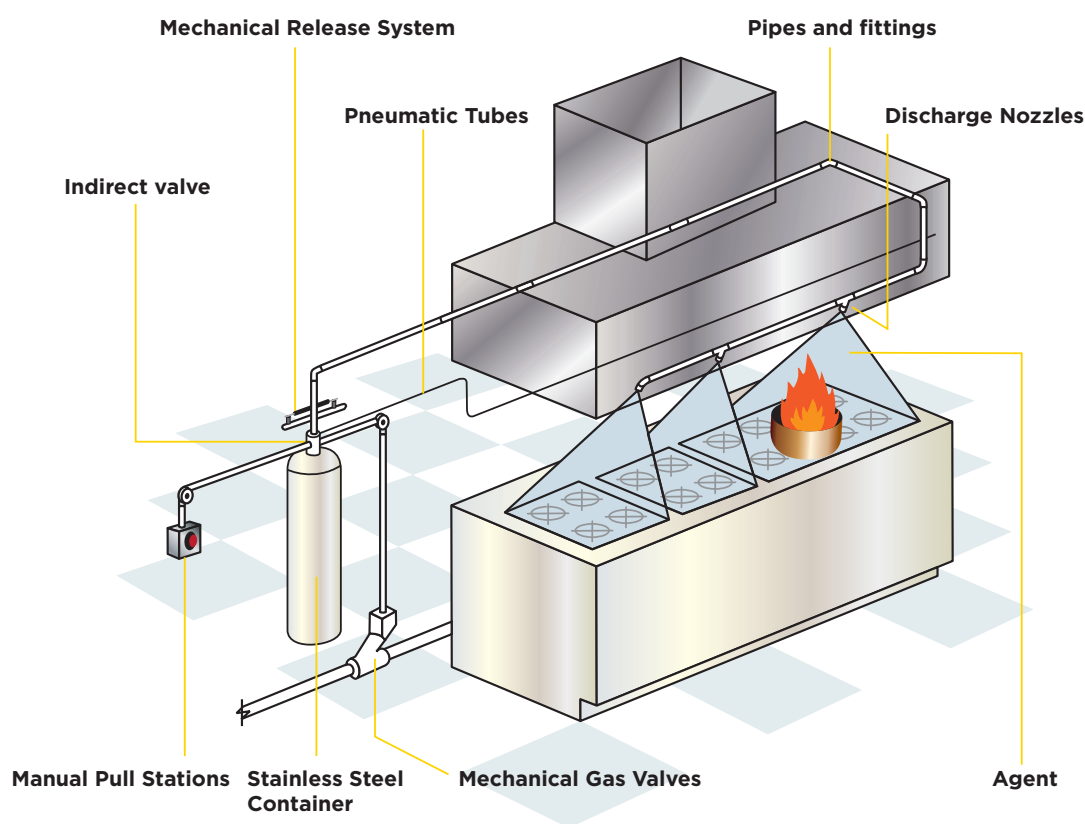
Please find the detailed list of Ceasefire Nozzles variants and their functionality mentioned in the technical specifications section.

## APPLICATION AREAS:

## COMMERCIAL KITCHENS

### RECOMMENDED: ROTOR-BASED SYSTEM

The widespread presence of oil, butter and fat in food production pose a major fire hazard. Not only do oil fires spread rapidly, they cannot be put out with ordinary water extinguishers. And the chemical agent extinguishers that are utilised in such cases are equally tough on food as they are on fire. The Ceasefire Watermist-based Suppression System for commercial kitchens provides the perfect protection for food production units. Being Watermist-based, it's harsh on fires yet safe on food and kitchen equipment.



**Working:** The minute there is a flame under the kitchen hood, the heat sensing tube (HST) bursts due to rise in temperature. The falling pressure in the HST activates the indirect valve to expel the extinguishing agent from the containers. The Watermist discharged from strategically located specialised nozzles, installed in the hood and in all exhaust ducts, covers all possible fire risk

areas. Simultaneously, the system can also shut the valve connected to the gas fuel line and electrical supply line, preventing further heating of cooking oil. Steam blankets the cooking oil and smothers the flames.

The Watermist simply evaporates, leaving your kitchen dry and ready to get back to business.



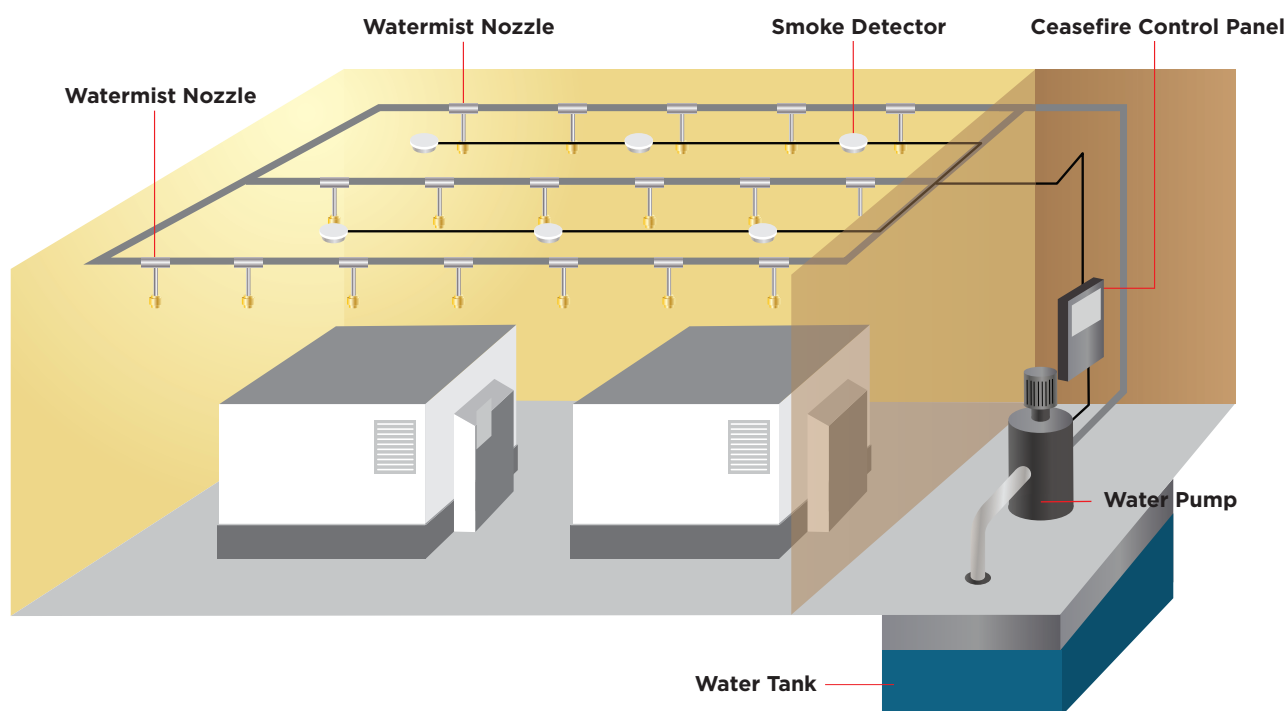
## APPLICATION AREAS:

## MACHINERY ROOM

**RECOMMENDED: PUMP-BASED SYSTEM**

Industrial sheds where expensive machinery and goods are stored can be very vulnerable to fire. Sparks from machines or wiring, caused by power fluctuations or a faulty installation, can fall on inflammable material or on the goods being stored there, resulting in a full-scale conflagration. Not only can it potentially destroy expensive equipment, gut the building and halt your operations indefinitely, but can also result in the loss of precious human life. While preventive measures are a necessity in any establishment, ensuring you have the right arsenal to fight fire is what's essential.

While chemical-based extinguishers can put out the fire, it comes at the cost of the equipment and goods. In such cases, the chemical-free Ceasefire Watermist-based Suppression System, which harnesses non-damaging and non-corrosive Watermist, ensures the fire is put out without leaving any collateral damage. What's more, it can be used on fires involving electrically charged devices as well.



**Working:** A network of detection devices, special Watermist nozzles and a connection to a water tank is installed and in the event of a fire, the system kicks into action in seconds. The specially designed nozzles dispense Watermist, made up of microscopic droplets of water (below 100 microns), and onto the fire affected area, quickly putting out the flames.

Entirely self-activated and requiring no human intervention, this integrated system provides a complete detection and suppression solution, working quickly to save property and lives.

## APPLICATION AREAS:

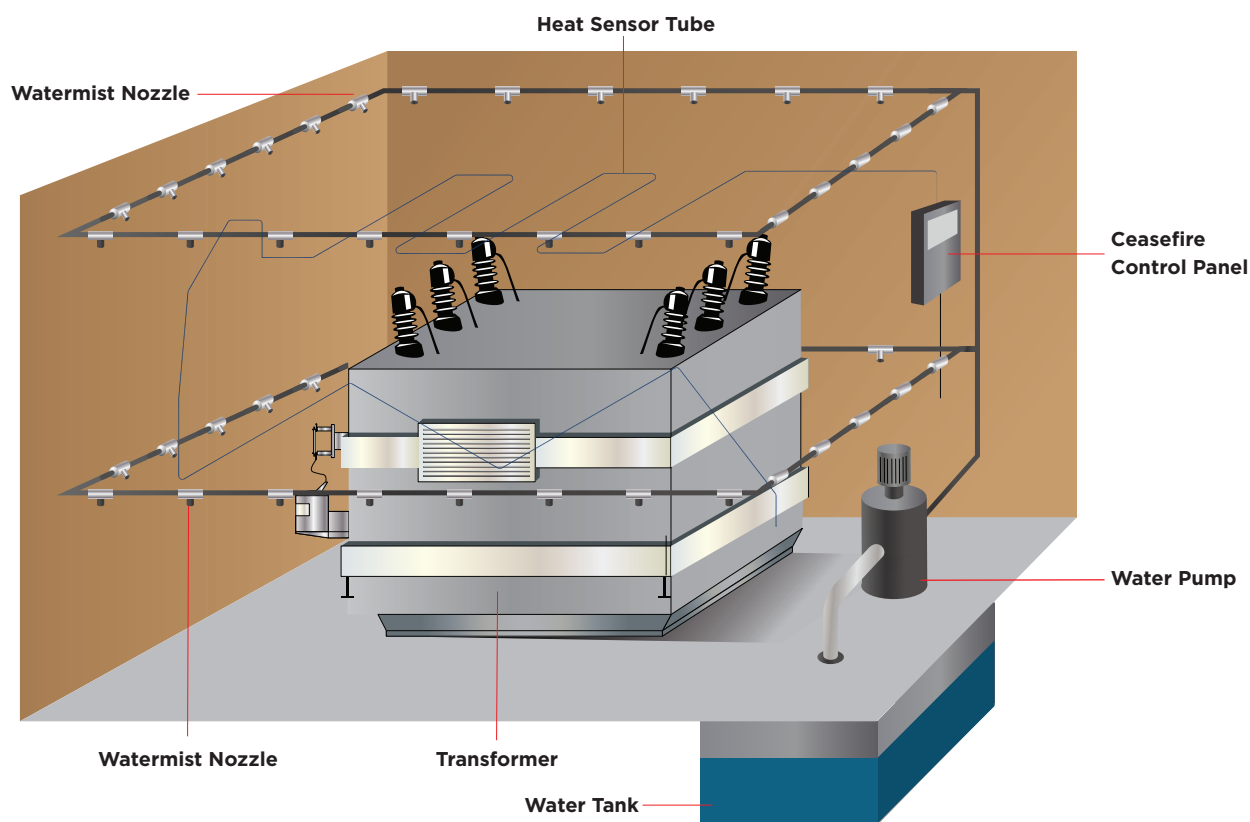
## TRANSFORMERS

### RECOMMENDED: PUMP-BASED SYSTEM

Transformers are electrical devices which convert alternating currents from one voltage to another, making them vital for any operation to run smoothly. The oil needed to fuel these transformers, coupled with high temperatures generated and the presence of huge amounts of electricity, makes the area vulnerable to fire. No matter what the size, oil-filled transformers pose a risk of explosion should the transformer fail and the insulating oil ignite. Even a small spark caused due to faulty wiring can lead to a deadly conflagration.

Besides, the high temperature and spread of oil can cause serious damage to the adjacent areas. Even if you were able to reach the transformer in time, you wouldn't necessarily be able to extinguish the fire.

The Ceasefire Watermist-based Suppression System is perfect for such environments as it detects and suppresses the fire right when it ignites. Watermist confines the fire in or around the transformer area and extinguishes it before it spreads, ensuring zero collateral damage.



**Working:** The system consists of a network of detection devices, special Watermist nozzles and a connection to a water tank installed in the local environment of the transformer. In the event of a fire, the system is programmed to kick into action in seconds.

Entirely self-activated and requiring no human intervention, this integrated system provides a complete detection and suppression solution for transformer fires, working quickly to save property and lives.

## APPLICATION AREAS:

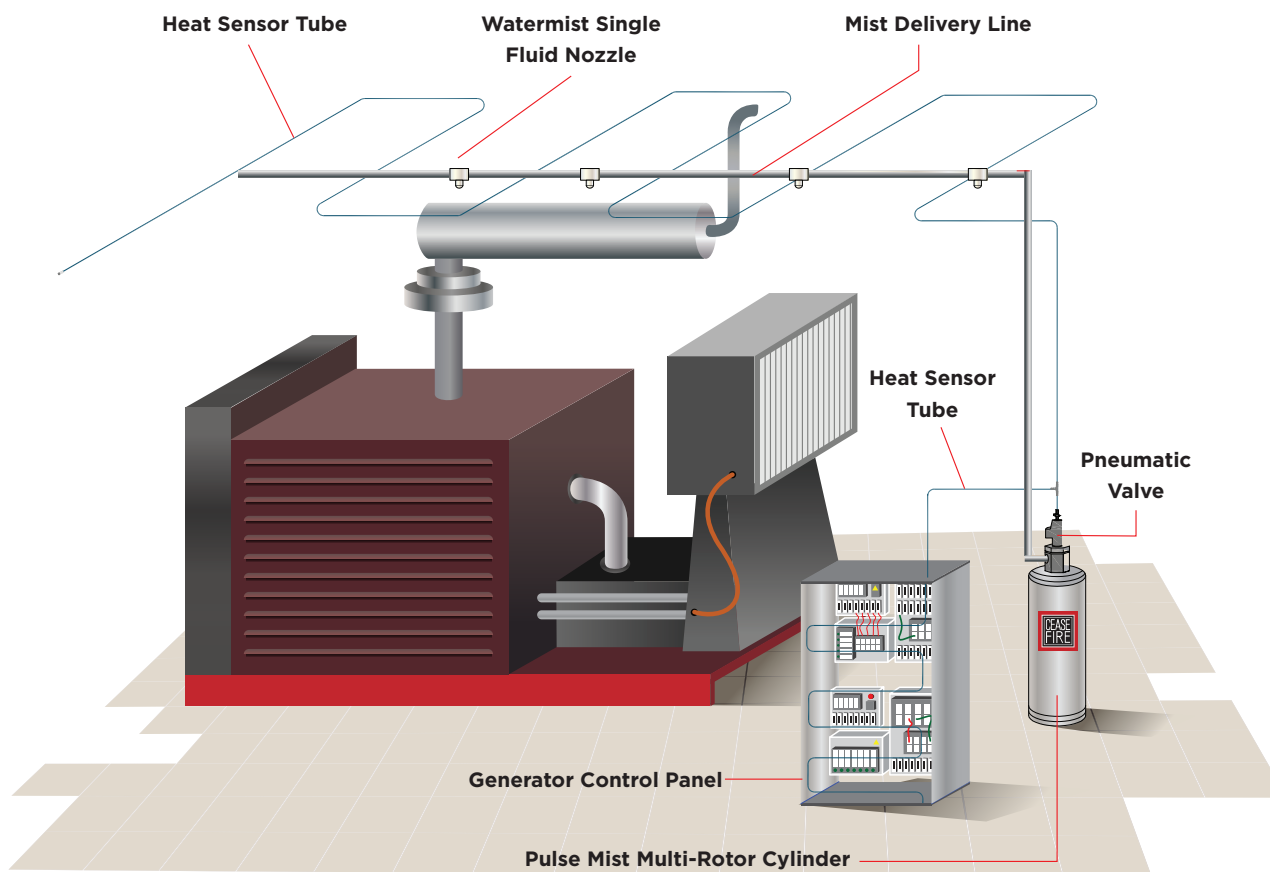
## GENERATORS

### RECOMMENDED: ROTOR-BASED SYSTEM

Gasoline or oil-powered generators are common at manufacturing, commercial and industrial facilities as well as residential premises that rely on a steady source of power. Generators tend to produce a lot of heat, and as a result, the surrounding area gets extremely hot. The unavoidable presence of fuel is cause for concern as sparks can trigger a fire, which soon turns into a raging inferno. Often, generators are placed in remote areas or areas that are difficult to get to quickly. Which means, in an emergency, precious time is lost before help arrives. What's worse is

that even if you detect the fire in time, you wouldn't necessarily be able to extinguish it.

The Ceasefire Watermist Suppression System is fully equipped to detect and suppress such fires automatically, without leaving any collateral damage. This means that the system not only tackles fires efficiently, it also helps reduce the time and money taken to clean up and re-establish damaged property. Its non-damaging, non-corrosive technology ensures zero downtime.



**Working:** First, in the generator area, a network of detection devices, special Watermist nozzles and a connection either to a water tank or water cylinders is installed in the microenvironment. In the event of a fire, the system kicks into action in seconds. The specially designed nozzles dispense

Watermist, made up of microscopic droplets of water (below 70 microns), onto the fire affected area, quickly putting out the flames as well as bringing the temperature down to non-combustion levels.



## APPLICATION AREAS:

## HANGARS

**RECOMMENDED:** ROTOR-BASED SYSTEM

Fueled by the extensive presence of petroleum, grease, paint, etc, fires in aeroplane hangars can potentially end in a devastating explosion. What's more, any damage to the plane or its parts stored there can be economically crippling. Another cause for concern is that the sheer height and the presence of engines and metal could push the fire out of control. In the event of a fire in a hangar, the Ceasefire Watermist-based Suppression System's automatic fire detection and suppression capabilities work quickly and capably to put out the fire immediately. Being water-based, its non-damaging, non-corrosive technology ensures zero collateral damage as well as zero downtime.



## APPLICATION AREAS:

## WAREHOUSES

**RECOMMENDED:** STORED COMPRESSED AIR SYSTEM

Fires in deserted areas such as warehouses and storage areas can go undetected till all the goods stored inside are completely destroyed. What's more, depending on their contents, stored goods can actually provide fuel for the fire. Not only do fires in warehouses result in huge amounts in collateral damage, the fire can spread to adjacent storage areas. The Ceasefire Watermist-based

Suppression system can prove invaluable for such applications. Fully equipped to detect and suppress fires automatically, it works independent of human intervention. As its water-based, Watermist's non-damaging, noncorrosive technology ensures zero collateral damage.



## APPLICATION AREAS:

## OFFICES & INDUSTRIES

**RECOMMENDED:** STORED COMPRESSED AIR SYSTEM

The presence of electronics, wiring, furniture, files, books and carpeting makes offices and industrial areas prone to fires. Not only do fires in such places result in huge amounts of collateral damage, they can also spell an end or long-term halt to business operations. Ceasefire Watermist-based Suppression Systems can prove

invaluable in case a fire breaks out in an office or industrial building. They detect and suppress fires automatically using non-damaging, non-corrosive technology, ensuring zero collateral damage as well as zero downtime. What's more, it's kind on electronics and good for the environment as well.



## APPLICATION AREAS:












## TUNNELS & UNDERGROUNDS




**RECOMMENDED:** ROTOR-BASED SYSTEM

Tunnels and undergrounds are lit 24X7, with very little opportunity to check the wiring. What's more, with automobiles and fumes constantly in the environment even a small spark could trigger an inferno in seconds. The high ceiling doesn't help, making it harder to put out the flames. The Ceasefire Watermist-based Suppression System's automatic fire detection and suppression capabilities work quickly and capably to put out fires in these areas immediately and efficiently. Being water-based, its non-damaging, non-corrosive technology ensures zero collateral damage as well as zero downtime.



## ADVANTAGES OF WATERMIST SUPPRESSION SYSTEM

	<b>Multiple Applications:</b> Works on A, B and electrically started fires, and is suitable for a variety of applications.
	<b>Low Pressure:</b> Water is stored in underground tanks at normal pressure and converted to high pressure Watermist when needed, and hence it's safer to maintain.
	<b>Green Suppression System:</b> Unlike other firefighting agents, Watermist neither damages the ozone layer nor does it contribute to global warming.
	<b>Clean Extinguishing Agent:</b> As the mist comprises water, it does not expose people to chemically active substances, ensuring it can be safely used with no risk of medical problems.
	<b>Economical:</b> Water as an agent does not cost anything. Traditionally the amount of water required is significantly low, which in turn means a smaller water reservoir and pumps with lesser construction and procurement costs.
	<b>Lower Water Usage:</b> Watermist uses only 20% of the water that conventional water-based systems use as it converts the water into a fine mist of less than 100 microns and increases the spread area.
	<b>Self-actuating:</b> Featuring an in-built detection mechanism that leads to instant and automatic activation, the system eliminates the need for human intervention.
	<b>Quick Installation:</b> A simple design ensures the system can be installed within a few hours, which means a major reduction in labour costs and downtime.
	<b>Long-lasting:</b> Its rugged quality ensures it can withstand even harsh conditions where other types of systems might be rendered inadequate.
	<b>Non-conductive:</b> The droplet size is less than 100 microns. Such a small-sized droplet has lower kinetic energy. Being light, it floats in the air and is non-conductive up to 35kva.
	<b>International Standards:</b> Built to Ceasefire's high standards, which are in compliance with international quality standards.

	<b>Post-fire Damage Reduction:</b> About 80% of the damages resulting from a fire are not caused directly by the flames, but by the extinguishing agent. Watermist, with an appropriate degree of dispersion, fully evaporates in the fire environment and leaves no residue behind.
	<b>Extra Security for People:</b> The small droplets of mist fall over a large surface, creating a perfect barrier against thermal radiation, thus providing effective protection against fire for firefighters and people in the vicinity.
	<b>Alternative to Traditional Sprinkler Systems:</b> This system can potentially replace a building's sprinkler system as it works faster than water, resulting in less fire damage and doesn't soak the premises in the process of putting out the fire.



## NOZZLE TECHNICAL SPECIFICATIONS










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### DETAIL SPECIFICATION OF WATERMIST NOZZLES

S. NO.	NOZZLE DESCRIPTION	NOZZLE NO.	PRODUCT IMAGE	MODEL NO.	X (KIND OF MATERIAL)	Y (KIND OF CAP)	BASIC EXTINGUISHING MEDIA	NET FILTER OPENING	DROPLET SIZE D <sub>v</sub>
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### NCSFH NOZZLES (OPEN)

1	Net Filter Circle Single Fluid Head	CF-NCSFH 08.X.Y		08	1 stainless steel (316) 2 stainless steel (304) 3 brass (C37800) 4 brass (CuZn36Pb2As)	0 without cap 1 silicone protection cap 2 stainless steel protection cap	Water	0.4 x 0.4 mm	55 - 100 µm
2	Net Filter Circle Single Fluid Head	CF-NCSFH 10.X.Y		10			Water	0.4 x 0.4 mm	55 - 100 µm
3	Net Filter Circle Single Fluid Head	CF-NCSFH 11.X.Y		11			Water	0.4 x 0.4 mm	55 - 95 µm
4	Net Filter Circle Single Fluid Head	CF-NCSFH 16.X.Y		16			Water	0.4 x 0.4 mm	55 - 80 µm
5	Net Filter Circle Single Fluid Head	CF-NCSFH 19.X.Y		19			Water	0.4 x 0.4 mm	55 - 130 µm
6	Net Filter Circle Single Fluid Head	CF-C-FSFH 04.X.Y		04	1 stainless steel (316) 2 stainless steel (304) 3 brass (C37800) 4 brass (CuZn36Pb2As)	0 without cap 1 silicone protection cap 2 stainless steel protection cap	Water	0.4 x 0.4 mm	55 - 95 µm
7	Net Filter Circle Single Fluid Head	NCSFH 05.X.Y		05			Water	0.4 x 0.4 mm	55 - 90 µm
8	Net Filter Circle Single Fluid Head	CF-NCSFH 29.X.Y Transformer protection		29			Water	0.4 x 0.4 mm	50 - 65 µm
9	Net Filter Circle Single Fluid Head	CF-NCSFH 24.X.Y		24			Water	0.4 x 0.4 mm	65 - 85 µm

						EFFECTIVE DISTANCE FROM OBJECT/SURFACE		DIA. OF SPRAY PATTERN				DISCHARGE THROUGH NOZZLE FOR ROTOR BASE SYSTEM
CONNECTION SIZE	INLET PRESSURE	K FACTOR	NUMBER OF ORIFICE PAIRS	NO. OF HOLE RINGS	HEAD WEIGHT	MIN.	MAX.	AT 0.5 M FROM NOZZLE	AT 1.0 M FROM NOZZLE	AT 3.0 M FROM NOZZLE	AT 5.0 M FROM NOZZLE	

1/2" BSP ext.	6-16 BAR	3	4	-	0.2 KG	0.5 M	5.0 M	φ 0.75 M	φ 0.95 M	φ 1.1 M	φ 1.2 M	7.5 LPM @ 6 BAR TO 12 LPM @ 16 BAR WATER ONLY
1/2" BSP ext.	6-16 BAR	2.2	4	-	0.2 KG	0.5 M	0.5.0 M	φ 0.75 M	φ 0.95 M	φ 1.1 M	φ 1.2 M	5.4 LPM
1/2" BSP ext.	6-16 BAR	1.8	4	-	0.2 KG	0.5 M	5.0 M	φ 0.5 M	φ 0.65 M	φ 0.85 M	φ 0.95 M	4.4 LPM
1/2" BSP ext.	6-16 BAR	2.9	6	-	0.2 KG	0.5 M	5.0 M	-	φ 1.2 M	φ 1.35 M	φ 1.65 M	7 LPM @ 6 BAR TO 11.6 LPM @ 16 BAR WATER ONLY
1/2" BSP ext.	6-16 BAR	4.2	6	-	0.2 KG	0.5 M	5.0 M	-	φ 0.95 M	φ 1.65 M	φ 1.85 M	10.5 LPM
1/2" BSP ext.	6-16 BAR	2.05	4	-	0.2 KG	0.6 M	2.0 M	0.5/ 0.2 M	0.6/ 0.3 M	0.8/ 0.35 M at 2 mtr.	N/A	5.1 LPM
1/2" BSP ext.	6-16 BAR	4.9	6	-	0.2 KG	1.0 M	5.0 M	-	φ 0.9 M at 1.5 mtr.	φ 1.3 M at 3.5 mtr	φ 1.6 M	12 LPM
1/2" BSP male	6-16 BAR	3.9	4	-	0.2 KG	1.0 M	4.0 M	-	φ 1.25 M	φ 1.45 M at 2.5 mtr	φ 1.6 M at 4.0 mtr	9.4 LPM @ 6 BAR TO 16 LPM @ 16 BAR WATER ONLY
1/2" BSP male	6-16 BAR	6.75	9	-	0.2 KG	1.0 M	5.0 M	-	φ 0.55 M	φ 10.8 M	φ 0.9 M	16.5 LPM @ 6 BAR TO 27 LPM @ 15 BAR WATER ONLY



### DETAIL SPECIFICATION OF WATERMIST NOZZLES

S. NO.	NOZZLE DESCRIPTION	NOZZLE NO.	PRODUCT IMAGE	MODEL NO.	X (KIND OF MATERIAL)	Y (KIND OF CAP)	BASIC EXTINGUISHING MEDIA	NET FILTER OPENING	DROPLET SIZE D <sub>v</sub>
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### CSSFH NOZZLES (OPEN)

10	CSSFH - Colliding nozzle	CF-CSSFH 01.S Engine protection		01	Stainless steel (304)	-	Water (Rotor mist)	0.4 x 0.4 mm	80 - 110 µm
11	CSSFH - Colliding nozzle	CF-CSSFH 02.S		02	Stainless steel (304)	-	Water (Rotor mist)	0.4 x 0.4 mm	85 - 120 µm
12	CSSFH - Colliding nozzle	CF-CSSFH 03.S		03	Stainless steel (304)	-	Water	0.4 x 0.4 mm	85 - 120 µm
13	NCSSFH - Colliding nozzle	CF-NCSSFH 31		31	Stainless steel	-	Water	0.6 x 0.6 mm and 0.4 x 0.4 mm	35 - 250 µm
14	NCSSFH - Colliding nozzle	CF-NCSSFH 32		32	Stainless steel	-	Water	0.6 x 0.6 mm and 0.4 x 0.4 mm	35 - 250 µm
15	NCSSFH - Colliding nozzle	CF-NCSSFH 33		33	Stainless steel	-	Water	0.6 x 0.6 mm and 0.4 x 0.4 mm	35 - 250 µm
16	NCSSFH - Colliding nozzle	CF-NCSSFH 34		34	Stainless steel	-	Water	0.6 x 0.6 mm and 0.4 x 0.4 mm	35 - 250 µm

						EFFECTIVE DISTANCE FROM OBJECT/SURFACE		DIA. OF SPRAY PATTERN				DISCHARGE THROUGH NOZZLE FOR ROTOR BASE SYSTEM
CONNECTION SIZE	INLET PRESSURE	K FACTOR	NUMBER OF ORIFICE PAIRS	NO. OF HOLE RINGS	HEAD WEIGHT	MIN.	MAX.	AT 0.5 M FROM NOZZLE	AT 1.0 M FROM NOZZLE	AT 3.0 M FROM NOZZLE	AT 5.0 M FROM NOZZLE	

1/2" BSP male	4 - 16 BAR	4.7	6 placed on of the nozzle's surface	-	0.2 KG	0.4 M		12 sq. mtr.				9.8 LPM @ 4 BAR TO 19 LPM @ 15 BAR WATER ONLY
1/2" BSP male	4 - 16 BAR	2.45	3 placed on of the nozzle's surface	-	0.2 KG	1.0 M		8 sq. mtr. Special discharge pattern				4.9 LPM @ 4 BAR TO 9.5 LPM @ 15 BAR WATER ONLY
1/2" BSP male	4 - 16 BAR	21	12	-	0.2 KG	Upright type					7 sq.m at 4 mtr	42 LPM @ 4 BAR TO 81.33 LPM @ 15 BAR WATER ONLY
" BSP male	Max 10 bar	76	3 X 12 (circular) + 4 (front)	-	0.35 kg	-	4.0 M	Sq. 6.0 x 6.5 m				152 LPM @ 4 BAR TO 240.5 LPM @ 10 BAR WATER ONLY
" BSP male	Max 10 bar	88.7	3 X 12 (circular) + 4 (front)	-	0.35 kg	-	4.0 M	Sq. 7.0 x 7.5 m				177.5 LPM @ 4 BAR TO 251 LPM @ 8 BAR WATER ONLY
" BSP male	Max 10 bar	103.3	3 X 12 (circular) + 4 (front)	-	0.35 kg	-	4.0 M	Sq. 8.5 x 9.5 m				206 LPM @ 4 BAR TO 252 LPM @ 6 BAR WATER ONLY
" BSP male	Max 10 bar	121.75	3 X 12 (circular) + 4 (front)	-	0.35 kg	-	4.0 M	Sq. 12.0 x 8.0 m				243.5 LPM @ 4 BAR TO 298 LPM @ 6 BAR WATER ONLY

## DETAIL SPECIFICATION OF WATERMIST NOZZLES

S. NO.	NOZZLE DESCRIPTION	NOZZLE NO.	PRODUCT IMAGE	MODEL NO.	X (KIND OF MATERIAL)	Y (KIND OF CAP)	BASIC EXTINGUISHING MEDIA	NET FILTER OPENING	DROPLET SIZE D <sub>v</sub>
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### GWP NOZZLES (OPEN)

17	Net Filter Head Multi Pairs	CF-NGWP-1		1	1 stainless steel (316) 2 stainless steel (304) 3 brass (C37800) 4 brass (CuZn36Pb2As)	0 without cap 1 silicone protection cap	Water	0.4 x 0.4 mm	50 - 130 µm
18	Net Filter Head Multi Pairs	CF-NGWP-9		9			Water	0.4 x 0.4 mm	50 - 130 µm
19	Net Filter Head Multi Pairs	CF-NGWP-11		11			Water	0.4 x 0.4 mm	50 - 130 µm
20	Net Filter Head Multi Pairs	CF-NGWP-14		14			Water	0.4 x 0.4 mm	50 - 130 µm
21	Net Filter Head Multi Pairs	CF-NGWP-15		15			Water	0.4 x 0.4 mm	70 - 130 µm
22	Net Filter Head Multi Pairs	CF-NGWP 32 X.Y		32	1 stainless steel (316) 2 stainless steel (304) 3 brass (C37800) 4 brass (CuZn36Pb2As)	0 without cap 1 silicone protection cap	Water	0.4 x 0.4 mm	65 - 90 µm
23	Net Filter Head Multi Pairs	CF-NGWP 34 X.Y		34			Water	0.4 x 0.4 mm	65 - 85 µm
24	Net Filter Head Multi Pairs	CF-NGWP 35 X.Y		35			Water	0.4 x 0.4 mm	80 - 105 µm
25	Net Filter Head Multi Pairs	CF-NGWP 36 X.Y		36			Water	0.4 x 0.4 mm	95 - 125 µm
26	Net Filter Head Multi Pairs	CF-NGWP 49 .Y		49	Stainless steel (304)	0 without cap	Water	0.4 x 0.4 mm	60 - 125 µm
27	Tunnel Nozzle T1	CF-T1		T1	Stainless steel	0 without cap	Water	-	100 - 400 µm










						EFFECTIVE DISTANCE FROM OBJECT/SURFACE		DIA. OF SPRAY PATTERN				DISCHARGE THROUGH NOZZLE FOR ROTOR BASE SYSTEM
CONNECTION SIZE	INLET PRESSURE	K FACTOR	NUMBER OF ORIFICE PAIRS	NO. OF HOLE RINGS	HEAD WEIGHT	MIN.	MAX.	AT 0.5 M FROM NOZZLE	AT 1.0 M FROM NOZZLE	AT 3.0 M FROM NOZZLE	AT 5.0 M FROM NOZZLE	

3/4" BSP ext.	6 - 16 BAR	14.8	-	2	0.5 KG	1.0 M	5.0 M	-	φ 1.7 M	φ 1.8 M	φ 1.8 M	36.2 LPM @ 6 BAR TO 59.5 LPM @ 16 BAR WATER ONLY
3/4" BSP ext.	6 - 16 BAR	9.5	-	1	0.5 KG	1.5 M	5.0 M	-		φ 4.4/5.1 M		23 LPM
3/4" BSP int.	6 - 16 BAR	12.7	-	1	0.5 KG	1.0 M	5.0 M	-	φ 3.8/4.7 M			30.5 LPM @ 6 BAR TO 51.56 LPM @ 16 BAR WATER ONLY
3/4" BSP int.	6 - 16 BAR	14.7	-	2	0.5 KG	1.0 M	5.0 M	-	φ 2.2/3.6 M			36 LPM
3/4" BSP int.	6 - 16 BAR	6.6	-	1	0.5 KG	0.5 M	4.0 M	φ 2:1 M		φ 3.5 M	φ 4.2 M	16.1 LPM @ 51.5 BAR TO 26.7 LPM @ 16 BAR WATER ONLY
3/4" BSP int.	6 - 16 BAR	13.4	-	-	0.4 KG	1.5 M	5.0 M		φ 5.3 M		φ 5.5 M	32.8 LPM @ 6 BAR TO 53.6 LPM @ 16 BAR WATER ONLY
3/4" BSP int.	4 - 12 BAR	15	-	-	0.4 KG	1.5 M	5.0 M		φ 4.5 M		φ 4.7 M	30 LPM @ 4 BAR TO 52 LPM @ 12 BAR WATER ONLY
3/4" BSP int.	4 - 16 BAR	12	-	-	0.5 KG	0.35 M	4.0 M	φ 5.5 M			φ 6.0 M	24 LPM @ 4 BAR TO 46.5 LPM @ 15 BAR WATER ONLY
3/4" BSP int.	4 - 16 BAR	15	-	-	0.4 KG	1.5 M	5.0 M		φ 4.6 M		φ 4.8 M	30 LPM @ 4 BAR TO 52 LPM @ 12 BAR WATER ONLY
3/4" BSP ext.	4 - 15 BAR	29.9	-	-	0.35 KG	1.5 M	5.0 M		φ 3.2 M		φ 4.6 M	59.8 LPM @ 4 BAR TO 115.8 LPM @ 15 BAR WATER ONL
3/4" BSP int.	4 - 6 BAR	90	-	-	1 KG	-	-	Elip. 10 x 8 m				170 LPM @ 4 BAR TO 230 LPM @ 6 BAR WATER ONLY

### DETAIL SPECIFICATION OF WATERMIST NOZZLES

S. NO.	NOZZLE DESCRIPTION	NOZZLE NO.	PRODUCT IMAGE	MODEL NO.	X (KIND OF MATERIAL)	Y (KIND OF CAP)	BASIC EXTINGUISHING MEDIA	NET FILTER OPENING	DROPLET SIZE D <sub>v</sub>
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### GWP NOZZLES WITH HEAT SENSING BULB (CLOSED)

28	Detection Head Multi Pairs	CF-DGWP 9.X.Y		9	1 stainless steel (316) 2 stainless steel (304) 3 brass (C37800) 4 brass (CuZn36Pb2As)	0 without cap 1 silicone protection cap	Water	0.4 x 0.4 mm	50 - 130 µm
29	Detection Head Multi Pairs	CF-DGWP 15.X.Y		15			Water	0.4 x 0.4 mm	65 - 140 µm
30	Detection Head Multi Pairs	CF-DGWP 16.X.Y		16			Water	0.4 x 0.4 mm	55 - 135 µm
31	Detection Head Multi Pairs	CF-DGWP 17.X.Y		17	1 stainless steel (316) 2 stainless steel (304) 3 brass (C37800) 4 brass (CuZn36Pb2As)	0 without cap 1 silicone protection cap	Water	0.4 x 0.4 mm	55 - 135 µm
32	Detection Head Multi Pairs	CF-DGWP 44.X.Y		44			Water	0.4 x 0.4 mm	65 - 95 µm
33	Detection Head Multi Pairs	CF-DGWP 46.X.Y		46	Stainless steel (316)		Water	0.4 x 0.4 mm	105 - 120 µm
34	Detection Head Multi Pairs	CF-DGWP 49.X.Y		49	Stainless steel (316)		Water	0.4 x 0.4 mm	115 - 125 µm
35	Detection Head Multi Pairs	CF-DGWP 62.X.Y		62	Stainless steel (316)		Water	0.4 x 0.4 mm	45 axis, 135 stream edge

						EFFECTIVE DISTANCE FROM OBJECT/SURFACE		DIA. OF SPRAY PATTERN				DISCHARGE THROUGH NOZZLE FOR ROTOR BASE SYSTEM
CONNECTION SIZE	INLET PRESSURE	K FACTOR	NUMBER OF ORIFICE PAIRS	NO. OF HOLE RINGS	HEAD WEIGHT	MIN.	MAX.	AT 0.5 M FROM NOZZLE	AT 1.0 M FROM NOZZLE	AT 3.0 M FROM NOZZLE	AT 5.0 M FROM NOZZLE	

1/2" BSP ext.	6-16 BAR	8.6	-	1	0.5 KG	1.5 M	5.0 M	-	φ 4.3 M	φ 4.3 M	φ 4.3 M (Max. dia 5.0 m at 16 bar)	21.1 LPM @ 6 BAR TO 34.4 LPM @ 16 BAR WATER ONLY
1/2" BSP ext.	6-16 BAR	6.55	-	1	0.5 KG	0.4 M	4.0 M	φ 4.3 M	φ 3.2 M at 1.5 m		φ 4.2 M	16.1 LPM @ 6 BAR TO 26.4 LPM @ 16 BAR WATER ONLY
1/2" BSP ext.	6-16 BAR	5.8	-	1	0.5 KG	0.4 M	3.0 M	Elip. 1 x 0.6 M	Elip. 1.9 x 0.95 M at 1.5 m		Elip. 2.3 x 1.0 M	14.2 LPM @ 6 BAR TO 23.2 LPM @ 16 BAR WATER ONLY
1/2" BSP ext.	6-16 BAR	4.4	-	1	0.5 KG	0.5 M	4.0 M	φ 2.2 M	φ 3.2 M at 2.0 m		φ 3.25 M	10.8 LPM @ 6 BAR TO 17.6 LPM @ 16 BAR WATER ONLY
1/2" BSP male	6-15 BAR	5.68	-	-	0.35 KG	0.6 M	4.0 M	φ 2.0 M			φ 3.2 M at 4.0 mtr	13.9 LPM @ 6 BAR TO 22 LPM @ 15 BAR WATER ONLY
1/2" BSP male	4-12 BAR	15.5	-	-	0.35 KG	1.0 M	5.0 M	-	φ 2.75 M		φ 4.75 M (12 Sq.m)	35 LPM @ 4 BAR TO 43 LPM @ 6 BAR WATER ONLY
3/4" BSP male	4-6 BAR	25.8	-	-	0.35 KG	1.0 M	5.0 M	-	φ 2.75 M		φ 4.75 M (12 Sq.m)	57.6 LPM @ 4 BAR TO 70.5 LPM @ 6 BAR WATER ONLY
3/4" BSP male	4-12 BAR	25.6	-	-	0.65 KG	-	-	φ 1.2 M at 2.5 m				51.5 LPM @ 4 BAR TO 88.5 LPM @ 12 BAR WATER ONLY



CF-NCSFH 08 NOZZLE  
Data Sheet

Full description: CFNCSFH 08.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**08** - Model number

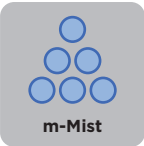
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

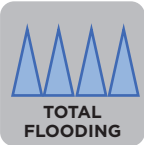
**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



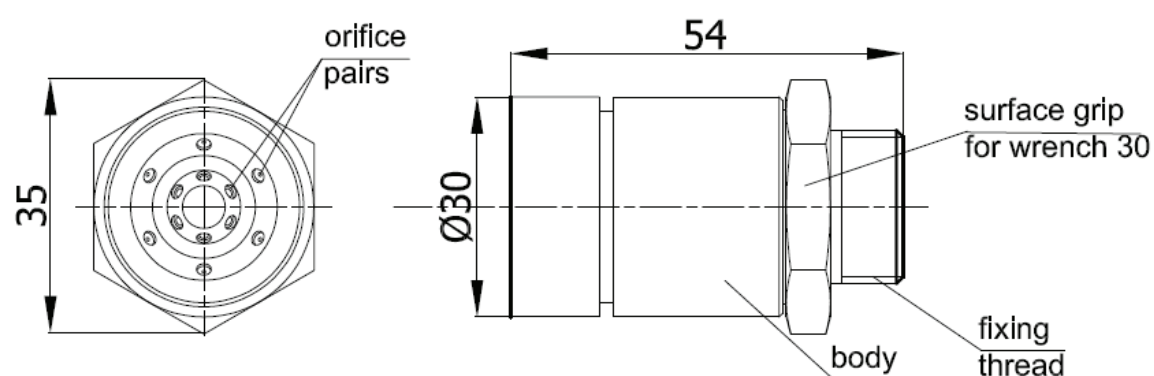
Application:



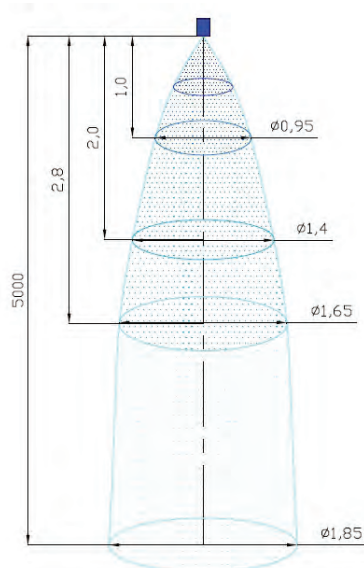
TECHNICAL PARAMETERS		
Basic extinguishing media	:	Water
Net filter opening	:	0,4 x 0.4 mm
Droplet size Dv	:	505 – 110 µm
Connection size	:	½” BSP ext.
Inlet pressure	:	6 - 16 bar
K factor	:	3,0
Number of orifice pairs	:	4
Head weight	:	0,2 kg
Protection cap	:	Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K flow factor	:	3,0			
Extinguishing agent expenditure [lit/min]	:	7,5	8,5	10,5	12,0
Effective stream range * [m]	:	1,6	1,8	2,1	2,4

## \*Range of horizontal stream.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSFH 10 NOZZLE  
Data Sheet

Full description: CFNCSFH 10.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**10** - Model number

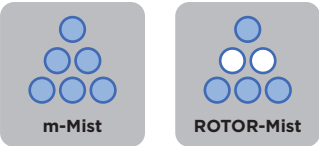
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



Application:

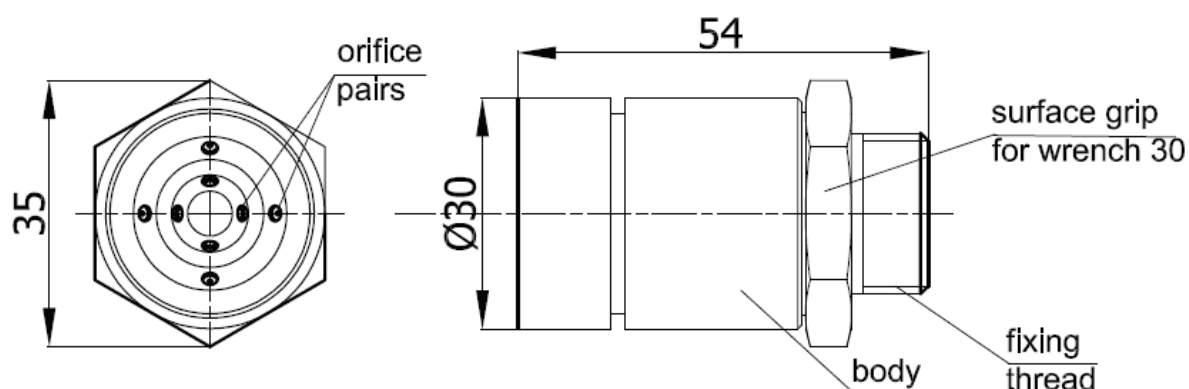


TECHNICAL PARAMETERS	
Total flow surface	: 4,7 mm <sup>2</sup>
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6 -1 6 bar
Number of orifice pairs	: 4
Head weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

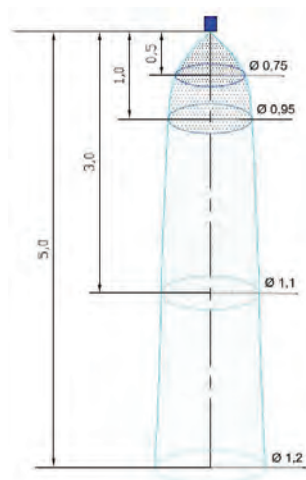
Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



## TECHNICAL DETAILS



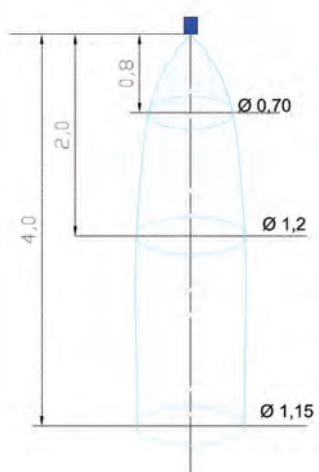
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	55 - 100			
K flow factor	:	2,2			
Extinguishing agent expenditure [lit/min]	:	5,4	6,2	7,6	8,8
Effective stream range * [m]	:	1,4	1,6	2,1	2,8

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50-95
Extinguishing agent expenditure** [lit/30 s]	:	5,75
The minimum distance required to develop a stream of Watermist [m]	:	0,4
Effective stream range *** [m]	:	3,0

\*Range of horizontal stream. | \*\*The value of information only. | \*\*\*Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSFH 11 NOZZLE  
Data Sheet

Full description: CFNCSFH 11.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**11** - Model number

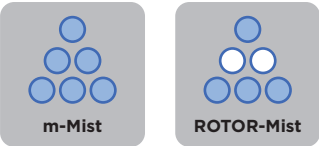
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



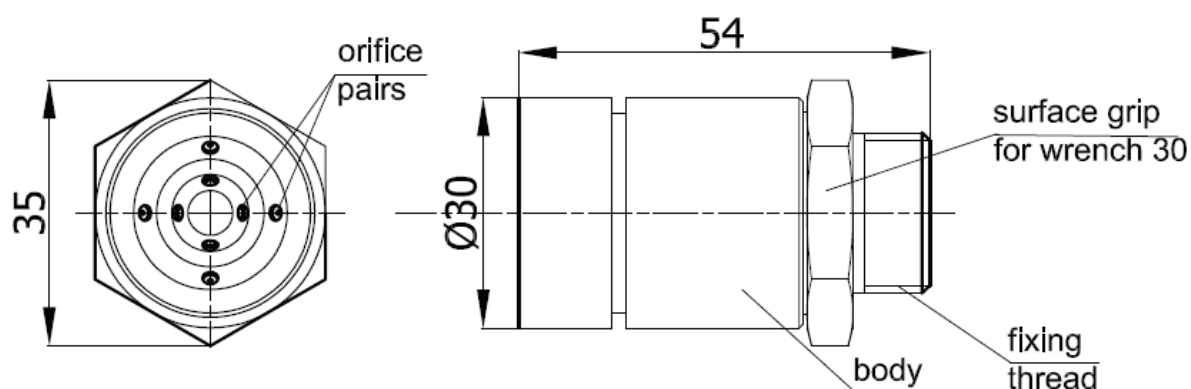
Application:



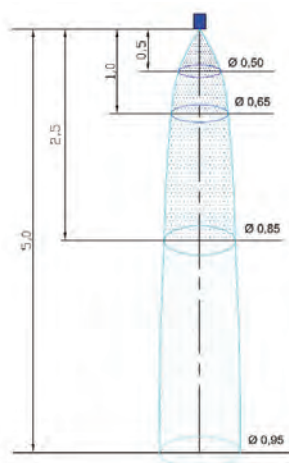
TECHNICAL PARAMETERS	
Total flow surface	: 3,7 mm²
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6 - 16 bar
Number of orifice pairs	: 4
Head weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



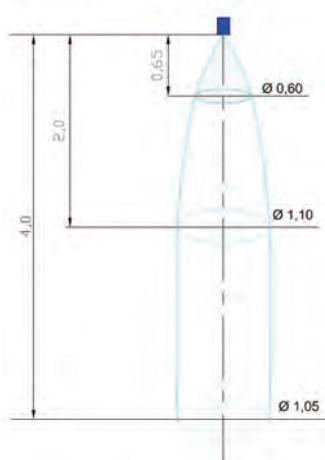
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	55 - 95			
K flow factor	:	1,8			
Extinguishing agent expenditure [lit/min]	:	4,4	5,1	6,2	7,2
Effective stream range * [m]	:	1,6	1,8	2,2	2,5

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50-90
Extinguishing agent expenditure** [lit/30 s]	:	5,15
The minimum distance required to develop a stream of Watermist [m]	:	0,3
Effective stream range *** [m]	:	2,8

\* Range of horizontal stream. | \*\* The value of information only. | \*\*\* Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NCSFH 16 NOZZLE  
Data Sheet

Full description: CFNCSFH 16.X.Y

CFNCSFH - Net Filter Circle Single Fluid Head

16 - Model number

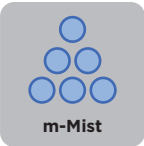
X - Kind of material:

- 1 stainless steel (316)
- 2 stainless steel (304)
- 3 brass (C37800)
- 4 brass (CuZn36Pb2As)

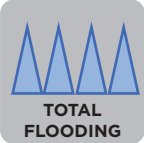
Y - 0 without cap

- 1 silicon protection cap
- 2 stainless steel protection cap

System Type:



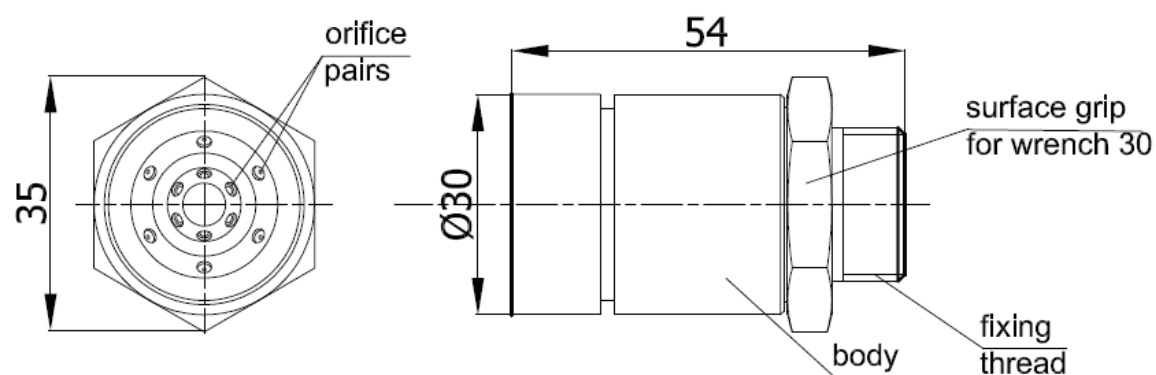
Application:



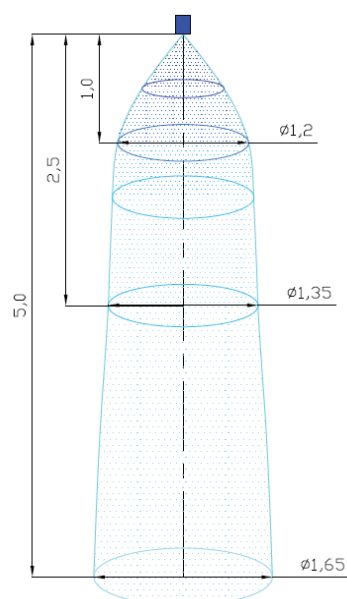
TECHNICAL PARAMETERS		
Basic extinguishing media	:	Water
Net filter opening	:	0,4 x 0,4 mm
Droplet size Dv	:	55 – 80 µm
Connection size	:	½” BSP ext.
Inlet pressure	:	6 - 16 bar
K factor	:	2,9
Number of orifice pairs	:	6
Head weight	:	0,2 kg
Protection cap	:	Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K flow factor	:	2,9			
Extinguishing agent expenditure [lit/min]	:	7,1	8,2	10,0	11,6
Effective stream range * [m]	:	1,3	1,5	1,9	2,3

**\*Range of horizontal stream.**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSFH 19 NOZZLE  
Data Sheet

Full description: CFNCSFH 19.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**19** - Model number

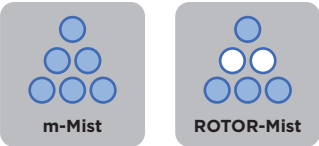
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



Application:

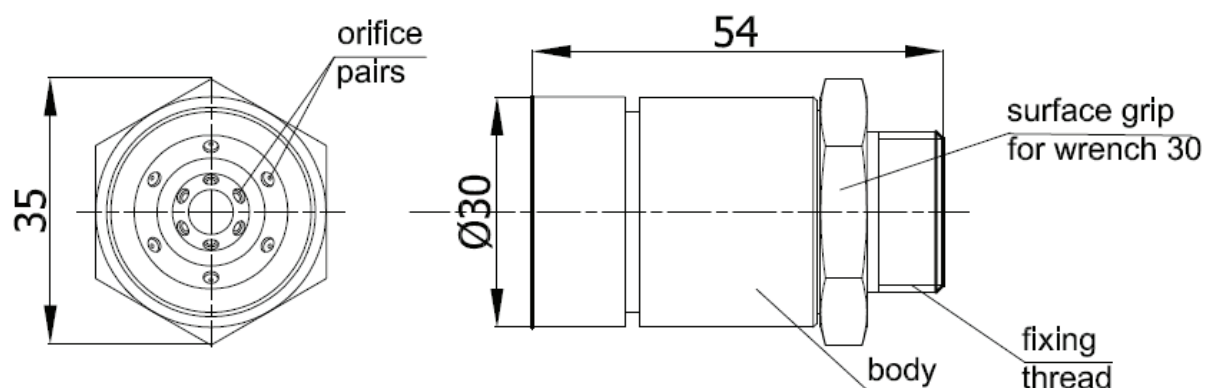


TECHNICAL PARAMETERS	
Total flow surface	: 8,45 mm <sup>2</sup>
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6 - 16 bar
Number of orifice pairs	: 6
Head weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

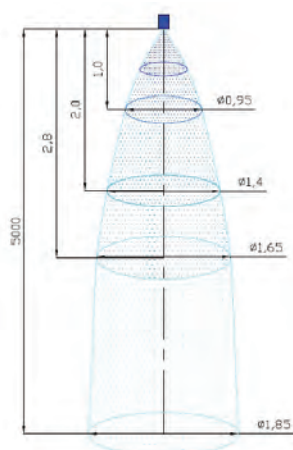
Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



## TECHNICAL DETAILS



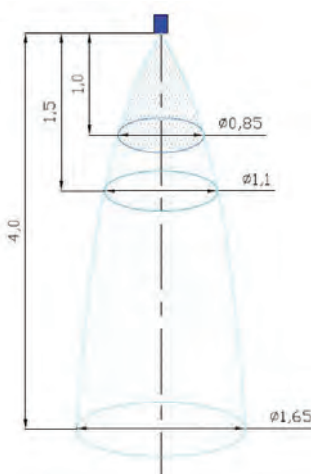
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	60 - 130			
K flow factor	:	4,2			
Extinguishing agent expenditure [lit/min]	:	10,5	12,0	14,5	16,5
Effective stream range * [m]	:	1,8	2,0	2,8	3,2

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	55-120
Extinguishing agent expenditure** [lit/30 s]	:	7,8
The minimum distance required to develop a stream of Watermist [m]	:	0,4
Effective stream range *** [m]	:	2,9

\* Range of horizontal stream. | \*\* The value of information only. | \*\*\* Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-C-FSFH 04 NOZZLE  
Data Sheet

Full description: CFC-FSFH 04.X.Y

CFC-FSFH - Net Filter Circle Single Fluid Head

04 - Model number

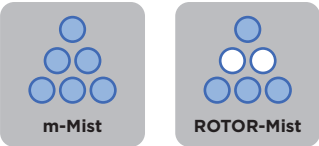
X - Kind of material:

- 1 stainless steel (316)
- 2 stainless steel (304)
- 3 brass (C37800)
- 4 brass (CuZn36Pb2As)

Y - 0 without cap

- 1 silicon protection cap
- 2 stainless steel protection cap

System Type:



Application:



CFC-FSFH 03.1.0

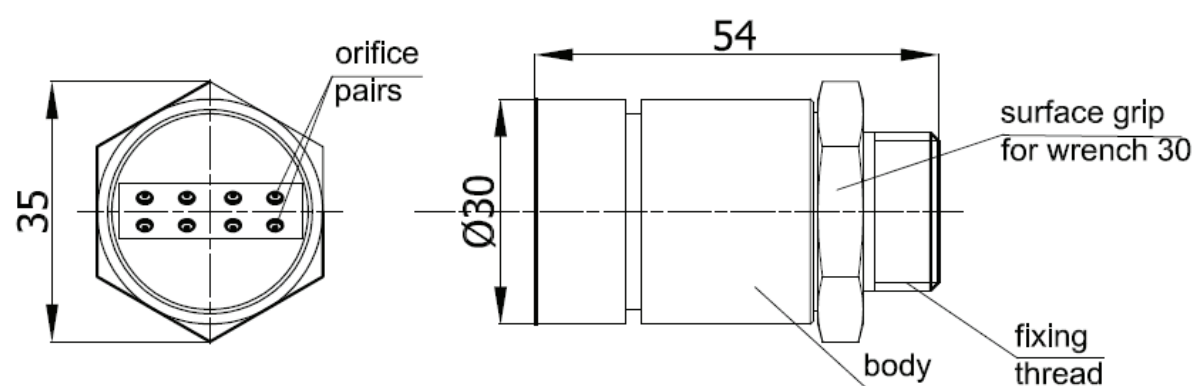


CFC-FSFH 03.1.1

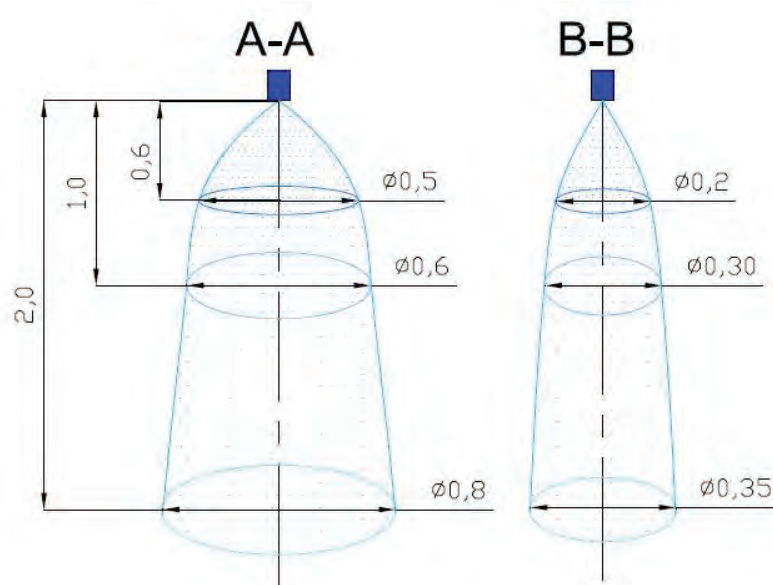
TECHNICAL PARAMETERS	
Total flow surface	: 4,0 mm <sup>2</sup>
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6 - 16 bar
Number of orifice pairs	: 4
Head weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size Dv [µm]		55-95			
K flow factor	:	2,05			
Extinguishing agent expenditure [lit/min]	:	5,1	6,1	7,0	8,35
Effective stream range * [m]		A 1,4 B 1,6	- -	- -	2,5 2,3

## \*Range of horizontal stream.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NCSFH 05 NOZZLE  
Data Sheet

Full description: CFNCSFH 05.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**05** - Model number

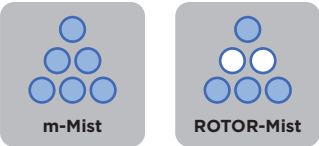
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



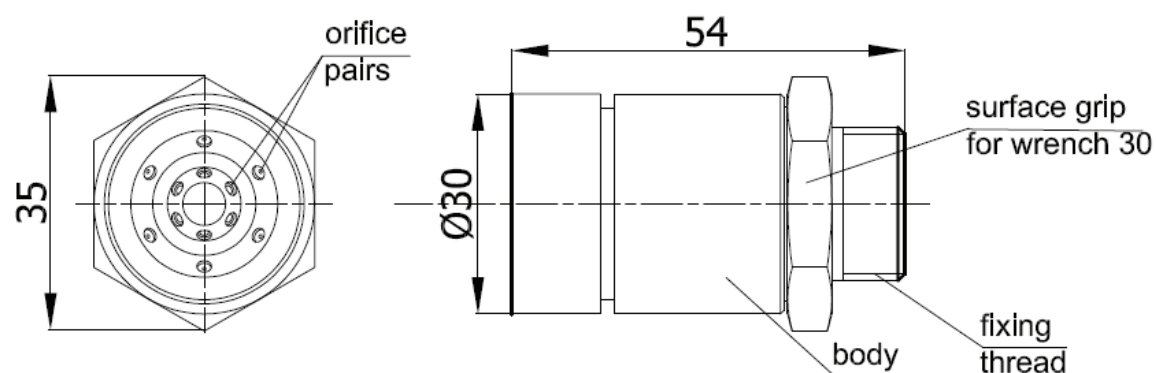
Application:



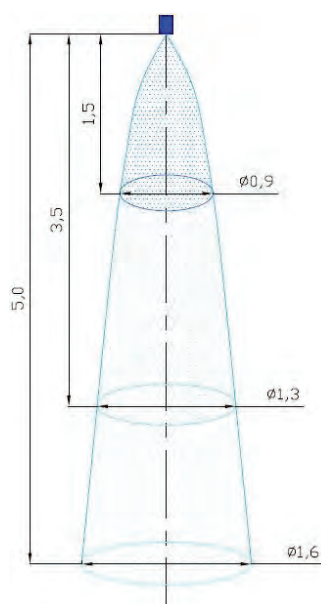
TECHNICAL PARAMETERS	
Total flow surface	: 8,7 mm²
Basic extinguishing media	: Water, gas and water (ROTOR)
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6-16 bar
Number of orifice pairs	: 6
Head weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - N 116 SS cap Cat. No. - K 059

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size Dv [µm]		55 - 90			
K flow factor	:	4,9			
Extinguishing agent expenditure [lit/min]	:	12,0	13,85	17,0	19,6
Effective stream range * [m]	:	2,0	2,2,	3,0	3,6

**\*Range of horizontal stream.**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSFH 29 NOZZLE  
Data Sheet

Full description: CFNCSFH 29.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**29** - Model number

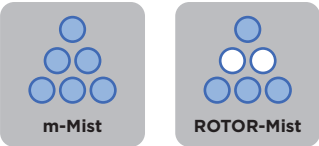
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



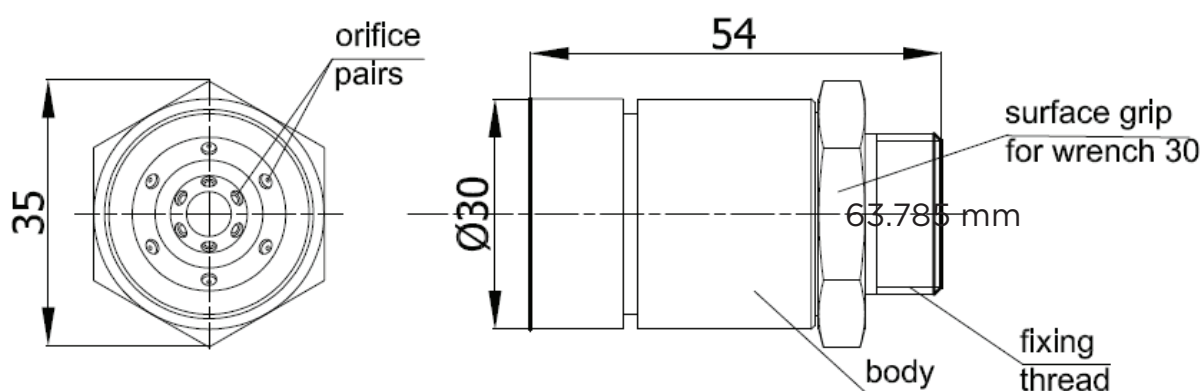
Application:



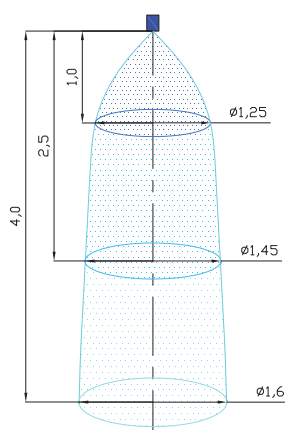
TECHNICAL PARAMETERS	
Total flow surface	: 6,44 mm <sup>2</sup>
Basic extinguishing media	: water or gas and water (RotoMist)
Filter mesh	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6-16 bar
Number of orifice pairs	: 4
weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - NA003 Stainless cap Cat. No. - NA001

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



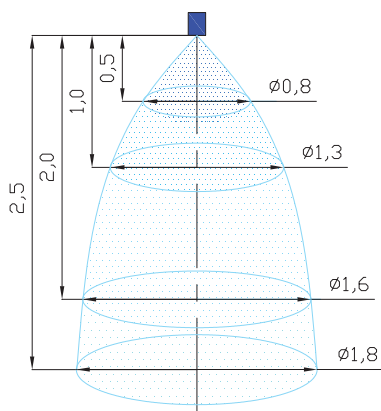
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	65	60	50	
K flow factor	:		3,9		
Extinguishing agent flow rate * [lit/min]	:	9,4	10,5	14,5	16,0
Effective stream range** [m]	:	2,8	3,0	3,6	3,9

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial working pressure [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	55-75
Minimum distance required to develop mist stream [m]	:	0,25
Effective stream range *** [m]	:	1,6

\* May vary  $\pm 5\%$ . | \*\* Range of horizontal stream. | \*\*\* Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NCSFH 24 NOZZLE  
Data Sheet

Full description: CFNCSFH 24.X.Y

**CFNCSFH** - Net Filter Circle Single Fluid Head

**24** - Model number

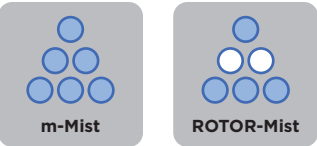
**X** - Kind of material:

- 1** stainless steel (316)
- 2** stainless steel (304)
- 3** brass (C37800)
- 4** brass (CuZn36Pb2As)

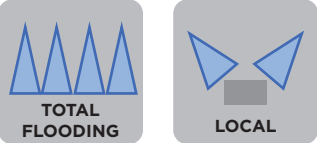
**Y** - 0 without cap

- 1** silicon protection cap
- 2** stainless steel protection cap

System Type:



Application:

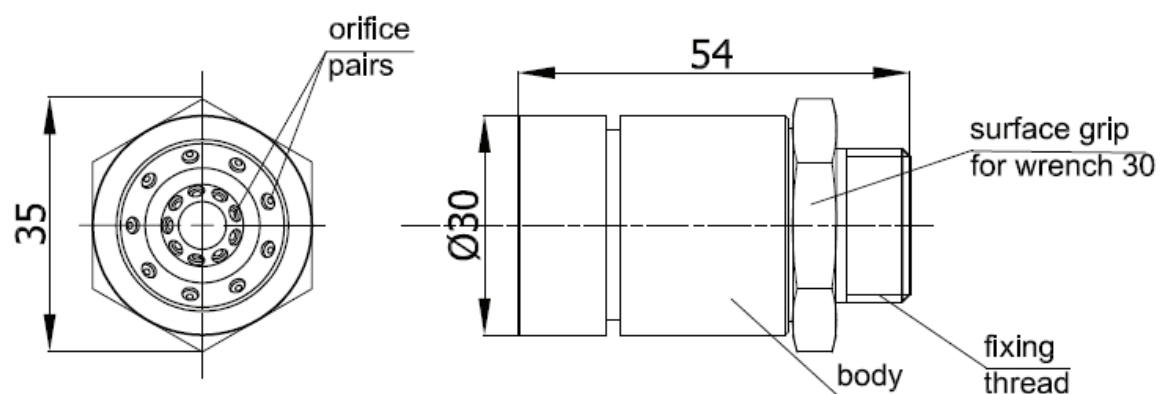


TECHNICAL PARAMETERS

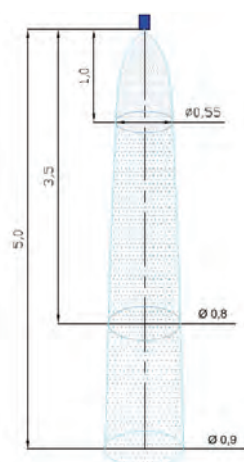
Total flow surface	: 13,05 mm <sup>2</sup>
Basic extinguishing media	: water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: ½" BSP ext.
Inlet pressure	: 6-16 bar
Number of orifice pairs	: 9
Weight	: 0,2 kg
Protection cap	: Silicon cap Cat. No. - NA003 Stainless cap Cat. No. - NA001

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



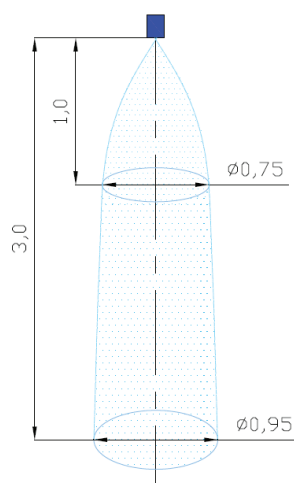
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	85	70		65
Average K flow factor	:		6,75		
Extinguishing agent flow rate * [lit/min]	:	16,5	19,1	23,4	27,0
Effective stream range** [m]	:	3,5	3,6	3,8	4,0

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial working pressure [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	65-95
Minimum distance required to develop mist stream [m]	:	1,0
Effective stream range *** [m]	:	3,5

\* May vary  $\pm 5\%$ . | \*\* Range of horizontal stream. | \*\*\* Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSSFH 01 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 01.S  
CFNCSSFH - Colliding nozzle  
01 - Model number  
S - Stainless steel (304)

System Type:



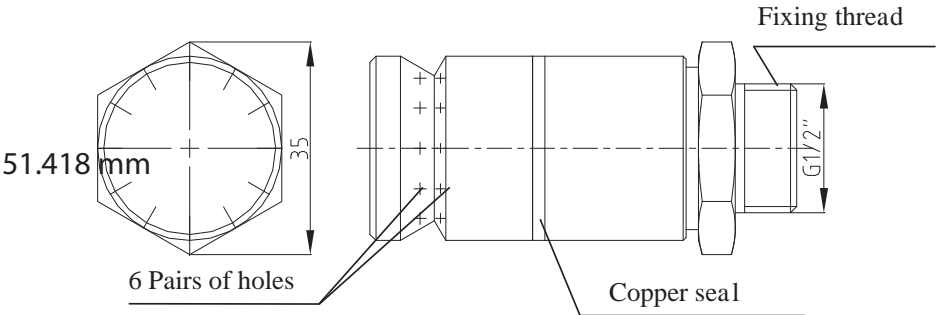
Application:



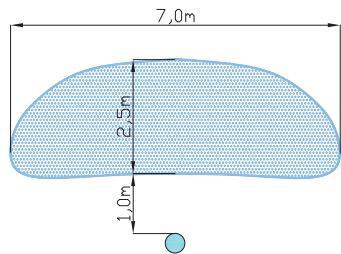
TECHNICAL PARAMETERS	
Total flow surface	: 8,7 mm²
Extinguishing medium	: Water and gas (RotorMist system)
Filter mesh	: 0,4 x 0,4 mm
Connection type	: 1/2" BSP male
Supply pressure	: Max 16 bar
Number of pairs of holes	: 6 placed on ½ of the nozzle's surface
Nozzle weight	: 0,2 kg

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

TECHNICAL DETAILS

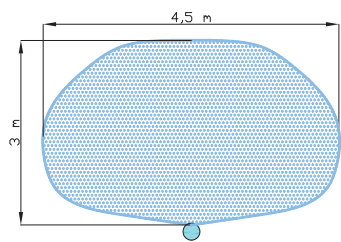


mMist MEDIUM PRESSURE SYSTEM ñ COVERAGE



mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS				
Working pressure [bar]	:	4	6	10 15
Dv droplet size [µm]	:	80 - 110		
Average K flow factor	:	4,79		
Extinguishing agent flow rate* [dm /min]	:	9,8	12,0	15,5 19,0

ROTOR MIST SYSTEM ñ COVERAGE



ROTOR MIST SYSTEM - MIST STREAM PARAMETERS*	
Initial pressure [bar]	: 15
Dv droplet size [µm]	: 85-120
Minimal distance from an obstacle [m]	: 0,4
Effective coverage with mist stream [m2]	: 12
Coverage of 1 m of protected area [dm /min]	: 0,6

\* May vary ±5%. | For nozzle fixed vertically.  
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NCSSFH 02 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 02.S  
CFNCSSFH - Colliding nozzle  
02 - Model number  
S - Stainless steel (304)

System Type:



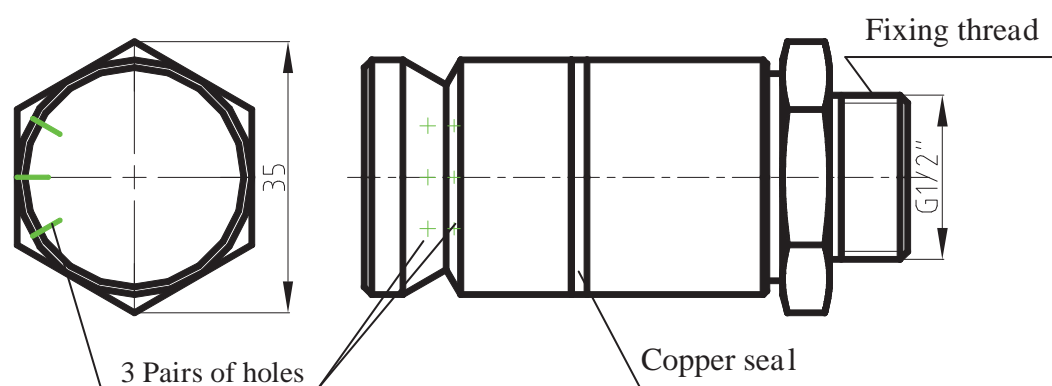
Application:



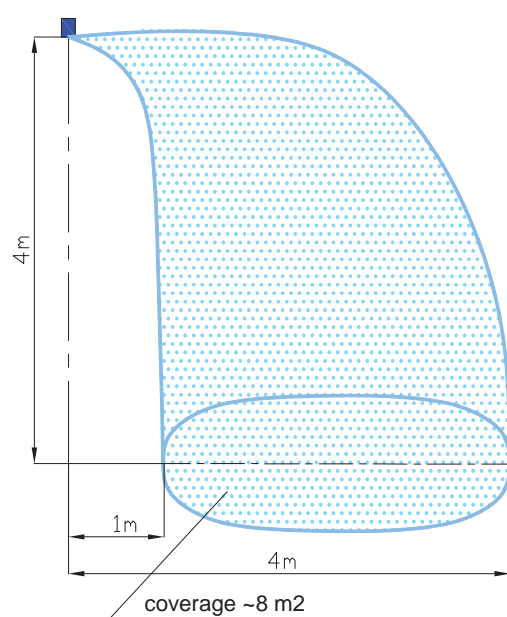
TECHNICAL PARAMETERS	
Total flow surface	: 4,37 mm <sup>2</sup>
Extinguishing medium	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection type	: 1/2" BSP male
Supply pressure	: Max 16 bar
Number of pairs of holes	: 3 placed on 1/4 of the nozzle's surface
Nozzle weight	: 0,2 kg

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## mMist MEDIUM PRESSURE SYSTEM ñ MIST STREAM



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	10	15
Dv Droplet size [µm]		85 - 120			
Average K flow factor	:	2,45			
Extinguishing agent flow rate* [dm /min]	:	4,9	6	7,5	9,5
Coverage of 1 m of protected area* [dm /min]	:	0,8			

\* May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSSFH 03 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 03.S  
CFNCSSFH - Colliding nozzle  
03 - Model number  
S - Stainless steel (304)

System Type:



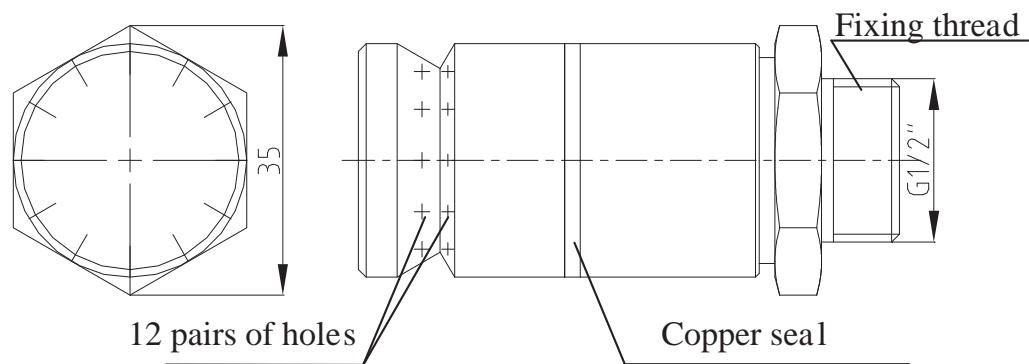
Application:



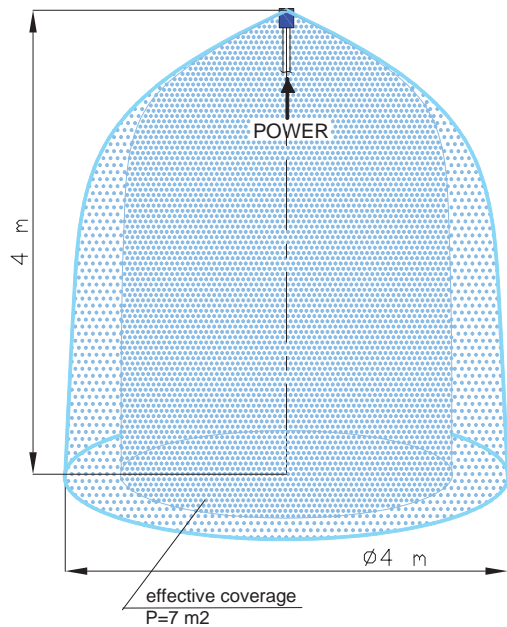
TECHNICAL PARAMETERS	
Total flow surface	: 45,31 mm <sup>2</sup>
Extinguishing medium	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection type	: 1/2" BSP male
Supply pressure	: Max 16 bar
Number of pairs of holes	: 12
Nozzle weight	: 0,2 kg

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

TECHNICAL DETAILS



mMist MEDIUM PRESSURE SYSTEM ñ MIST STREAM



mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	10	15
Dv Droplet size [µm]		85 - 120			
Average K flow factor	:	21,0			
Extinguishing agent flow rate* [dm /min]	:	42,0	51,44	66,41	81,33
Coverage of 1 m of protected area* [dm /min]	:	3,9			

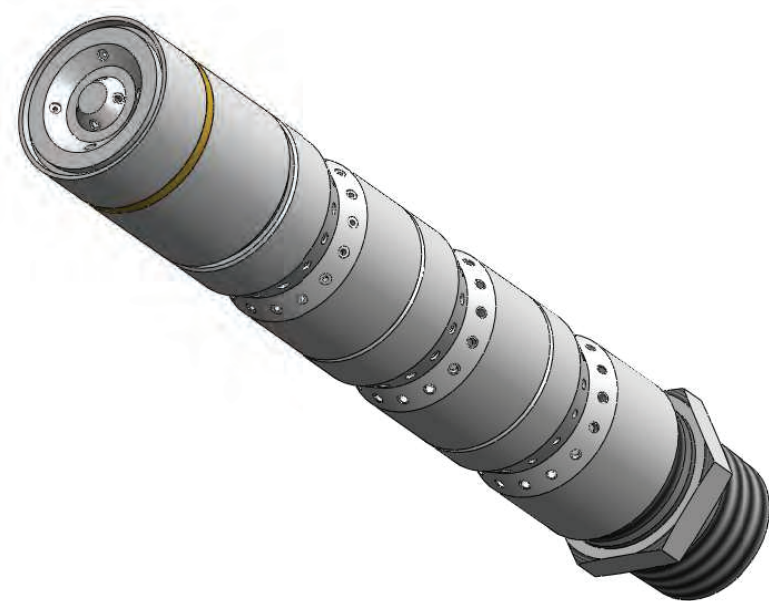
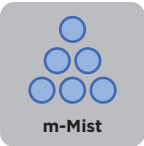
\* May vary ± 5%.  
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NCSSFH 31 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 31  
CFNCSSFH - Colliding nozzle  
31 - Model number

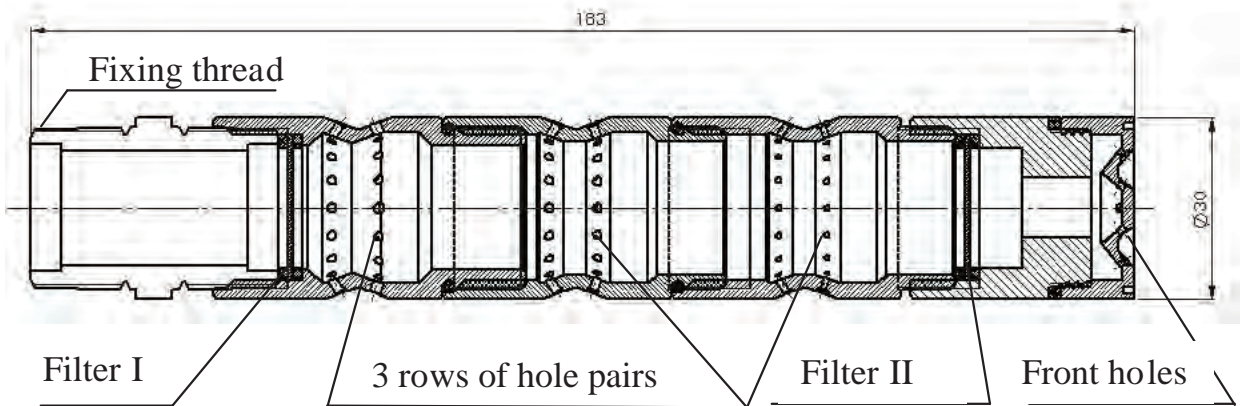
System Type:



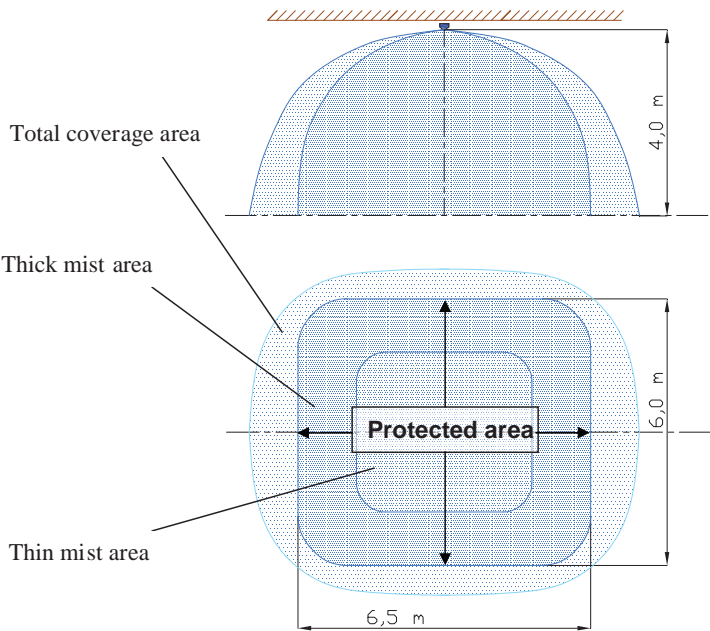
TECHNICAL PARAMETERS	
Total outflow surface	: 148,8 mm <sup>2</sup>
Extinguishing medium	: Water
Filter mesh	: 0,6 x 0,6 mm and 0,4 x 0,4 mm
Connection type	: ¾" BSP male
Supply pressure	: Max 10 bar
Number of pairs of holes	: 3 X 12 (circular) + 4 (front)
Nozzle weight	: 0,35 kg

Application: Head set dedicated for extinguishing mine corridors (5m width).

TECHNICAL DETAILS



mMist MEDIUM PRESSURE SYSTEM ñ MIST STREAM



mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

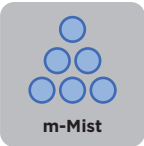
Working pressure [bar]	:	4	6	8	10
Dv Droplet size [µm]		35 - 250			
Average K flow factor	:	76,0			
Extinguishing agent flow rate* [dm /min]	:	42,0	186	215	240,5
Coverage of 1 m of protected area* [dm /min]	:	2,75			
Protected area [m ]	:	39			

\* May vary ± 5%.  
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSSFH 32 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 32  
CFNCSSFH - Colliding nozzle  
32 - Model number

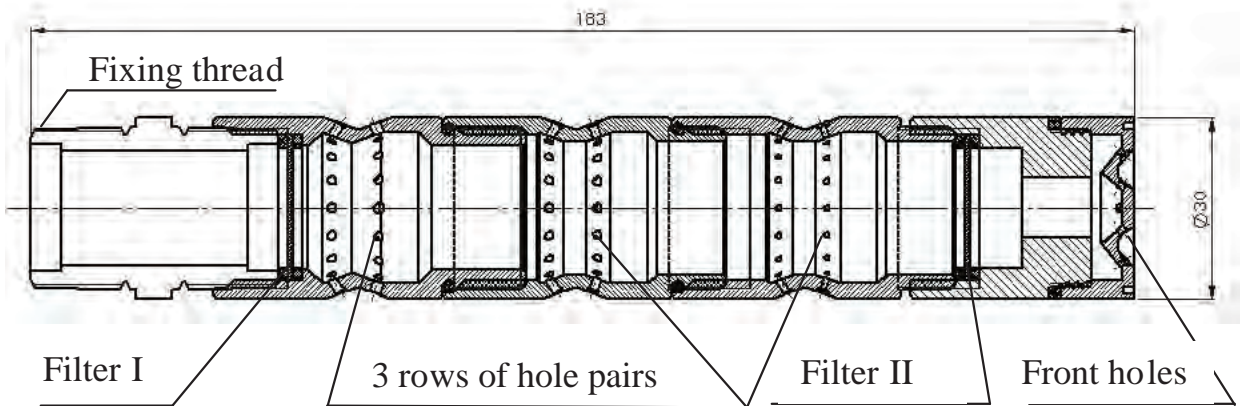
System Type:



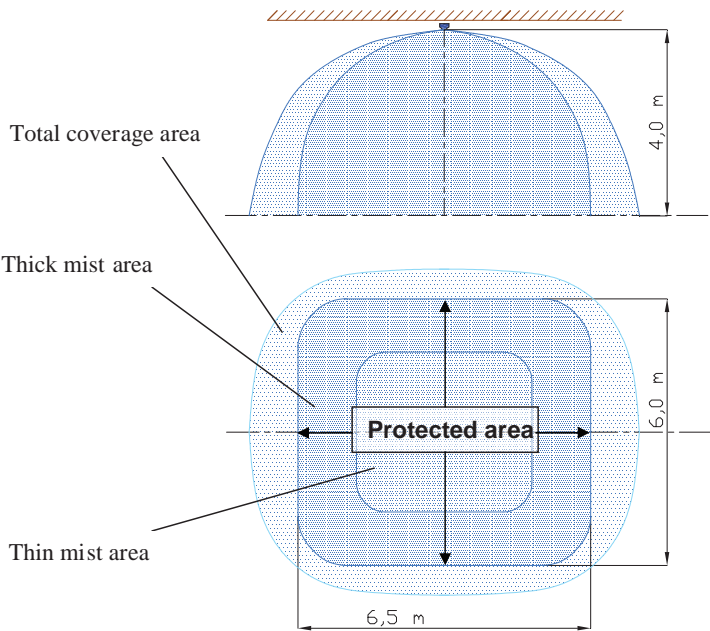
TECHNICAL PARAMETERS	
Material	: Stainless steel
Total outflow surface	: 179,5 mm <sup>2</sup>
Extinguishing medium	: Water
Filter mesh	: 0,6 x 0,6 mm and 0,4 x 0,4 mm
Connection type	: ¾" BSP male
Supply pressure	: Max 10 bar
Number of pairs of holes	: 3 X 12 (circular) + 4 (front)
Nozzle weight	: 0,35 kg

Application: Head set dedicated for extinguishing mine corridors (7m width).

TECHNICAL DETAILS



mMist MEDIUM PRESSURE SYSTEM ñ MIST STREAM



mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	8	10
Dv Droplet size [µm]		35 - 250			
Average K flow factor	:	76,0			
Extinguishing agent flow rate* [dm /min]	:	42,0	186	215	240,5
Coverage of 1 m of protected area* [dm /min]	:	2,75			
Protected area [m ]	:	39			

\* May vary ± 5%.  
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



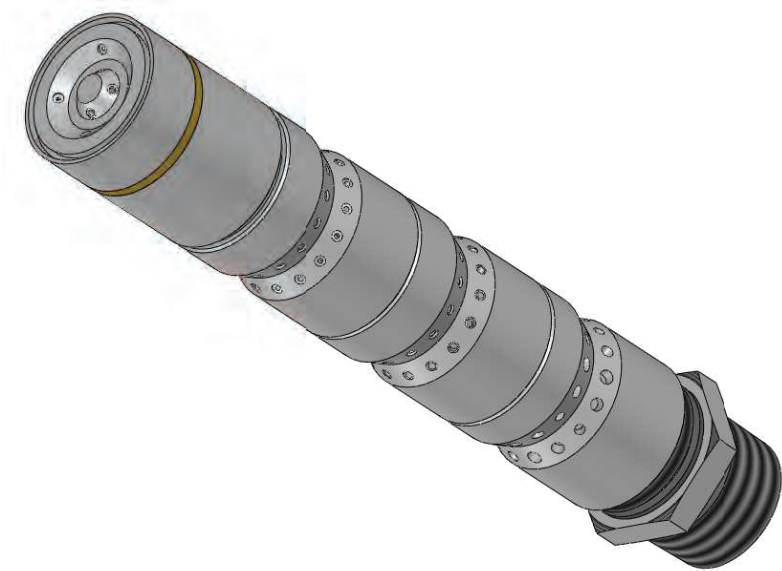
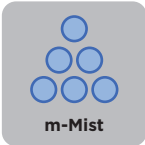
CF-NCSSFH 33 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 33

CFNCSSFH - Colliding nozzle  
(Net filter Circle Symmetrical  
Set Fluid Heads)

33 - Model number

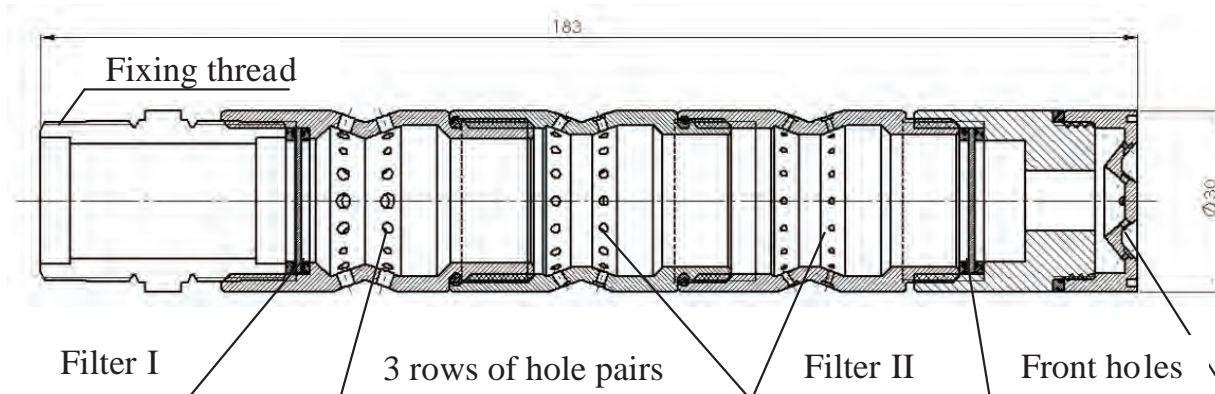
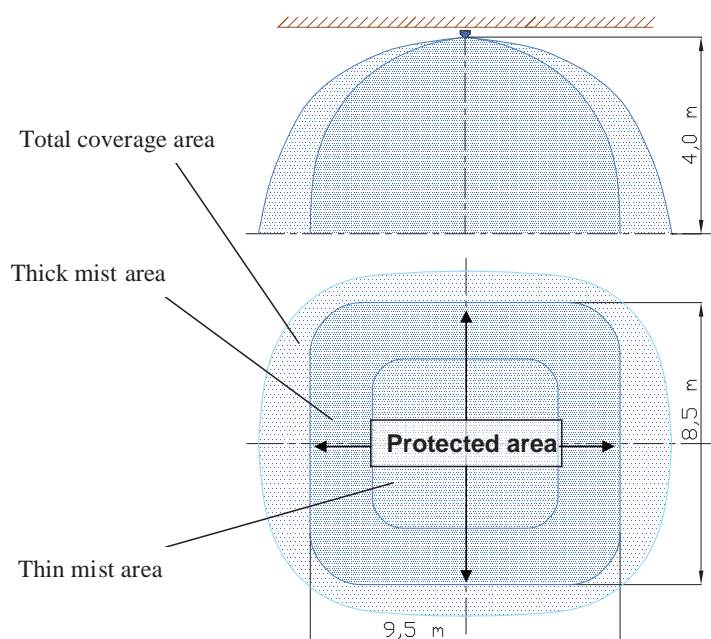
System Type:



TECHNICAL PARAMETERS	
Material	: Stainless steel
Total outflow surface	: 231,35 mm <sup>2</sup>
Extinguishing medium	: Water
Filter mesh	: 0,6 x 0,6 mm and 0,4 x 0,4 mm
Connection type	: ¾" BSP male
Supply pressure	: Max 10 bar
Number of pairs of holes	: 3 X 12 (circular) + 4 (front)
Nozzle weight	: 0,35 kg

Application: Head set dedicated for extinguishing mine corridors (11m width).

## TECHNICAL DETAILS

**mMist MEDIUM PRESSURE SYSTEM ñ MIST STREAM****mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS**

Working pressure [bar]	:	4	6	8	10
Dv Droplet size [µm]		35 - 250			
Average K flow factor	:	103,3			
Extinguishing agent flow rate* [dm /min]	:	206,0	252,0	-	-
Coverage of 1 m of protected area* [dm /min]	:	2,1			
Protected area [m ]	:	74			

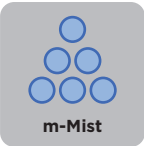
\* May vary ± 5%.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NCSSFH 34 NOZZLE  
Data Sheet

Full Title: CFNCSSFH 34  
CFNCSSFH - Colliding heads set  
34 - Model number

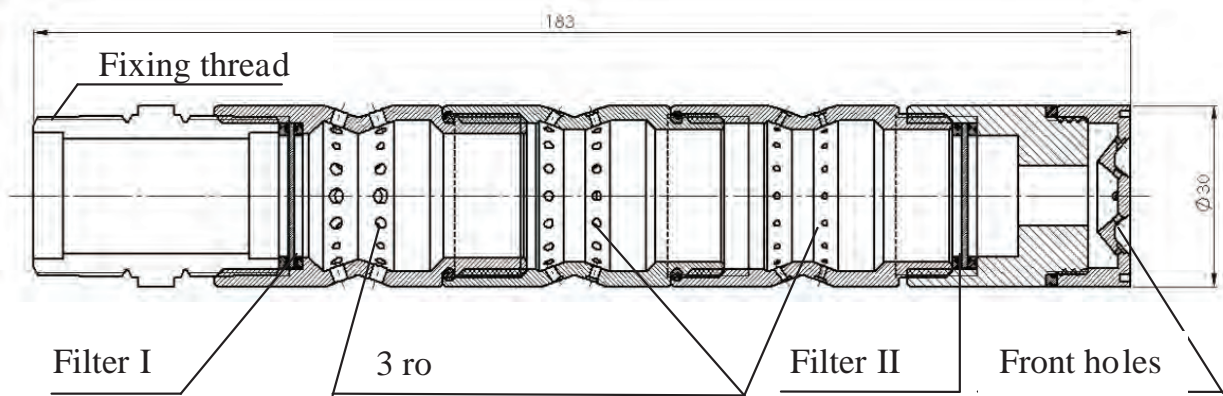
System Type:



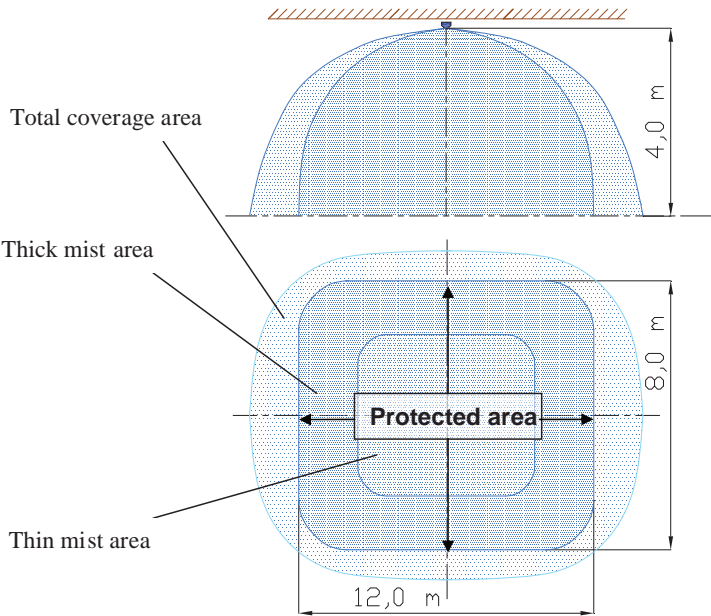
TECHNICAL PARAMETERS	
Material	: Stainless steel
Total outflow surface	: 272,33 mm²
Extinguishing medium	: Water
Filter mesh	: 0,6 x 0,6 mm and 0,4 x 0,4 mm
Connection type	: ¾" BSP male
Supply pressure	: Max 10 bar
Number of pairs of holes	: 3 X 12 (circular) + 4 (front)
Nozzle weight	: 0,35 kg

Application: Head set dedicated for extinguishing mine corridors (11m width).

TECHNICAL DETAILS



mMist MEDIUM PRESSURE SYSTEM ñ MIST STREAM



mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	8	10
Dv Droplet size [µm]		35 - 250			
Average K flow factor	:	121,75			
Extinguishing agent flow rate* [dm /min]	:	243,5	298,0	-	-
Coverage of 1 m of protected area* [dm /min]	:	1,95			
Protected area [m ]	:	88			

\* May vary ± 5%.  
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NGWP 1 NOZZLE  
Data Sheet

Full description: CFNGWP 1.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**1** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

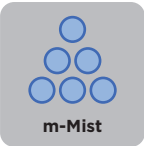
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

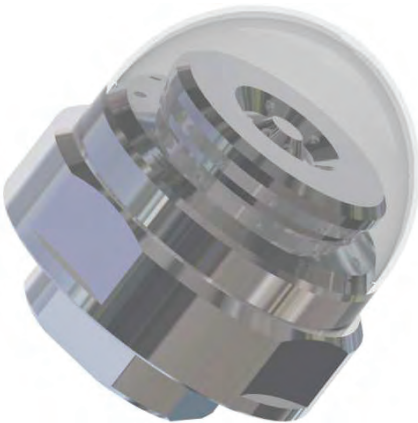
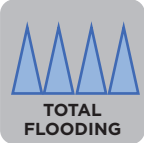
**Y** - 0 without cap

**1** silicon protection cap

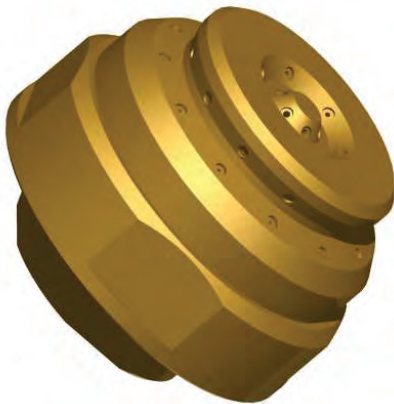
System Type:



Application:



CFNGWP 1.1.1

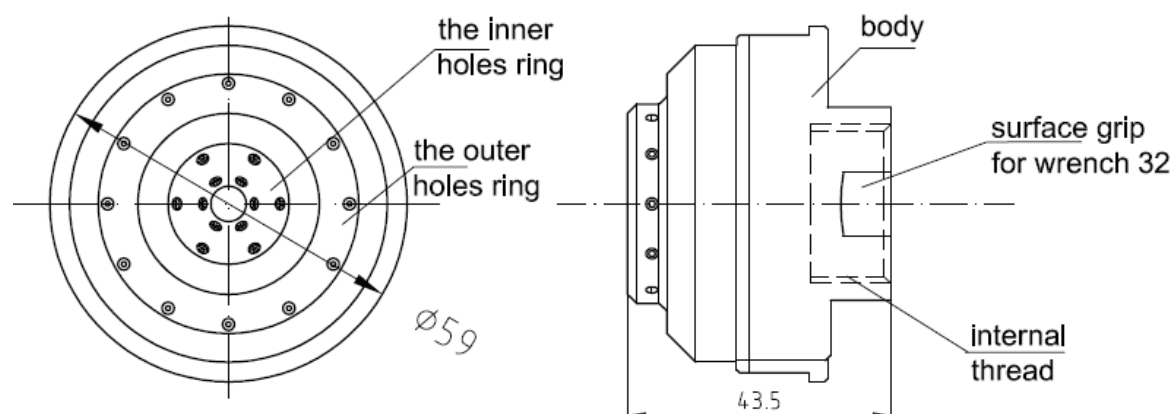


CFNGWP 1.3.0

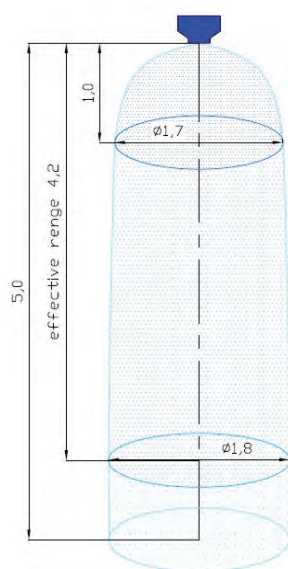
TECHNICAL PARAMETERS	
Total flow surface	: 26,1 mm <sup>2</sup>
Basic extinguishing media	: Water
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ¾" BSP int
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 2
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 117

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50 - 130			
K outflow factor	:	14,8			
Extinguishing agent expenditure [lit/min]	:	36,2	42,0	51,5	59,5
Effective stream range * [m]	:	1,8	2,2	3,0	3,6

**\*Range of horizontal stream.**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NGWP 9 NOZZLE  
Data Sheet

Full description: CFNGWP 9.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**9** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

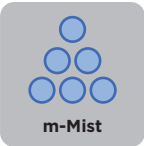
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

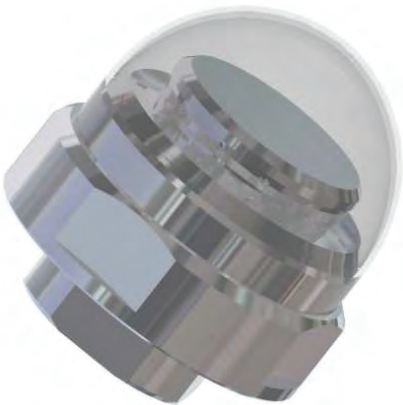
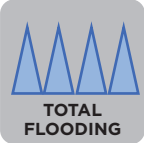
**Y** - 0 without cap

**1** silicon protection cap

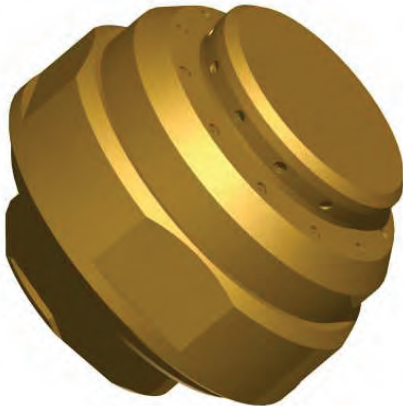
System Type:



Application:



CFNGWP 9.1.1

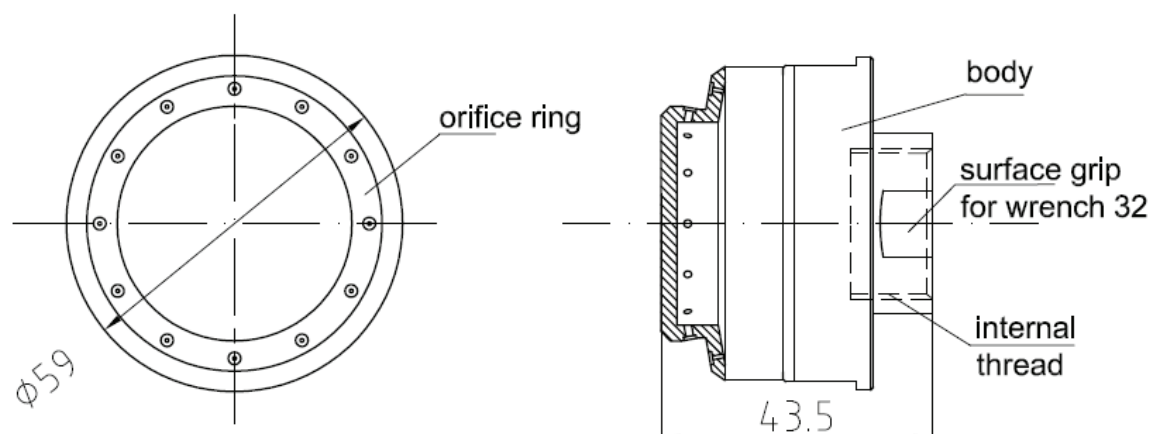


CFNGWP 9.3.0

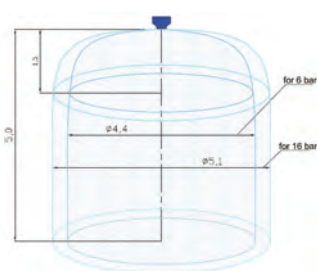
TECHNICAL PARAMETERS	
Total flow surface	: 17,0 mm <sup>2</sup>
Basic extinguishing media	: Water, gas and water
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ¾" BSP int
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 1
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 117

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



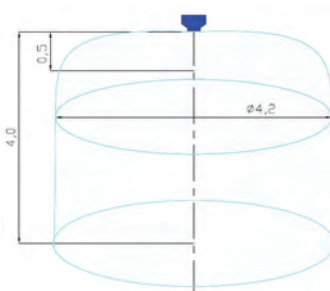
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50 - 130			
K flow factor	:	9,5			
Extinguishing agent expenditure [lit/min]	:	23,0	27,0	33,0	38,0
Effective stream range * [m]	:	0,3	0,55	0,75	0,9

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50-100
Extinguishing agent expenditure** [lit/30 s]	:	14,0
The minimum distance required to develop a stream of Watermist [m]	:	0,3
Effective stream range *** [m]	:	0,5

\*Range of horizontal stream. | \*\*The value of information only. | \*\*\*Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NGWP 11NOZZLE  
Data Sheet

Full description: CFNGWP 11.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**11** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

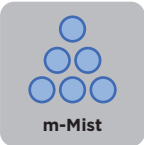
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

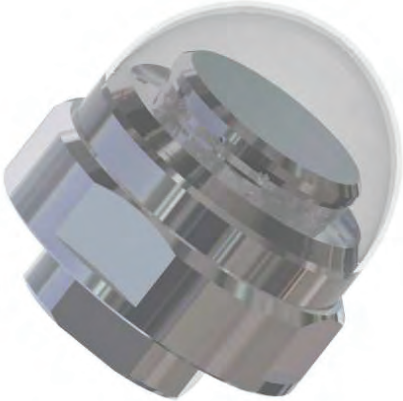
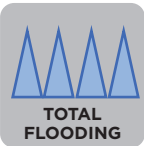
**Y** - 0 without cap

**1** silicon protection cap

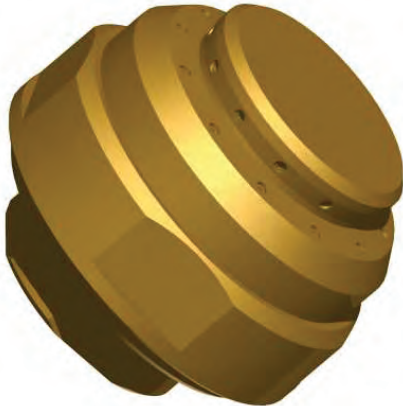
System Type:



Application:



CFNGWP 11.1.1

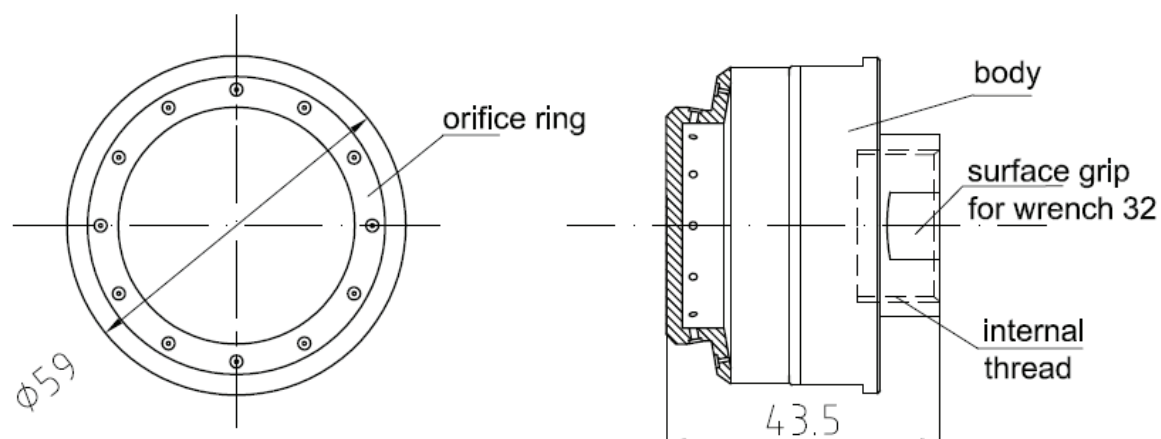


CFNGWP 11.3.0

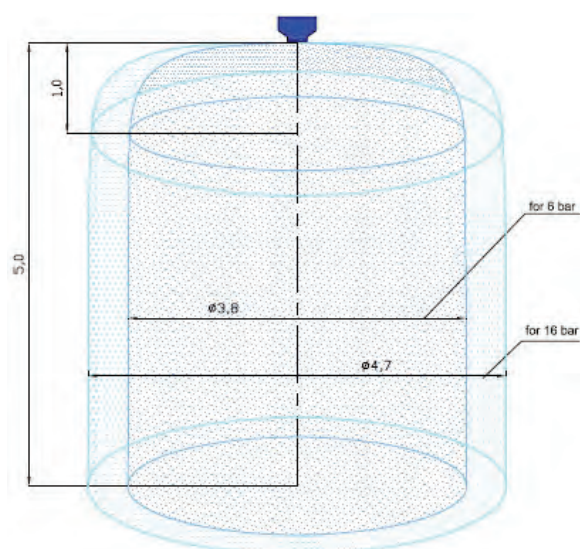
TECHNICAL PARAMETERS		
Basic extinguishing media	:	Water
Net filter opening	:	0,4 x 0,4 mm
Droplet size Dv	:	50 – 130 μm
Connection size	:	¾" BSP int
Inlet pressure	:	6 - 16 bar
K outflow factor	:	12,7
Number of holes ring	:	1
Head weight	:	0,5 kg
Protection cap	:	Cat. No. - N 117

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K outflow factor	:	12,7			
Extinguishing agent expenditure [lit/min]	:	30,5	36,0	44,0	51,5
Effective stream range * [m]	:	0,4	0,75	0,9	1,0

**\*Range of horizontal stream.**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NGWP 14NOZZLE  
Data Sheet

Full description: CFNGWP 14.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**14** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

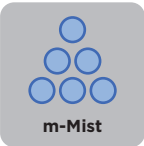
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

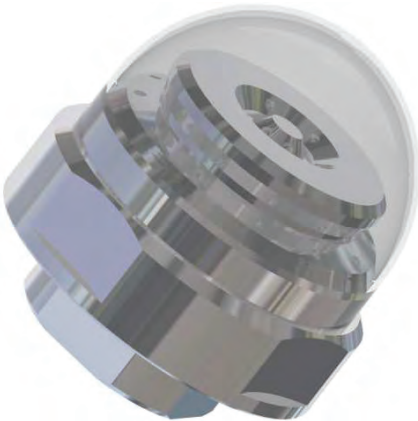
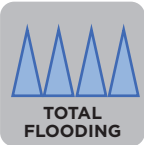
**Y** - 0 without cap

**1** silicon protection cap

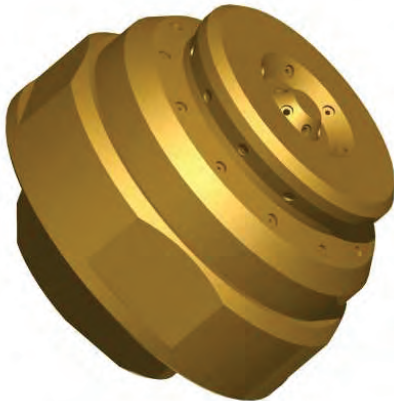
System Type:



Application:



CFNGWP 14.1.1

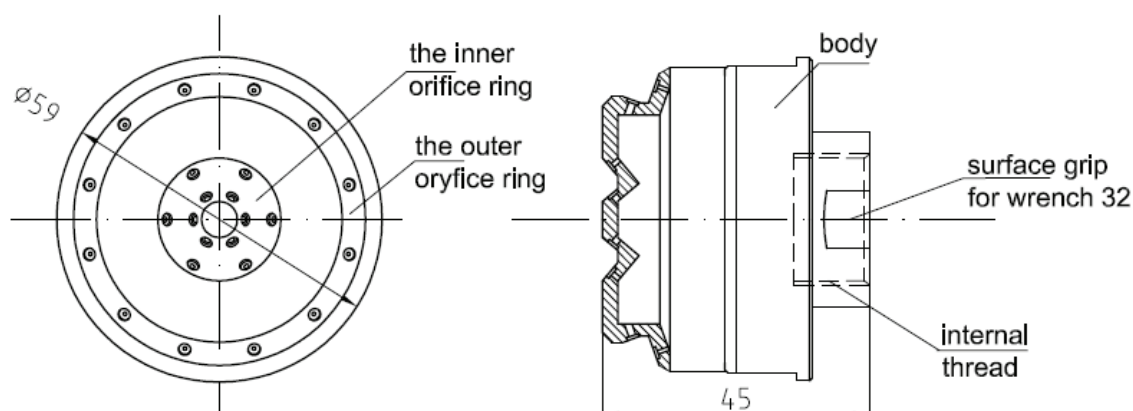


CFNGWP 14.3.0

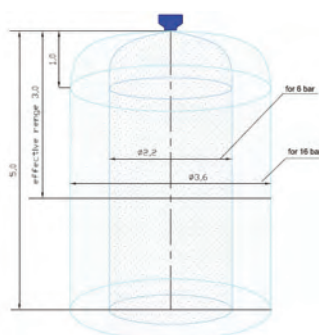
TECHNICAL PARAMETERS	
Total flow surface	: 25,65 mm <sup>2</sup>
Basic extinguishing media	: Water, gas and water
Net filter opening	: 0,4 x 0,4 mm
Connection size	: ¾" BSP int
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 2
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 117

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



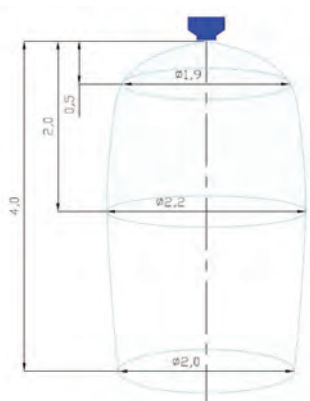
## MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50 - 130			
K flow factor	:	14,7			
Extinguishing agent expenditure [lit/min]	:	36,0	41,5	51,0	59,0
Effective stream range * [m]	:	2,2 3,0	3,2	3,4	

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	:	15
Extinguishing agent expenditure** [lit/30 s]	:	25,1
The minimum distance required to develop a stream of Watermist [m]	:	0,5
Effective stream range *** [m]	:	3,3
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50-110

\*Range of horizontal stream. | \*\*The value of information only. | \*\*\*Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NGWP 15 NOZZLE  
Data Sheet

Full description: CFNGWP 15.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**15** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

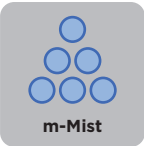
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

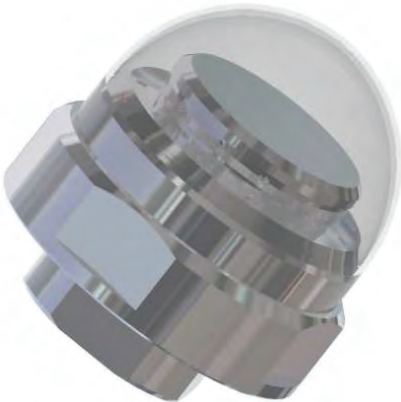
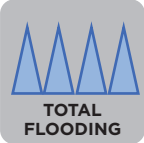
**Y** - 0 without cap

**1** silicon protection cap

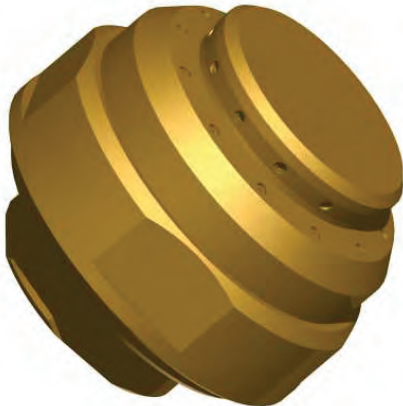
System Type:



Application:



CFNGWP 15.1.1

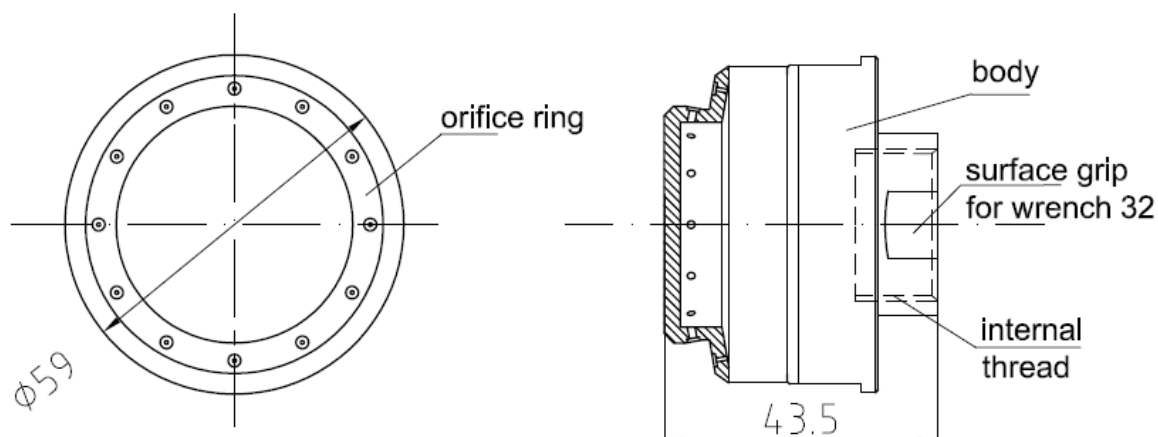


CFNGWP 15.3.0

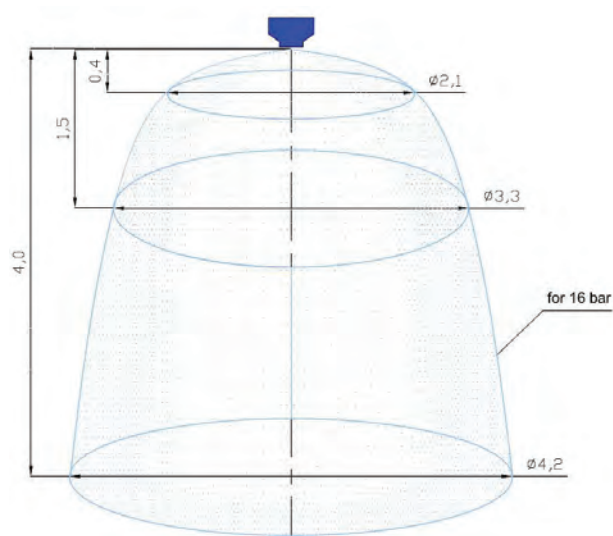
TECHNICAL PARAMETERS		
Basic extinguishing media	:	Water
Net filter opening	:	0,4 x 0,4 mm
Droplet size Dv	:	70 – 130 µm
Connection size	:	¾” BSP int
Inlet pressure	:	6 - 16 bar
K outflow factor	:	6,6
Number of holes ring	:	1
Head weight	:	0,5 kg
Protection cap	:	Cat. No. - N 117

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K outflow factor	:		6,6		
Extinguishing agent expenditure [lit/min]	:	16,1	18,7	23,0	26,7
Effective stream range * [m]	:	0,3	0,35	0,5	0,6

## \*Range of horizontal stream.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NGWP 32 NOZZLE  
Data Sheet

Full description: CFNGWP 32.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**32** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

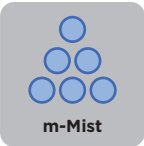
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

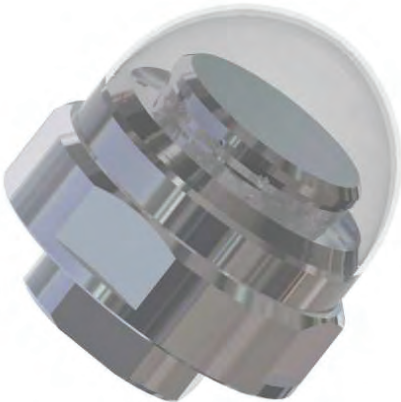
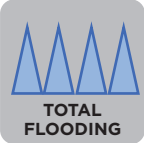
**Y** - 0 without cap

**1** silicon protection cap

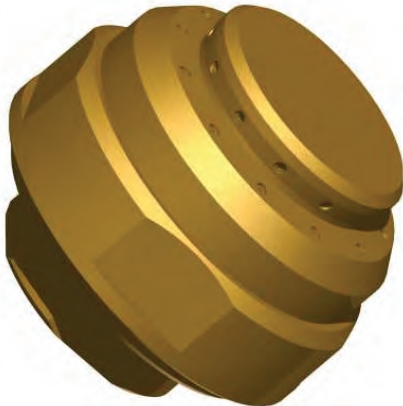
System Type:



Application:



CFNGWP 32.1.1

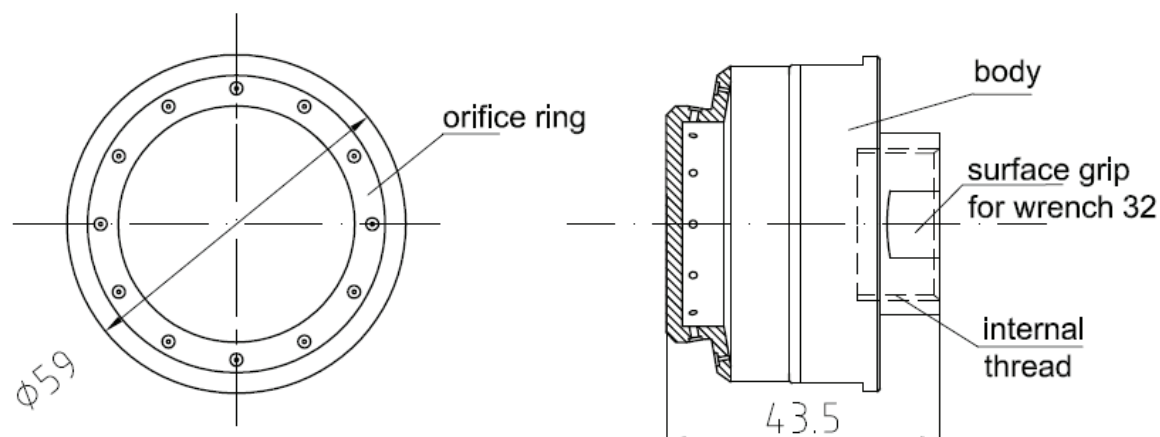


CFNGWP 32.3.0

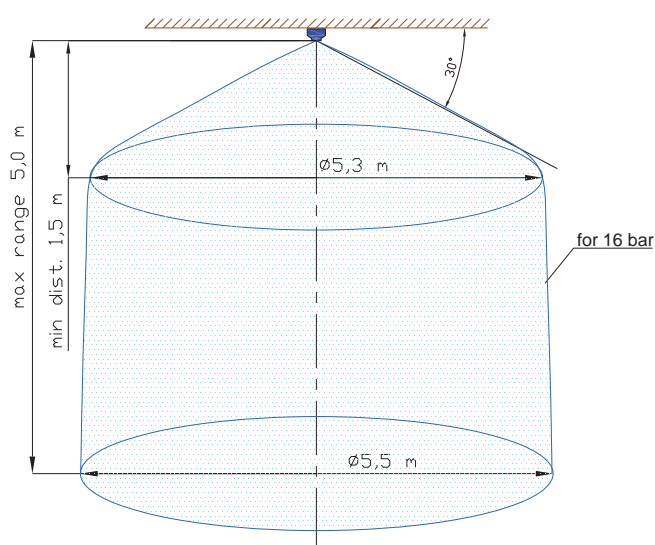
TECHNICAL PARAMETERS	
Total flow surface	: 24,5 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: ¾" BSP female
Inlet pressure	: 6 - 16 bar
Weight	: 0,4 kg
Protection cap	: Cat. No. - N 117

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	90	80	70	65
Average K outflow factor	:	13,4			
Extinguishing agent flow rate* [lit/min]	:	32,8	37,9	46,4	53,6

\*May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



CF-NGWP 34 NOZZLE  
Data Sheet

Full description: CFNGWP 34.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**34** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

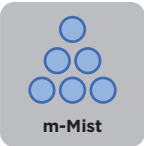
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

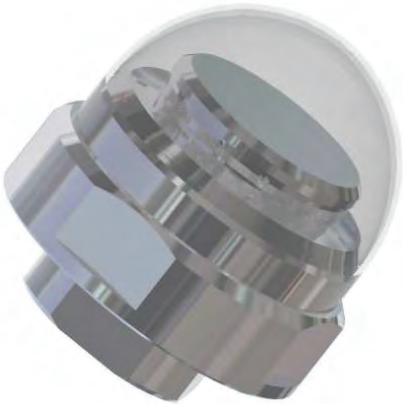
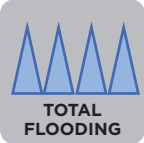
**Y** - 0 without cap

**1** silicon protection cap

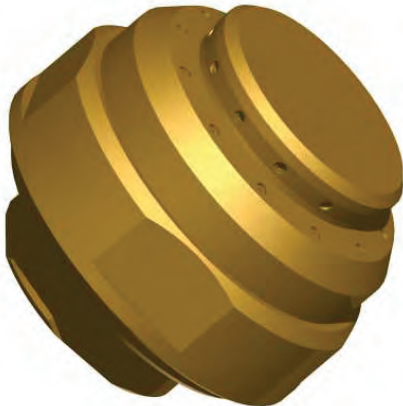
System Type:



Application:



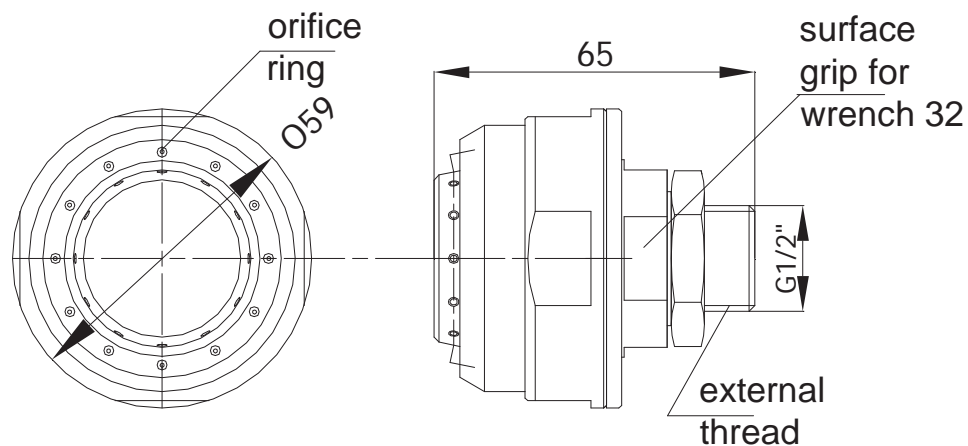
CFNGWP 34.1.1



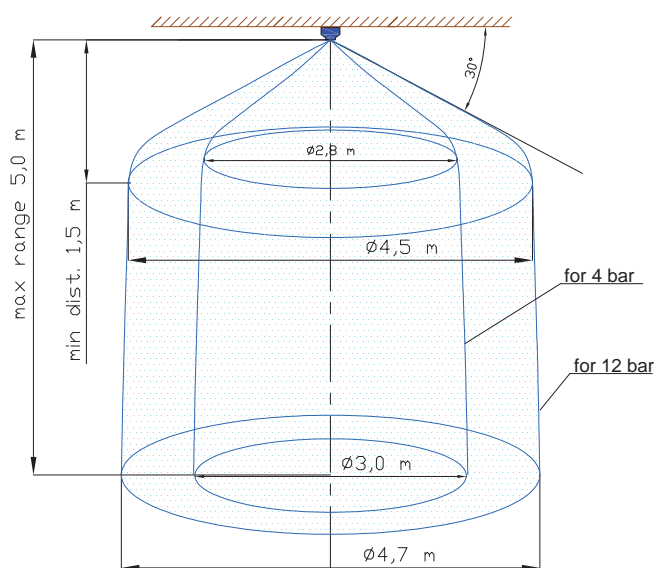
CFNGWP 34.3.0

TECHNICAL PARAMETERS	
Total flow surface	: 28,8 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: ¾" BSP female
Inlet pressure	: 4-16 bar
Weight	: 0,4 kg
Protection cap	: Cat. No. - N 117

## TECHNICAL DETAILS



## mMIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	8	12
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	80	75	70	65
Average K outflow factor	:	15,0			
Extinguishing agent flow rate* [lit/min]	:	30,0	36,5	42,5	52,0

\*May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NGWP 35 NOZZLE  
Data Sheet

Full description: CFNGWP 35.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**35** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

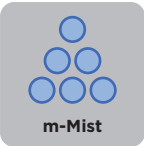
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

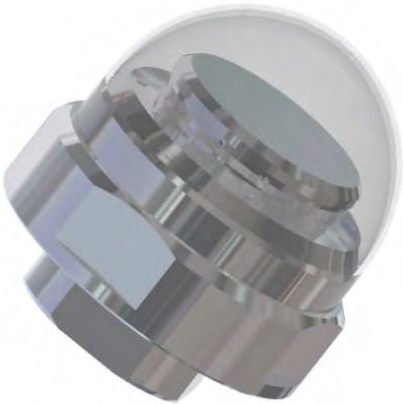
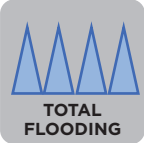
**Y** - 0 without cap

**1** silicon protection cap

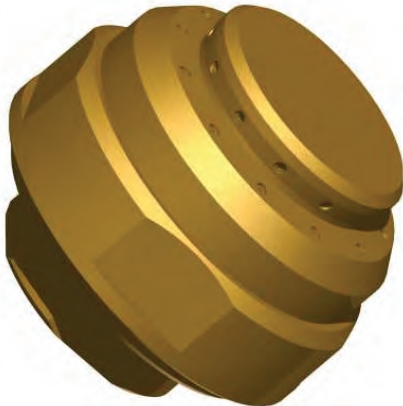
System Type:



Application:



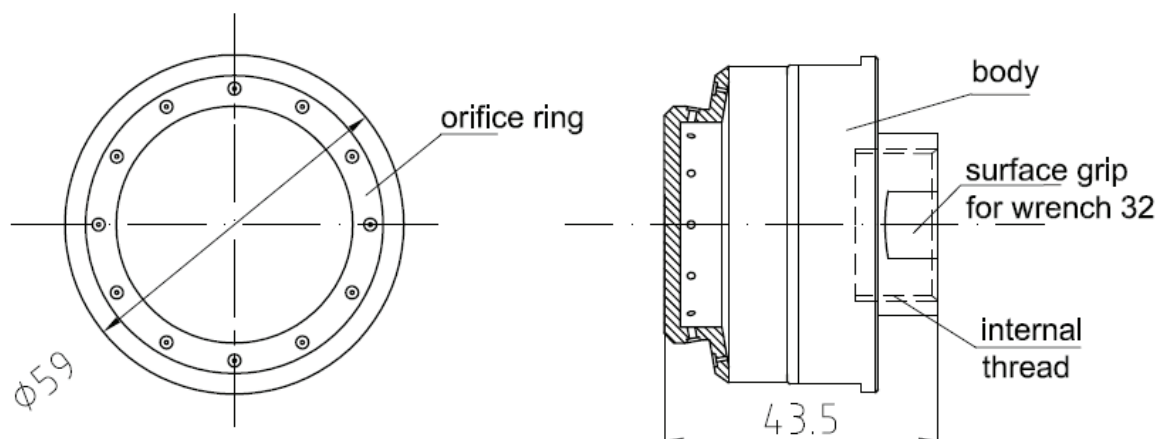
CFNGWP 35.1.1



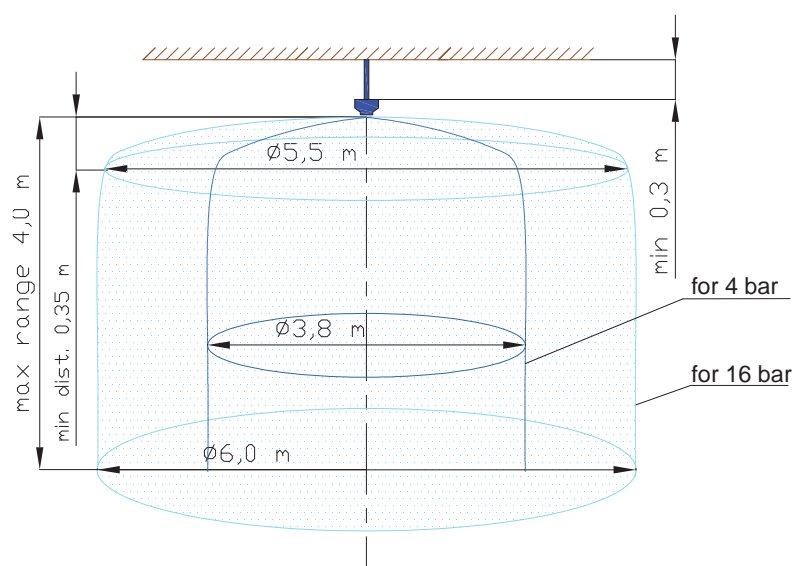
CFNGWP 35.3.0

TECHNICAL PARAMETERS	
Total flow surface	: 22,6 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: ¾" BSP female
Inlet pressure	: 4-16 bar
Weight	: 0,5 kg
Protection cap	: Cat. No. - N 117

## TECHNICAL DETAILS



## mMIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	4	8	12	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	105	95	90	80
Average K outflow factor	:	12,0			
Extinguishing agent flow rate* [lit/min]	:	24	34	41,5	46,5

\*May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NGWP 36 NOZZLE  
Data Sheet

Full description: CFNGWP 36.X.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs

**36** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

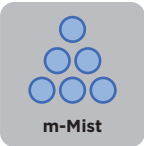
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

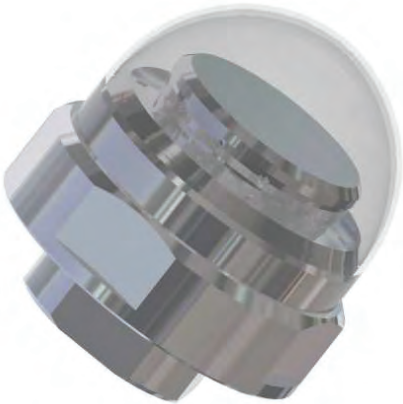
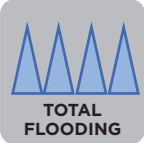
**Y** - 0 without cap

**1** silicon protection cap

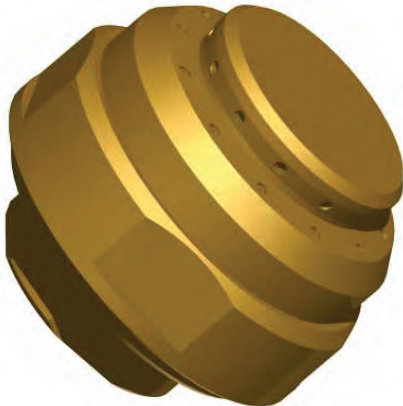
System Type:



Application:



CFNGWP 36.1.1

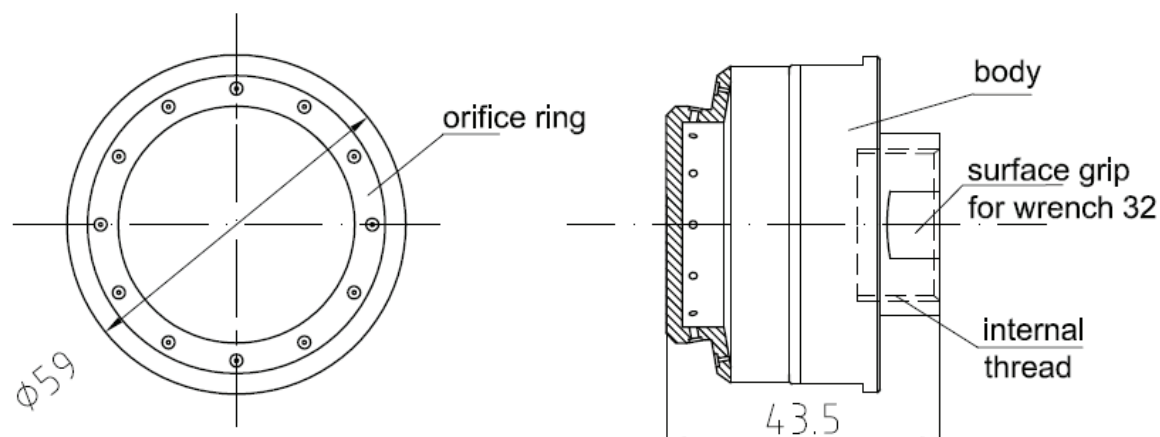


CFNGWP 36.3.0

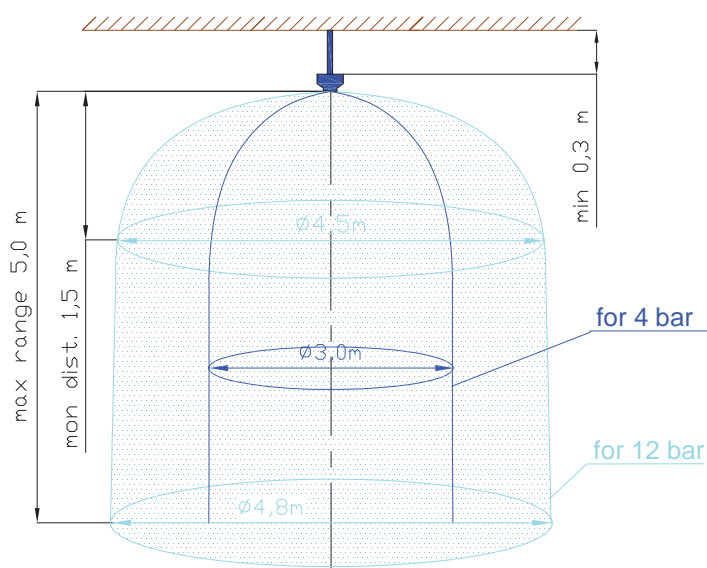
TECHNICAL PARAMETERS	
Total flow surface	: 28,8 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: ¾" BSP female
Inlet pressure	: 4-16 bar
Weight	: 0,4 kg
Protection cap	: Cat. No. - N 117



## TECHNICAL DETAILS



## MIST STREAM



## MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	8	12
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	125	110	105	95
Average K outflow factor	:	15,0			
Extinguishing agent flow rate* [lit/min]	:	30,0	36,5	42,5	52,0

\*May vary  $\pm 5\%$ .

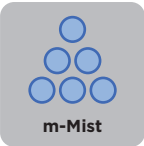
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-NGWP 49 NOZZLE  
Data Sheet

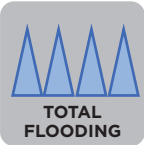
Full description: CFNGWP 49.Y

**CFNGWP** - (N) net filter, (G) head, (WP) multi pairs  
**49** - Model number  
**Y** - 0 without cap  
**1** silicon protection cap

System Type:



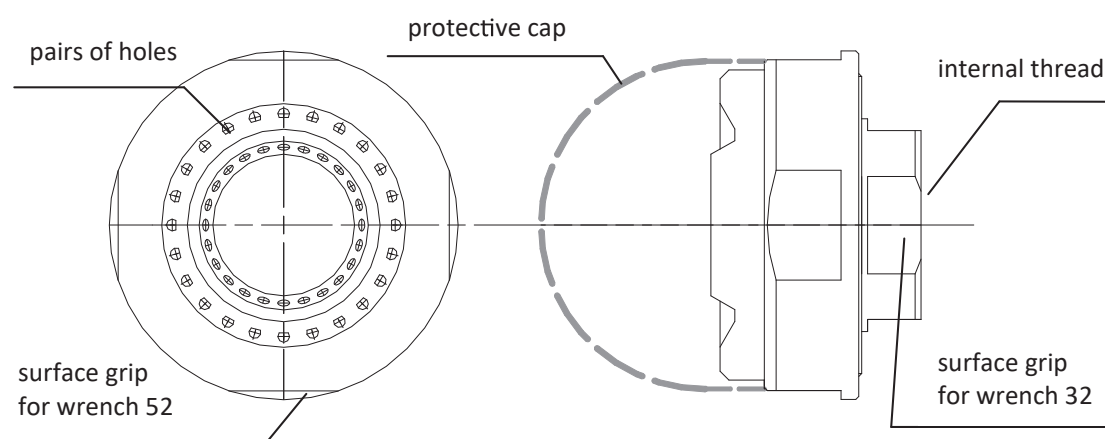
Application:



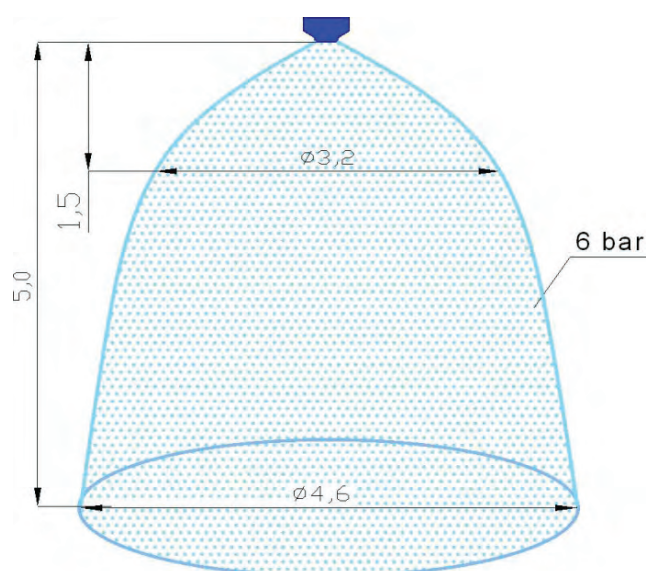
CFNGWP 49.0

TECHNICAL PARAMETERS	
Material	: Stainless steel (316)
Total flow surface	: 60,5 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection type	: 3/4" BSP male
Inlet pressure	: 2 - 6 bar
Nozzle weight	: 0,35 kg
Protection cap	: cat. no. - NA 004

## TECHNICAL DETAILS



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	10	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	60 - 125			
Average K flow factor	:	29,9			
Extinguishing agent flow rate* [dm /min]	:	59,8	73,2	94,5	115,8
Average flow rate per m2 ** [dm /min]	:	3,2			
Effective range of horizontal stream [m]	:	3	3	3	3,5

\*May vary  $\pm 5\%$ . | \*\*At pressure P=6 bar

USAGE: The nozzle is dedicated for systems with regular nozzle spacing 4 x 4 m. Calculation value of flow rate at such spacing at 6 bar pressure is 4,5 dm /m .

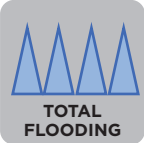
Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

TUNNEL NOZZLE T1  
Data Sheet

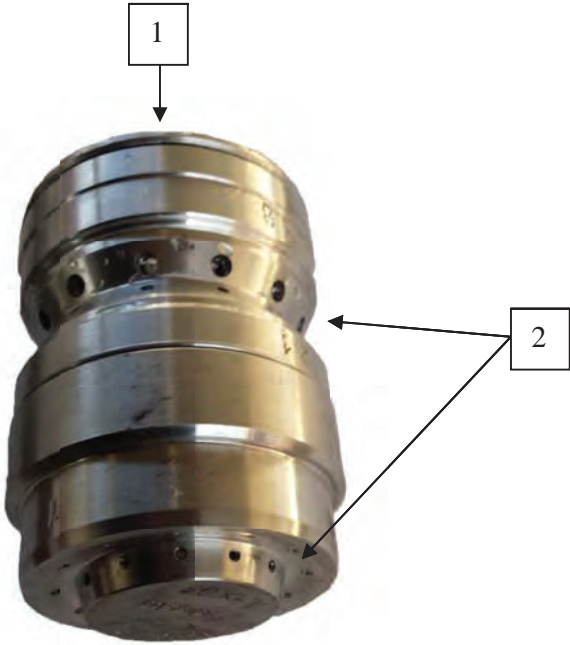
CATALOGUE NO.: C3008

- 1 Nozzle inlet ”
- 2 Pairs of outlet holes

Application:



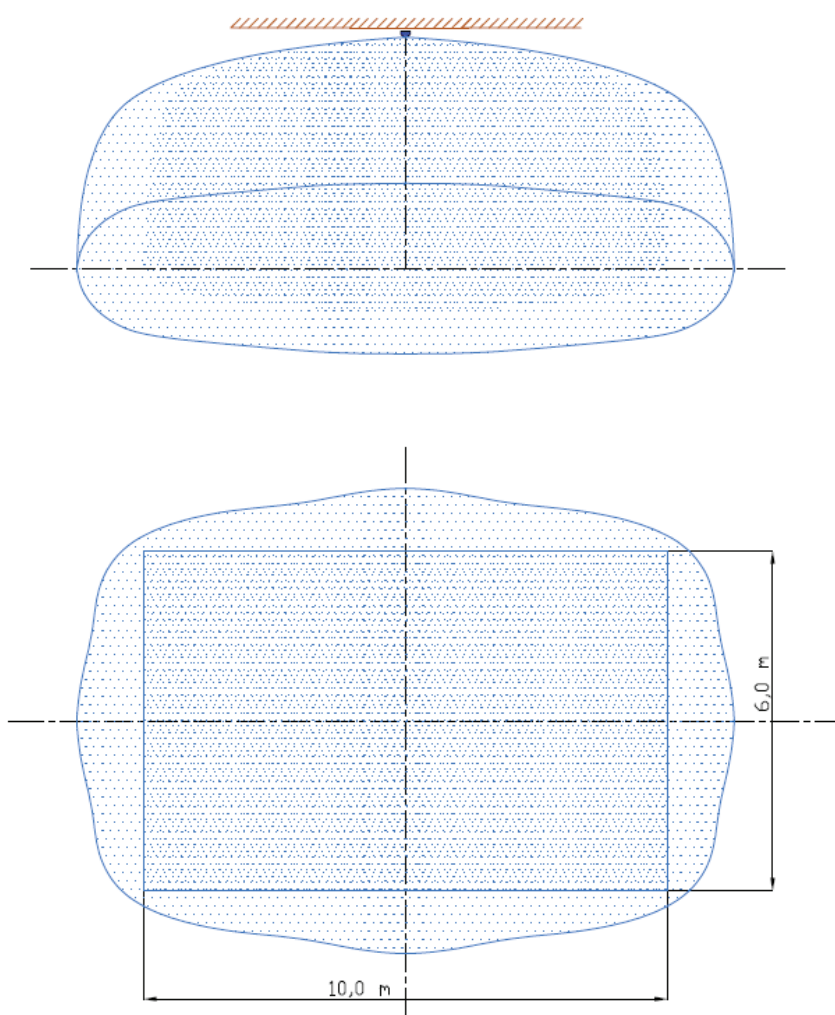
The nozzle, specially designed for tunnel protection, provides large coverage with its rectangle-shaped stream, which fits well into limited tunnel space.



TECHNICAL PARAMETERS	
Weight	: 1 kg
Water purity	: < 400 μm
Connection type	: ¾” internal thread

## STREAM PARAMETERS

Extinguishing medium	:	Water
Supply	:	Water supply system or pump, continuous mode
Pressure [bar]	:	4                      6
Flow rate [L/min]	:	170                      230
Stream diameter [m]	:	10 x 8                      10 x 8
Average coverage [L/m <sup>2</sup> ]	:	2,2                      2,6
K flow factor	:	90
Droplet size [μ]	:	100-400

**MIST STREAM**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



## CF-DGWP9 NOZZLE Data Sheet

### Full description: CFDGWP 9.X.Y

**CFDGWP** - (D) detection, (G) head, (WP) multi pairs

**9** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

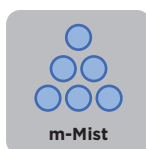
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

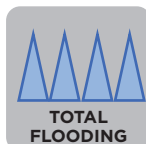
**Y** - 0 without cap

**1** silicon protection cap

### System Type:



### Application:



**CFNGWPA 9.1.1**



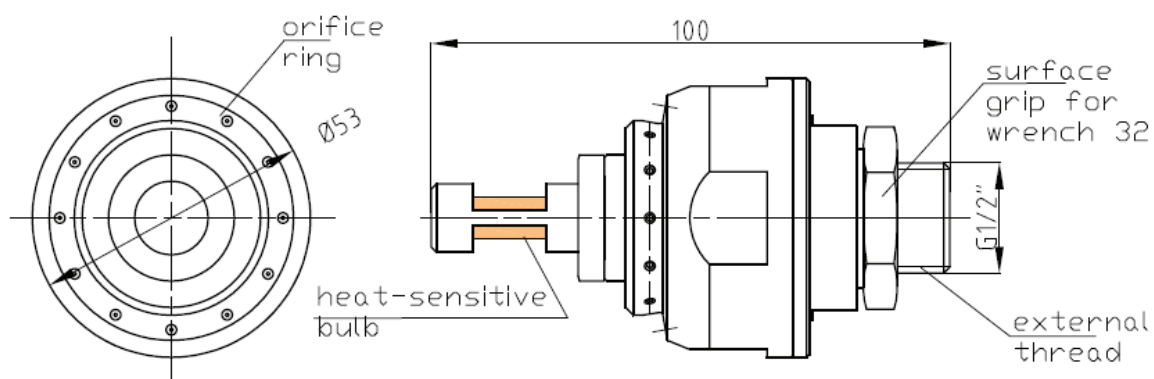
**CFNGWPA 9.2.0**

### TECHNICAL PARAMETERS

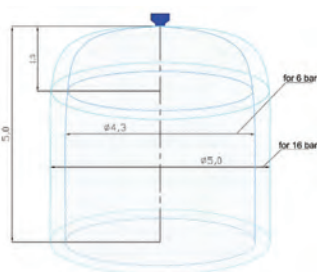
Total flow surface	: 17,0 mm <sup>2</sup>
Basic extinguishing media	: Water, gas and water
Net filter opening	: 0,4 x 0,4 mm
Connection size	: 1/2" BSP ext.
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 1
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 118
Heat-sensitive bulb	: Orange - 57°C/RTI - 22ms

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



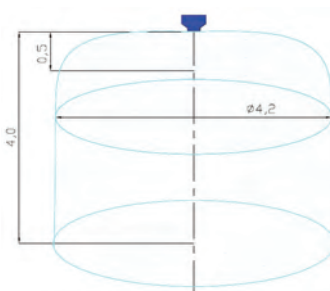
## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50 - 130			
K flow factor	:	8,6			
Extinguishing agent expenditure [lit/min]	:	21,1	24,3	29,7	34,4
Effective stream range * [m]	:	0,3 0,55	0,75	0,9	

## ROTOR MIST SYSTEM - MIST STREAM



## ROTOR MIST SYSTEM - MIST STREAM PARAMETERS

Initial pressure of work [bar]	:	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	50-100
Extinguishing agent expenditure** [lit/30 s]	:	14,0
The minimum distance required to develop a stream of Watermist [m]	:	0,3
Effective stream range *** [m]	:	0,5

\*Range of horizontal stream. | \*\*The value of information only. | \*\*\*Measurement in 30 seconds of action.

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## CF-DGWP15 NOZZLE Data Sheet

### Full description: CFDGWP 15.X.Y

**CFDGWP** - (D) detection, (G) head, (WP) multi pairs

**15** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

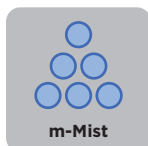
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

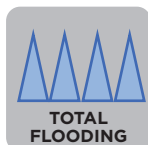
**Y** - 0 without cap

**1** silicon protection cap

### System Type:



### Application:



**CFDGWPA 15.1.1**



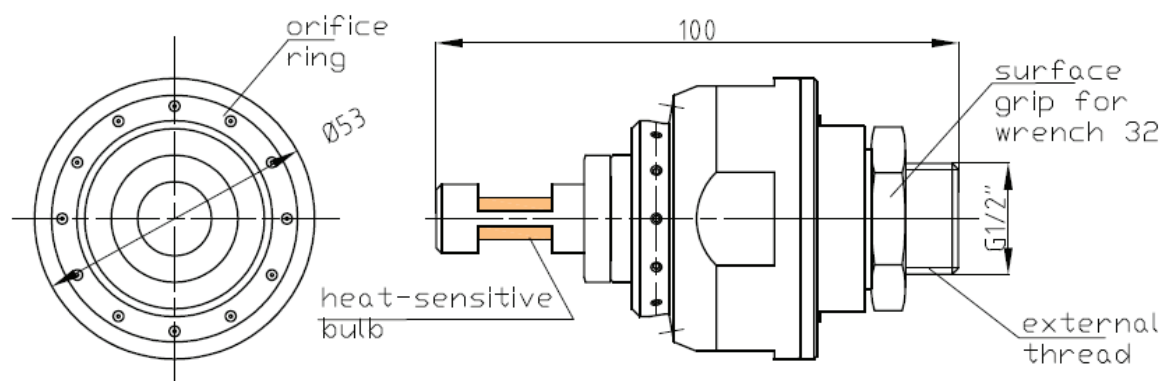
**CFDGWPA 15.2.0**

### TECHNICAL PARAMETERS

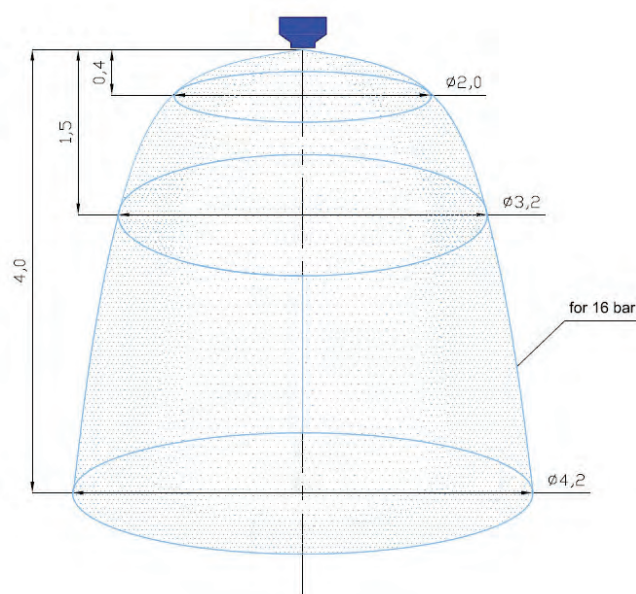
Total flow surface	: 12,8
Basic extinguishing media	: Water
Net filter opening	: 0,4 x 0,4 mm
Droplet size Dv	: 65 – 140 µm
Connection size	: ½" BSP ext
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 1
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 118
Heat-sensitive bulb	: Orange - 57°C/RTI - 22ms

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K flow factor	:		6,55		
Extinguishing agent expenditure [lit/min]	:	16,1	18,6	22,8	26,4
Effective stream range * [m]	:	0,3	0,5	0,75	0,85

**\*Range of horizontal stream**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## CF-DGWP16 NOZZLE Data Sheet

### Full description: CFDGWP 16.X.Y

**CFDGWP** - (D) detection, (G) head, (WP) multi pairs

**16** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

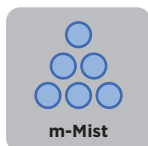
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

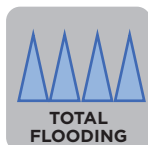
**Y** - 0 without cap

**1** silicon protection cap

### System Type:



### Application:



**CFNGWPA 16.1.1**



**CFNGWPA 16.2.0**

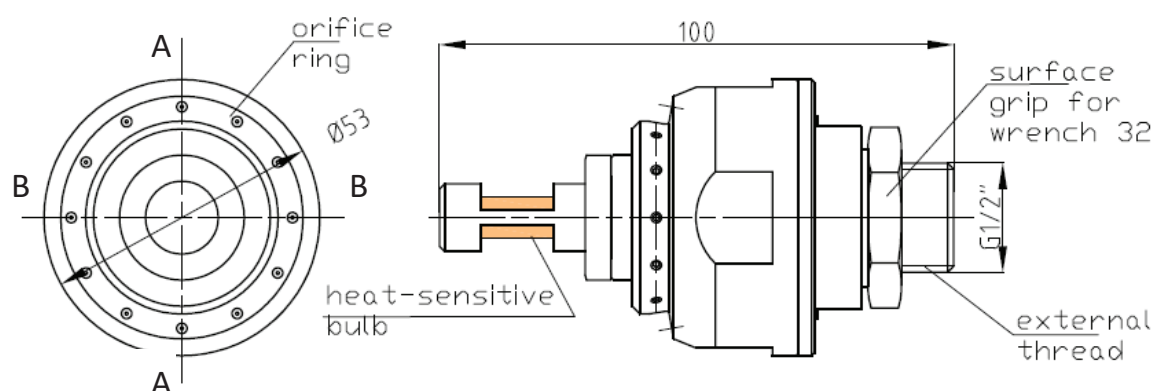
### TECHNICAL PARAMETERS

Total flow surface	: 11,8 mm <sup>2</sup>
Basic extinguishing media	: Water
Net filter opening	: 0,4 x 0,4 mm
Droplet size Dv	: 55 – 135 µm
Connection size	: ½" BSP ext
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 1
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 118
Heat-sensitive bulb	: Orange - 57°C/RTI - 22ms

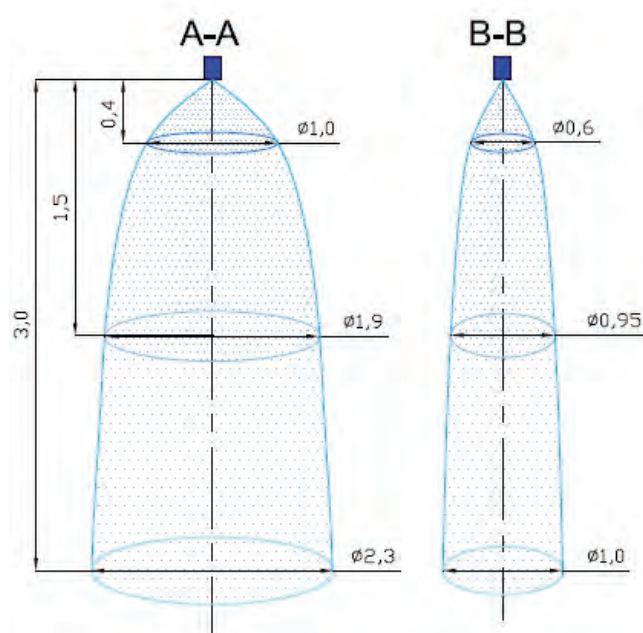
Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



## TECHNICAL DETAILS



## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K flow factor	:	5,8			
Extinguishing agent expenditure [lit/min]	:	14,2	16,4	20,1	23,2
Effective stream range * [m]		A 1,1 B 0,8	- -	- -	1,4 1,7

**\*Stream has an elliptical shape.**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## CF-DGWP17 NOZZLE Data Sheet

### Full description: CFDGWP 17.X.Y

**CFDGWP** - (D) detection, (G) head, (WP) multi pairs

**17** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

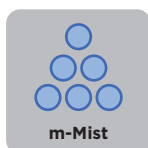
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

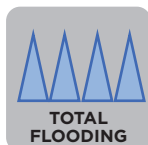
**Y** - 0 without cap

**1** silicon protection cap

### System Type:



### Application:



**CFNGWPA 17.1.1**



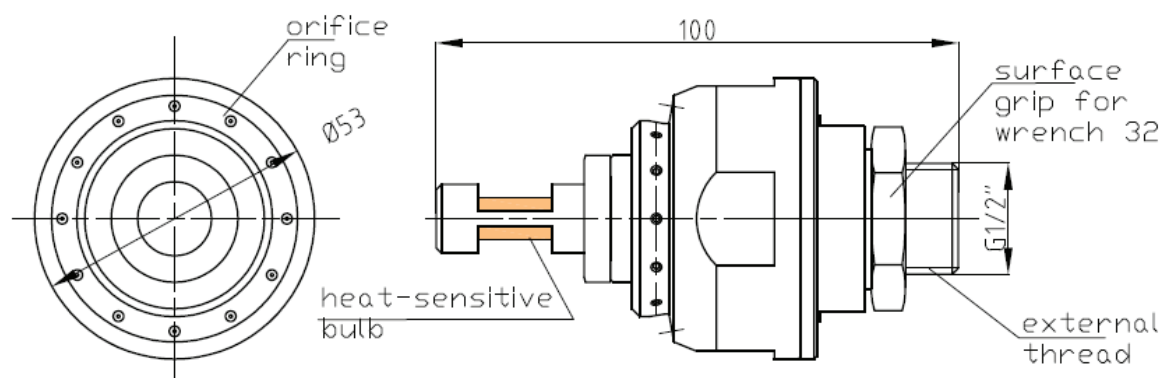
**CFNGWPA 17.2.0**

### TECHNICAL PARAMETERS

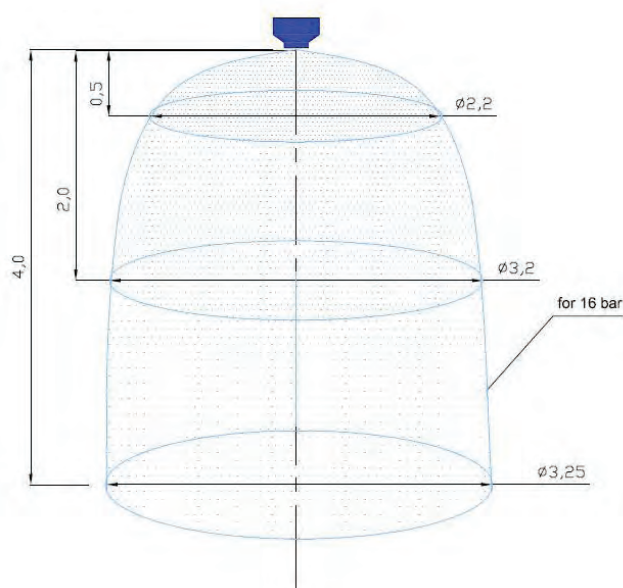
Total flow surface	: 11,8 mm <sup>2</sup>
Basic extinguishing media	: Water
Net filter opening	: 0,4 x 0,4 mm
Droplet size Dv	: 55 – 135 µm
Connection size	: ½" BSP ext
Inlet pressure	: 6 - 16 bar
Number of holes ring	: 1
Head weight	: 0,5 kg
Protection cap	: Cat. No. - N 118
Heat-sensitive bulb	: Orange - 57°C/RTI - 22ms

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## MEDIUM PRESSURE SYSTEM - MIST STREAM



## MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	16
K flow factor	:		4,4		
Extinguishing agent expenditure [lit/min]	:	10,8	12,5	15,2	17,6
Effective stream range * [m]	:	1,2	-	-	1,4

**\*Range of horizontal stream.**

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## CF-DGWP44 NOZZLE Data Sheet

### Full description: CFDGWP 44.X.Y

**CFDGWP** - (D) detection, (G) head, (WP) multi pairs

**44** - Model number

**X** - Kind of material

**1** stainless steel (316)

**2** stainless steel (304)

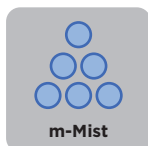
**3** brass (C37800)

**4** brass (CuZn36Pb2As)

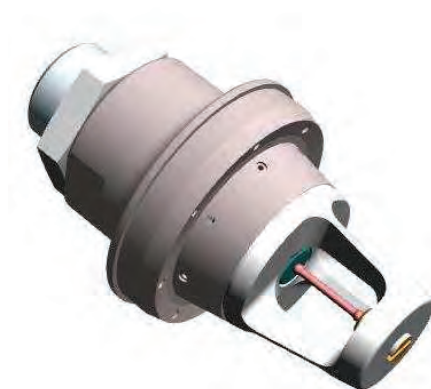
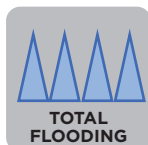
**Y** - 0 without cap

**1** silicon protection cap

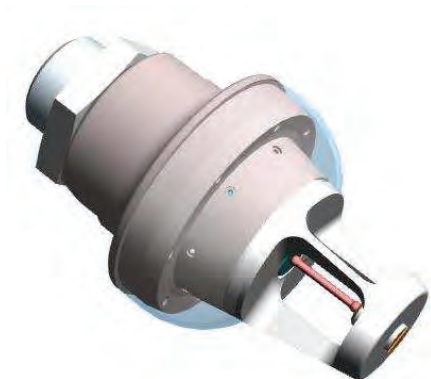
### System Type:



### Application:



**CFDGWP 44.1.0**



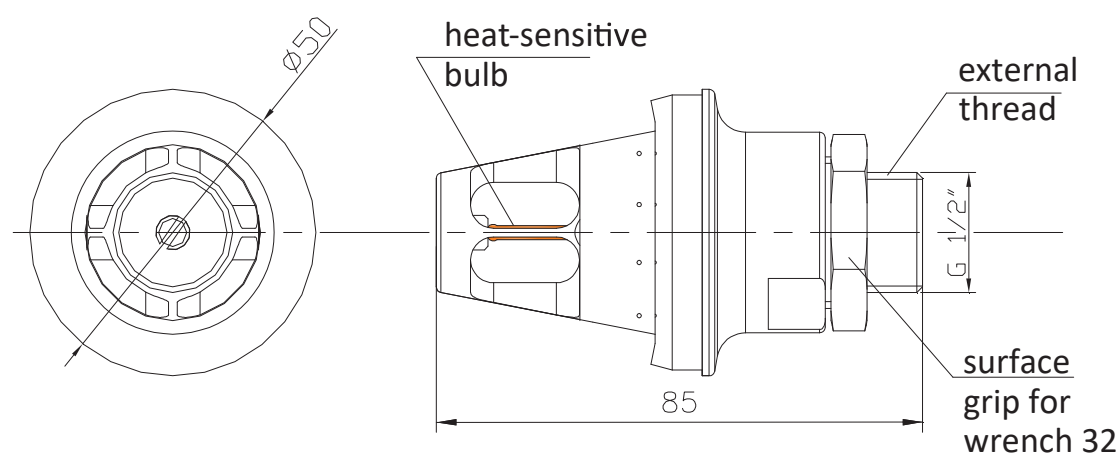
**CFDGWP 44.2.1**

### TECHNICAL PARAMETERS

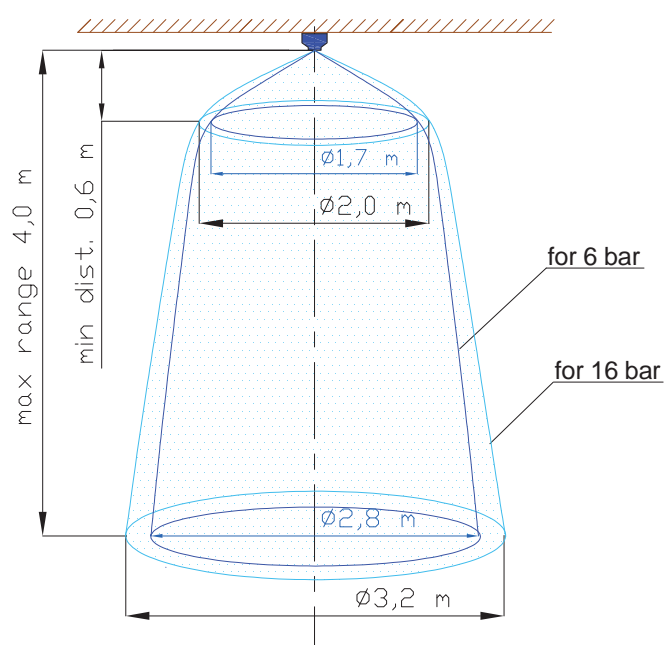
Total flow surface	: 9,86 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: 1/2" BSP male
Inlet pressure	: 6 -15 bar
Nozzle weight	: 0,35 kg
Protection cap	: cat. no. - N 119
Heat-sensitive bulb	: Orange - 57°C/RTI - 22ms

Design instructions are included in design manual. Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## TECHNICAL DETAILS



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	6	8	12	15
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	95	85	70	65
Average K flow factor	:	5,68			
Extinguishing agent flow rate* [ $\text{dm}^3/\text{min}$ ]	:	13,9	16,0	19,7	22,0

\*May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.



## CF-DGWP46 NOZZLE Data Sheet

### Full description: CFDGWP 46.S.Y

**CFDGWP** - (D) detection, (G) head, (WP) multi pairs

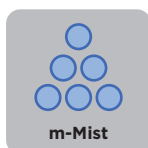
**46** - Model number

**S** - stainless steel (316)

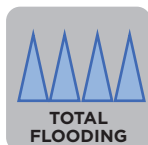
**Y** - 0 without cap

**1** silicon protection cap

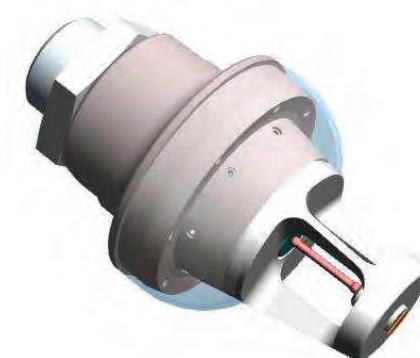
### System Type:



### Application:



**CFDGWP 46.S.0**

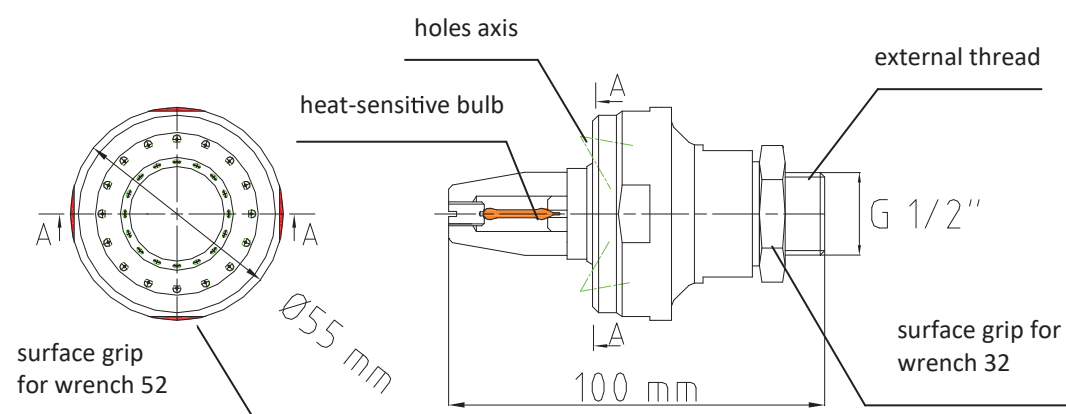


**CFDGWP 46.S.1**

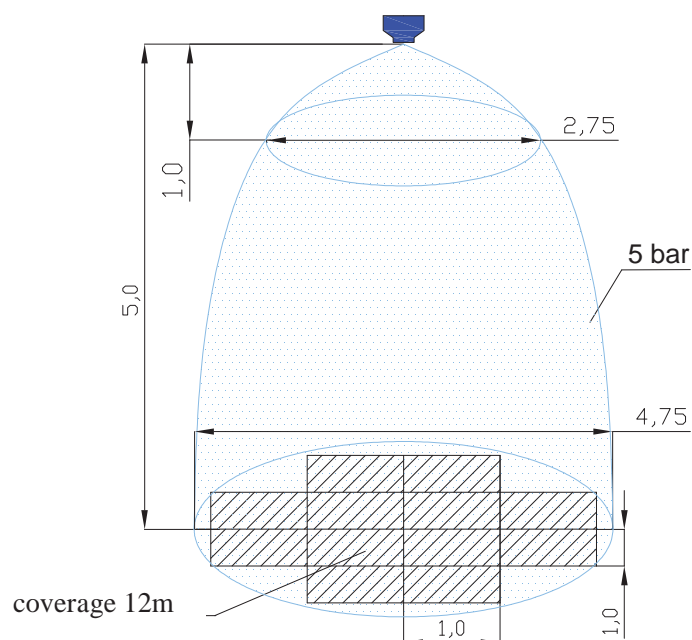
### TECHNICAL PARAMETERS

Total flow surface	: 38,0 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: 1/2" BSP male
Inlet pressure	: 4 -12 bar
Nozzle weight	: 0,35 kg
Protection cap	: cat. no. - N 119
Heat-sensitive bulb	: Orange - F2 x 16

## TECHNICAL DETAILS



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	5	6
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	120	110	105
Average K flow factor	:		15,5	
Extinguishing agent flow rate* [ $\text{dm}^3/\text{min}$ ]	:	35,0	39,0	43,0
Average flow rate per $\text{m}^2$ [ $\text{l}/\text{min}$ ]	:	2,11	2,27	2,47

\* May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

CF-DGWP49 NOZZLE  
Data Sheet

Full description: CFDGWP 46.S.Y

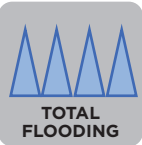
**CFDGWP** - (D) detection, (G) head, (WP) multi pairs  
**49** - Model number  
**S** - Stainless steel (316)

**Y** - 0 without cap  
**1** silicon protection cap

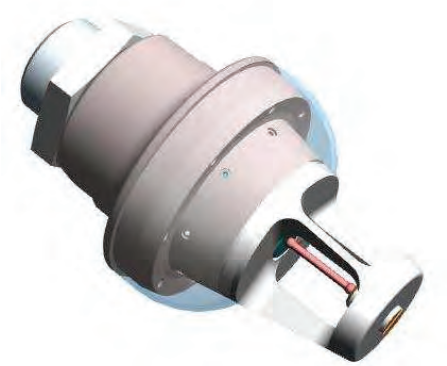
System Type:



Application:



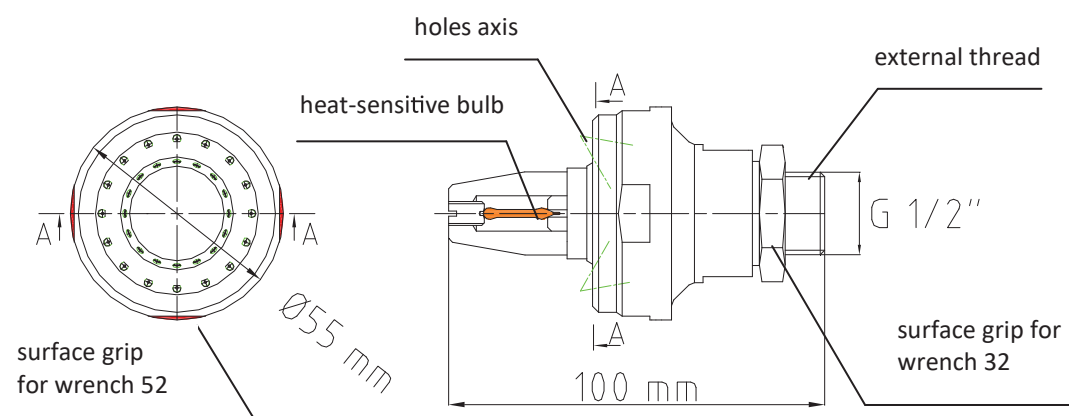
CFDGWP 49.S.0



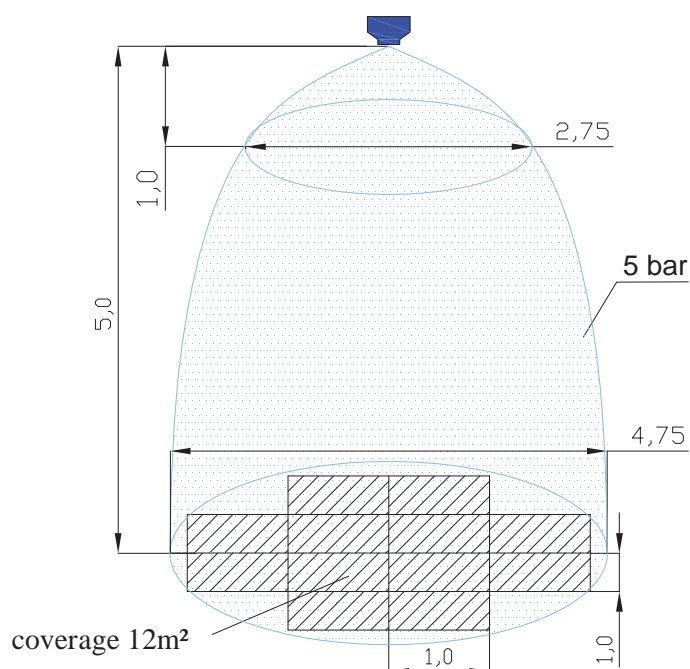
CFDGWP 49.S.1

TECHNICAL PARAMETERS	
Total flow surface	: 60,5 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection size	: 1/2" BSP male
Inlet pressure	: 4 - 6 bar
Nozzle weight	: 0,35 kg
Protection cap	: cat. no. - N 119
Heat-sensitive bulb	: Orange - F2 x 16

## TECHNICAL DETAILS



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	5	6
Droplet size $D_v$ [ $\mu\text{m}$ ]	:	125	115	110
Average K flow factor	:		28,8	
Extinguishing agent flow rate* [ $\text{dm}^3/\text{min}$ ]	:	57,6	64,4	70,5
Average flow rate per $\text{m}^2$ [ $\text{l}/\text{min}$ ]	:	-	4,03	-

\* May vary  $\pm 5\%$ .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

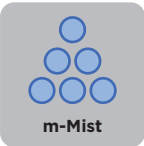
CF-DGWP 62 NOZZLE  
Data Sheet

Full description: CF-DGWP 62.X

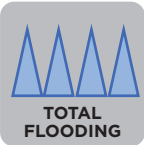
CF-DGWP - (N) net filter, (G) head, (WP) multi pairs  
62 - Model number

X - 0 without cap  
1 silicon protection cap

System Type:



Application:

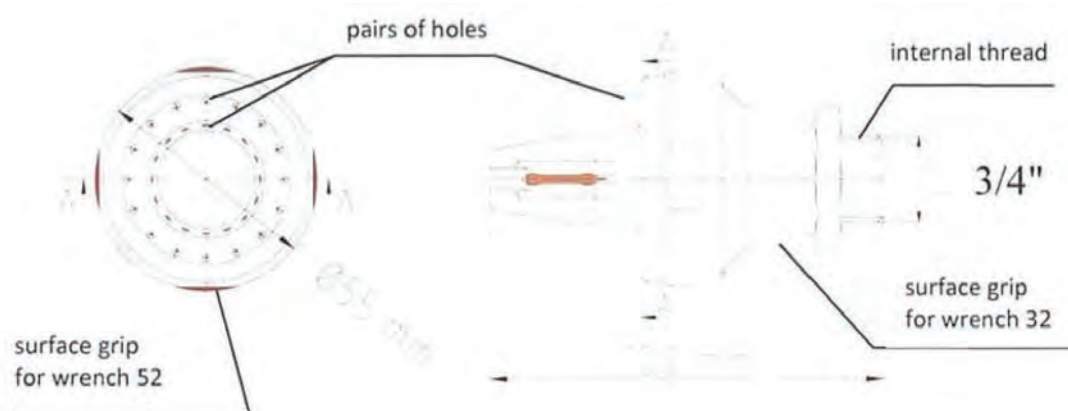


DGWP 62.0

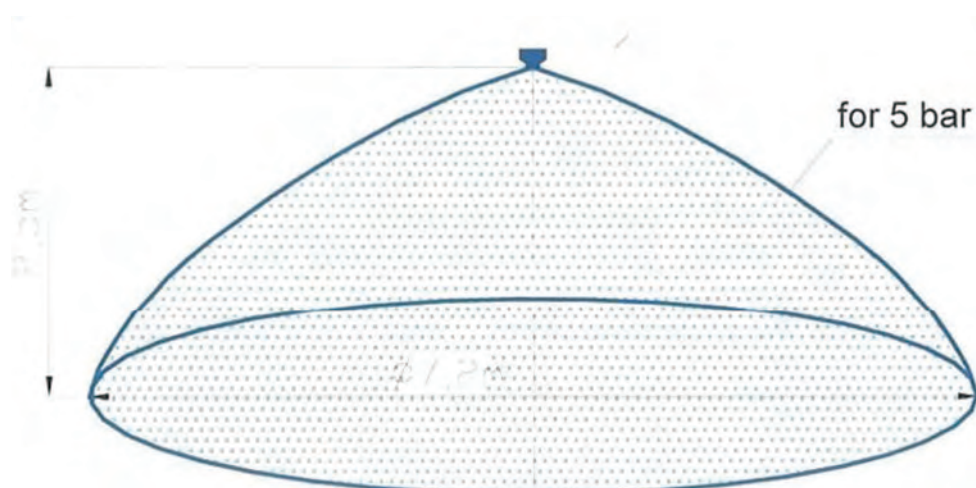
TECHNICAL PARAMETERS	
Material	: Stainless steel (316)
Total flow surface	: 55,0 mm <sup>2</sup>
Basic extinguishing media	: Water
Filter mesh	: 0,4 x 0,4 mm
Connection type	: 3/4" BSP male
Inlet pressure	: 4 - 12 bar
Nozzle weight	: 0,65 kg
Protection cap	: Cat. no. - NA 006



## TECHNICAL DETAILS



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM



## mMist MEDIUM PRESSURE SYSTEM - MIST STREAM PARAMETERS

Working pressure [bar]	:	4	6	8	12
Droplet size $D_v^*$ [ $\mu\text{m}$ ]	:	45 - axis, 135 - stream edge			
Average K flow factor	:	25,6			
Extinguishing agent flow rate* [dm /min]	:	51,5	62,5	72,5	88,5
Coverage of 1 m <sup>2</sup> of protected area* [dm /min]	:	1,2			

\*At pressure P=5bar | \*\* May vary  $\pm 5\%$ .

**USAGE:** The nozzle is dedicated for systems with regular nozzle spacing 4 x 4 m. Calculation value of flow rate at such spacing at 6 bar pressure is 4,5 dm /m .

Our products are being constantly developed and improved, therefore we reserve the right to change technical specifications without prior notice.

## WATERMIST HEAD MODEL 111 FEN-T ZRT-30.00.00

### PRODUCT DESCRIPTION

#### CATALOG NUMBER 7/G

#### DESIGNATION: 111 FEN-T

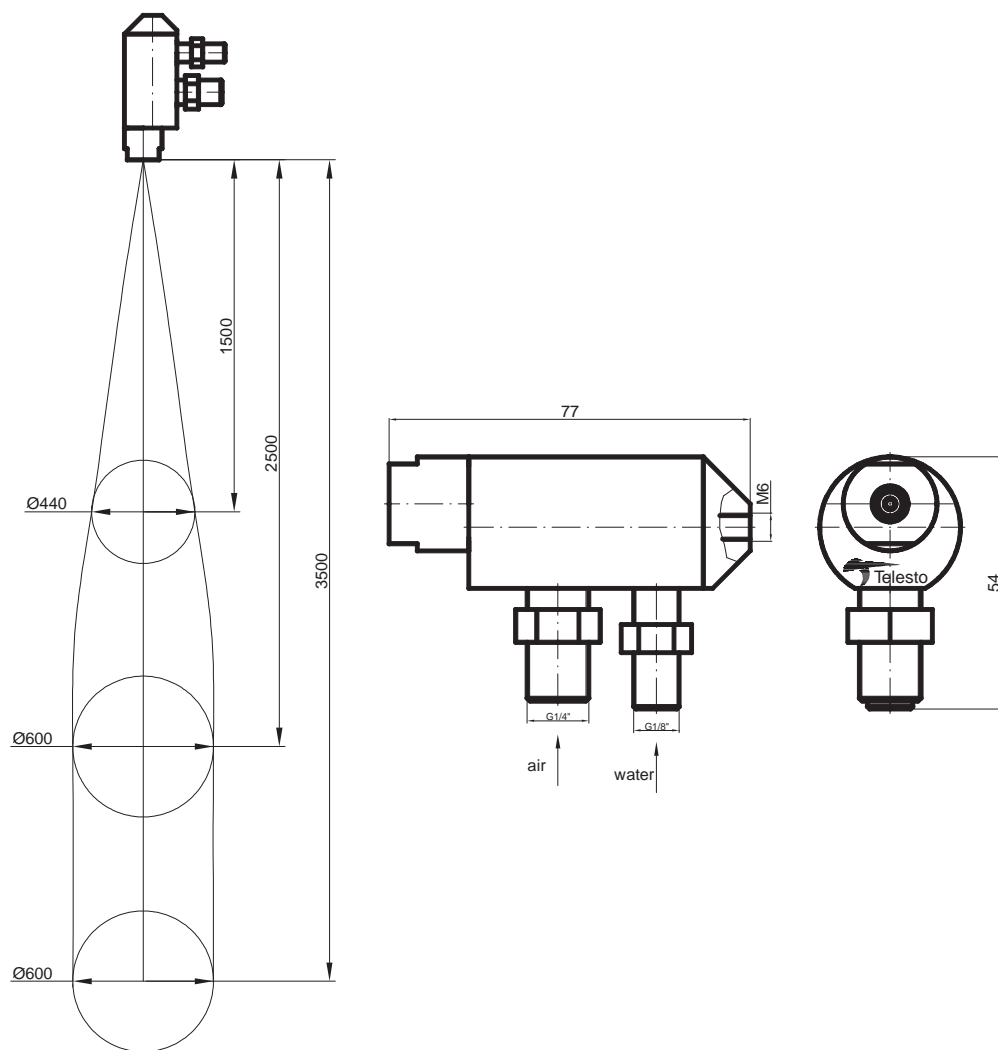
**1** - Number of water jets

**1** - Number of air jets

**1** - Air flow [m<sup>3</sup>/min]

**FEN** - Flame Effective Neutralization

**T** - Temperature: Elevated temperature resistant air water



## TECHNICAL PARAMETERS

	Air	Water
Req. supply pressure	4±0.5 [bar]	4±0.5 [bar]
Req. suppl. flow rate	1±0.2 [m <sup>3</sup> /min]	2±0.2 [l/min]
Req. suppl. flow qual.	Solids diameter under 40 [μm] Allowable conctr. < 10 [mg/m <sup>3</sup> ]	filter 300 [μm]

Watermist head weight	: 0.4 [kg]
Range of effective mist stream	: 2.5 [m]
Maximum range of mist stream	: 3.5 [m]
Working temperature	: 10 to 700 °C
Application	: Fire suppression
Droplet diameter	: 4 to 200 μm
Average volume droplet diameter	: 20 to 30 μm
Connections are threaded nipple	: - Air : Threaded nipple 1/4" - Water : Threaded nipple 1/8"
Mounting	: M6 threaded aperture on back side of the head body

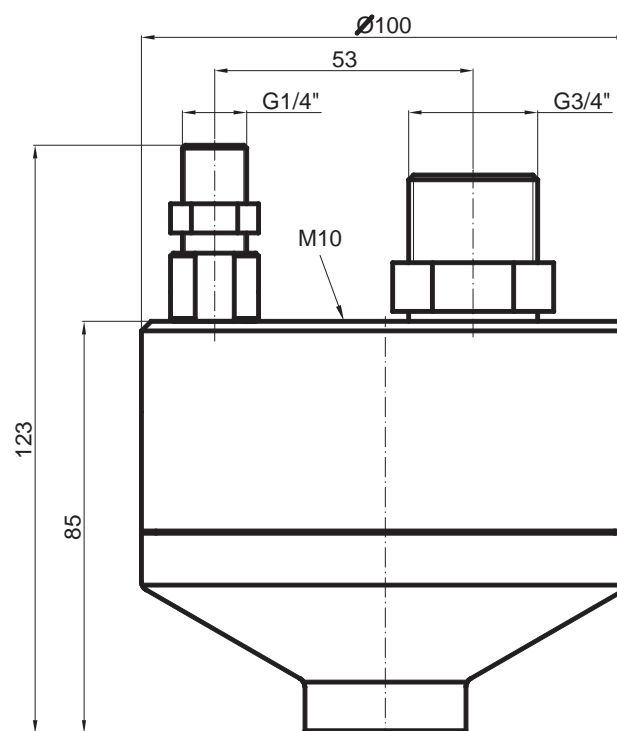
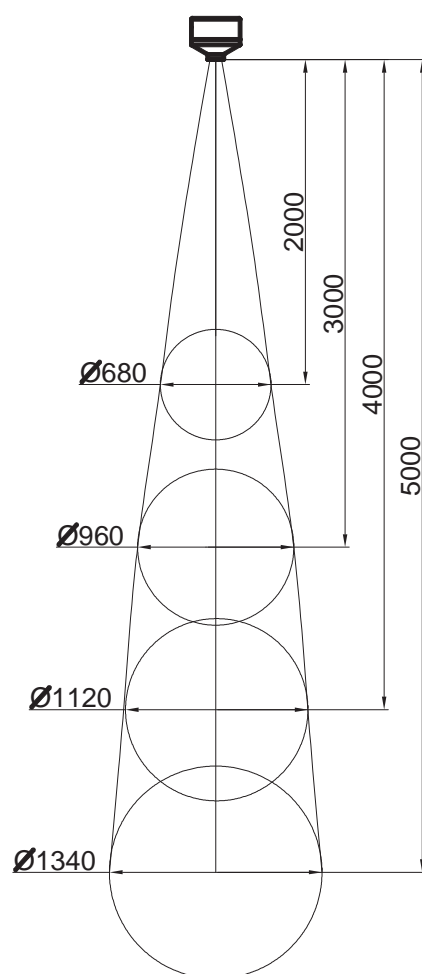
## WATERMIST HEAD MODEL 234 FEN- T GT-13.01.00/3

### PRODUCT DESCRIPTION

#### CATALOG NUMBER 12/G

#### DESIGNATION: 234 FEN-T

- 2** - Number of water jets
- 2** - Number of air jets
- 4** - Air flow [m<sup>3</sup>/min]
- FEN** - Flame Effective Neutralization
- T** - Temperature: Elevated temperature resistant



## TECHNICAL PARAMETERS

	Air	Water
Req. supply pressure	4±0.5 [bar]	4±0.5 [bar]
Req. suppl. flow rate	4±0.3 [m <sup>3</sup> /min]	12±1 [l/min]
Req. suppl. flow qual.	Solids diameter under 40 [µm] Allowable conctr. < 10 [mg/m <sup>3</sup> ]	filter 300 [µm]

Watermist head weight	: 3.4 [kg]
Seals	: Flat copper gasket
Air	: Flat copper gasket outer diam. 23/ inner diam.17/ thickness 2 [mm]
Water	: Flat copper gasket diam.11,5/diam.8/ thickness 2 [mm]
Range of effective mist stream	: 5 [m]
Maximum range of mist stream	: 6 [m]
Installation	: Arbitrary
Operating temperature	: 10 to 100 °C Heatproof to 800 °C
Application	: Fire suppression
Droplet diameter	: 4 to 300 µm
Average volume droplet diameter	: 40 µm
Mounting	: M10 threaded aperture on back side of the head body.



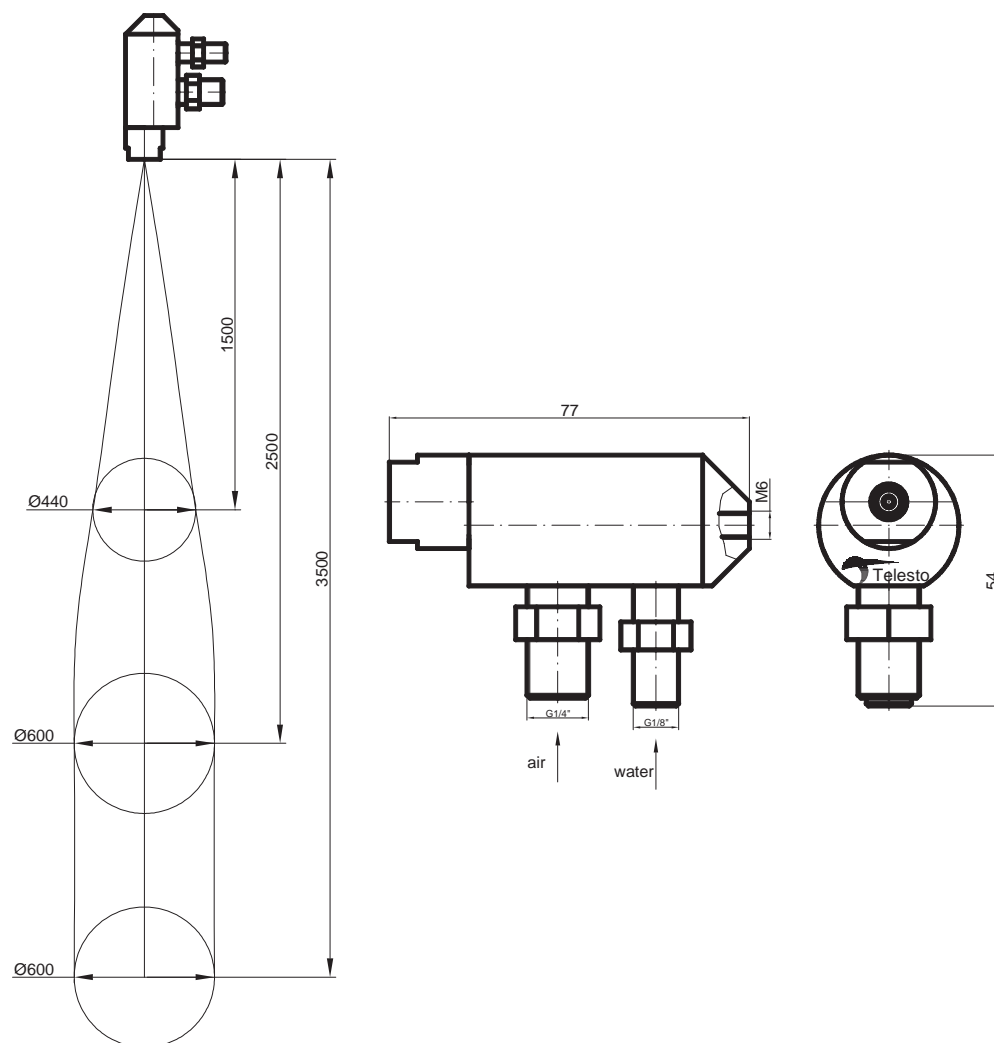
## WATERMIST HEAD MODEL 110,5 FEN-T ZRT-33.00.00

### PRODUCT DESCRIPTION

#### CATALOG NUMBER 6/G

#### DESIGNATION: 110,5 FEN-T

- 1** - Number of water jets
- 1** - Number of air jets
- 0,5** - Air flow [m<sup>3</sup>/min]
- FEN** - Flame Effective Neutralization
- T** - Temperature: High heat resistant



## TECHNICAL PARAMETERS

	Air	Water
Req. supply pressure	4±0.5 [bar]	4±0.5 [bar]
Req. suppl. flow rate	0,5±0,1 [m <sup>3</sup> /min ]	1±0,1 [l/min]
Req. suppl. flow qual.	Solids diameter under 40 [µm ] Allowable conctr. < 10 [mg/m <sup>3</sup> ]	filter 300 [µm]

Watermist head weight	: 0.4 [kg]
Range of effective mist stream	: 2.5 [m]
Maximum range of mist stream	: 3.5 [m]
Working temperature	: 10 °C to 700 °C
Application	: Fire suppression
Droplet diameter	: 4 µm to 200 µm
Average volume droplet diameter	: 20 µm to 30 µm
Connections are threaded nipple	: - Air : Threaded nipple 1/4" - Water : Threaded nipple 1/8"
Mounting	: M6 threaded hole on back side of the head .

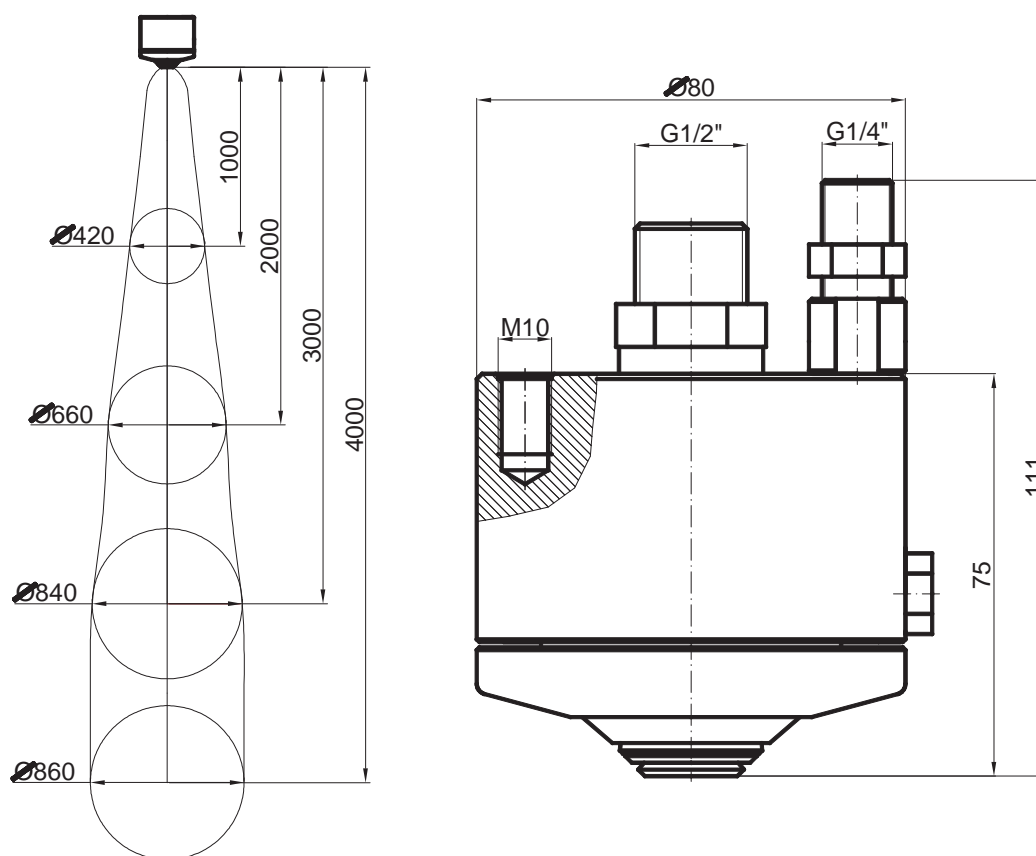
## WATERMIST HEAD MODEL 122 FEN-T GT-55.00.00

### PRODUCT DESCRIPTION

#### CATALOG NUMBER 1/G

#### DESIGNATION: 122 FEN-T

- 1** - Number of water jets
- 2** - Number of air jets
- 2** - Air flow [m<sup>3</sup>/min]
- FEN** - Flame Effective Neutralization
- T** - Temperature: High heat resistant



## TECHNICAL PARAMETERS

	Air	Water
Req. supply pressure	4±0.5 [bar]	4±0.5 [bar]
Req. suppl. flow rate	2±0.2 [m <sup>3</sup> /min]	4±0.2 [l/min]
Req. suppl. flow qual.	Solids diameter under 40 [μm] Allowable conctr. < 10 [mg/m <sup>3</sup> ]	filter 300 [μm]

Watermist head weight	: 2.25 [kg]
Seals	: Flat copper gaskets
Air	: outer diam.18/ inner diam.14/ thickness 2 [mm]
Water	: outer diam.11.5/ inner diam. 8/ thickness 2 [mm]
Range of effective mist stream	: 4 [m]
Maximum range of mist stream	: 4.5 [m]
Installation	: Arbitrary
Operating temperature	: 10 to 100 °C Heatproof to 800 °C
Application	: Fire suppression
Droplet diameter	: 4 to 200 μm
Average volume droplet diameter	: 20 to 30 μm
Mounting	: M10 threaded aperture on back side of the head body.
Option	: Water supply tap may be to the side of the head body.

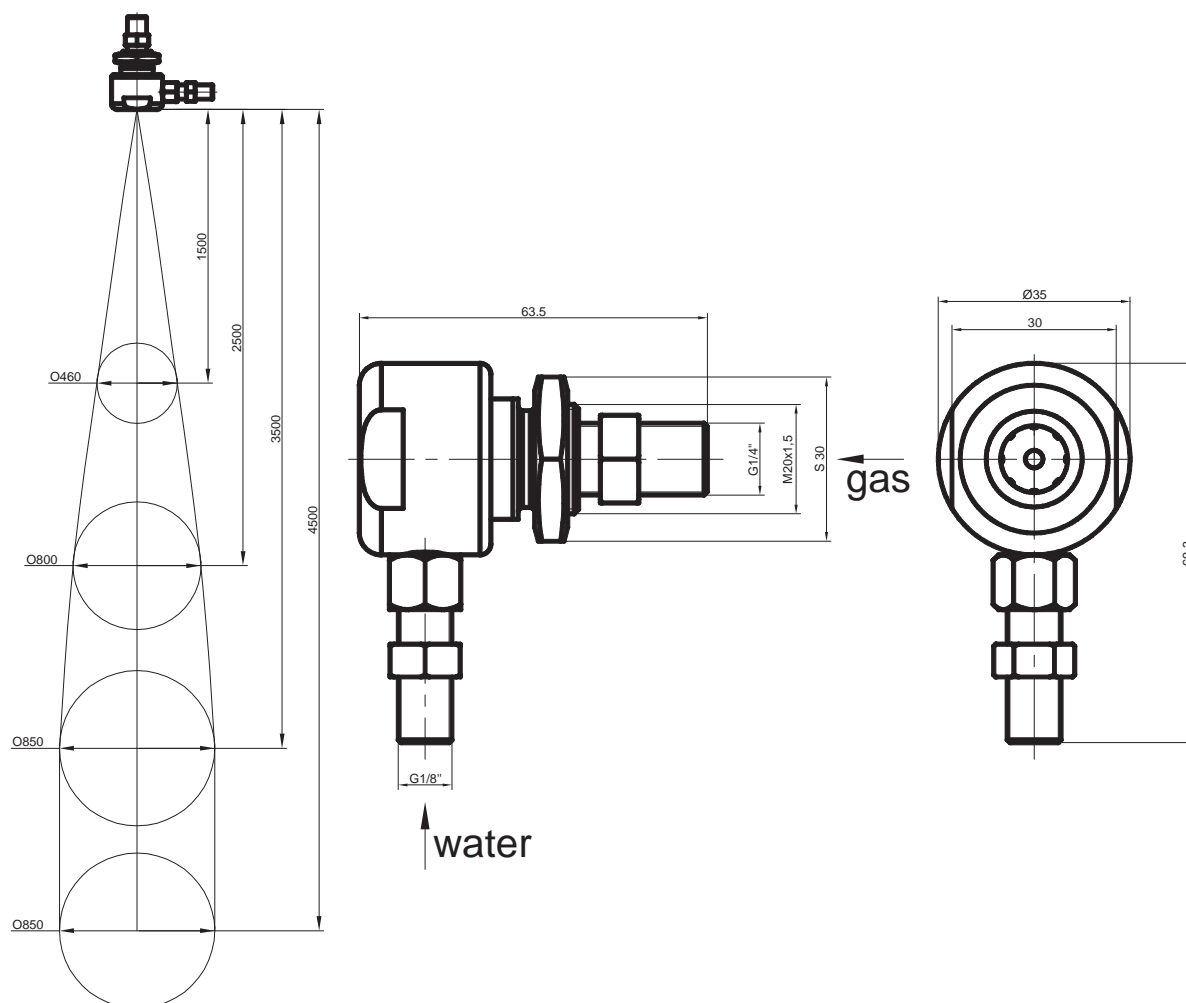
## WATERMIST HEAD MODEL 110,5 B FEN-T GT-60.00.00

### PRODUCT DESCRIPTION

#### CATALOG NUMBER 11/G

#### DESIGNATION: 110,5 B FEN-T

- 1 - Number of water jets
- 1 - Number of air jets
- 0,5 - Air flow [m<sup>3</sup>/min]
- B - Radial feed of liquid
- FEN - Flame Effective Neutralization
- T - Temperature: High heat resistant





## TECHNICAL PARAMETERS

	Air	Water
Req. supply pressure	4±0.5 [bar]	4±0.5 [bar]
Req. suppl. flow rate	0,5±0,1 [m <sup>3</sup> /min ]	1±0,1 [l/min]
Req. suppl. flow qual.	Solids diameter under 40 [µm ] Allowable conctr. < 10 [mg/m <sup>3</sup> ]	filter 300 [µm]

Watermist head weight	: 0.25 [kg]
Range of effective mist stream	: 3.5 [m]
Maximum range of mist stream	: 4.5 [m]
Working temperature	: 10 °C to 700 °C
Application	: Fire suppression, dust suppression, decontamination
Droplet diameter	: 4 µm to 200 µm
Average volume droplet diameter	: 20 µm to 30 µm
Connections are threaded nipple	: - Air : Threaded nipple 1/4" - Water : Threaded nipple 1/8"
Mounting	: M6 threaded hole on back side of the head .

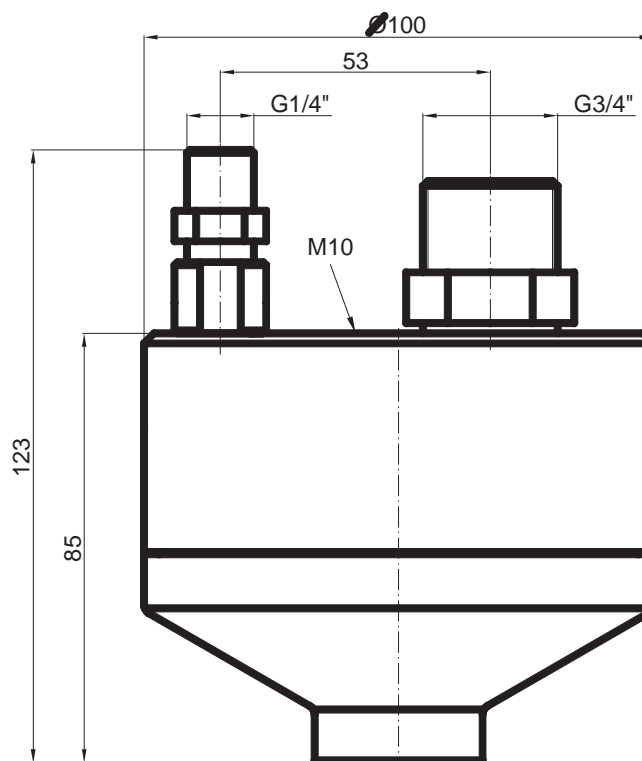
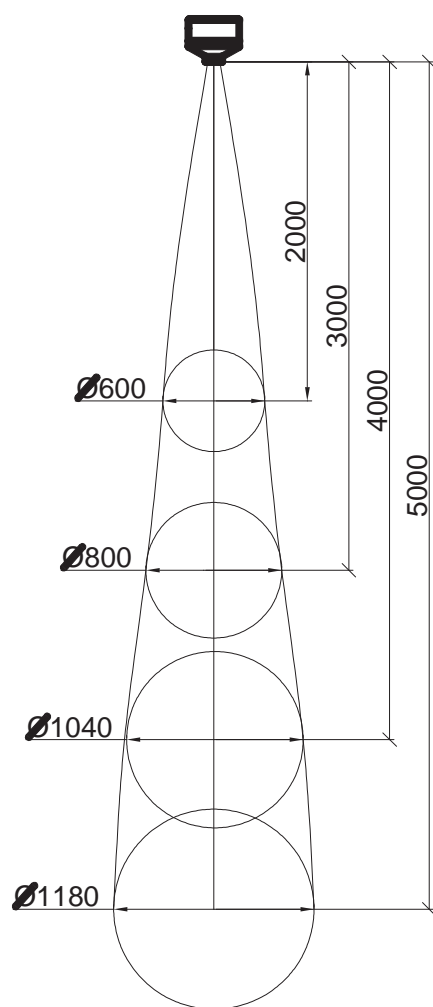
## WATERMIST HEAD MODEL 233 FEN- T GT-12.01.00/3

### PRODUCT DESCRIPTION

#### CATALOG NUMBER 8/G

#### DESIGNATION: 233 FEN-T

- 2** - Number of water jets
- 2** - Number of air jets
- 3** - Air flow [m<sup>3</sup>/min]
- FEN** - Flame Effective Neutralization
- T** - Temperature: Elevated temperature resistant



## TECHNICAL PARAMETERS

	Air	Water
Req. supply pressure	4±0.5 [bar]	4±0.5 [bar]
Req. suppl. flow rate	3±0.3 [m <sup>3</sup> /min]	9±1 [l/min]
Req. suppl. flow qual.	Solids diameter under 40 [μm] Allowable conctr. < 10 [mg/m <sup>3</sup> ]	filter 300 [μm]

Watermist head weight	: 3.4 [kg]
Seals	: Flat copper gasket
Air	: Flat copper gasket outer diam. 23/ inner diam.17/ thickness 2 [mm]
Water	: Flat copper gasket diam.11,5/diam.8/ thickness 2 [mm]
Range of effective mist stream	: 5 [m]
Maximum range of mist stream	: 5.5 [m]
Installation	: Arbitrary
Operating temperature	: 10 to 100 °C Heatproof to 800 °C
Application	: Fire suppression
Droplet diameter	: 4 to 300 μm
Average volume droplet diameter	: 40 μm
Mounting	: M10 threaded aperture on back side of the head body.









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