



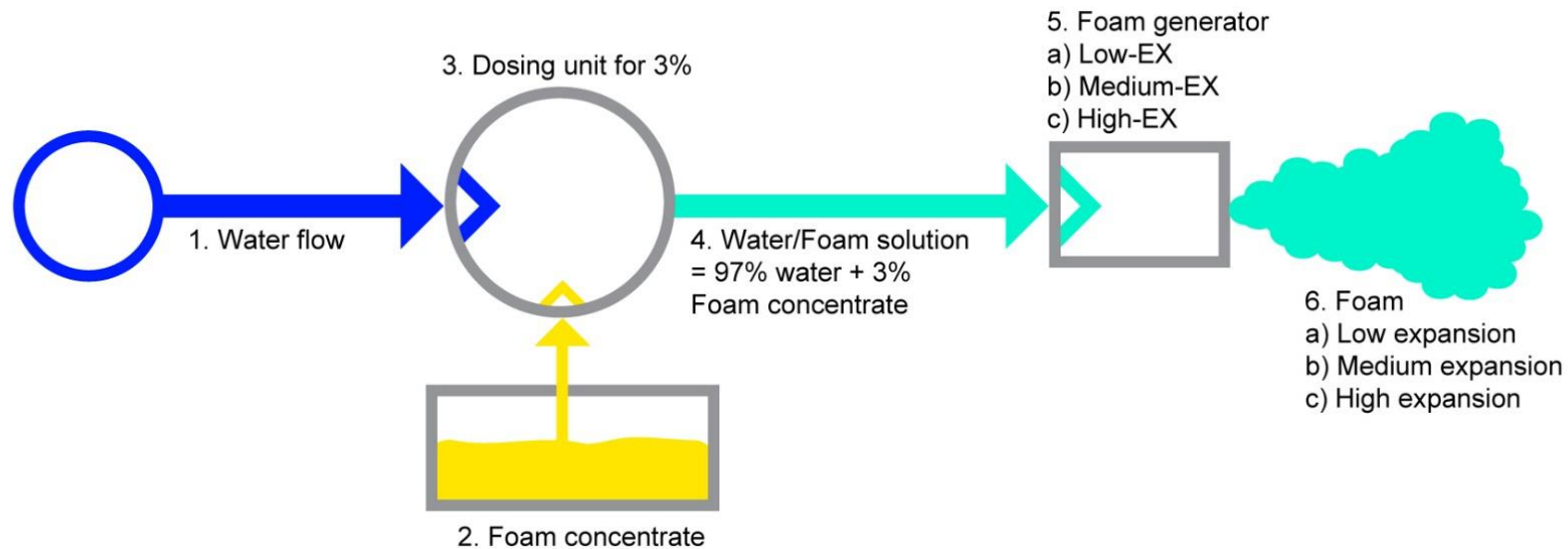
## WATER DRIVEN PUMP PROPORTIONERS FOR FIRE FIGHTING

### - HOW TO SELECT THE MOST SUITABLE FOAM PUMP TYPE

FIREMIKS is a reliable and easy-to-use foam proportioner, driven by the water flow only.

[www.firemiks.com](http://www.firemiks.com)

# BASIC ELEMENTS IN PRODUCING FOAM

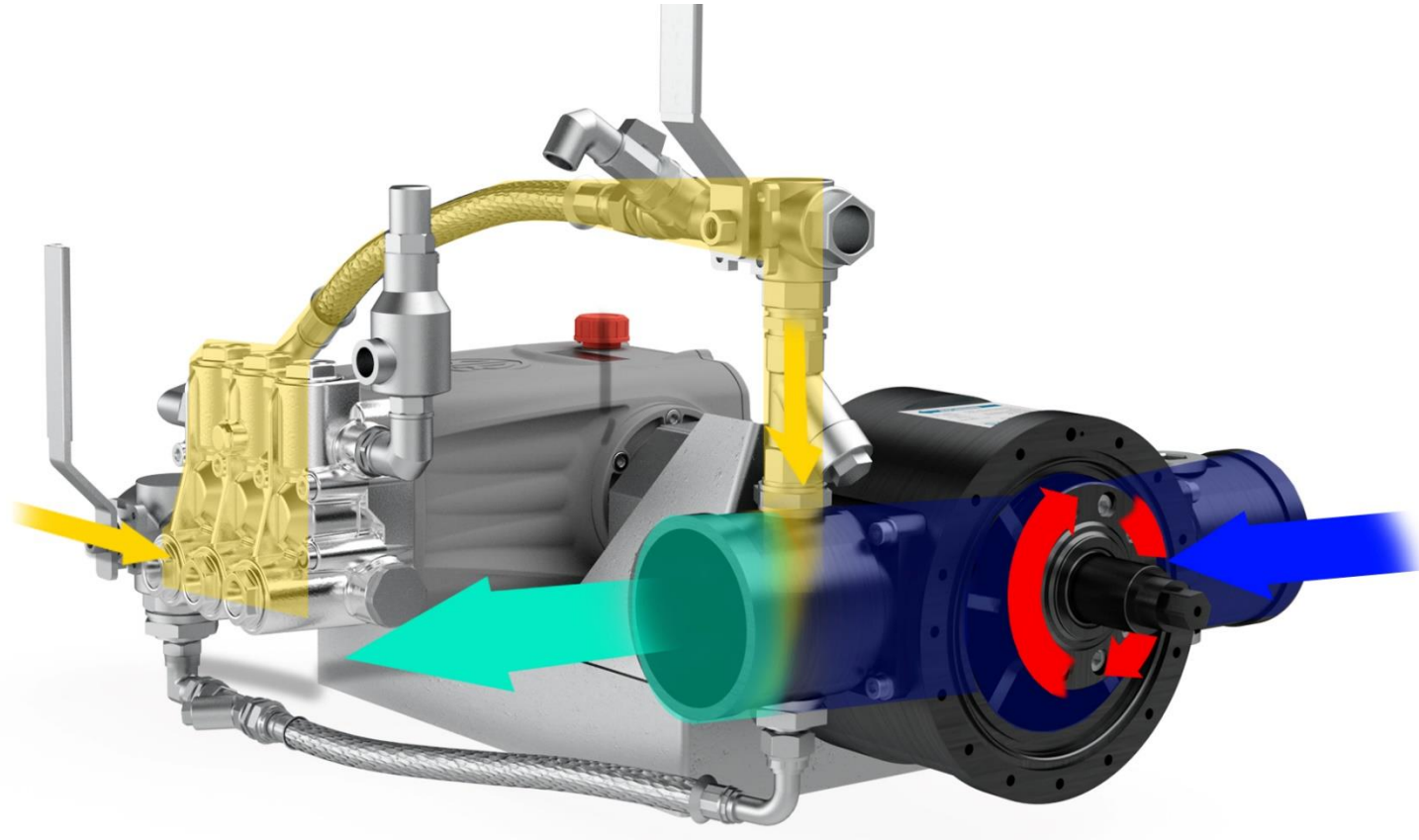


1. Water flow.
2. Foam concentrate (for example 3%).
3. Dosing unit – FIREMIKS - to inject the Foam concentrate into the Water creating:
4. Water/Foam solution.
5. Foam generator, to add air into the Water/Foam solution to produce:
6. Finished Foam, Low-EX, Medium-EX or High-EX.

# WORKING PRINCIPLE

## UNIQUE WATER MOTOR

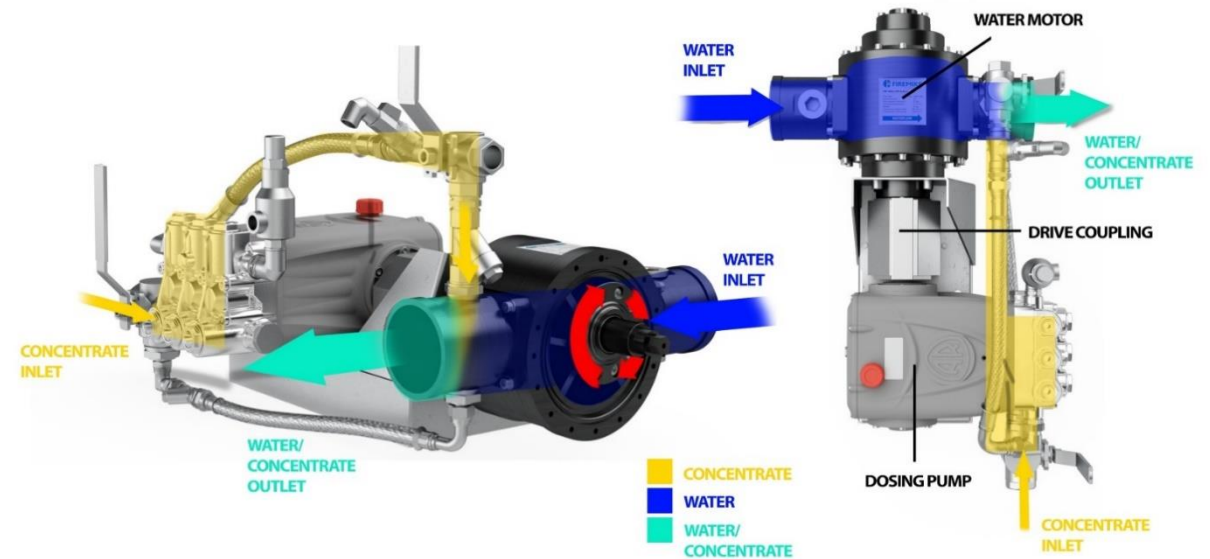
- Special designed volumetric water motor using 8-10 vanes extending from the rotor gives smooth rotation and volumetric function without using moving elastomer sealing.



# WORKING PRINCIPLE

## FLOW DRIVEN

- The water flow goes through the FIREMIKS positive displacement water motor. This generates an axial rotation, transferred to the dosing pump over the direct drive coupling.
- Since the water motor functions both as a drive to the dosing pump and as a flow meter device, the system becomes by that flow proportional: dosing remains within approved tolerance regardless of variations in the water flow.



# TWO FOAM PUMP TYPES

## PISTON PUMP TYPE

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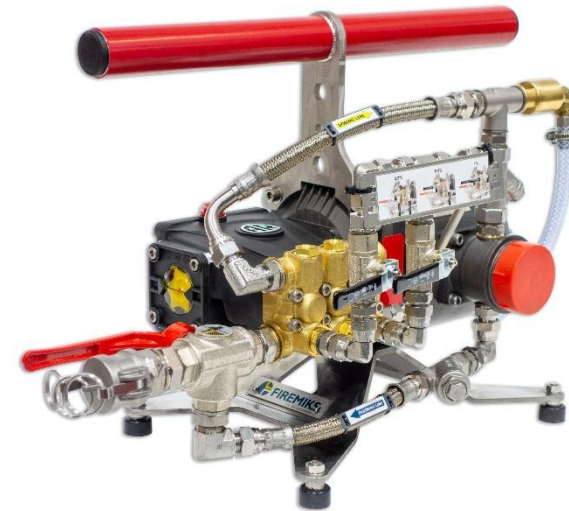
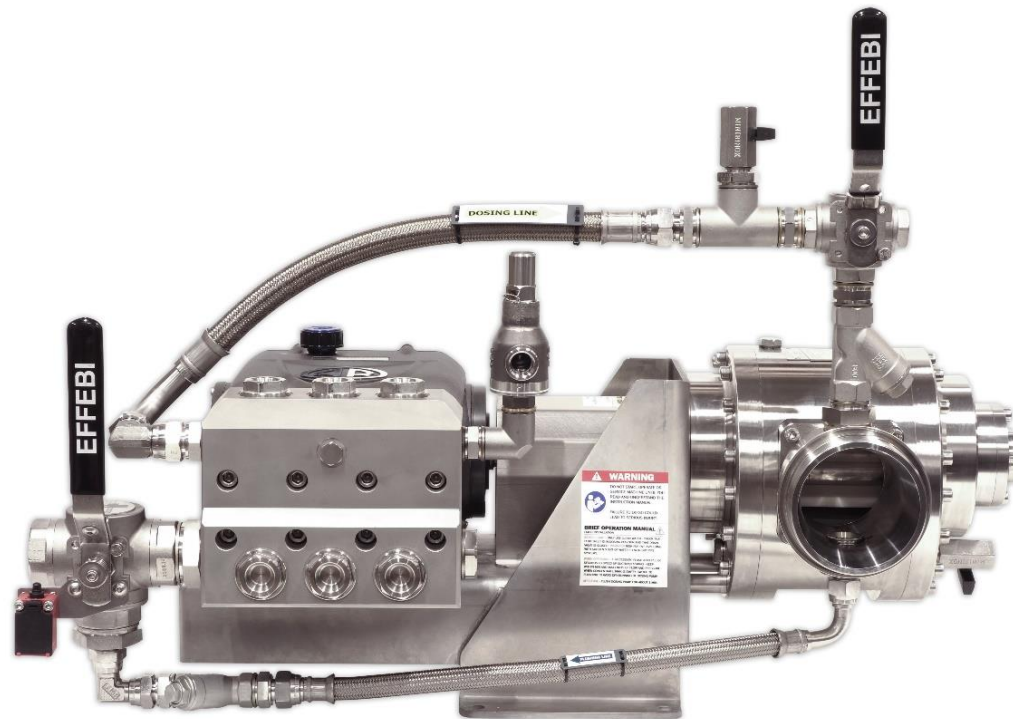
- A very tight and accurate pump for precise dosing.
- Our FIREMIKS provided with Piston Pump (-PP) are particularly suited for use in systems with a wide flow range, for example sprinkler systems.
- Piston pumps have a limit upwards to high viscosity concentrates for correct dosing. If the static viscosity is too high, above around 4,000 – 4,500 cSt with non-Newtonian concentrates, the concentrate will not flow smoothly and therefore the correct dosing rate might not be achieved.



Piston Pumps (-PP) is a reciprocating pump and perform at their best at low and medium viscosities due to the Piston pump principle; for each revolution, the plunger sucks concentrate and then presses it out and the concentrate goes from zero to full speed twice per revolution.

# TWO FOAM PUMP TYPES

PISTON PUMP TYPE ARE AVAILABLE BOTH IN FIXED AND MOBILE VERSIONS



FIREMIKS piston pump types are also available with shut-off valves, for easy selection of dosing rates, for example 1% - 2% - 3% or 0,3%- 0,6% - 1%.



# TWO FOAM PUMP TYPES

## GEAR PUMP TYPE

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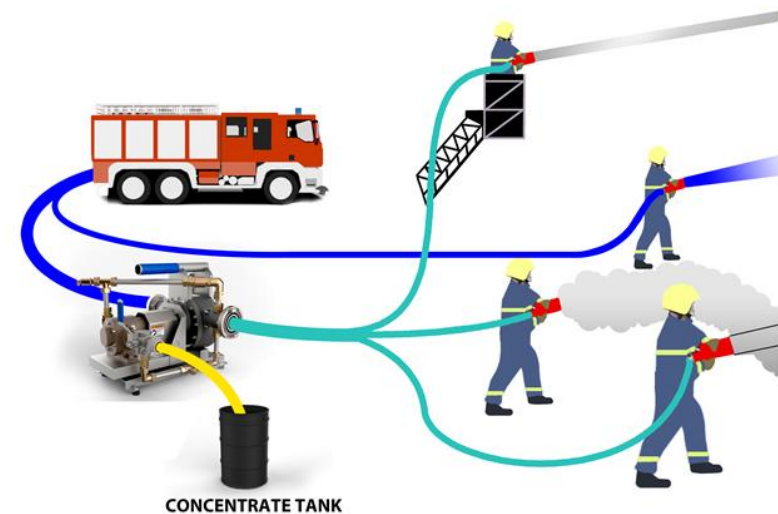
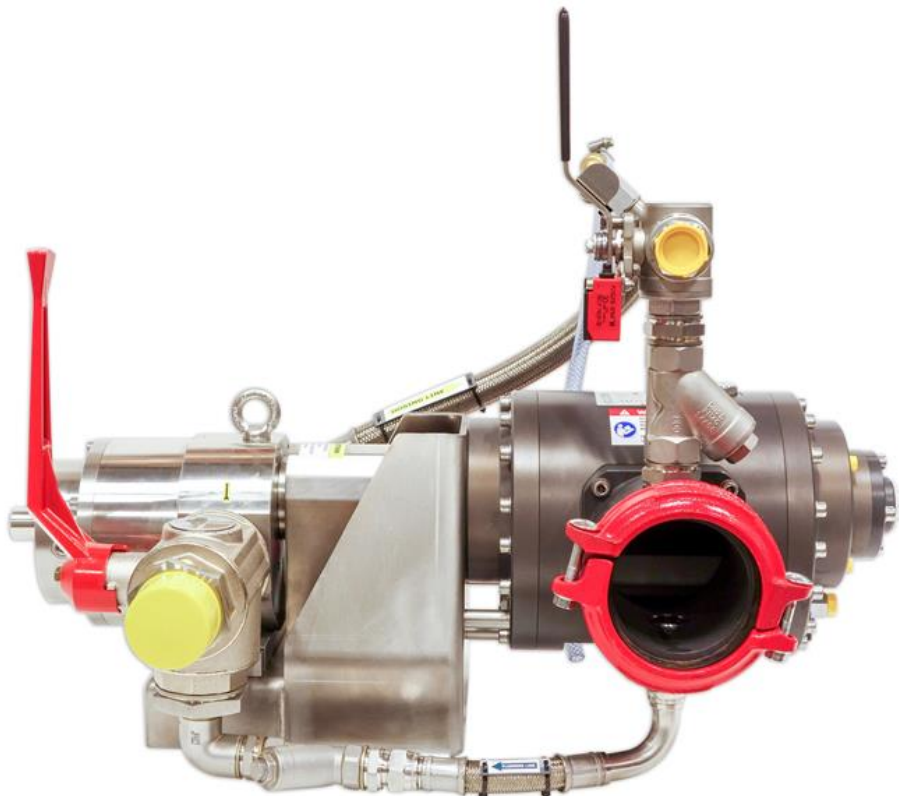
- A sturdy pump with minimum maintenance.
- Our FIREMIKS provided with a Gear pump (-GP) is particularly suited for working in the higher end of a systems maximum flow rate, such as deluge installations and full flow monitors.
- Gear pumps are also very suited for high and very high (up to at least 8000 cP) viscosity concentrates, incl Fluor-free foams.



A gear pump uses internal gears to grab the concentrate. The advantages of using gear pumps are that flow is not pulsating, and they "grip" higher viscosity concentrates very well.

# TWO FOAM PUMP TYPES

GEAR PUMP TYPE ARE AVAILABLE BOTH IN FIXED AND MOBILE VERSIONS



With a Mobile FIREMIKS it is possible to use several different nozzles simultaneously, positioned at different lengths and heights.

Allows to quickly open and close nozzles, "pulsing", immediate correct dosing is achieved



Thank you for your attention!  
For more info, visit



[www.firemiks.com](http://www.firemiks.com)