

THE USER-FRIENDLY DOSING SYSTEM FOR FIRE FIGHTING

# SIMPLICITY

FIREMIKS® is a mechanical dosing system used for fire fighting. The circulation of the water solely drives the motor - no other additional energy is required! An efficient proportioning system where cost and environmental concerns are paramount.

**Fixed Installations** 



**Mobile Applications** 



Industrial

Fire Brigades





Marine/Offshore

Forest/Bush Fires



Sprinkler





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# THE USER-FRIENDLY DOSING SYSTEM

#### EASY TO

#### ...INSTALL:

Compact system driven by the water flow only.

- No additional parts or external energy needed.

#### ...USE:

Mechanical self-regulating and flow controlled system with a wide flow and pressure range.

- No need for complicated pressure balancing or calibration.

#### ... MAINTAIN AND TEST:

Economical and environmentally acceptable testing with the option of adding a Dosing return valve.

- No need to consume the extinguishing media during testing or maintenance.

The basic concept of FIREMIKS<sup>®</sup> is two interconnected volumetric devices; a water motor and a dosing pump. This gives great advantages since this principle creates a practically flow and pressure independent admixture, within the min and max limits for the unit. Importantly, only the water flow is needed to operate the unit, no other additional energy is required.





## THE USER-FRIENDLY DOSING SYSTEM SPECIFIC ADVANTAGES WITH FIREMIKS

• Dosing is proportional to flow rate and practically independent of pressure variations. This gives a steady admixture within the min/max flow and pressure for the FIREMIKS.

• FIREMIKS is available in different max flow sizes; from 150 up to 12.000 lpm, with fixed dosing alternatives; 0,5%, 1%, 2%, 3% or selectable. Other dosing options on request.

• By offering models with either piston or gear pump, FIREMIKS covers virtually all types of foaming agents including high-viscosity alcohol resistant types and low-viscosity wetting agents.

• Permits uninterrupted application time as long as the extinguishing media concentrate and water are supplied.

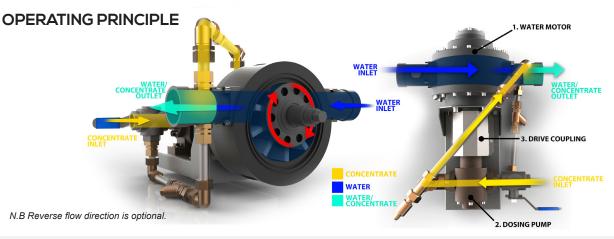
• FIREMIKS is available for both fixed installations and mobile use and can also be easily adapted for semi-permanent installations.

• You may use different types of nozzles, at different heights and lengths from FIREMIKS. Changes of length or diameter of pipe/hose system after FIREMIKS up to the nozzles are not affecting the admixture, as long as the water pressure from main pump is sufficient to transport the water/concentrate solution to the end of the system.

• Materials used are hard anodized and PTFE-coated aluminum for the water motor. All other parts are also made in corrosion resistant material such as AISI 316 stainless steel, brass and PET. Other materials are available on request. We offer our water motor in bronze or stainless steel for a durable resistance in sea water.

• Flushing with water of the dosing pump is easy through the internal flushing line.

• With a Dosing return valve, it is possible to test the FIREMIKS without consuming the extinguishing media concentrate, an economic and environmentally beneficial solution.



The water flow goes through the FIREMIKS water motor. This generates a circular rotor motion, transferred to the dosing pump over the direct drive coupling. The concentrate is pumped into the water motor outlet, where dosing occurs.

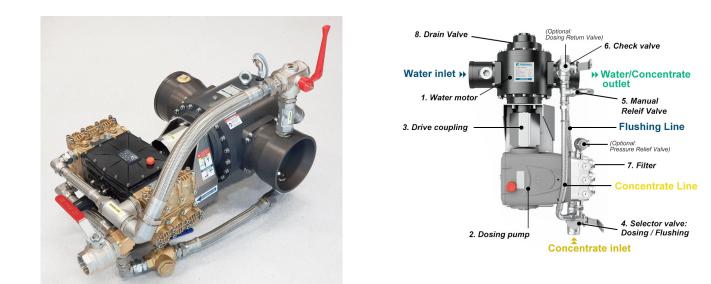
Since the water motor functions both as a power source to the dosing pump and as a flow meter system, the system becomes flow proportional: dosing automatically follows all the variations in the water flow. The water motor rotor has 8 or 10 working wings, which gives an early and stable volumetric function of the water motor within a wide flow range.

FIREMIKS has, through its precise and accurate interior design of the water motor, a lower noise level than other systems. This is important for a good and safe working environment, it also increases the potential for many years of reliable operation.



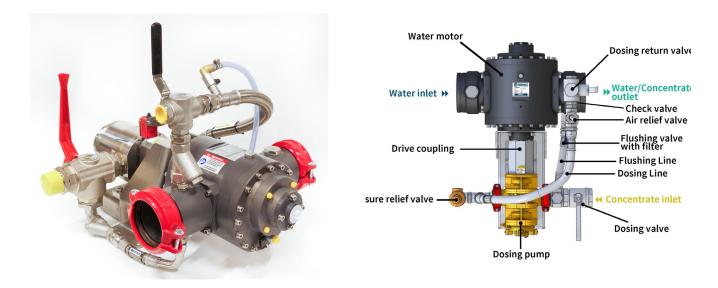
## THE USER-FRIENDLY DOSING SYSTEM FIREMIKS - PP (PISTON PUMP)

FIREMIKS - PP is provided with a piston pump that is well suited for low starting flows (for example, sprinkler systems) as well as for extinguishing media concentrates with low viscosity such as wetting agents. It gives a very precise dosing, even at high pressures. The unit shall be placed in such a manner that the media concentrate has a free flow and flows down from the tank to the dosing pump.



# FIREMIKS - GP (GEAR PUMP)

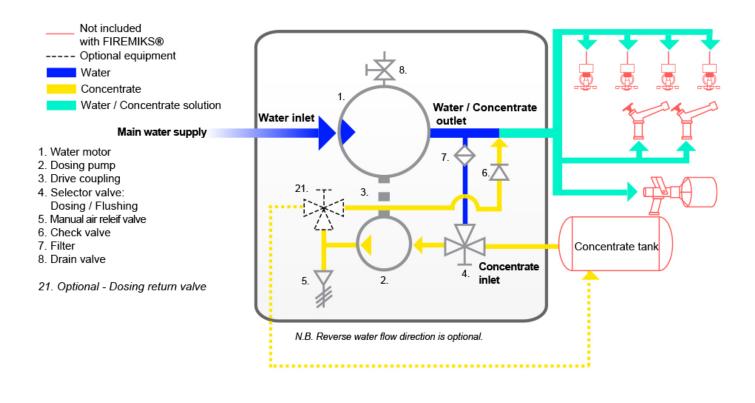
FIREMIKS – GP is provided with a gear pump and is particularly suited for use in systems with higher flow rates, such as deluge systems, fire monitors and fire trucks. This type is, in addition, also very suited for high viscosity extinguishing media concentrates. An industrial Gear pump is a rugged and reliable solution to achieve the correct admixture within the approved tolerances. It can be placed in both vertical and horizontal positions.



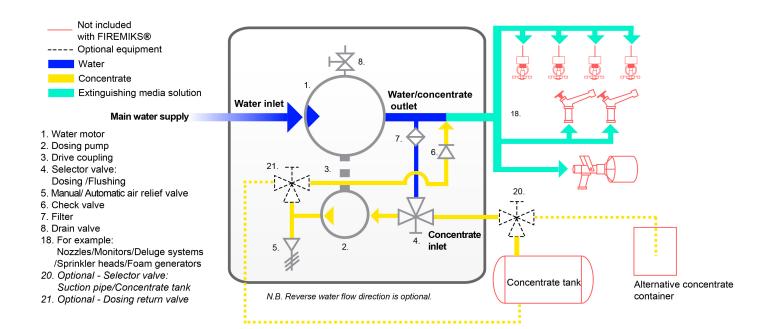
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### THE USER-FRIENDLY DOSING SYSTEM FLOW CHART- PP (PISTON PUMP)



# FLOW CHART- GP (GEAR PUMP)





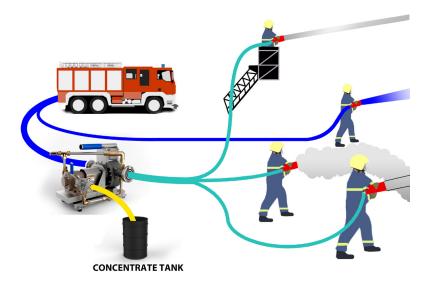
### THE USER-FRIENDLY DOSING SYSTEM SELECTED LINE OF FM-APPROVED UNITS



# **ONE FIREMIKS - SEVERAL NOZZLES**

With FIREMIKS, fire & rescue services can count on a very flexible system that easily adapts to different fire-fighting situations. You may use several different nozzles at the same time, positioned at different lengths and different heights from the FIREMIKS.

You may add or remove hoses, vary the hose diameter and open or close nozzles independently. It does not affect the quality of the admixture as long as the min and max flows of the FIREMIKS unit are followed.





#### THE USER-FRIENDLY DOSING SYSTEM SEA WATER RESISTANT

# SUITABLE FOR MARINE ENVIRONMENTS AND OFFSHORE INSTALLATIONS

FIREMIKS is available with the water motor entirely made from bronze, to make it suitable for offshore, shipping and other installations where seawater is used. Other material options are high-grade stainless steel, super-duplex, titanium, etc.

The gear pumps on our type - GP are made of bronze or stainless steel as standard. The piston pumps on our type - PP can also be delivered in fully corrosionresistant materials.





#### ENVIRONMENTAL AND SAFETY BENEFITS WHEN USING FIREMIKS

FIREMIKS is driven solely by water. No other additional energy is required for dosing, neither a combustion engine nor electricity. There are several important environmental and safety benefits when using the FIREMIKS-system. An electrically driven dosing pump can in some cases mean an increased risk in hazardous areas. Electricity may create sparks and cause explosions in areas where there are flammable gases. With FIREMIKS this risk can be eliminated if you specify an explosion-proof unit. Furthermore, the water is itself environmentally friendly, non-flammable, inexpensive, clean and readily available.

We strongly recommend only using environmentally friendly extinguishing agents. Forest fires are considered to be responsible for 20 % of CO2 emissions which effectively increases the effects of global warming. With an effective firefighting system, such as FIREMIKS, we can help to mitigate that effect by quick and efficient extinguishment.

Our company believes in a more sustainable world so we support WWF in its campaign for saving the Baltic Sea.



## THE USER-FRIENDLY DOSING SYSTEM FIREMIKS AB - ORIGINALLY FOUNDED IN 1979

Originally founded in 1979 – is a Swedish based business with headquarters in Stockholm.

Throughout the years, our main focus has been to develop, manufacture and distribute our product line of water motor driven proportioning systems worldwide.

Our work method is to produce with flexibility, offering the opportunity to customize the product to the individual preferences of our clients.



#### Contact us

Please contact us directly for additional information about our products, a quotation or to make an order.

Visit our website where you can download our technical data sheets and find more information.

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