

# **H<sub>2</sub>O** GUARD 60v

ELYSATOR Eng. AG™

Permanently protects any  
technical water system.

- Self-regulating pH control
- Permanent degassing

- Magnetic flow filter
- 300 µm suspended solids filter



**ELYSATOR**

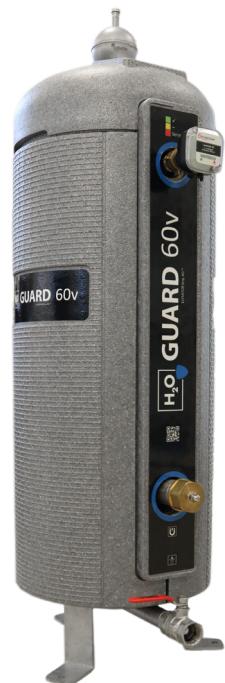
engineering water

# ONE DEVICE FOR EVERYTHING SELF-SUFFICIENT & ELECTRICITY-FREE

swiss made 



The result of many hours of development work combined with 50 years of experience, this device brings together the existing proven ELYSATOR processes and the latest filter technology – H<sub>2</sub>O GUARD® 60v – in a single unit. A winning combination for optimum system water quality – easy to maintain, energy saving, efficient, durable, universally applicable and with the option of modular expansion!



## For reliable long term operation

A wide range of materials are used in the manufacture of modern technical water systems. The latest components are highly sensitive and designed for maximum energy efficiency. To allow reliable and efficient long term operation, these need to be optimally protected. The new H<sub>2</sub>O GUARD® 60v meets these requirements perfectly.

## All in one device

H<sub>2</sub>O GUARD® 60v guarantees unique fourfold protection. Its self-regulating pH control, permanent degassing, magnetic flow filter and 300 µm suspended solids filter ensure that all disruptive factors are eliminated. It can also be expanded on a modular basis and used at full volume flow as well as within a bypass circuit.

The whole device is encased in thick, high grade EPP insulation. This will save energy and money. You will also conserve resources and the environment.

The H<sub>2</sub>O GUARD® 60v can of course also be used solely as a filter.

## Your device for:

- Heating systems
- Cooling systems
- Process water
- Circulation water
- Boiler water systems
- Engine Jacket CW systems

# H<sub>2</sub>O GUARD 60v SPECIAL FEATURES



## Self-regulating pH control

The pH value is continuously regulated by the high potential protective magnesium anodes. The system functions autonomously and does not need any external power. The sacrificial anode oxidises during this process, which leads to a reduction in oxygen and a simultaneous increase in the pH value.



## Permanent degassing

The water contains large quantities of micro gas bubbles, which cannot be removed with a standard air vent. In the H<sub>2</sub>O GUARD® 60v, the water is channelled in a way that promotes optimum gas release. A grille is used to combine the smallest micro gas bubbles into larger gas bubbles. These rise up and can be discharged from the system at the device's highest point via the high quality ELYSATOR® air-vent INOX automatic air vent.



## Magnetic flow filter

The magnetic flow filter is a new design. The flow speed of the water is greatly reduced in the high-volume tank, which slows down the movement of solids for better sedimentation. In addition, the water flow is designed to allow better retention of the magnetic particles by the extra strong neodymium magnets. A shut-off valve is fitted at the lowest point of the H<sub>2</sub>O Guard® 60v for sludge removal. Sludge can be removed when the device is closed.



## 300 µm suspended solids filter

The extremely robust stainless steel suspended solids filter cleans the system water continuously. It has such a large surface area (almost 0.5 m<sup>2</sup>) that no significant pressure drop can be detected even when the system water is highly contaminated.

# OPTIONAL



## Optimal 5 µm depth filter

If the system water is highly contaminated, there is a risk of damage to system components. The 5 µm depth filter can be temporarily installed in the H<sub>2</sub>O GUARD® 60v to prevent this. It reliably filters out even the finest particles. The filter is removed after a short time and can be disposed of. Here too, the aim is to ensure that your system continues to work reliably for many years.



## Optional conductivity checking

The conductivity of the system water is indicated by the green, orange and red LEDs and can be interpreted very easily. The PUROTAP® i-control-21 can be extended with a switching contact and an external display. An external power supply is also possible via a micro USB connection. Compliance with guidelines and limit values is therefore visible at all times.



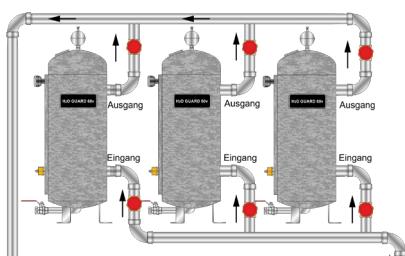
## Optional differential pressure measurement

The degree of filter contamination can be monitored through differential pressure measurement. This indicates when the filter mesh is clogged up and the volume flow therefore too greatly impaired.

The basic option (visual):

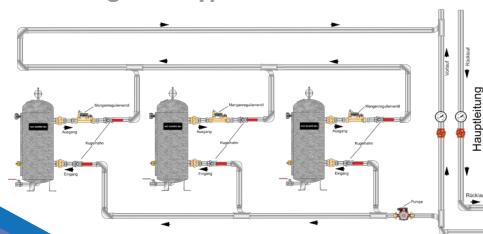
The convenient option (automatic): With two pressure gauges  
An adjustable pressure switch monitors the pressure differential.

### Connecting with full volume flow



	1 × H <sub>2</sub> O GUARD® 60v	2 × H <sub>2</sub> O GUARD® 60v	3 × H <sub>2</sub> O GUARD® 60v	4 × H <sub>2</sub> O GUARD® 60v
System volume	< 15 m <sup>3</sup>	< 40 m <sup>3</sup>	< 80 m <sup>3</sup>	< 120 m <sup>3</sup>
Throughput	< 250 l/min	< 400 l/min	< 600 l/min	< 900 l/min

### Connecting with bypass circuit



	1 × H <sub>2</sub> O GUARD® 60v	2 × H <sub>2</sub> O GUARD® 60v	3 × H <sub>2</sub> O GUARD® 60v	4 × H <sub>2</sub> O GUARD® 60v
System volume	< 30 m <sup>3</sup>	< 55 m <sup>3</sup>	< 80 m <sup>3</sup>	< 100 m <sup>3</sup>
Throughput total bypass circuit	18 - 20 l/min	33 - 38 l/min	50 - 60 l/min	70 - 80 l/min
Throughput single device	18 - 20 l/min			
Connection size	1"	1"	1½"	1½"

max.  
100°C

max.  
10 bar



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