

CATALOGO
NEBULIZZAZIONE
2013

MGF
Professional Plumbing Tools

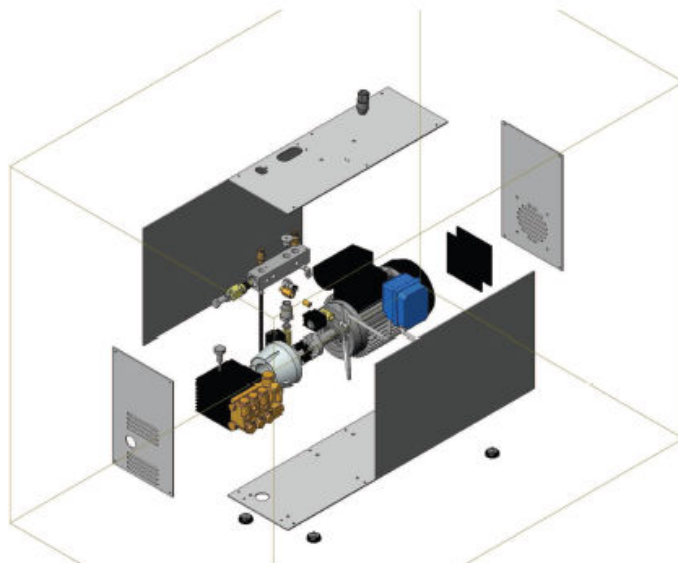


MGF: A reliable partner for winning solutions

Before choosing a partner for your misting job, we invite you to estimate carefully the company with which you will collaborate. Pay particular attention to the 3 key aspects of a production company.

Planning

- ✓ **Our unit planning, that takes advantage of the contribution of engineers and experts, covers all the areas involved in the equipments for the misting process: mechanical, electromechanical and electronic**
- ✓ Beyond all the slogans, we have planned pumps to **variable capacity** without any recirculate of water, depressurizing systems of the line **without drainage** and **iControl**, a remote control for all the functions of the misting process.
- ✓ Our planning experience is, from more than 30 years, at the service of the customers, and it allows us to realize, every year, **various complex industrial applications**. For our customers we realize also complete plans.
- ✓ Only who plans and develops in all the fields can supply the adequate technical support in phase of advising, installation and post sale.



Product Range - Production

- ✓ Proud of our many years' experience, we have developed a complete range of products.
- ✓ Base pumps, like those offering from our competitors, with or without evolved control systems, are all with a **standard job pressure of 100 bars**. And who knows the misting, knows how much important is the job pressure.
- ✓ Evolved, silent, intelligent and complete pumps, all equipped with dedicated control systems are all planned by us. We have invested a lot in the research of the misting process, and today we can offer several evolved controls. **Who would pilot his own system of air conditioning (in his house or his car) using a timer?**
- ✓ We carry out from our inside (and we demonstrate it to who visits us) all the productive cycle: stamping, milling, turning, welding, plastic stamping, rectify, assembly and test. The choice of producing allow to assure us the **highest qualitative standards** and being **flexible and quick** in the deliveries.



Pre and Post Sale Services

- ✓ **Planning and prevention: software and technical staff at your service for writing of estimates care, until the detail plan, also complex, of the systems.**
- ✓ **CAD Software:** software for the prevention and the calculation of the misting systems: save your time in order to realize the estimates.
- ✓ **Personalized inspections:** our sales organization, very structured through a net of agents, retailers and installators, is able to carry out free inspections to prevent feasibility and costs of any misting system.
- ✓ **Robotic automatic warehouse:** The excellence in logistics in order to assure to clients the best level of service in the deliveries.



APPLICATIONS OF MISTING IN CIVIL LIFE

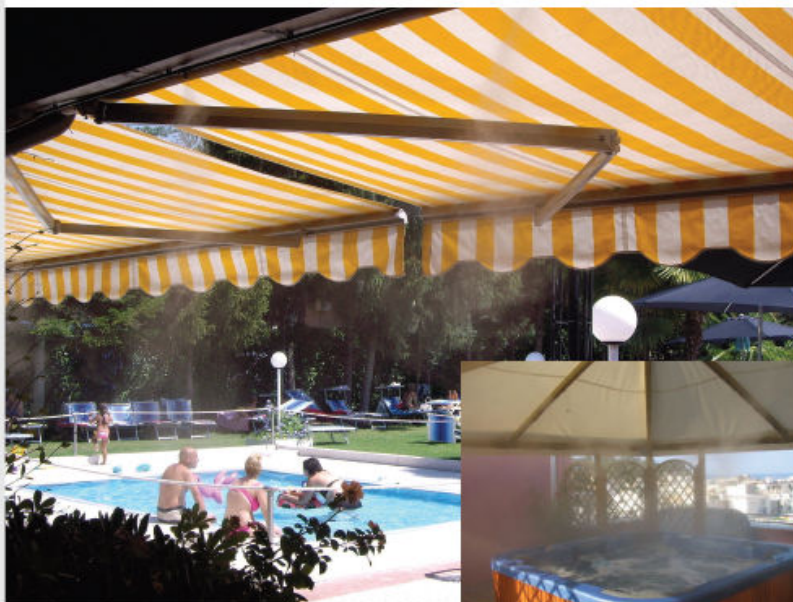


COOLING

Summer gardens and patios

In Summer misting to cool down the temperature is used by **restaurants, hotels, discos and in places near the sea** to increase customer wellness, with or without fans.

- Better micro-climate
- Thermoigrometric wellness
- Aromas spraying
- Insect remouving
- Bad smells neutralisation



AROMATHERAPY

Wellness Centers, SPA, hotel, discos

Many systems have already been installed with the result of **aroma therapy**. Hotels and discos also spray perfumes to increase the sensorial experience of their customers.

In the side picture, an "**emotional massage**", made by the synergy of the following components:

- ◆ Hot water jacuzzi bathtub
- ◆ Misting of variable temperature water
- ◆ Aromas and essential oils misting



WATER GAMES

Pools, Discos, Parks

With fog is possible to make **special effects** and **water games** that sure impress people and will be an enjoyable cooling during summer season.

System flexibility and easy engineering together with user ideas and needs allows unique realizations that will add value for sure to the customer investment and will satisfy the final user



COOLING

Gazebo, Balconies

Summer cooling is used in **county houses, balconies and roof gardens** per:

- More favorable microclimate and thermoigrometrical wellness
- Misting of agreeable aromas and deodorisation
- Bugs removal

Thanks to its new intelligent checking systems, the quantity of fog is regulated to have the maximum wellness with the minimum need of wather and energy.



MICROIRRIGATION & SCENE EFFECTS

Gardens, Parks, Discos

Also in the garden field the architects use the misting systems for realisation of:

- Landscaping
- Scene effects
- Microirrigation of green walls
- Misting of chemical substances
- Bugs removal
- Areas valorisation

It is possible to add **perfumed aromas** or **fertilizers**.



MISTING FOR FIRST CLASS HOUSES

The misting system is placed, thanks to the flexible capacity of our pumps, in order to work all year long: some nozzles atomize water to control the humidity in wine cellars and circuits of conditioning.

Moreover misting **makes fresh the air coming from external conditionner units**. In that way the energetic efficiency is at maximum.

In the **passive house**, with the heat exchangers, it makes fresh in Summer(riducing consumption)and makes humidity in Winter.



INDUSTRIAL Applications



DUST AND BAD SMELL REMOVAL

Misting can be used in several industries to reduce and neutralize bad smells and dusts:

- Civil and industrial depuration
- Wood and paper industry
- Marble, ceramics and cement working
- Demolitions, building industry in general

Thanks to our know-how and technical service, it has been possible to design very complex systems, able to satisfy also the bigger automation needs.

It is already possible to interface **iControl** with some **MGF "electronic noses"**, to find the concentration of bad smell substances dosing the blast killers consequently.



HUMIDIFICATION

The online systems besides for cooling, are employed for the humidification, very important for the production of some processes:

- Paper, wood and tissue industry
- Refrigerating rooms for the conservation
- Iron and plastic industry
- Electrical industry (reduction elettrostatical charges)
- Frigos

The remote control of **iControl**, with the exception of the generic igrostats, allows a simple interface with industrial machines, also with protocol MODBUS RTU and corrects the relative humidity value based on the temperature, main condition for the correct calculation of the humidity



COOLING PRODUCTION CYCLE

Thanks to **BREZZA**, in its three configurations, is possible to improve the well-being conditions of work atmospheres.

Thanks to the **optimal control of the heat index** is possible to maximize the termoigrometrical well-being and obtain a larger productivity during the summer.

Our system is installed in:

- Foundries
- Plastic industry stamping
- Food industry
- Iron industry

CATTLES

We made an experimental research in collaboration with the veterinary faculty of the University of Parma.

The system now is optimized for:

- Cooling of animals during the summer
- Maintenance of the optimal thermoigrometrical conditions
- Bigger production of milk
- Improvement of the animal general health
- Removal of the bugs



SWINES

In the swine breedings the production improves considerably thanks to the misting:

- Cooling of the animals during the summer
- Automatic or manual disinfection of atmospheres (stables, deliveries room...)
- Reduction of the ammoniacal concentration in the air
- Smells fall

DIGIMIST or iControl units can simultaneously perform different of the listed functions.



GREENHOUSES

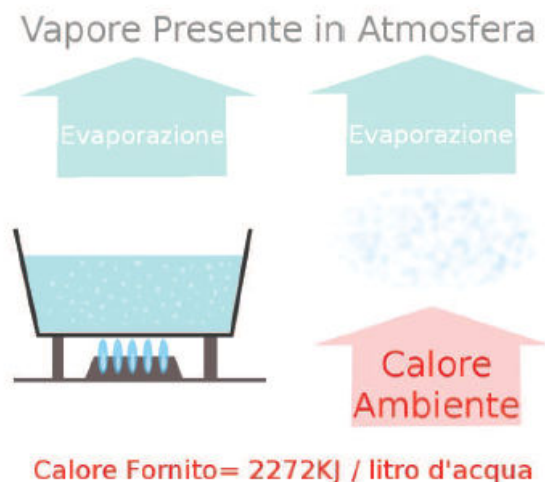
Also in floriculture is possible to obtain economic results of relief thanks to the misting, by means of which it is possible:

- Humidification of the greenhouses for maintenance of an optimal humidity rate for the increase of the plants
- Spread of chemical products
- Microirrigation
- Green walls



EVAPORATIVE COOLING

How Does it work? Why is it so dry? Is it convenient?



Question: Why it COOLS?

Water needs energy (=heating) to evaporate: for this reason, we must light up the stove to make it boil.

Imagine how much heat we need to boil and completely evaporate a cooker containing 1 litre of water: the same energy can be subtracted from the environment. Physicians says that we need 2272 KJ.

This system is in nature from the beginning of times: also we, when we overheated, we perspire, and with sweat evaporation we are able to keep our body temperature almost constant.

Surface Ø 1 m = **0,785m²**

Number of drops Ø 15 µm per liter of water
= **6.900.000.000.000**

Total drops surface = 424.800 m²

The evaporative process
è 424.800/0,785 =
541000
faster

Question: Why it does not WET?

If we throw the same litre of water into the environment, this would fall down to the floor, wetting it and evaporating in a pair of hours.

The secret is spraying the water through fine drops using special nozzles. In this way the evaporation effect is very quick and it happened before the drop is fallen to the floor.

For this reason is very important working at a high pressure: higher the pressure, finer the drops.

We need about 7000 billions drops of atomized water to create a litre of water...



Unione europea
Fondo sociale europeo



IL PERCORSO DELL'EFFICIENZA ENERGETICA
THE ROUTE OF ENERGY EFFICIENCY

**QUESTO
PRODOTTO FA
RISPARMIARE
eNERGIA**

THIS PRODUCT SAVES ENERGY

Contribuisce a ridurre le emissioni di CO₂ e può essere utilizzato dai distributori elettrici e del gas ed Energy Service Companies per programmi di risparmio energetico.

This product contributes to reducing CO₂ emissions and can be used by electricity and gas suppliers, and energy service companies in energy saving programs.



MILANO, 28 FEB - 4 MAR 2006

Question: Is it CONVENIENT?

The most important advantage is the economy of use.

If we use water from the aqueduct, spending 2 €/m³, to cool an area of 100 mq, we will pay:

- for water: 0,002 €/h

- for electrical energy: 0,01 €/h

Total: **0,012 €/h** to cool a balcony of 100 mq.

The saving is significant also **pre-cooling** the exchangers of large systems refrigerators, so as to increase the efficiency of the refrigerators systems.

For this reason our system has been already rewarded with the **NEXT ENERGY AWARD** (fair of Milan) and has been object of research from university agencies.

THE MISTING

Why does it demolish dust and smells? Why does it increase the production?

Question: Why does it DEMOLISH DUST AND SMELLS?

Misting water constitutes a real leaking barrier. The microscopic drops of water, suspended in the air, are attracted with the powder particles, that inglobe them. The drop, thus weighted, falls down and purifies the air.

A beneficial effect of the system is the **reduction of the electrostatic charges**. The electrical charged particles attract the drop of water and get inglobated by them, falling on earth.

Electronic noses, interfaced with **iControl**, allow to dose neutralizers of chemical smells, making extremely useful this action.

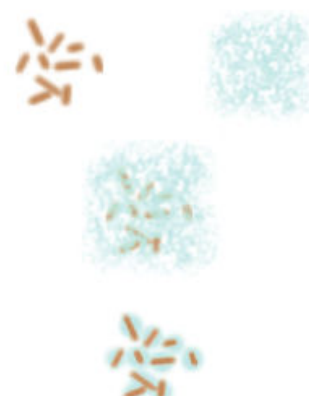
Phase 1: dust is made during manufacturing process



Phase 2: dust and drops are attracted electrically



Phase 3: drops, loaded by dust, fall down



Question: Why does it INCREASE THE PRODUCTION?

The maintenance of levels of optimal humidities concurs to reduce the refuse and to improve the quality of the product in numbers of industrial fields.

Our system has been installed with success in:

- food industry (refrigerating room and slaughters);
- wood, paper and cardboard industry;
- iron industry;
- working plastics;
- chemical industries.

In general, is used in order to **precooling air destined to exchangers**, and it contributes to considerable energetic savings.

Optimal relative humidity for manufacturing process (source: mechanical engineer manual – Hoepli)

Fresh meat development:	80%
Frozen foods preservation:	90%
Apple warehouse:	90%
Lemon warehouse:	90%
Egg warehouse:	80%
Fur working:	75%
Chick production:	75%
Pasta rise:	75%
Baked cooling:	70%
Typographies:	70%
Cotton-spinning:	70%
Weaving:	70%

Question: is it good also for FARMING?

Yes. Our misting system improves from years life of cows, chickens, swines, horses.

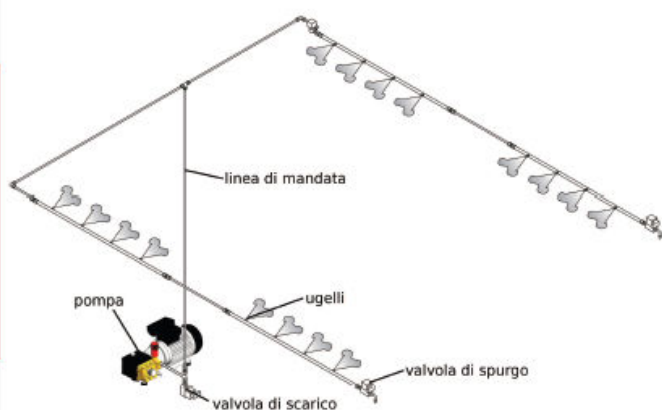
Academic studies suggests to mist into farms, together with fans, to cool animals during Summer season.

Good effects:

- reduced chicken dead for asphyxia (up to 99%);
- increased weight (+10%);
- better milk quality (as macro nutrients composition);
- reduced diseases caused by thermal stress;
- reduced bacteria into far.



F.A.Q. (Frequently Asked Questions)



How many nozzles I must put on the line?

The nozzles distance must be decided upon a covering criteria: every 75 cm for windy environments, every 100 cm with light wind, every 125 cm in still air.

What is nozzle jet distance?

Depending on ventilation and evaporation (temperature) conditions, the jet can be from 1-2 metres to 3-4 metres.

What about nozzle cleaning?

Remove dirty externally, dive the nozzle into a vinegar or a cleaning solution, let the dirty became soft, then spray with compressed air.

How many meters a nozzle covers?

Basing us on medium considerations, 1 mq. A termodinamic study can help to analyse the system in all its details.

What kind of nozzle is better to choose?

The average drop diameter has to be chosen depending on the desired effect: 15 µm (micron) for flash evaporation and dry applications, 30 µm for an heavier and wind insensitive drop, 50 µm for a compact fog.



Why STAINLESS STEEL fittings?

Stainless steel is necessary for HACCP requirements in alimentary industry.

When I should use the misting fan?

The misting fan is suggested to concentrate the cooling in one point. The fan is also useful for quick and easy installations, especially when is necessary to ensure 4 air exchanges per hour.

What do I do if I want to add more fans?

The pump is able to serve more than one fan. The COMFORT unit is able to reconfigure after fan addition.

What is the correct height for the line?

Usually the line is installed at 3-4 metres, but is possible also at up to 6 metres, since nozzles can be oriented. Sometimes lines has been installed in the floor, then oriented towards the sky.

Why do I have to use iControl?

There is no law obligation! But using a smart system as iControl, I can obtain the best from my cooling system... No one manages his own boiler or his own air conditioner with a timer... Why doing it with an evaporative cooling system???



Copper pipe must be calibrated?

No. The fittings are blocked and hermetical also with 0,2 mm of tolerance on roundness. It's important to dribble the pipe to avoid O-ring cutting.

How to disinfect the pipeline?

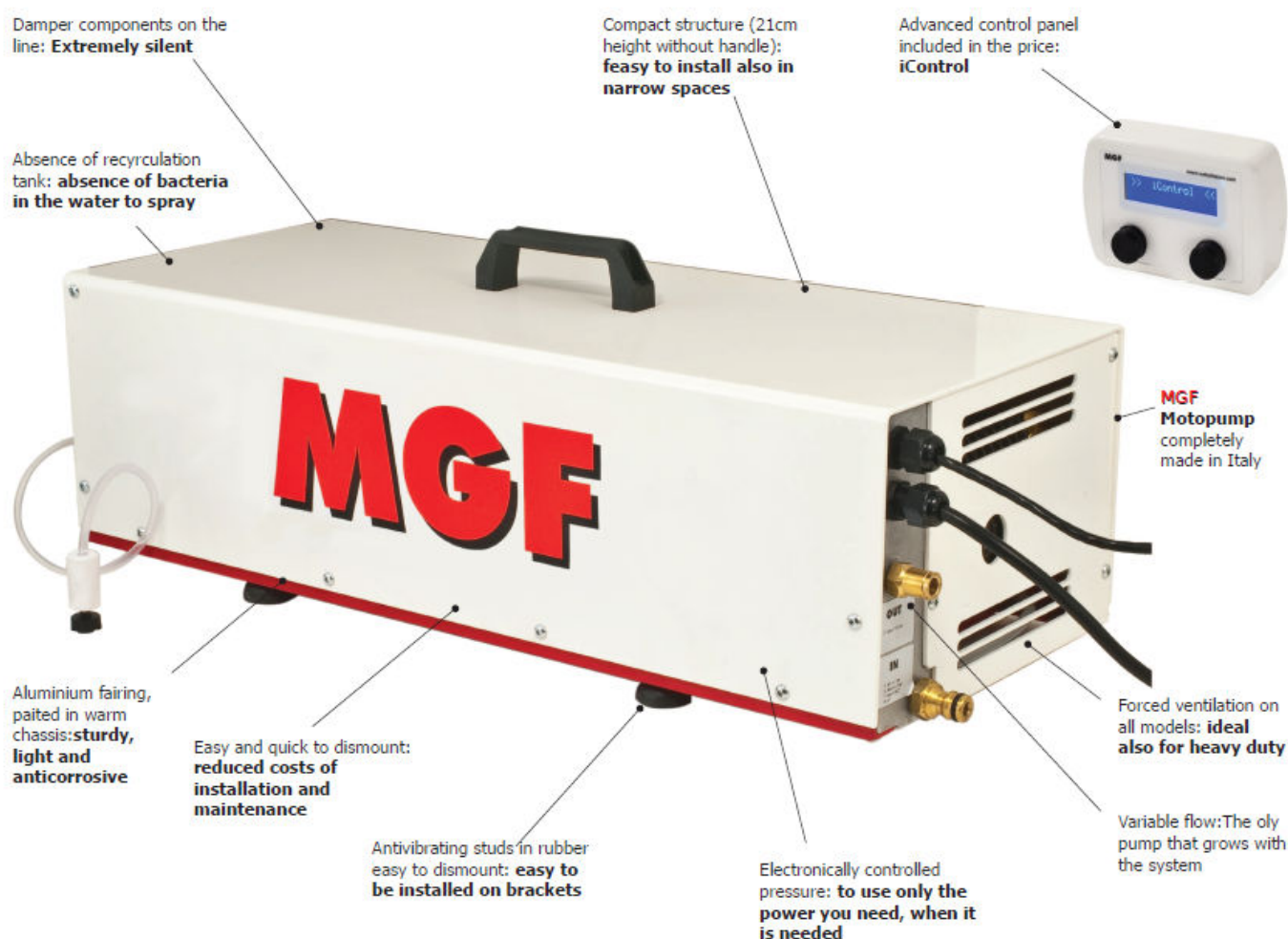
MGF suggests two ways: the softener system, that has also an antibacterial function (scientifically proved); or pumping a disinfecting chemical. With a 5 l tank are possible more than 1000 cycles.

Why is it dry?

Differently from other systems, centrifugal or lower pressure, our system allows the fogging of lower diameter drops, allowing a quicker evaporation and reducing thus the number of drops falling down.

PC COMFORT

The better solution for a misting system



Power pump unit **COMFORT PC AROMAS** is the most refined thing that is now available in the misting field.

The supervision system **iControl** assures: silence, dripping absence, the maximum well-being in any environmental condition.

No programmer to set up, no thread to connect.

All the system management operations become simple and intuitive: from the regulation of the threshold operation (let us do to a dedicated CPU the calculations on temperature and humidity), until the maintenance (water absence alarm, broken tube, oil substitution, cleaning filters...)

The "**Aromas**" version allows also the amount and the aromas, essences and chemicals misting.

The **new design** has been optimized for a simple maintenance thanks to its components and to reduce the dimensions (**half-height**)

Technical features

	0-1 L	1-6 L
Installed power:	0,75 KW	1,5 KW
Demanded power:	depends on the capaility	
Maximum current (peak):	8,6 A	14,8 A
Tension:	230V~ 50/60Hz	
Noisiness:	<65 dB@0,2L/min	<65 dB@1,2L/min
Working pressure:	60÷100 bar	
Pressure regulation:	digital, automatic or manual	
Supply pressure:	1÷2,5 bar	
Protection:	IP54	IP54
Class service:	S1	S1
Working temperature:	0-50°C	0-50°C
Size:	620x280x260mm	670x280x260mm
Weight:	27 Kg	30 Kg

8 good reasons why PC COMFORT is the best possible choice



1. Silence

We have removed the cause of the noise to the source: the vibrations.

Only after having eliminated the vibrations, we have supplied to soundproof the pump.

For this we can assure you that the **nozzle breath will be in a position to cover the noise of the pump**

2. Variable capacity from 0 to 100%

For us, variable capacity means from 0 up to 100%

The variable capacity concurs to pass through the single pump only the water that will arrive to the nozzles, consequently:

- **the water will not be heated** passing through systems of bypass more or less complexes to manage and hold;
- **the system grows with the customer:** acquiring a Pump, you will be able to vary the number of nozzles without any intervention on the pump;
- **flexible system:** you can control more areas with a single pump, without worrying on the number of the nozzles;
- **Less wear of the mechanical moving parts:** reduction of maintenance costs by reducing the number of mechanical parts and the reduction of their average speed.

3. No accumulate Tank

Thanks to a real variable capacity, we do not need an accumulate tank to the pump bypass service.

As it is well-known from the installators, that an open jar full of water is an ideal habitat for bacteria and fungi, that could then be "misted" in the surrounding atmosphere.

The circulation without an accumulate tank, guarantees **elevated sanitary hygienic standards**

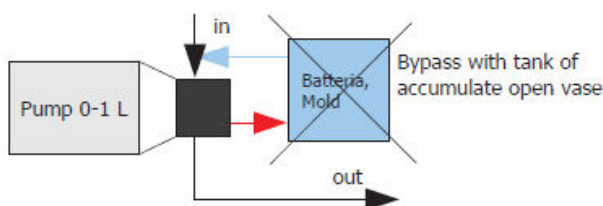
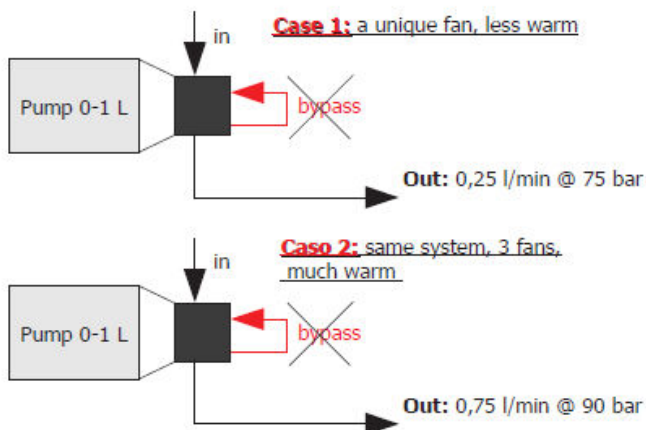
4. Pressure transducer

When the standard is a pressostate, we mount an electronic sensor of pressure from 0 up to 100 bars.

Thanks to this sensor, we succeed to carry out a constant monitoring of the job pressures, signaling to the customer:

- **absence of water**
- **blocked filters**
- **broken tube**

Simplifying his life and reducing risks of breaks, floodings...



Pressure transducer designed by **MGF** for misting Diagnostic more efficient and precise

5. Dumping electrovalves and electricity supply

The **supply electrovalve** protects the user from leaks of water: in case of pump arrest, the income flow gets blocked.

The **dumping electrovalve** depressurizes the misting line to render instantaneous the valves antidrop intervent. The dumping, included on the supply line, can be easily transformed in dumping in open air.



6. Reduced operating costs

The inverter system of which the pump is equipped allows to minimize **energy consumption**.

High working pressure, with **MGF** nozzles, allows fine water spray reducing consumption. Also security valves help to **reduce water waste**.

For all these reasons, this product won the **NEXT ENERGY AWARD** in Milan Fair.



7. iControl (available on every single pump)

iControl: supervision system that includes: timer, thermostat, igrostat, index of management heat, chemicals amount, interface with the domotica, functions of maintenance,... (see also the following pages)

Thanks to the display, the operations are **simple and intuitive** and it does not demand any technical formation.

The connection to the pump does not demand **any wire** and it happens by means of standard ethernet cable.



8. Dosing pump (only for PC AROMI)

Also the amount of aromas can render more pleasant the misting experience: try to think to aromatherapy.

The amount pump, wired and integrated in the system for means of iControl, renders this experience even more pleasant and simple.



Standard equipment for PC COMFORT pumps

Each pump is supplied with:

- ✓ iControl
- ✓ Supply electrovalve
- ✓ Dumping electrovalve
- ✓ Electric pressure sensors
- ✓ Little cable for connection pump 5m
- ✓ User's manual
- ✓ Dosing pump (only on 909822-909828)

Accessories and Spare parts

The supplied equipment is complet and you don't need accessories.

We supply in any case net cables for the connection pump-iControl of different sizes and colours.

Art.	Capacity	Aromas	Power	Price BGN without V.A.T.
909812	0-1 L/min	(option)	750W	4 550.00
909818	1-6 L/min	(option)	1500W	4 900.00
909822	0-1 L/min	0-1 L/h	750W	4 950.00
909828	1-6 L/min	0-1 L/h	1500W	5 200.00
Art.	Model			Price BGN without V.A.T.
790050	Oil for MGF misting pumps 500mL			25.60
720114	Dosing pump for chemicals			369.00

Minimal and modern design:
you can put it
everywhere

Easy and complete:
iControl

Impermeable head.
Protected from
sprays and power

Frame in painted
aluminium: **strong and
ideal for external
environnements**



Where to use I Control

iControl is included in **PC Comfort pumps** that take advantage of all its capability, but it can be also employed on:

- Atom pumps
- Dosing pumps
- Foggy
- Nebula pumps
- Zone Electrovalves

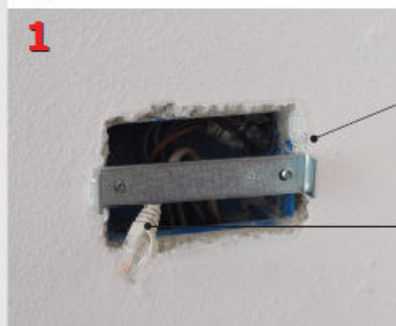
Technical features

Supply	24VDC
Permeability	100mA
Humidity	0-100%
Risolution Humidity	0,1%
Temperature	-40 / 110 °C
Risolution Temperature	0,1 °C
Analogic entrances/exits	0-5VDC
Digital exits	Transistor NPN
Program Memory	8Kb

Art.	Model	Price BGN without V.A.T.
909993	iControl	659.00

Quick installation

1



Dima for installation:
**easy to assemble on
walls or on pack
boxes type 503**

Passage cable under
trace or in wall housing:
simple and flexible

2

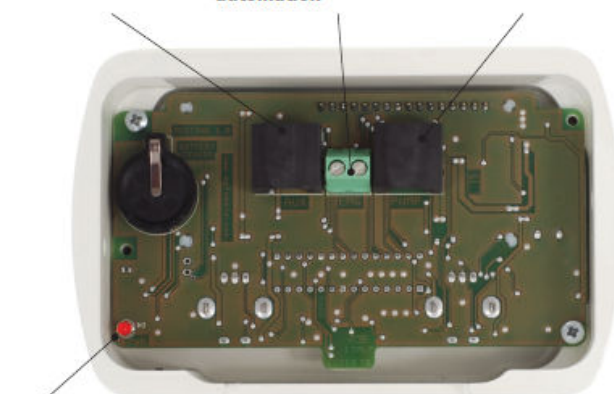


Once fixed the dima
and connected the
cable, you need only to
put iControl with a
screw: **quick**

ModBUS RTU included:
**high level standard
communication**

Connectionf for remote control:
**simple and universal for
domotics and industrial
automation**

Connection to products
MGF type RJ45:
easy to assemble



Power lead:
easy diagnostic

Driver for remote control

You can programme the code without opening it.
You can use more drivers with the same receiver.

Battery	2 x CR2016
Capacity	50m in an open space
Frequency	AM 433.92 MHz
Code combination	4096
Dimensions	32 x 68 x 12 mm
Weight	16 g

Receiver for remote control

The receiver can be connected to iControl or to Digimist (in that case you can control two different functions)

Alimentation	12/24V AC/DC
Frequency	AM 433.92 MHz
Combination code	4096
Maximum load contacts	1A resistive
Dimensions	42 x 88 x 32 mm
Weight	45 g

Extremely reduced dimensions:
possibility to use in all
conditions

IP67Protection:
warranty for dust, wather
and humidity



Modern and minimal design:
possible to put it in every
situation

Different ways of electric
alimentionation:
flexibility of use



Art.	Model	Price BGN without V.A.T.
710077	Radio transmitter 2 channels	115.00
710078	Radio receiver 2 channels	235.00
909995	Kit transmitter + receiver	426.00

Chip for updating the software

Easy to introduce, it is possible to update the firmware to the last available version.

If you give us back the old chip it's amount is given you back too: **Updating operation is free of charge**

Firmware updating whitout
programme:
simple and quick also in
yards



Art.	Model	Price BGN without V.A.T.
757998	Microchip to update iControl	45.00

Alimentation and adaptetion Instrument for ATOM, NEBULA, Electrovalves....

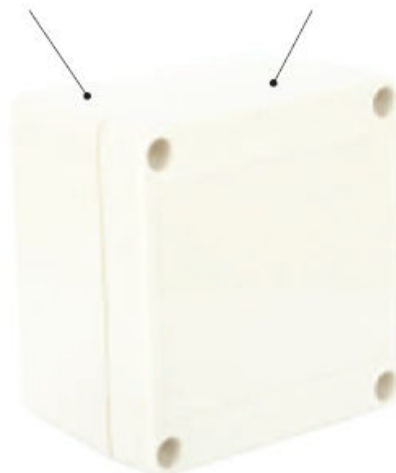
It is possible to connect iControl to all different features from the PC COMFORT pump.

It gives alimentionation to iControl and to the included power relè.

Alimentation:	230V~50Hz , 15W
Maximum charge:	16A resistive
Dimensions:	100 x 100 x 50 mm

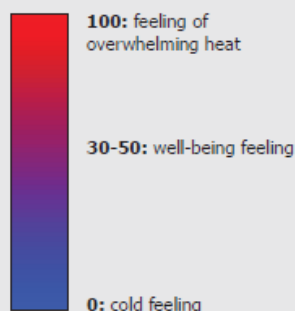
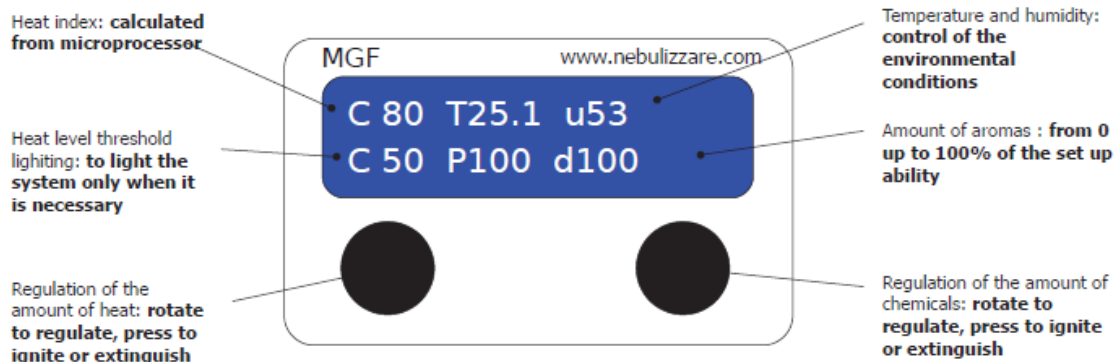
IP67 Protection: warranty
for dust, wather and
humidity

Simple installation:
only 4 cables



Art.	Model	Price BGN without V.A.T.
909994	iControl power supply and interface	373.00

iControl – Example of Cooling Modality



HEAT INDEX

Amount of heat perceived from an average sample of people in summerclothes.

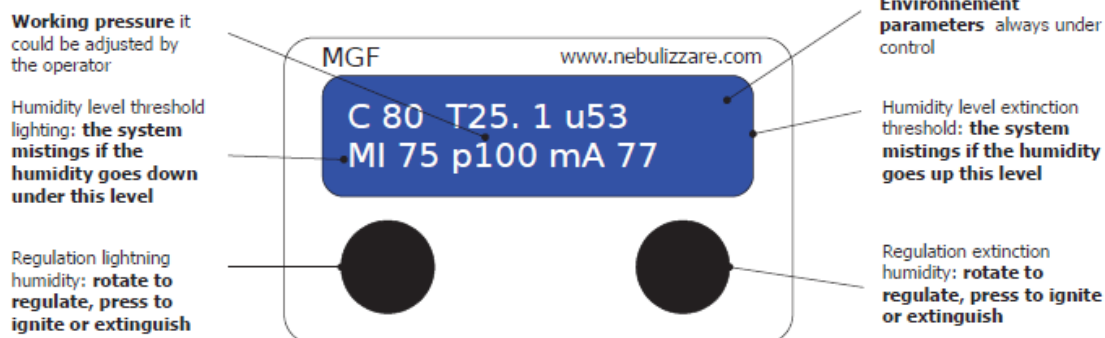
It goes from 0 up to 100, and it is calculated from the temperature and humidity with a complex mathematical function.

Temperature or humidity only by themselves are not enough in the misting applications, as the two parameters are correlated each other.

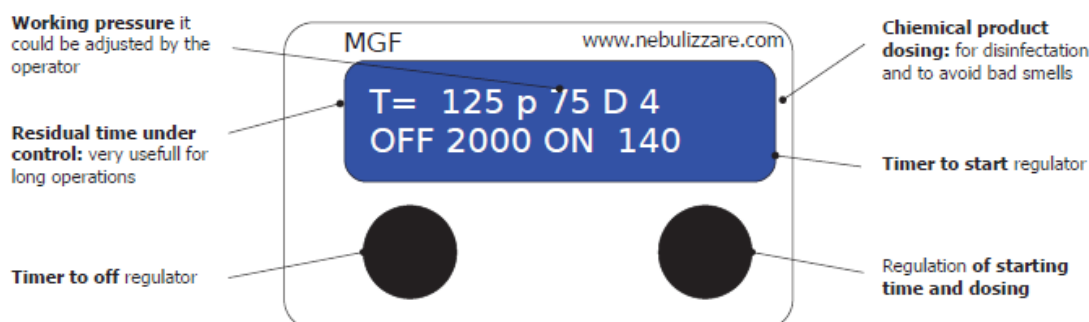
As an example, the heat perceived to 30°C is very different if the relative humidity is 30% or 60%.

An efficient control demands a parameter that takes care of both factors, the heat index exactly.

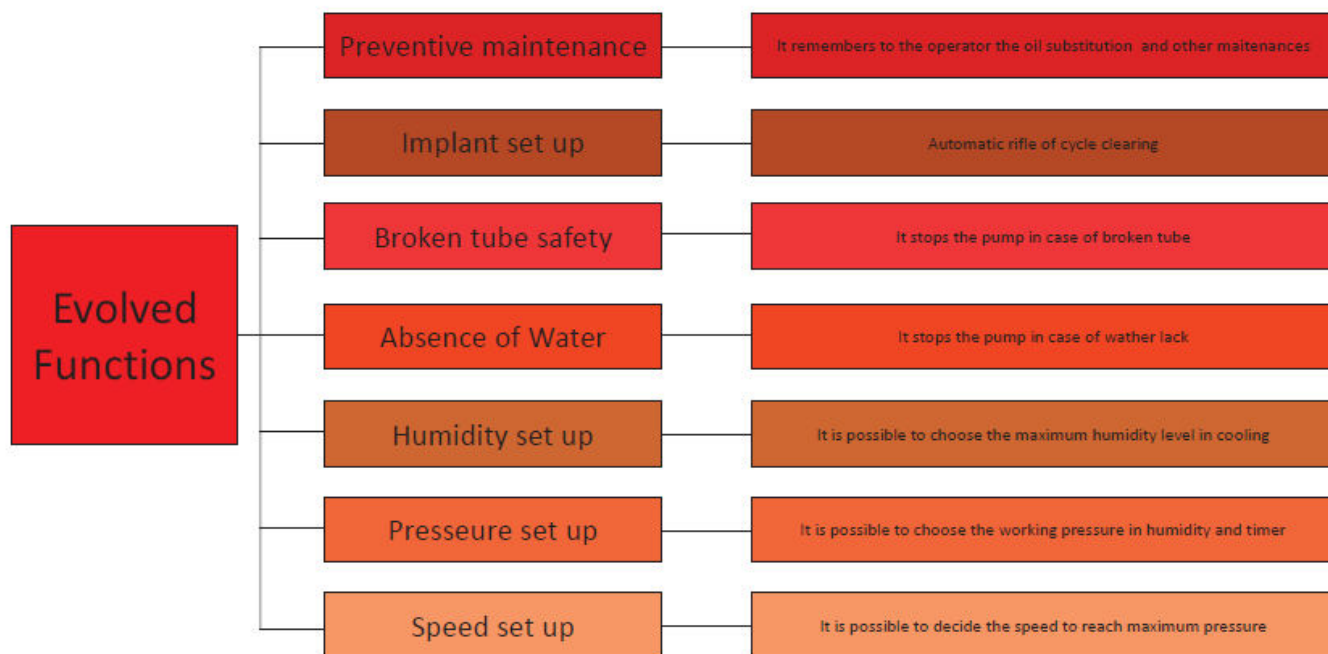
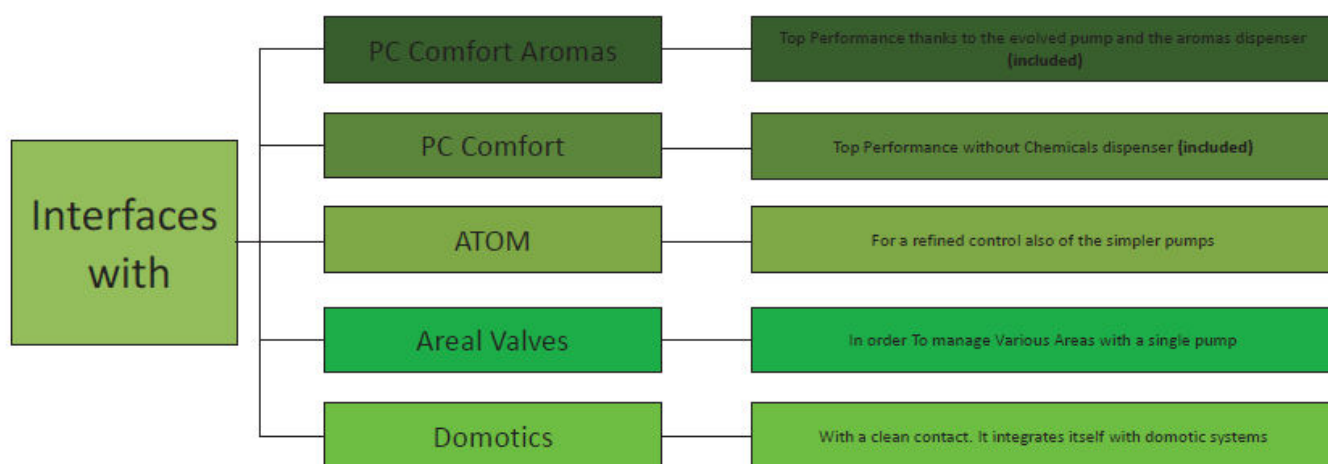
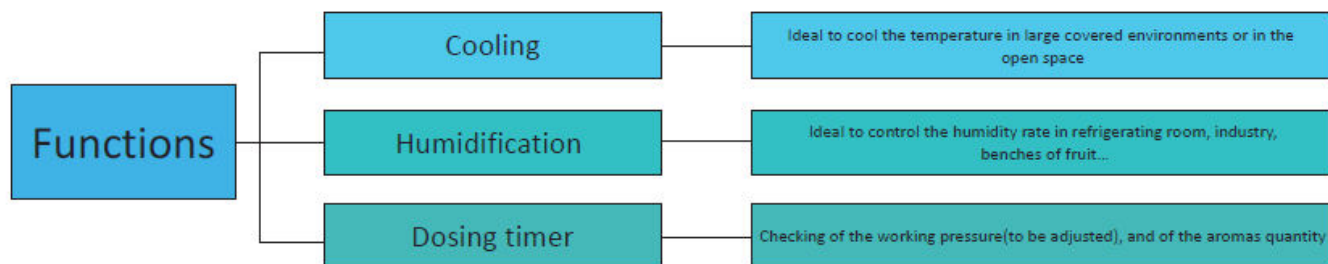
iControl – Example of Humidification Modality



iControl – Example of TIMER with DOSING



iControl – Description of the main Functions



ATOM ELECTROPUMPS

Misting electropumps

MGF made in Italy,
motopump

4 ball bearing transmission:
set up good for **extreme**
usage, **elevated service**
class and **environmental**
hostile situations

Pressure check and
regulation **elevated**
safety and flexibility

Brass and ceramic pistons:
robust and more resistant
than pumps with **Inox**
pistons and **aluminium**
head

Rubber feet to **reduce**
noise, vibrations and
preserve floors

Quick click-clack connector
on the alimentation line, or
of 1/2" F: **easy**
connection, quick and
flexible

Technical Advantages

Silent	Noise level:	<75 dB
Power	Max pressure (higher):	150 bar
Reliable	Transmission with Joints and 4 ball bearings	
Strong	Ceramic pistons and brass head	
Powerful	Service class:	S1
	Exercise Temp:	0-50°C
	IP Protection:	IPX5
	Isolation class:	F
	Alimentation pressure:	1bar minimum

Atom

MONOPHASE

TRIPHASE

Art.	Model	Tension	Power	Pression	Flow Rate	Weight	Dimensions	Price BGN without V.A.T.
909901	ATOM 1L/min monophase	230V ~ 50Hz	0,75KW	0-100bar	1L/min	18 Kg	454x208x188	1 926.00
909902	ATOM 2L/min monophase	230V ~ 50Hz	0,75KW	0-100bar	1.8L/min	18 Kg	454x208x188	1 936.00
909904	ATOM 4L/min monophase	230V ~ 50Hz	1,5KW	0-100bar	4L/min	22 Kg	481x232x196	2 132.00
909906	ATOM 6L/min monophase	230V ~ 50Hz	1,5KW	0-100bar	6L/min	22 Kg	481x232x196	2 132.00
909908	ATOM 8L/min monophase	230V ~ 50Hz	1,5KW	0-100bar	8L/min	22 Kg	481x232x196	2 142.00
909910	ATOM 10L/min monophase	230V ~ 50Hz	2,25KW	0-130bar	9.5L/min	32 Kg	455x320x266	3 090.00
909912	ATOM 12L/min monophase	230V ~ 50Hz	2,25KW	0-100bar	12L/min	32 Kg	455x320x266	3 193.00
909931	ATOM 1L/min threephase	400V ~ 50Hz	0,75KW	0-100bar	1L/min	18 Kg	454x208x188	1 802.00
909932	ATOM 2L/min threephase	400V ~ 50Hz	0,75KW	0-100bar	1.8L/min	18 Kg	454x208x188	1 812.00
909934	ATOM 4L/min threephase	400V ~ 50Hz	1,5KW	0-100bar	4L/min	22 Kg	481x232x196	1 915.00
909936	ATOM 6L/min threephase	400V ~ 50Hz	1,5KW	0-100bar	6L/min	22 Kg	481x232x196	1 926.00
909938	ATOM 8L/min threephase	400V ~ 50Hz	1,5KW	0-100bar	8L/min	22 Kg	481x232x196	1 936.00
909942	ATOM 12L/min threephase	400V ~ 50Hz	3,8KW	0-140bar	12L/min	32 Kg	455x320x266	2 925.00
909944	ATOM 14L/min threephase	400V ~ 50Hz	3,8KW	0-120bar	14L/min	32 Kg	455x320x266	2 987.00
909945	ATOM 15L/min threephase	400V ~ 50Hz	5,2KW	0-150bar	15L/min	32 Kg	455x320x266	2 997.00
909947	ATOM 17L/min threephase	400V ~ 50Hz	5,2KW	0-130bar	17L/min	32 Kg	455x320x266	3 172.00

MGF

www.mgf-tools.com
Professional Plumbing Tools

ATOM ELECTROPUMPS – Special Versions

ATOM Pumps version 24V

Special version pumps realized with low tension motors, usefull to put on operating machines and for transports.

- This application is useful in different fields:
- **Humidification** (average cooled for alimentary commodities)
- **Mobile disinfection** (breedings and agriculture)
- **Powders elimination** (average of transport and heavy machines)



Art.	Model	Tension	Current	Power	Pression	Flow Rate	Weight	Dimensions	Price BGN without V.A.T.
909901-24	ATOM 1L/min 24V	24VDC	40A	0,75 KW	0-100 bar	1 L/min	35 Kg	454x208x188	4 944.00
909902-24	ATOM 2L/min 24V	24VDC	40A	0,75 KW	0-100 bar	2 L/min	35 Kg	454x208x188	4 944.00
909904-24	ATOM 4L/min 24V	24VDC	80A	1,5 KW	0-100 bar	4 L/min	50 Kg	481x232x196	4 944.00
909906-24	ATOM 6L/min 24V	24VDC	80A	1,5 KW	0-100 bar	6 L/min	50 Kg	481x232x196	4 944.00
909908-24	ATOM 8L/min 24V	24VDC	80A	1,5 KW	0-100 bar	8 L/min	50 Kg	481x232x196	4 944.00

ATOM Pumps Special version

Special version pumps studied on specific Customer need and able to saticsfy the following needs.

- **High capacities** (pump groups at high and very high pressure / high capacity)
- **Stell bodies** (to use with demineralized wather or with Ozone for example)
- **Special healds** (for pumping aggressive liquids)
- **High temperatures** (for pumping liquids at high temperature)

MODELS AVAILABLE ONLY ON REQUEST

ATOM pump realized on the request of one of our customers:

Capacity: 240L/min, Power: 50 KW , Weight: 268 Kg



OPTIONS for ATOM PUMPS



The solenoid valve stops water flow in case of power supply failure: **greater safety**

The filter protects pump and nozzles from fillings and damages: **greater duration in time**



Aluminium chassis: **light, strong, anti-corrosive**

Pump and motor on a steel body: **robust and easy to maintain**

Inlet solenoid valve: **water stopping at pump stopping**



Pipeline drain valve: **avoids dropping**



NEW MODELS
Page 36

Aluminium chassis: **light, strong, anti-corrosive**

iControl included: **set of powerful function included, see pages 12-15**



PCI KITS provided with pre-assembled pipe w/stainless steel fittings: **reduce installation cost near to zero**

EA - Supply solenoid valve + Filter

The aluminium **emergency filter** protects the pump from particulate in suspension. In case of dirty water, it is necessary use the filters described in the following page.

The **supply solenoid valve** works to stop water flow at pump stopping.

For three-phase pumps it is required a neutral 5 pins socket power supply.

Pump price with/EA option:

Example:

Art.	Model	Price BGN without V.A.T.
909901EA	ATOM Pump 230VAC 1L/min opz. EA	2 116.00

EC - Solenoid Valves + Filter + Chassis (only for pumps until 8 L)

The **body in light alloy** confers to the pump an agreeable aspect, protects it from dirty and hits and it is easy to carry.

The pump, motor and all parts are assembled on a steel body, in order to get **maximum resistance** and **easy maintenance**.

The **supply solenoid valve** allows to stop the water flow immediately after pump stop, avoiding any water leak.

The **drain solenoid valve** allows to de-pressurize the pipeline after pump stop. It is not necessary install a drain line.

For three-phase pumps it is required a neutral 5 pins socket power supply.

Pump price with/EC option:

Example:

Art.	Model	Price BGN without V.A.T.
909901EC	ATOM Pump 230VAC 1L/min opz. EC	3 126.00

PCI Pump sets

Basically **PCI Pump sets** are the evolution of **IC** option.

In the box you'll find:

- **Atom pump** with desired flow rate
- **iControl** ready to plug and play, see pages 12-15
- **inlet valve**: to stop water flow
- **drain valve**: to de-pressurize water line after pump stop
- **digital pressure transducer**: provide alarm safety functions

PCI KITS

PCI KITS are composed by:

- **PCI pump set**
- Multilayer pre-assembled pipe w/nozzles and wall mount holders

ACCESSORIES

Fully compatible with every MGF misting pump

De scaling / Disinfecting System

Available in two versions, this system is very easy to be installed and managed. It reduces dramatically scale formation and bacteria reproduction into pipes, as demonstrated by a university lab. PRO model is identical, but with a stronger effect.

Size/Weight: 110 x 65 x 30 mm/200 g
Power: 1 W
Supply: 12 V (Power supply included)

Art.	Model	Price BGN without V.A.T.
939999	EASY Descaling System	
939998	PRO Descaling System	
720114	Chemical products dosing pump	369.00

Filters

Suggested for dirty water, it can be assembled alone or in battery. Filtering insert is made in high quality polypropylene to ensure the best filtering effect.

Dimensions: 5", 1/2" connection

Art.	Model	Price BGN without V.A.T.
213005	1 µm Filter with spare insert	65.00
213050	50 µm Filter with spare insert	65.00
213100	100 µm Filter with spare insert	65.00
213004	1 µm spare insert	7.50
213049	50 µm spare insert	7.50
213099	100 µm spare insert	7.50
213090	Filter holder	7.00
213091	2 Filters holder	14.00

Damping system

Suggested to reduce the pipeline vibrations and noises. Can be installed as a standard pipeline end.

Dimensions: 100 x 45 x 15 mm

Art.	Model	Price BGN without V.A.T.
211210	Quick connection damping pipeline end	232.00
211211	3/8" M damping pipeline end	224.00

Pumps oil

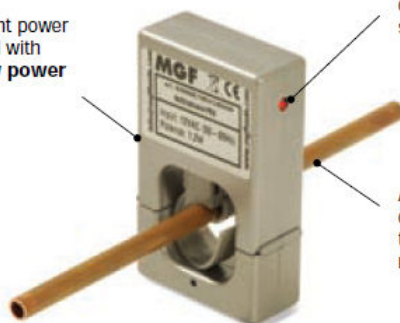
Misting pumps oil. Regularly used it preserves the pump and its mechanisms and makes its life longer.

As general rule of thumb, we suggest to change oil after first 50 hours and the regularly after 250h

Art.	Model	Price BGN without V.A.T.
790051	5 L mineral oil for misting pumps	181.00
790050	0,5L mineral oil for misting pumps	25.60

1,2 W wall mount power supply delivered with instrument: **low power consumption**

Led indicating correct working: **simple to check**



Assembled directly on the tube: **no stand required**



Dosing pump for descaling, aromas disinfection: **ensure good mist quality**

1/2" brass connection

1/8" hole for venting and for pressure switch connection



Polypropylene flake insert: **high quality filtering**

Damps pressure into pipeline: **more silent and less pump wear**

With charging valve: **for all working conditions**



Art. 211211

Lubricates and preserves all **MGF** pumps



NEBULA SYSTEM

The cheap and reliable solution

Nebula



Nebula is the cheapest machine introduced in **MGF** misting pumps program.

Even maintaining the products at a high standard level, our engineers wanted to reach two main objectives:

- Reduce costs without reducing quality and reliability
- Get a simple system, easy to use and to move

This motorpump is the right solution for all the moving installations where it's necessary to reduce at the minimum product costs maintaining the reliable level as the other high quality pumps.

Assembled chassis example
(Optional)



Technical features

Power:	500W
Power supply:	230VAC~50Hz
Max. current:	4A
Water flow rate:	from 0,2 to 1L/min
Max pressure:	85bar
Weight:	14,7 Kg
Dimensions:	367 x 195 x 200 mm

Accessories for Nebula Pump

Chassis in powder painted aluminium easy to install by the customer after sale it makes the product nicer and more silent

Chassis dimensions: 370 x 200 x 210 mm

Art.	Model	Price BGN without V.A.T.
909960	Motorpump NEBULA 01	1 782.00
909961	Motorpump NEBULA 01 with chassis	1 998.00
909962	Motorpump NEBULA 01 w/remote control+chassis	2 451.00
800115	Kit chassis for NEBULA 01 motorpump	202.00
213005	1um filter with spare insert (SUGGESTED)	65.00
213004	Spare insert 1um	7.50
213090	Filter support	7.00

MGF

www.mgftools.com
Professional Plumbing Tools

NEBULA KIT

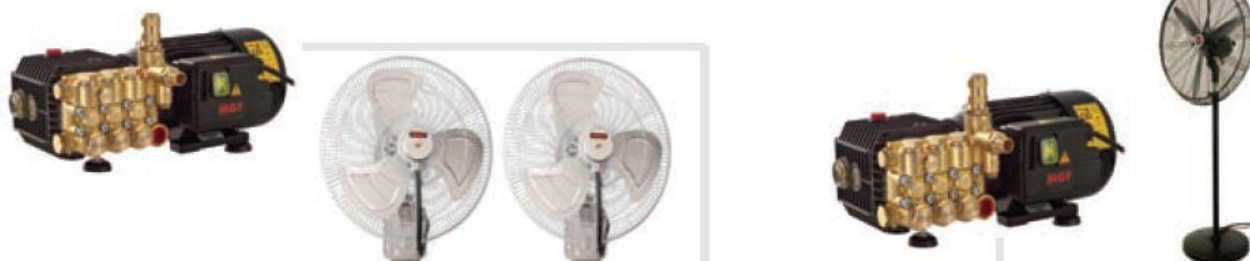
Install a misting system in a few minutes



KIT for LINE SYSTEMS

	Art. 909859 KIT MICRO	Art. 909860 KIT MINI	Art. 909861 MAXI
Motorpump:	NEBULA 01	NEBULA 01	NEBULA 01
Nozzles 20um with anti-drop (art. 225120):	5	10	20
Distance pump / nozzles:	10 m	10 m	20 m
Distance nozzles:	80 cm	80 cm	80 cm
Total length of the pipe:	13,2 m	17,2 m	35,2 m
Pipe supports:	10	20	40

KITS with misting fans



	Art. 909862 KIT BREZZA S402	Art. 909863 KIT BREZZA P650
Motorpump:	NEBULA 01	NEBULA 01
Distance pump / fan:	20 m	20 m
Distance between fans:	10 m	-
Fans:	2 BREZZA S400 (on the wall)	1 BREZZA P650 (with stand)

MGF Shop Corner: Nebula Kit + "Totem" display for leaflets

SIMPLE, IMMEDIATE, EFFECTIVE

Art.	Model	Price BGN without V.A.T.
909859	NEBULA Kit Micro	1 864.00
909860	NEBULA Kit Mini	1 981.00
909861	NEBULA Kit Maxi	2 367.00
909862	NEBULA Kit Brezza S402	2 935.00
909863	NEBULA Kit Brezza P650	2 472.00



Piacere di lavorare

BREZZA 400

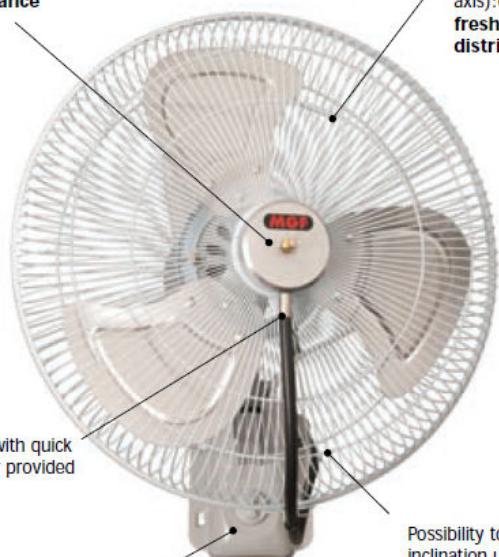
Only one central nozzles: **less maintenance costs**

90° tilt (+/-45° to the central axis): **optimal fresh distribution**

2m pipe with quick connector provided

Possibility to modify inclination up to 45° from the horizontal: **easy to install**

Three speeds: **flexible**



Technical features

Tilt controlled by the strong independent motor, possibility to stop the fan separately (optional)

Power:	120 W
Tension:	230 V~50Hz
Current max.:	2 A
Max air flow:	100 m³/min
Max water flow:	0,12 l/min
Weight:	5 Kg
Dimensions:	460x600x350 mm
Protection:	IP24
Service class:	S1
Covered surface:	Approximately 40 m²
Reached Distance:	Approximately 6m
Diameter blade:	400mm

These data can be modified by the environmental conditions
Screws and fixing parts (fisher) not included.

Art.	Model	Price BGN without V.A.T.
909892	BREZZA S400 misting fan with wall stand	679.00

BREZZA 650

Misting fan for big spaces

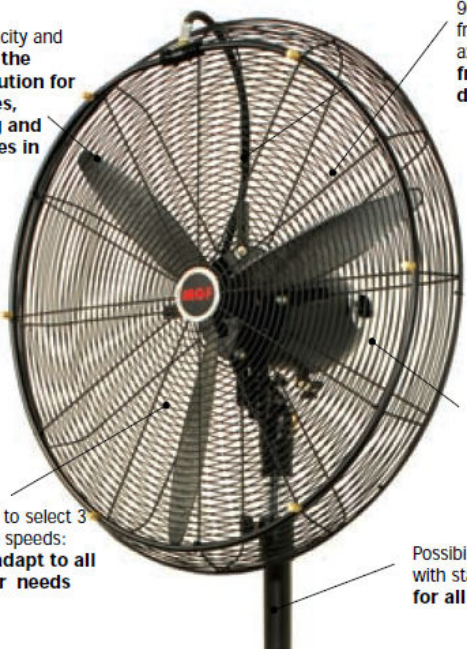
High capacity and air speed: **the right solution for industries, breeding and big spaces in general**

90° tilt (±45° from the central axis): **optimal fresh distribution**

Possibility to regulate the orientation: **flexible**

Possibility to select 3 oscillation speeds: **easy to adapt to all customer needs**

Possibility to have it with stand or foot: **for all use**



Technical features

High efficiency misting fan to guarantee high speed and air flow. This mixes very well air and water and makes it good to use in spaces of big dimensions where it is necessary to reach long distances.

Power:	230 W
Power supply:	230 VAC~50Hz
Max. current:	2,5 A
Max air capacity:	205 cu.m/min
Max water capacity:	0,2 l/min (12 l/h)
Weight:	12 Kg
Dimensions:	diam 650 mm
Protection:	IP24
Service class:	S1
Covered space:	around 60 m²
Reached distance:	around 7 m
Diameter blade:	650mm

These data can be modified by the environmental conditions
Screws and fixing parts (fisher) not included.

Art.	Model	Price BGN without V.A.T.
909896	BREZZA S650 misting fan with wall stand	998.00
909897	BREZZA P650 misting fan with floor stand	998.00
909896/XX	BREZZA S650 with customized RAL color painting	1100.00



BREZZA "D"

De-stratification + Misting

Technical Features

Power:	140 W
Power Supply:	230VAC or 400VAC 3ph
Current max.:	2,15 A
Max air flow:	205 cub.m/min
Max water flow:	0,25 l/min (15 l/h)
Weight:	50 Kg
Dimensions:	1000 x 1000 x 500 mm
Protection:	IP55
Service class:	S1

Art.	Model	Price BGN without V.A.T.
909894	Misting destratificator BREZZA D Threephase	3 193.00
909895	Misting destratificator BREZZA D Monophase	3 193.00



Air diffuser under way profile: ideal for de-stratification and improves evaporation

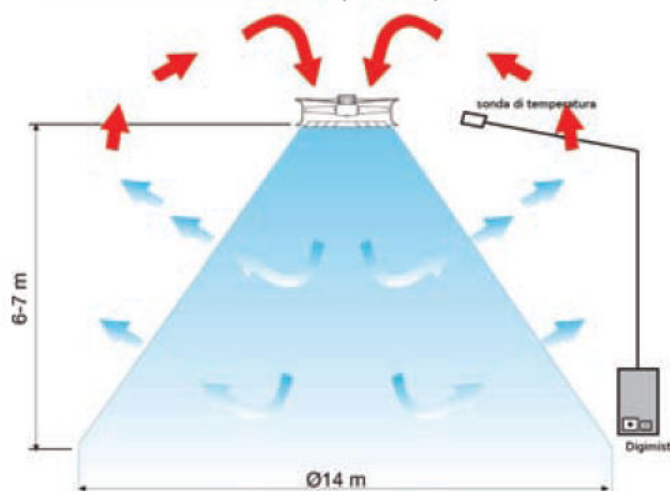
Nozzle position: avoids any fall of drops



Hooks and supplied chains of series: simple installation

Paint job to black powder: elegant and discreet

OUTLINE SUMMERY OPERATION (COOLING)

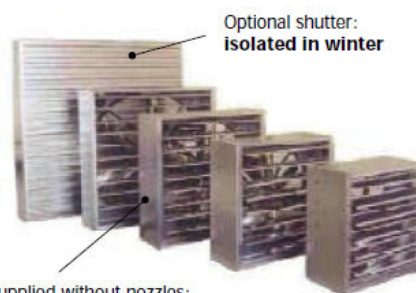
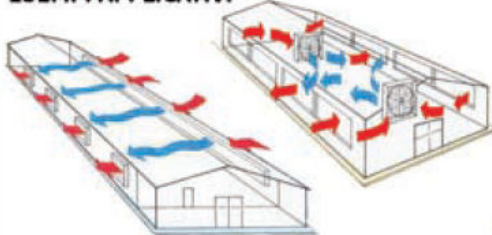


Brezza

MELTEMI - Fan for Agriculture and Industry

Industrial fans in stainless steel and with motor speed reduction in order to develop remarkable air exchanges. These fans are supplied **without nozzles** in order to have the maximum flexibility. *For example it is possible to install window fans and nozzles in line inside the room.*

ESEMPI APPLICATIVI



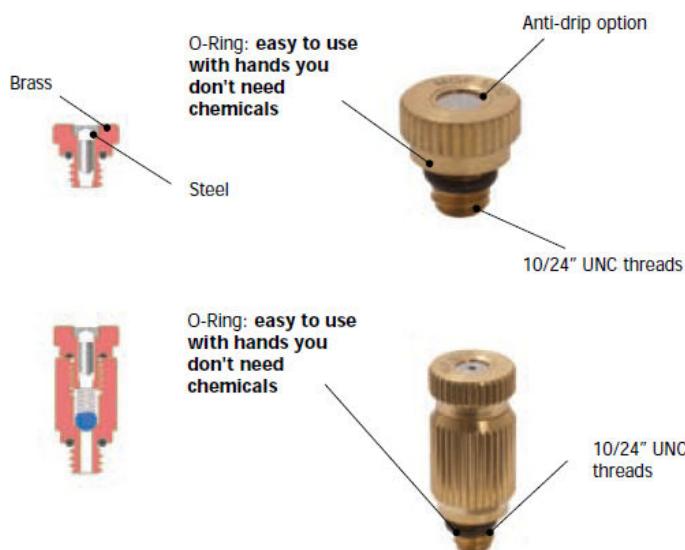
Optional shutter: isolated in winter

Supplied without nozzles: flexible installation

Art.	Model	Slovel	Air Flow	Suggested water	Tension	Power	Price BGN without V.A.T.
908801	MELTEMI fan 660mm	660mm / 26"	15.655m3/h	1l/min	230/400V	0.375KW – 0,5HP	1 602.00
908802	MELTEMI fan 660mm w/shutter	660mm / 26"	15.655m3/h	1l/min	230/380V	0.375KW – 0,5HP	1 723.00
908803	MELTEMI fan 790mm	790 mm / 31"	18.633 m3/h	1,2l/min	230/380V	0.375KW – 0,5HP	1 679.00
908804	MELTEMI fan 790mm w/shutter	790 mm / 31"	18.633 m3/h	1,2l/min	230/380V	0.375KW – 0,5HP	1 804.00
908805	MELTEMI fan 990mm	990 mm / 39"	27.144 m3/h	1,8l/min	230/380V	0.5KW – 0,75HP	1 755.00
908806	MELTEMI fan 990mmw/shutter	990 mm / 39"	27.144 m3/h	1,8l/min	230/380V	0.5KW – 0,75HP	1 869.00
908807	MELTEMI fan 1270mm	1270 mm / 50"	41.306 m3/h	2,7l/min	230/380V	0.75KW – 1HP	1 844.00
908808	MELTEMI fan 1270mm w/shutter	1270 mm / 50"	41.306 m3/h	2,7l/min	230/380V	0.75KW – 1HP	2 031.00
908809	MELTEMI fan 1750mm	1750 mm / 69"	72.411 m3/h	5l/min	230/380V	1.5KW – 2HP	3 228.00
908810	MELTEMI fan 1750mm w/shutter	1750 mm / 50"	72.411 m3/h	5l/min	230/380V	1.5KW – 2HP	3 681.00

Piacere di lavorare

Brass/AISI304 Steel NOZZLES



NOZZLES in AISI304 or AISI316



Art.	Diameter	Antidrop	Price BGN without V.A.T.
225015	15 µm	no	13.40
225020	20 µm	no	10.00
225030	30 µm	no	7.20
225040	40 µm	no	7.20
225050	50 µm	no	7.20
225060	60 µm	no	7.20
225080	80 µm	no	7.20
225099	100 µm	no	7.20
225098	120 µm	no	7.20
225115	15 µm	yes	14.80
225120	20 µm	yes	11.80
225130	30 µm	yes	8.40
225140	40 µm	yes	8.40
225150	50 µm	yes	8.40
225160	60 µm	yes	8.40
225180	80 µm	yes	8.40
225199	100 µm	yes	8.40
225198	120 µm	yes	8.40

Art.	Diameter	Antidrop	Washable	Price BGN without V.A.T.
225214	15 µm	no	yes	16.00
225215	15 µm	yes	no	25.00
225216	15 µm	yes	yes	25.00
225219	20 µm	no	yes	14.00
225220	20 µm	yes	no	20.00
225221	20 µm	yes	yes	20.00
225229	30 µm	no	yes	10.80
225231	30 µm	yes	yes	16.00
225239	40 µm	no	yes	10.80
225241	40 µm	yes	yes	16.00
225249	50 µm	no	yes	10.80
225251	50 µm	yes	yes	16.00
225222	20 µm AISI316	yes	no	32.00

Nozzle Flow Rates [litres /minutes] (The indicated capacities are average values and can change depending on nozzles and on environmental conditions)

	10 bar	20 bar	30 bar	40 bar	50 bar	60 bar	70 bar	80 bar	90 bar	100 bar	110 bar
15 µm			0,030	0,036	0,039	0,045	0,047	0,049	0,051	0,053	0,054
20 µm		0,042	0,051	0,054	0,064	0,070	0,072	0,076	0,080	0,083	0,085
30 µm	0,045	0,065	0,082	0,091	0,100	0,112	0,123	0,130	0,137	0,144	0,151
40 µm	0,065	0,089	0,110	0,126	0,136	0,155	0,164	0,173	0,182	0,191	0,200
50 µm	0,090	0,114	0,141	0,160	0,180	0,198	0,211	0,223	0,235	0,248	0,260
60 µm	0,115	0,137	0,165	0,195	0,220	0,250	0,267	0,285	0,307	0,320	0,332
80 µm	0,140	0,175	0,200	0,235	0,270	0,295	0,320	0,340	0,360	0,380	0,400
100 µm	0,165	0,195	0,228	0,265	0,305	0,332	0,360	0,380	0,405	0,430	0,447
120 µm	0,190	0,215	0,254	0,295	0,334	0,363	0,395	0,420	0,455	0,480	0,495

CALCULATION FORMULAS and EXAMPLES

Minimum flow rate requested = number of nozzles x nozzle flow rate

i.e.: 22 nozzles 20 µm pipeline at 100 bar. Flow rate requested=22x0,083=1,826 l/min

Max number of nozzles = Pump flow rate / nozzle flow rate at maximum working pressure

i.e.: 1 l pump, 15 µm nozzles, 70 bar max pressure. Nozzles number=1/0,047=21 nozzles

Accessories for Brass Nozzles

All components are in OT58 brass and are compatible with **MGF** nozzle range.

The thread connection is 10/24" and standard gaskets are in NBR. It is possible to use VITON on demand.

Art.	Description	Price BGN without V.A.T.
211184	Brass antidrop 10/24" MF UNF	5.00
225000	Brass cap for nozzles	3.80
211197	50 mm Extension	6.40
211207	Drain valve	7.40
211230	Brass nozzle filter holder	5.40
225266	Swivel Nozzle	14.80
225264	300 mm flexible extension	19.80
211233	Polyethylene filter for nozzles 5-20um	0.80
240001	Universal O-Ring for nozzles	0.30
225101	Antidrop valve (spring+ball)	1.20



Accessories for Steel Nozzles

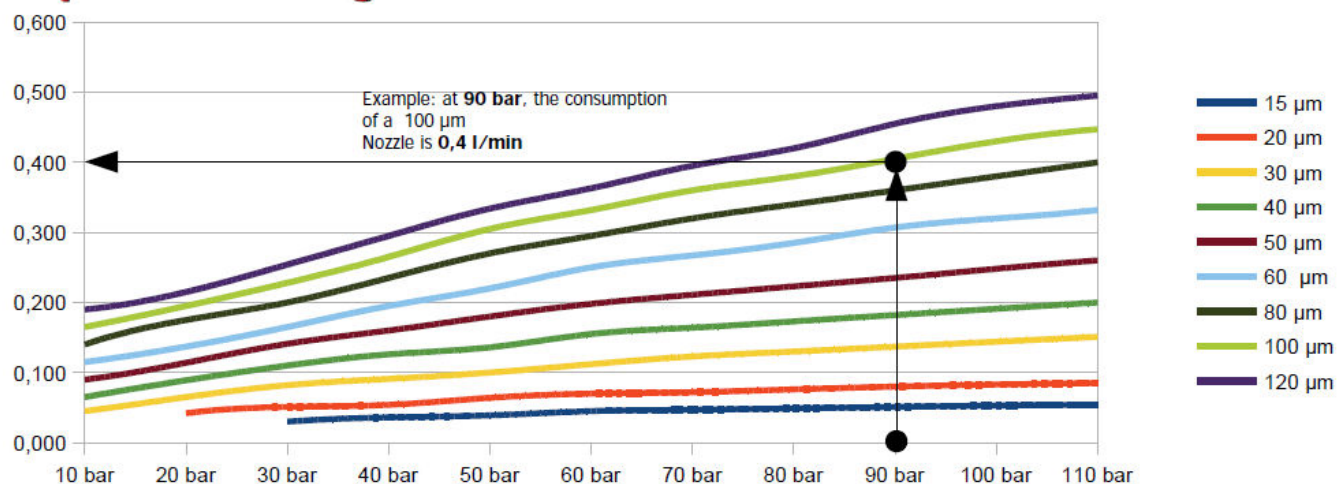
All components are in AISI304 and are compatible with **MGF** nozzle range.

The thread connection is 10/24" and standard gaskets are in NBR. It is possible to use VITON on demand.

Art.	Description	Price BGN without V.A.T.
211183	Steel antidrop 10/24" UNF MF	6.00
211199	Inox welding nozzle holder	4.80
211231	Stainless steel nozzles filter holder	5.80
211233	Polyethylene filter for 5-20um nozzles	0.80
240001	Universal O-Ring for nozzles	0.30
225101	Antidrop valve (spring+ball)	1.20



Experimental diagram for MGF nozzles flow rates



NOZZLE HOLDERS FOR MISTING PIPELINES

For copper and plastic pipes from 3/8"

You can mount it with hands



The fitting is dismountable and orientable in the space

The **MGF** quick-connection nozzle holders are ideal for misting lines building even very complex, combining also different material pipes, i.e. plastic and copper.

To disassemble the connector, simply hold tight the ring nut and pull the pipe off.

To ensure the correct and watertight operation of the connector, you must:

- ensure the ring nut movement, avoiding any frictions;
- avoid scratches on the pipe or dirty on the internal O-ring.



Standard Nozzle Holder (2 connections, 1 nozzle holder)

Used in standard misting pipelines.

Art.	Model	Price BGN without V.A.T.
211176	Nozzle holder 2 connections, 1 nozzle	23.00



2 Nozzle Holder (2 connections, 2 nozzles)

Used to mist in both sides, at 180° (i.e.: farming)

Art.	Model	Price BGN without V.A.T.
211196	Nozzle holder 2 onnections, 2nozzles 180°	23.00



Pipeline ending nozzle holder (1 connection, 1 nozzle)

Side nozzle hole.

Art.	Model	Price BGN without V.A.T.
211182	Side nozzle holder 1 nozzle	13.80



Pipeline ending nozzle holder (1 connection, 2 nozzles)

Side nozzle connections at 180°.

Art.	Model	Price BGN without V.A.T.
211218	Pipeline ending nozzle holder 2 nozzels 180°	13.40



Front pipeline ending nozzle holder (1 tube connection, 1 nozzle)

Front nozzle holder. Good to make extensions.

Art.	Model	Price BGN without V.A.T.
211191	Front pipeline ending nozzle holder	13.80



Umbrella nozzle holder (3 nozzles)

Side holder nozzle at 120° angle steps

It make a fog "umbrella" .

Art.	Model	Price BGN without V.A.T.
211162	3 nozzles umbrella	23.40



Umbrella nozzle holder (4 nozzles)

Side holder nozzle at 90° angle steps.

It make a fog "umbrella" .

Art.	Model	Price BGN without V.A.T.
211163	4 nozzles umbrella	23.60



Umbrella nozzle holder (6 nozzles)

Side holder nozzle at 60° angle steps.

It make a fog "umbrella" .

Art.	Model	Price BGN without V.A.T.
211164	6 nozzles umbrella	24.40

MISTING PIPELINES CONNECTORS

For copper and plastic pipes from 3/8"

Straight Joint

Useful as plastic or copper pipelines extension.

Art.	Model	Price BGN without V.A.T.
211172	Straight Joint	21.00

L Joint

Useful for small radius bending ($r < 250$ mm).

Art.	Model	Price BGN without V.A.T.
211186	L joint	26.60

Straight Joint with tap

Useful to branch pipelines.
(tap to be moved with pump off).

Art.	Model	Price BGN without V.A.T.
211195	Straight joint with tap	38.40

TEE Connector

Useful for additional pipeline.

Art.	Model	Price BGN without V.A.T.
211177	TEE Connector	34.00

Cross Connector

For 2 additional lines.

Art.	Model	Price BGN without V.A.T.
211181	Cross Connector	49.00

3 ways Connector

For 2 lines at 90°. (i.e. rooftop)

Art.	Model	Price BGN without V.A.T.
211187	3 ways connector	49.00

4 ways connector

To make a collector.

Art.	Model	Price BGN without V.A.T.
211165	4 ways connector	80.20

5 ways connector

To make a collector.

Art.	Model	Price BGN without V.A.T.
211166	5 ways connector	98.00

3/8" F-quick connector

Example of use: To connect steel to plastic/copper tube

Art.	Model	Price BGN without V.A.T.
211174	3/8" F-quick connector	16.00

3/8" M - Quick connector

Example of use: To connect steel to plastic/copper tube

Art.	Model	Price BGN without V.A.T.
211201	3/8" M-quick connector	16.00

Joint with 100 bar electrovalve

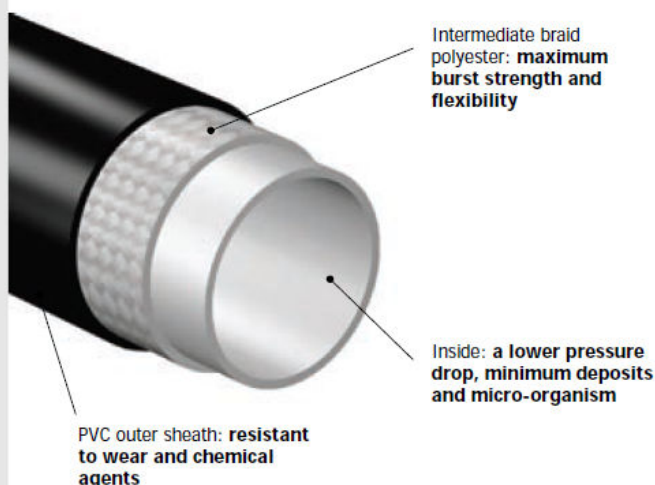
Tension 230V~ / 50Hz or 24VDC, working pressure 100 bar. With DIN connector

Art.	Model	Price BGN without V.A.T.
211222	Joint with 100bar 230V ~ solenoid valve	152.00
211227	Joint with 100bar 24VDC solenoid valve	152.00
720116	Solenoid valve 1/4" Gas F-100bar-230V ~	134.00
720117	Solenoid valve 1/4" Gas F-100bar-24VDC	134.00



PRESSFITTING FOR MISTING SYSTEMS

More professional systems

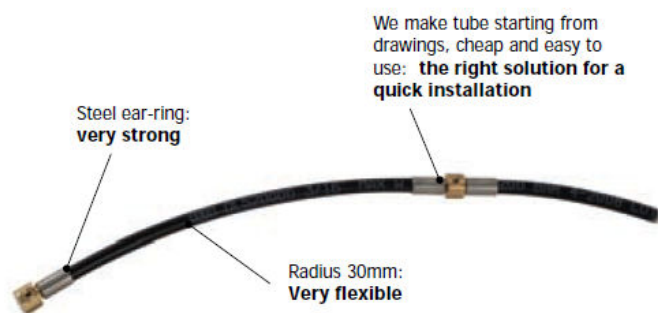


Ultra-Flexible Multilayer Pipe

Thanks to the triple layer, it is more resistant to temperature, abrasion and chemical exposure than traditional plastic pipes.

Working pressure:	200 bar
Explosion pressure:	800 bar
Min. bending radius:	45 mm
Max. Temperature:	60°C
Coil length:	250 m

Art.	Model	Price BGN without V.A.T.
00TUTE009	Multilayer plastic pipe depending on mesure	4.20
TAGLIO	Fixed amount for cutting >20 m length	40.00
00TUTE009	Multilayer plastic pipe 250 m (approx., priced on real lenght)	



Preassembled Pipes in Iperflexible Thermoplastic

Work pressure 200 bar, burst 800 bar. With M 5 pipe thread on the rear of every nozzle holder for simplified assembling. Quick connections compatible with pipes both in plastic and in copper. On demand you can also have these products in different size.

HOW TO ASK FOR A QUOTATION

Each component is identified with an acronym. The pipe is indicated with a number between the different acronyms: this is the distance in metres between two components.

For example to indicate the side picture, assuming that the distance between the end line (FL) and the nozzle holder (PU) is 50cm, we have to use the following code:
FL-0,5-PU-....

Universal Pressfitting Bushing for Multilayer Pipe

Compatible with all **MGF** fittings and **MGF** Multilayer pipe
Material: AISI 303 Steel

Art.	Model	Price BGN without V.A.T.
210107	Universal Pressfitting Bushing for Multilayer	4.60

Male Joints For Multilayer Pipe

To joint fittings for gas or couplings "nebula".
Material: AISI 303 Steel

Art.	Model	Price BGN without V.A.T.
211228	Multilayer pipe joint – 1/4"M (1/4M)	14.80
211226	Multilayer pipe joint – 3/8"M (3/8M)	14.20
211234	Male joint for quick connection (ARM)	14.80

Female Joints For Multilayer Pipe

For joints with male fittings for gas or fast type "nebula"
Material: Galvanized Steel, Brass

Art.	Model	Price BGN without V.A.T.
211235	Coupling kit 1/2"F for Multilayer pipe (1/2F)	18.20
211236	Coupling kit 3/8"F for Multilayer pipe (3/8F)	18.20
211237	Coupling kit Quick connection to the pump (ARP)	13.40



PRESSFITTING FOR MISTING SYSTEMS

More professional systems

Nozzle Holders For Multilayer Tube

Nozzle holders of various shapes to create the misting line according to all needs.

Material: AISI 303 Stainless Steel
Thread holder: 10/24" UNF
Thread fastening screw: M4 (only on radial models with a single nozzle)

Art.	Model	Price BGN without V.A.T.
211215	Nozzle holder for multilayer pipes (PU)	14.40
211217	Nozzle holder (2 nozzles at 180°) Multilayer (PU2)	15.00
211214	End line nozzle holder for multilayer pipes (FL)	12.40
211238	End line 2 nozzle holder (180°) multilayer (FL2)	12.80
211232	End line nozzle holder (front) for multilayer pipe (FLF)	11.80
211241	Nozzle holder (x2 at 90°) Multilayer (2U90)	15.00
211242	End line nozzle holder (x2 at 90°) (2FL90)	15.00

Tee For Multilayer Pipes

TEE fitting removable and adjustable even after pressing. It makes dismantling and repositioning of the line easier, for example, at the end of season. To reposition the insert, grease the O-ring to prevent damages.

Material: AISI 303 Stainless Steel

Art.	Model	Price BGN without V.A.T.
410056	TEE Multilayer body (T)	14.00
211239	TEE file for multilayer pipe (AT)	8.20
211240	TEE kit for complete multilayer pipe	20.60
242031	O-ring for 211239 (min. 10 pieces)	1.00



Art. 211215

Art. 211217



Art. 211241



Art. 211238



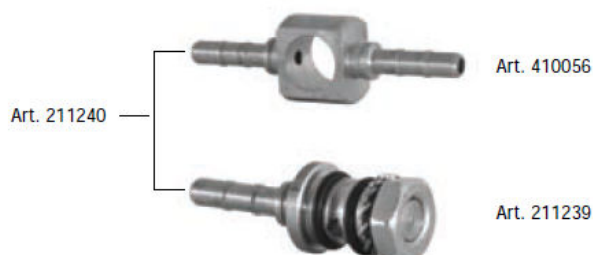
Art. 211232



Art. 211214



Art. 211242



Art. 410056

Art. 211239

Quick illustrated guide for a perfect crimping

1. Preparation

1. Cut the tube at 90 ° to its axis
2. Insert the bushing in the bottom of the tube
3. Push the hose connector assembly of tube + bush.

2. Coupling pipe / fitting

1. Before pressing, the head of the bushing must be in contact with the head of the fitting
2. The allowed space between the head and bushing is 1mm max

3. Pressing

1. The jaw must embrace the whole bush
2. The press must continue all the way (lock)
3. Test the junction before continuing.



INOX AISI304 Fittings and Nozzle Holders

Compatibles with stainless steel 8 mm pipes

Connections to tighten with ogive. Without rubber or plastic gasket, ideal to build a very resistant line, i.e. in high temperature environments. Ideal also for systems in which it is necessary to satisfy HACCP requirements (i.e. fish cold rooms).



Ogive for Stainless Steel Fittings

Spare for all fittings. Ogive must be replaced after being pressed (and deformed) the first time.

Art.	Model	Price BGN without V.A.T.
211229	Ogive for INOX fittings	4.00

Standard Stainless Steel AISI304 nozzle holder

Completely in Stainless Steel. Tighten fitting.

Art.	Model	Price BGN without V.A.T.
211203	Nozzle holder (2 Connections, 1 Side Nozzle)	40.00

Stainless Steel AISI304 2 Nozzles Holder at 180°

Completely in stainless steel. Tighten fitting.

Art.	Model	Price BGN without V.A.T.
211216	Nozzle holder (2 Connections, 2 Side noz. at 180°)	49.00

Stainless Steel AISI304 End Line Plug

To put on standard nozzle holder, at the end of the line.

Art.	Model	Price BGN without V.A.T.
211204	End line Plug	4.40

Stainless Steel AISI304 Welding Nozzle Holder

To be welded on stainless steel pipes, it guarantees a long-lasting and resistant connection during time, eliminating problems of held on threads directed on tube.

Art.	Model	Price BGN without V.A.T.
211199	Stainless Steel Welding Nozzle Holder	4.80

Stainless Steel AISI304 L Joint

Tighten fitting.

Art.	Model	Price BGN without V.A.T.
211205	AISI304 Stainless Steel L joint	42.00

Stainless Steel AISI304 straight Joint

Tighten fitting.

Art.	Model	Price BGN without V.A.T.
211212	AISI304 Stainless steel straight joint	34.00

Stainless Steel AISI304 TEE fitting

Tighten fitting.

Art.	Model	Price BGN without V.A.T.
211213	AISI304 stainless steel TEE fitting	70.00

Stainless Steel AISI304 3/8"-8 mm joint

Useful to connect steel to plastic/copper lines.

Art.	Model	Price BGN without V.A.T.
211206	AISI304 Stainless steel 3/8"-8 mm joint	26.00

PLASTIC, COPPER, STAINLESS STEEL MULTILAYER PIPES

Copper pipes, in bars Ø 3/8"

High pressure rate pipe. Copper has an anti bacterial action.
Straight bars to make perfect installations.

Max working pressure: 150 bar
Max pressure: 500 bar
Weight of the pipe: 214 g/m (full of water: 284 g/m)
Thermal stress: 1,6 mm each 100 m/°C

Art.	Model	Price BGN without V.A.T.
304032	Copper pipe in 2 m bars	36.00
304034	Copper pipe in 2.5 m bars	47.00

Stainless steel bars, Ø 8mm bars

AISI304 pipe for high pressure.
Straight bar to make perfect installations.

Max working pressure: 150 bar
Max pressure: 500 bar
Weight of the pipe: 180 g/m (full of water: +38 g/m)
Thermal stress: 1 mm each 100 m /°C
External diameter: 8 mm
Thickness: 1 mm
(NB.: expansion is not compensated by the compression fittings)

Art.	Model	Price BGN without V.A.T.
304043	Inox pipe in 3 m bars	29.00
304060	Inox 3m pipe x 4noz. (distance 0,75m)	150.00
304061	Inox 3m pipe x 3noz. (distance 1 m)	120.00

Plastic pipes, in bars and coils Ø 3/8"

Black plastic pipe. Flexible, quick installation and easy to cut.
Pipe manufactured according to DIN73378.

Wall thickness: 2,5mm (stronger than 2 pipes)
Min bending radius: 250 mm
Max working pressure: 100 bar
Working temperature: -20/50°C (Up to 80°C; p. max= 60 bar)
Weight of the pipe: 60 g/m (Full of water:76 g/m approximately)

Art.	Model	Price BGN without V.A.T.
304006	25 m black coil pipe	224.00
304001	50 m black coil pipe	422.00
304002	100 m black coil pipe	844.00
304004	3 m black coil pipe	25.20
304005	2 m black coil pipe	16.80

Piping clamps

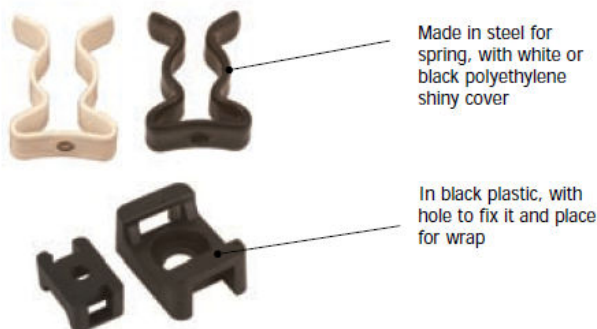
Fixing clips: self-tapping M2 screw (included)
Max temperature: 60°C.

Art.	Model	Price BGN without V.A.T.
211500	Package with 25 black clamps	55.40
211501	Package with 25 white clamps	64.00
710024	Black plastic holder (100 pieces)	0.20

Ideal for line installations



Radius: 300mm approximately



Control panel for humidification, cooling, dust suppression

Programmable parameters+4 function keys: flexible and easy to use

Optional padlock door lock: ideal for work places and spaces accessible to the public



Humidity and temperature sensor as standard: avoids dew effect and maximizes the cooling

DigiMIST "FULL OPTIONAL"

Includes all the functions needed to manage a system:

- Weekly programmer (i.e. management opening hours)
- Interface for remote controls (by push button, radio ...)
- Interface for industrial automation systems
- Humidity sensor and temperature with heat index calculation
- Setting desired heat index
- Setting desired humidity
- Humidity threshold for fans (optional relay)
- Cyclical timing programmable pump (0-30000 s)
- Control dosing pump flavourings / disinfectants

	Mono-phase	Three-phase+neutral
Supply:	230 V~50Hz	400 V~50Hz
Max current (only panel):	16A (1 A)	
Outputs:	signal relay + contactor for pump motor	
Backlit display:	4 x 20 digit + 4 function keys	
Temperature probe :	-10/+60°C	
Humidity probe:	10/90% RH	
Max distance probe-panel:	200 m	
Water protection:	IP65	
Dimensions:	470 x 250 x 170 mm	
Weight:	1,5 Kg	

Art.	Model	Price BGN without V.A.T.
909990	Monophase DigiMist	1 530.00
909991	Three-phase DigiMist	1 900.00

Programmable parameters+4 function keys: flexible and easy to use



Optional padlock door lock: ideal for work places and spaces accessible to the public

DigiMIST "TIMER"

For applications where T/H control is not important:

- Start weekly programmer (i.e. management opening hours)
- Interface for remote controls (by push button, radio ...)
- Interface for industrial automation systems
- Cyclical timing programmable pump (0-30000 s)
- Control dosing pump flavourings / disinfectants

	Mono-phase	Three-phase+neutral
Supply:	230 V~50Hz	400 V~50Hz
Max current (only panel):	16A (1 A)	
Outputs:	signal relay + contactor for pump motor	
Backlit display:	4 x 20 digit + 4 function keys	
Water protection:	IP65	
Dimensions:	470 x 250 x 170 mm	
Weight:	1,5 Kg	

Art.	Model	Price BGN without V.A.T.
909992	Monophase DigiMist Timer	950.00
909996	Three-phase DigiMist Timer	1 300.00

DigiMIST "INDUSTRY"

AISI 316 Box, designed according to customer specifications. We provide free of charge a feasibility study on the basis of your requirements. It can include (not-exhaustive list):

- Industrial Touch-screen Panel
- Optical and audible signal devices
- Remote commands via cable or radio frequency
- Alarm functions (i.e., lack of water or broken pipe)
- Counter for the maintenance
- Interfaces V PLC
- Purge piping systems and other automated lines

DigiMIST "CUSTOM"

Framework designed and built according to customer specifications, but in a plastic container, similar to the one of DigiMIST timer.

Also in this case we produce free estimates on the basis of your requirements and technical specifications.

In both cases technical specifications will be provided in the offer, eventually in combination with a "custom manifold"

Art.	Model	Price BGN without V.A.T.
90999I	DigiMIST Industry	при запит ване
90999C	DigiMIST Custom	при запит ване
90999B	Custom Manifold block	при запит ване

Pressure Switches For Water Supply And Outlet

Pressure: 0-10 bar and 10-100 bar (adjustable with screws)

Contact: NO/NA, 2A max (resistive)

Body: brass, 1/8"G connection

Digital Pressure Sensor

Range detection: 0-100 bar (max pressure 150 bar)

Precision: $\pm 1\%$

Power, signal: 5VDC $\pm 0,1$; 0,5V=0bar 4,5V=100bar

Body: AISI 316 stainless steel, 1/8"G connection

Conforms to : EN 837

Flow rate switch

Flow switch: 0,8L/min $\pm 15\%$

Contact capacity: 0,5 A resistive

Pressure drop: 0,5 bar max

Mounting: vertical, 1/2"G connection

Humidity Switch

Range detection: relative humidity 40% - 90%

Commutation: 5% ($\pm 1\%$), response time 5s

Contact capacity: 1,6A resistive

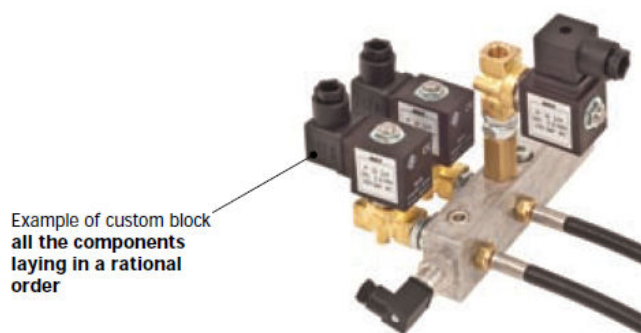
Protection/Conditions: IP20 0-60°C

Average life: > 50000 cycles

Art.	Model	Price BGN without V.A.T.
750203	Pressure sensor 0-100 bar	256.00
750205	Inlet pressure switch (0-10bar)	125.80
750206	Outlet pressure switch (10-100bar)	125.80
750207	Inlet flow switch (0,8L/min)	181.20
750002	T (-10/60°C) and H (10-90%RH) sensor	453.00
750003	Igrostate 40%-90%	371.00



Example of complete DigiMIST Industry



Example of custom block all the components laying in a rational order

Pressure threshold setting screw

Pressure switch at a preset pressure, allowing installation shut down in case of problems (i.e. lack of water)

It is possible to put the pressure switch directly on MGF filters

Pressure Transducer art. 750203 allows to monitor the line pressure

Flow rate switch art. 750207 allows you to check the correct flow rate of the pump

Humidity Switch art. 750003 allows you to control the humidity in an economic way

Misting ESSENCES AND CHEMICALS



NATURAL ESSENCES AGAINST INSECTS Lemongrass, geranium, eucalyptus and andiroba natural extracts mix, to protect naturally from insects. It's not an insect killer, but since its fragrance is not appreciated, it removes insects. 100 ml bottle is enough to treat 100 sqm for 10 hours.

NEWS: citronella extract that can be diluted into water. Completely natural, you can put the quantity you like obtaining the wished concentration. Suggested dilution: 1/1000

DISINFECTING – SANITIZING Wide range disinfecting: it kills both positive and negative gram bacteria, ferments, moulds, and many viruses. Not reactive with pipelines, not corroding. Indicated for domestic and farming environments.

Temperature resistant, not deactivating in contact with organic residuals, it has a good environmental impact and low toxicity for mammals.

Effective in 2 minutes, with a dilution of 1/20. The box is enough for about 1000 operations.

It can be used also to periodically sanitize also pipeline.

BAD SMELLS NEUTRALISER Its ecological formula encapsulates bad smells molecules and modifies them in order to neutralize bad odours. Thanks to its absorption efficiency, this product does not leave any stain or halos.

Effective in 10-15 minutes.

The box is enough for 20-30 applications, to be changed depending on ventilation condition and customer needs.

Art.	Model	Price BGN without V.A.T.	Art.	Model	Price BGN without V.A.T.
793020	Lemongrass (1L)	19.20	793025	Lemongrass powder	27.00
793021	Geranium (1L)	21.00	793001	Sanitizing (5L)	49.00
793022	Eucalyptus (1L)	21.00	793010	O dours neutralizer (1L)	13.40
793023	Andiroba (1L)	21.00			

CAREZZA – Deodorant for water-soluble environments

Concentrated aromas for environments. The product can be water-soluble. It eliminates chemically bad smells and leaves a natural, enjoyable, persistent aroma.

This offer include a bouquet composed of 4 fragrances, able to satisfy the most demanding customer. Every fragrance is characterized by an intense starting aroma, a central heart and a timeless background. A 750 ml bottle is enough to perfume 100 sqm for 25 hours. This can change on customer needs.



ORANGE FRESH Carezza 750 ml

Citrus mix, lemon, orange and bergamot, enriched by colonial aroma. The hearth is essential and is composed by ozonic and neroli notes. The background is musk.

Family: CITRUSES. Very good for restaurants.

Aroma elements: green, spicy, flower, musk

Emotional area: natural

INDIA PASSION Carezza 750 ml

Flower, oriental, slightly fruited, with and heart of flowers, and cedar wooden, evolving into a creamy vanilla background.

Family: ORIENTAL. The leader in women perfumes.

Aroma elements: amber, patchable, sweet

Emotional area: tasty

EXOTIC MIX Carezza 750 ml

An exotic mix, red fruits, evolving into a strawberry and rose heart.

The persisting background is amber and musk.

Family: FLOWER, FRUITS. "Trendy" perfume. For discos and beaches.

Aroma elements: strawberry, blackcurrant, pear, vanilla

Emotional area: amusing

WILD HERBS Carezza 750 ml

Herbs, basil, rosemary and mint, evolving in a fruity pear heart and a then a wooden, musk, dry background.

Family: FOUGERE. Green Fougere are the most requested men perfumes.

Aroma area: pear, mint, basil, musk

Emotional area: natural

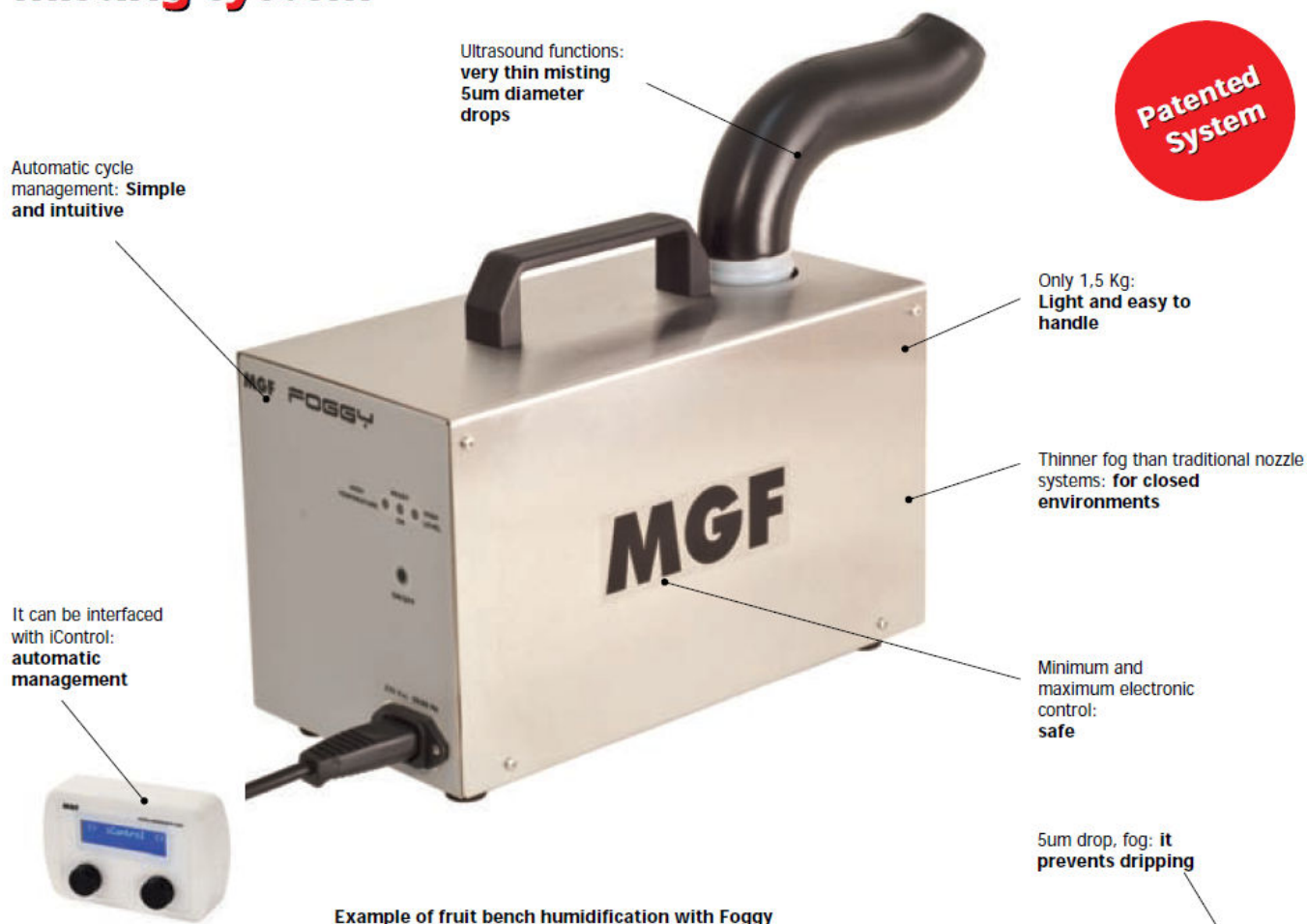
Art.	Model	Price BGN without V.A.T.	Art.	Model	Price BGN without V.A.T.
793040	Carezza "Wild Herbs"	30.00	793042	Carezza "Orange Fresh"	30.00
793041	Carezza "Exotic Mix"	30.00	793043	Carezza "India Passion"	30.00

MGF

www.mgftools.com
Professional Plumbing Tools

FOGGY

HUMIDIFICATION and AROMATHERAPY portable misting system



Example of fruit bench humidification with Foggy



Technical Features

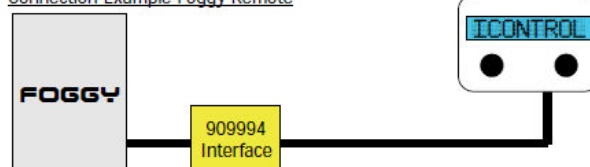
Power:	230V~50Hz (350W)
Weight :	1,5 Kg
Water flow rate :	300mL/hour
Tank capacity :	500 ml, for 75 minutes working time Charging can 'be done directly from the spout
Interface (REMOTE):	IN = start OUT = alarm

When and how to use it?

- Humidification** of rooms where it could be necessary a check in humidity (libraries, museums, musical instruments, refrigerators, food stock or shops, fish markets, fruit or vegetable markets ...).
- Aromatherapy**: it is possible to mist diluted perfumed essences in wellness centres, hotels, gyms...
- Disinfection**: it is possible to mist disinfectant essences in little environments, such as dentist offices, laboratories...

Art.	Model	Price BGN without V.A.T.
791039	FOGGY with 2 diffusers	1300.00
791037	FOGGY REMOTE (for remote control)	1558.00
909993	iControl	659.00
909994	iControl power supply and interface box	373.00

Connection Example Foggy Remote



Piacere di lavorare

PCI Pumpsets

**NEW
MODELS**
Year 2013

iControl provided in the box:
full optional at low price



Steel frame with rubber feet: **maximum strenght and noiseless**

Aluminum chassiss with epoxy powder painting: **anti oxidation and lightweight**

Digital pressure sensor: **full system control**

Inlet and drain solenoid valves: **no water drops**

Technical Features

PCI pumpsets are the good trade off between **performance** and **price**.

Our idea in mind is to keep almost all the advantages of the technology delivered by **iControl**, the misting controller, eliminating every other frill in order to be competitive with pumpsets equipped with a simple timer.

In the meanwhile we put all or experience in maintenance in order to get a pump very easy to maintain, with reduced costs also after sale. Inside the chassiss, you'll find all the **MGF atom pumps** technology and experience:

- Inlet and drain solenoid valves
- 4 ball bearing transmission, ceramic pistons

Art.	Model	Price BGN without V.A.T.
909901IC	PCI PUMP 1L/min 230VAC 0,75KW	2 730.00
909902IC	PCI PUMP 2L/min 230VAC 0,75KW	2 730.00
909904IC	PCI PUMP 4L/min 230VAC 1,5KW	3 100.00
909906IC	PCI PUMP 6L/min 230VAC 1,5KW	3 150.00
909908IC	PCI PUMP 8L/min 230VAC 1,5KW	3 150.00

PCI kits: pumpset + preassembled pipe with nozzles

**NEW
MODELS**
Year 2013

Every kit includes a PCI pumpset:
full optional



Pipe, nozzles and pipe holders provided as well: **minimum installation costs**

Technical Features

PCI kits are the complete sets to get maximum performance at lowest price.

PCI pumpset is the best performance/price ratio pumpset ever.

The **multilayer pipeline** ensures top class reliability with stainless steel fittings and lowest installation costs.

Every pipeline is delivered with quick connector "Nebula" and 20m pipe between pump and first nozzle.

Then a number of nozzles, at 1m distance each, according to pump maximum flow rate, from 20 nozzles (1L) to 160 nozzles (8L).

Included in the box black **pipe holders** (2 holder each nozzle).

Art.	Model	Price BGN without V.A.T.
909901KIT	PCI kit 1L pump 20 nozzles 20m + 20m	3 500.00
909902KIT	PCI kit 2L pump 40 nozzles 20m + 40m	4 100.00
909904KIT	PCI kit 4L pump 80 nozzles 20m + 80m	5 460.00
909906KIT	PCI kit 6L pump 120 nozzles 20m + 120m	6 700.00
909908KIT	PCI kit 8L pump 160 nozzles 20m + 160m	7 900.00

MGF

www.mgftools.com
Professional Plumbing Tools

ENGINEERING AND CUSTOMIZING

Products and services to make an easy offer

Our salesmen are obviously at your disposal for offer tailored on your needs, nevertheless **MGF** gives to his own customers a "service pack" with the possibility to provide design also for complex systems.

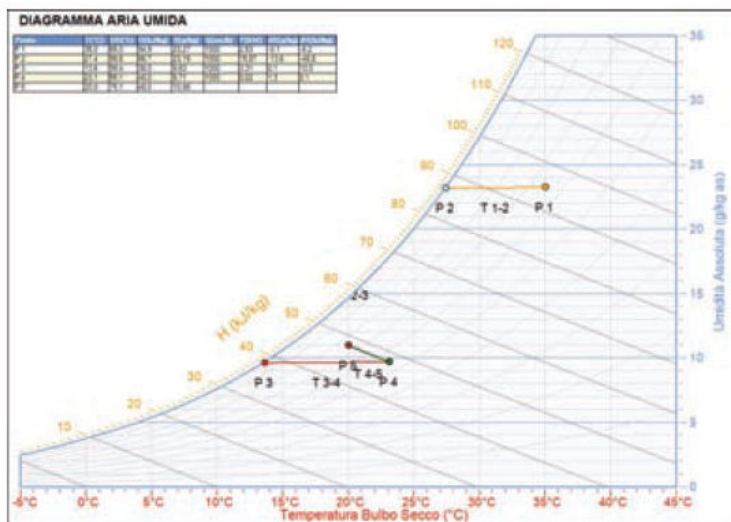
Software for offers and projects

Through our website www.nebulizzare.com it is possible to have a **free of charge software for drawings**.

For interested Customers we can make thermodynamic **calculations** to obtain a precise result.

Our sales partners can provide all the necessary assistance to realise a good system.

Customers service is one of our most important objectives.



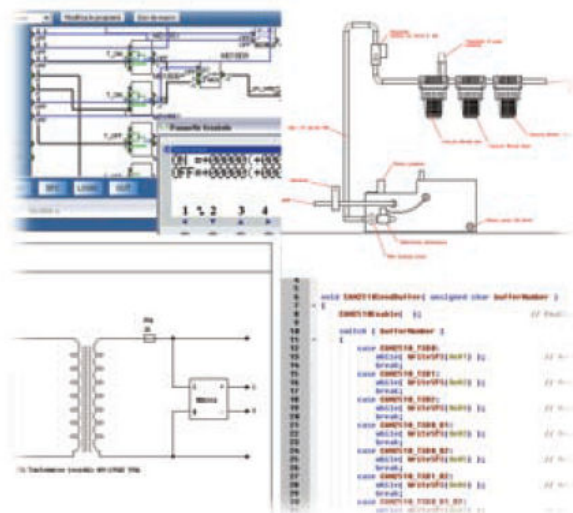
"TAILORED" Engineering

Several systems require a detailed engineering, both on **mechanics/fluids** side and **electrical/circuit** side.

Our technical department is able to give you all the required support, to define also complex engineering for complete automation or retrofitting into existing automated systems, as usually happens in industrial contexts, based on most diffused field bus.

On side picture, **an idea of an engineering project**:

Mechanical and P&id drawings, software, electric schemes and HMI simulation.



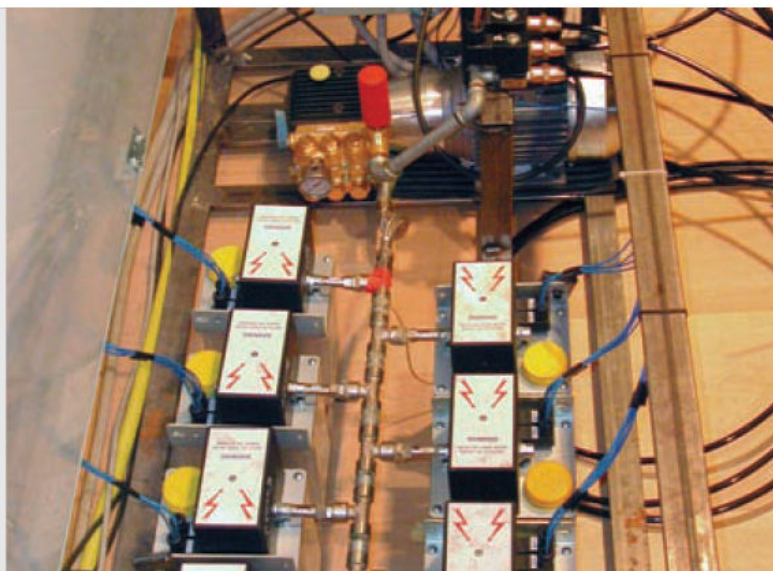
"TAILORED" Production

As manufacturers, we're able to offer to our customers fully customized products, to get also very complex systems.

Thanks to the flexibility and modularity of these systems it is possible to make complex systems at a cost-effective level.

On side picture, a prototype of **an automatic machine to spray chemical products**.

MGF has provided engineering, development, manufacturing and installing of machine.



Hydraulic pressfitting machine for multilayer pipe

Easy to use with one hand (for starting):
It easy to held the tube during the operation

Moving 180° head:
adaptable to
different situations

Easy and automatic
return: practical

Hand can be opened before and after pressing
operation: **In can be adapted to already
made tubes**

Art. 903100
Copper ratchet
bender

Art. 902800
Lever Fiberglass
bender

Art. 922095
Copper tubes
cutter

Art. 922097
Steel tube
cutter

Art. 922695
Plastic tube pipe shear

Art. 922797
Pipe Shear for tubes in
plastic without ratchet
and spring return,
in reinforced fiberglass

Technical Features

Light and compact hydraulic pressfitting machine for misting fittings. Very high force in pressing ensures watertight connections. Handles with grip and auto return in order to work with a single hand, the other remains free for positioning the connection. The head can be rotated of 180° making simpler press while working. Integrated bypass valve that operates when the maximum force is reached, to ensure proper pressing.

External box not supplied.

Dimensions: 346mm x 130mm
Weight: 2Kg
Pressure strong: 50kN

Art.	Model	Price BGN without V.A.T.
900980	Radial hydraulic Pressfitting machine without jaw	2 558.00
900982	Kit hydraulic Pressfitting machine with jaw	2 748.00
281600	Kit of jaws for multilayer misting system	190.00
281602	Misting jaw (1 semi-jaw)	110.00

Tools for metal pipes

MGF offers a complete tool range for working and installation of metal and plastic pipes. For this reason we address you to our general catalogue on tools. Hereunder a proposal of useful products for the installation of misting systems with metal pipes.

Art.	Model	Price BGN without V.A.T.
903100	MGF 3/8" – 7/8" Bender	342.00
902800	Fiberglass 4-10 mm Bender	45.50
903291	Classic Bender 3/8"	40.50
922095	MINI 16 (3-16 mm) copper cutter	13.20
922097	Inox MINI 22 (1/8"-7/8") copper cutter	30.50
922999	40 mm deburrer	25.50
922994	8-38 mm universal deburrer	78.00

Pipe shears for plastic pipes

MGF offers a complete tool range for working and installation of metal and plastic pipes. For this reason we address you to our general catalogue on tools. Hereunder a proposal of useful products for the installation of misting systems with plastic pipes.

Art.	Model	Price BGN without V.A.T.
922695	CLASSIC 32 pipe shear	14.50
922797	UNIQUE MINI 28 pipe shear	32.00

Send this module to: +359 2 943 41 58 or info@mgf.bg

NAME _____

TEL/FAX/MAIL

NAME

TEL/FAX/MAIL

NAME _____

TEL/FAX/MAIL

☐ Cooling ☐ Humidification ☐ Odours Reduction ☐ Dust Reduction ☐ Scene Effects

CHANGE OF AIR ☐ By nature ☐ Forced : _____ cub.m/h VENTILATION ☐ < 2 changes/h ☐ 2-4 changes/h ☐ > 4 changes/h

AROMAS ☐ Aromas ☐ Odours Neutraliser ☐ Disinfecting ☐ Citronella

NOZZLES ☐ AISI316 ☐ AISI304 ☐ Brass PIPE ☐ AISI316 ☐ AISI304 ☐ Copper ☒ Poly amide ☐ Multilayer

SUPPLY ☐ 230 V Monophase ☐ 400 V Three-phase ☐ 24 V DC **OPTIONS** ☐ Silenced ☐ Electronic Control ☐ Body

FILTERING ☐ three filter battery (recommended) ☐ Unique Filter ☐ No filter **SOFTENER-ANTIBACTERIAL** ☐ Yes ☐ No

Indicate on the planimetry the positions of: : **(A)** cold water connection **(E)** Electric connection **(P)** preferential pump position **(Hmin)** Minimal height to mist (Indicate the number) **(Hmax)** Maximum point of height to mist (Indicate the number)

[illegible]

ЕКОФЛОР БЪЛГАРИЯ ЕООД

изключителен търговски представител на MGF – Италия

гр. София, бул.Кн.Ал.Дондуков 57Б тел./факс: 02/ 943 41 58

GSM 0889 666 413 ; 0889 666 415

E-Mail: info@mgf.bg URL: www.mgf.bg

