

### Food & Hygiene

Wherever there is a need for exceptional hygiene in the production, preparation and service of food and beverage products, Hydrakos water-driven dosing pump is present, helping operators to cover a multitude of disinfection requirements. These dedicated systems ensure managers can maintain the highest standards of hygiene across sites such as restaurants and hospitals where public health protection is paramount.



### Industry

Industrial processes require solutions that are robust and durable without compromising on performance, which is why our Hydrakos water-driven pumps are the go-to dosing solution for operators of demanding applications within the graphic and metalworking industries to name just two. From vibro-abrasion, degreasing and legionella control to mineral dosing and wetting agent injection, these versatile systems cover myriad processes.



### Car Wash

In the ever-demanding automotive care sector where exceptional results must be achieved as standard, Hydrakos water-driven dosing pumps offer high-precision chemical injection solutions for tunnel wash, self-serve and gantry wash systems and many other commercial car wash applications. These systems help managers minimise chemical, water and energy consumption while maintaining consistent results as part of a sustainable, profitable operation.



## Globally Present, Locally Active



Twenty-two national SEKO companies across six continents means that, wherever you are, you enjoy the same exceptional level of service as every SEKO customer around the world.

And an accredited partner distributor network allows us to provide local customer support in over 120 countries, so you benefit from region-specific knowledge and rapid delivery of goods as well as world-class after-sales service and technical assistance.

## Hydrakos Water-driven dosing pumps



Type: FPM/PP  
SN: 30E03069E  
Date: 25/11/2024  
Maximum Temperature: 40°C  
Mass: 1.7kg  
CE UK CB

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## Industry Applications



### Water Treatment

For every chemical dosing requirement in water-treatment applications – from legionella control to maintaining hot and cold-water networks – our superior Hydrakos water-driven pumps deliver efficiency, longevity and sustainability in equal measure. Whether treating drinking water, process water or wastewater, these next-generation systems help operators achieve optimal system performance and chemical consumption while meeting ever-changing environmental legislation.



### Agriculture

Farmers around the world benefit from the precision and consistency of Hydrakos water-driven dosing pumps, which are used to inject fertiliser, pesticides and other additives into irrigation water. This means growers can rely on their equipment to help achieve healthy crops and enjoy improved yields for increased profitability while these systems' superior dosing accuracy means chemical and water waste is minimised.



### Livestock

In livestock applications as varied as poultry farming, pig rearing and rabbit breeding, Hydrakos water-driven pumps are the go-to-solution for protecting animal health in order to prevent the spread of disease. From the injection of vaccines and medicine into livestock drinking water to the sanitisation of pipelines, these versatile systems give breeders peace of mind at all times.



# Hydrakos

## Automatic chemical dosing systems

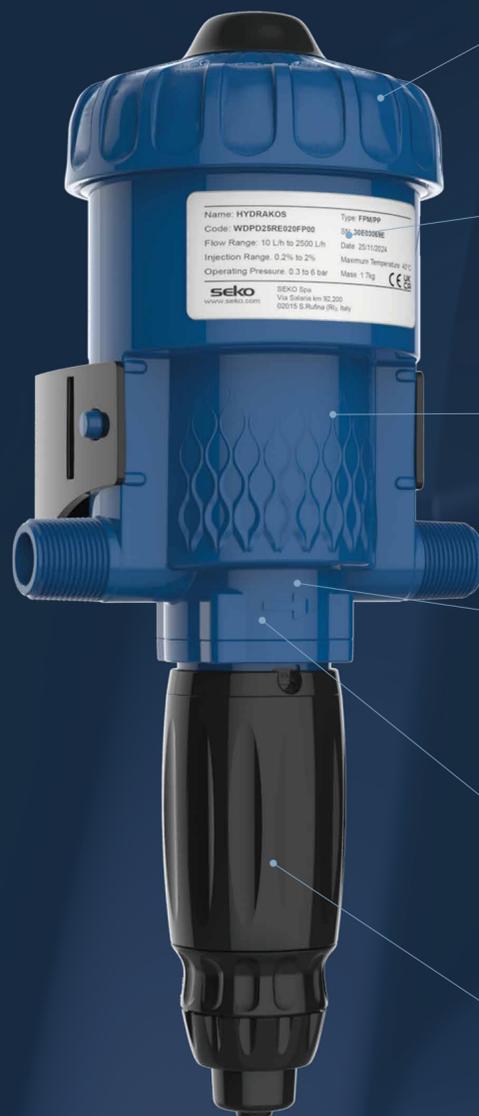
SEKO's Hydrakos water-driven pumps are the latest addition to our world-leading range of chemical dosing systems, offering an alternative to automatic solenoid, peristaltic and motor-driven metering to serve a vast range of applications.

Installed directly in the water supply line, the Hydrakos uses water pressure as its power source and automatically mixes concentrated chemical proportional to water volume regardless of variations in flow or pressure which may occur in the main line.

This ultra-reliable dosing method means operators can rely on consistent performance in applications as varied as water treatment, automotive care and industrial processes.



## Features & benefits



### Low operating & maintenance costs

Hydrakos's robust components and intelligent design make the system inexpensive to both run and maintain.



### High-precision, repeatable dosing

Operators can depend upon Hydrakos to dose a range of chemicals with superior accuracy every time.



### Non-electric

The pump's absence of electrical connection makes it the perfect solution for operators seeking to achieve precise dosing even in remote locations.



### Reduced cleaning and servicing time

The exceptional build quality of Hydrakos allows operators to spend minimal time servicing the system.



### Self-priming and efficient mixing

Removing the need for manual priming, Hydrakos brings speed and efficiency to every dosing application.



### Easily regulated injection rate

With an adjustable dosing percentage depending on the selected model, users enjoy ultra-tight control to prevent chemical wastage and associated costs.

# Hydrakos water-driven pump technology

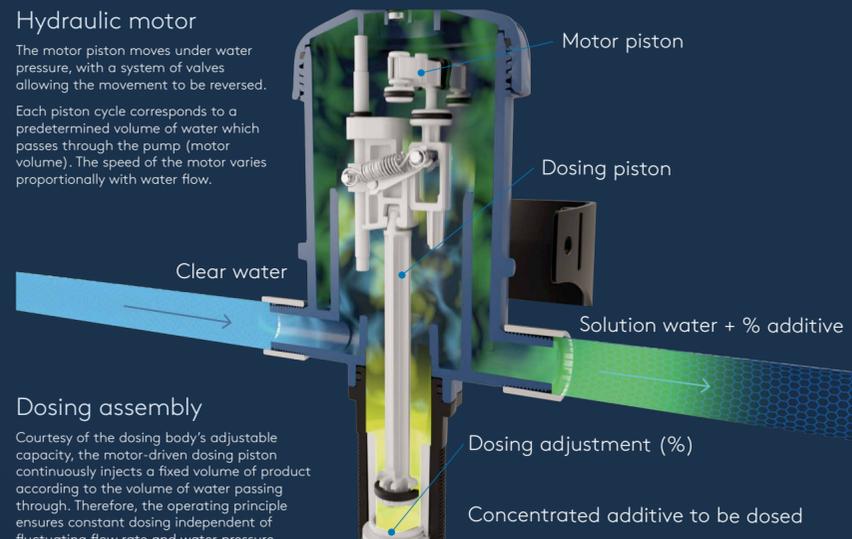
Water-driven pump technology is based on a hydraulic motor pump activated only by pressure and water flow. Installed directly on the water supply line, the pump operates by using the water flow rate as a source of energy.

The pressure and flow rate of the water actuate the motor piston which drives a second, product-dosing piston. The product is injected and mixed continuously with the water from the mains supply at the selected dosing rate percentage (rate of product/water incorporation). The dose of concentrated product is directly proportional to the volume of water passing through the pump, independent of variations in the flow rate and pressure of the mains water supply.

## Hydraulic motor

The motor piston moves under water pressure, with a system of valves allowing the movement to be reversed.

Each piston cycle corresponds to a predetermined volume of water which passes through the pump (motor volume). The speed of the motor varies proportionally with water flow.



## Dosing assembly

Courtesy of the dosing body's adjustable capacity, the motor-driven dosing piston continuously injects a fixed volume of product according to the volume of water passing through. Therefore, the operating principle ensures constant dosing independent of fluctuating flow rate and water pressure.

### Pump installation

In order to optimise your installation and get the most out of your water-driven pump, we recommend the following guidelines are met:

- Refer to local water regulations
- Install a filter upstream depending on water quality
- Change dosing seals at least once a year
- Rinse as often as possible with clean water
- Turn off water supply and allow pressure to drop to zero before adjusting injection rate
- Install necessary protections for excess flow, excess pressure and water hammer

## Features

- Easily regulated injection rate
- Portability (emergency skids)
- Low operating and maintenance costs
- Dose any liquid or water-soluble product
- Precise, repeatable dosing
- Non-electric (energy saving)
- Simple dosage adjustment (in % increments)
- Self-priming and efficient mixing
- Optimal water and polymer consumption
- Reduced cleaning and maintenance time
- Automatic dosing stops in event of water flow ceasing

## Specification

Model	D25RE020	D25RE050	D25RE100
Injection Dosage	0.2 - 2%	1 - 5%	3 - 10%
Water Flow Rate*	10 - 2,500 l/h	10 - 2,500 l/h	10 - 2,000 l/h
Pressure	0.3 - 6 bar	0.3 - 6 bar	0.3 - 4 bar
Concentrated Additive Injection Rate	0.02 - 50 l/h	0.1 - 125 l/h	0.3 - 200 l/h

\*For others fluids than water, please contact us

## Hydrakos key code

Model						
WDP Water driven pump.						
Type	Pressure [bar]	Flow rate [l/h]	Ø Hydr. Connections IN/EXT. [mm]	Concentrated product injection rate [l/h]	Adjustable dosage [%] [1:]	
D25	0.3 - 6	10 - 2,500	½" M BSP-NPT Ø 20 x 27mm	0.02 - 50	0.2 - 2	500 - 50
	0.3 - 4	10 - 2,000		0.1 - 125	1 - 5	100 - 20
<b>Injection dosage</b>						
RE	Adjustable					
Dosage range		%	1:			
020		2	50			
050		5	20			
100		10	10			
<b>Seals</b>						
F	FPM					
E	EPDM					
A	AFLAS					
<b>Body material</b>						
P	PP					
V	PVDF					
<b>Mixing device</b>						
0		Internal				
0		Market				
0		Western				



## Hydrakos with PP body

- The ideal general-purpose pump
- Broad chemical compatibility
- Suitable for fresh, salt and deionised water
- Commonly used for chemicals as varied as formaldehyde, potassium and sulfuric acid

## Hydrakos with PVDF body

- Exceptional chemical compatibility
- Easy to weld
- Superior thermal stability and resistance to stress cracks
- High corrosion resistance

