

HYGIENE AND SERVICE

The Pur water treatment system



DRAABE
success is in the air

THE BENEFITS TO YOU

THE PUR SYSTEM

Our production techniques and innovative ongoing development of our humidification systems have made DRAABE the technology leader in the industry. Thanks to the modular design and combinability of our systems, along with our full-service approach, DRAABE guarantees hygiene, efficiency and the highest technical standards – at all times.



The modular exchange system

All DRAABE systems can be dismantled and replaced in seconds. This unique exchange system guarantees 100 % reliability and cost-effectiveness.

100% hygiene and reliability

Pure water systems are always subject to considerable wear. The accumulation of substances in the water and its gradual contamination is unavoidable. Full performance and the required quality of the pure water can only be achieved through regular preventive maintenance and disinfection. That's why all DRAABE Pur systems are installed in modern, portable small containers. These containers can be disconnected from the wall bracket and exchanged in a few simple steps.

The full-service rental system

As part of the full-service rental system, DRAABE takes care of the semi-annual maintenance of the Pur system. Every 6 months, DRAABE customers receive a fully refurbished, disinfected replacement device. Technical improvements and innovations are retrofitted automatically and free of charge.

VDI certification

DRAABE systems and components are certified to VDI Standard 6022 Sheet 6, proving that they use the best available technology. In addition, the installed systems are checked on site by VDI engineers in accordance with VDI requirements and recertified every year. DRAABE customers are therefore protected against liability risks.

The benefits to you:

- 100 % hygiene
- Absolute reliability
- Integrated maintenance approach
- Always state-of-the-art technology
- Confidence in business planning
- Compliance with VDI guidelines





FULL SERVICE

THE PUR SYSTEM

Any humidification system is only as reliable, hygienic and environmentally sound as the approach to service and maintenance underlying it. The DRAABE full-service approach is based on the modular design principle of DRAABE systems, ensuring both cost-effective and professional maintenance and disinfection. The semi-annual replacement of containers guarantees DRAABE rental customers systems that are always in mint condition, with the latest technology in compliance with VDI guidelines.

1. Cleaning and disinfection

Each system is completely disassembled. All components are checked and thoroughly cleaned. Wear parts are replaced. Special rinsing processes clean and disinfect the systems.



2. Special test benches

DRAABE technicians use special test benches to set the systems exactly to the individual performance profile.



3. Atomiser check-up

As part of the DRAABE check-up (optional every 2 years), the pure water atomisers are also exchanged and cleaned, wear parts are replaced and all functions are tested. Check-up customers receive a 2-year warranty renewal.



6. Container-exchange

In just a few simple steps, the used system is replaced by the fully-maintained Pur container and reconnected to the pipe system with quick-release couplings. The used system is returned after 6 months to the DRAABE laboratory workshop.



5. Express shipping & service hotline

When maintenance is complete, the systems are packaged securely for transport and shipped to the customer. In the event of complete failure, the customer is guaranteed a replacement unit within 24 hours.



4. Documented hygiene

In the DRAABE laboratory, water samples are tested for total bacterial count and moulds. Only after this test is the system released and the maintenance documented in the maintenance book – which means that the last maintenance can always be reviewed.



PURE WATER

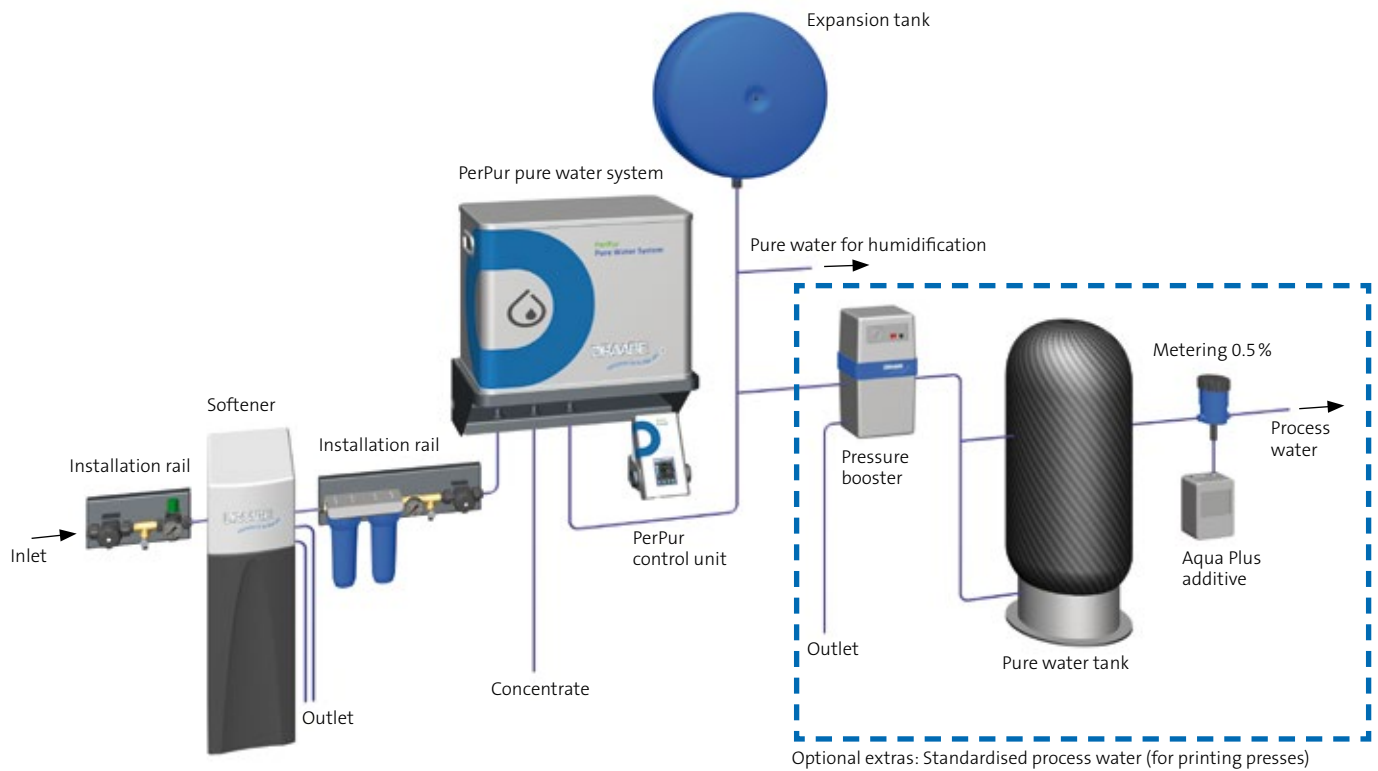
PERPUR

Tap water contains a whole host of substances, including for example minerals such as lime and salts. Water is only suitable for humidification if it contains very few minerals and is completely germ-free. Even in medium hard water, the substances present can cause significant problems. For smooth and 100% hygienic operation of the humidification system, the DRAABE PerPur system produces pure water. Minerals and the finest impurities, bacteria and germs are filtered out and the concentrate is discarded. The DRAABE pure water (permeate) is almost completely demineralised and germ-free!



The benefits to you:

- No deposits in pipes or nozzles
- Minimalized mineral discharge into the air
- Consistent performance of the system
- Maintenance-free for the operator
- Optional: Production of standardised process water for machines
- 100% hygienic due to automatic rinsing



Technical details	PerPur 60	PerPur 120	PerPur 200	PerPur 300
Max hyd. performance	60 l/h	120 l/h	200 l/h	300 l/h
Min inlet pressure	3 bar			
Max inlet pressure	5 bar			
Operating pressure	2 – 3.5 bar			
Dimensions	578 x 383 x 467 mm (L x W x H)			
Weight	30 kg	30 kg	34 kg	38 kg
Operating voltage	230 V AC 50/60 Hz			
Electrical power	750 W			



High performance

Up to three membrane units for filtering the water can be used in the PerPur unit. This guarantees pure water production of up to 300 kg/h.

Optimised water consumption

Up to 80 % of the inlet water is used for humidification. Only 20 % is discarded after water treatment, ensuring optimised water consumption and costeffectiveness.

Automated pure water hygiene

An automatic rinsing function with integrated automatic fresh water prevents contamination of the system and downstream pure water tanks through stagnation.

HIGH PRESSURE

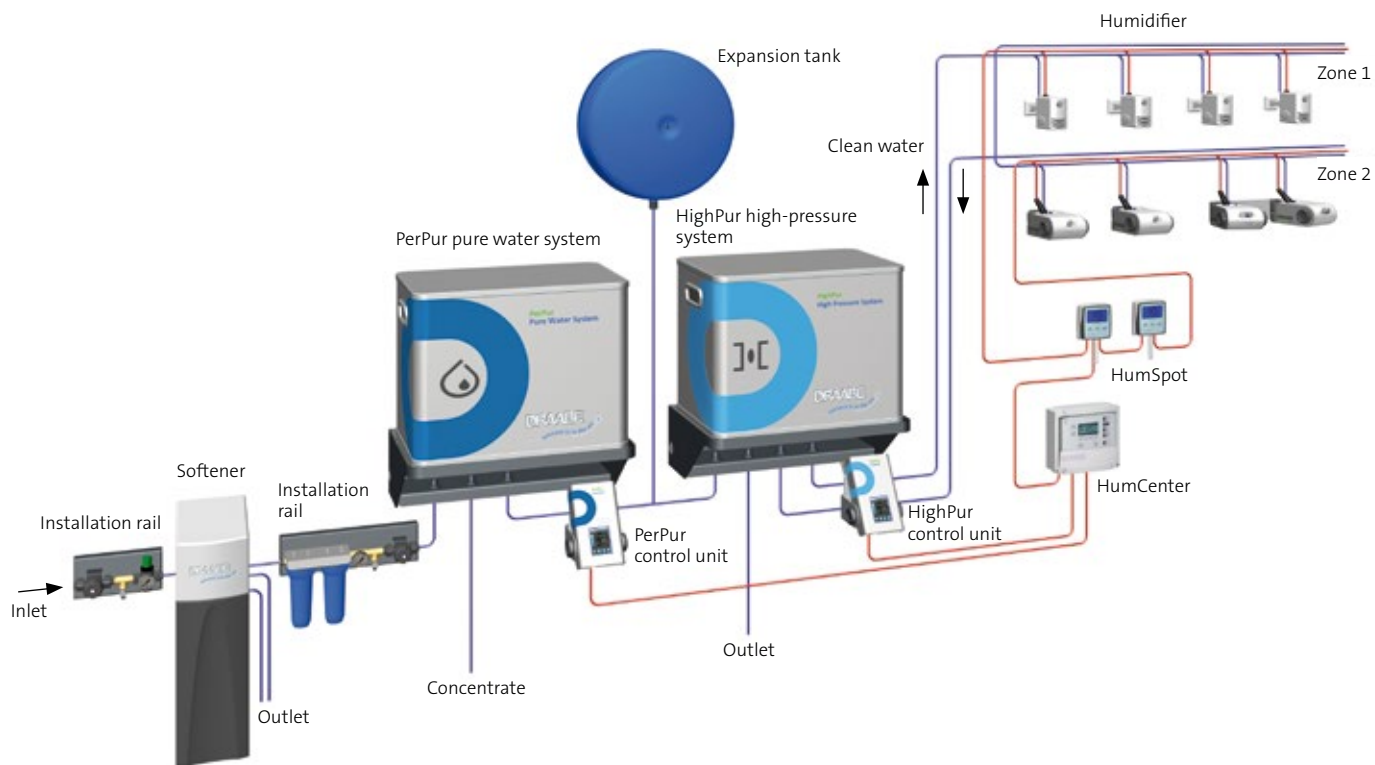
HIGHPUR

With an operating pressure of 75 bar, the frequency-controlled high pressure system HighPur creates a pulsating hydraulic flow which in turn creates the micro-fine, completely droplet-free atomisation of the pure water. Compared to other humidification technologies (such as compressed air, steam, ultrasound), it generates only a fraction of the energy costs. The HighPur high pressure system is also completely built into a portable container that is easily replaced during servicing.



The benefits to you:

- Very energy efficient compared to other humidification technologies
- 100% hygienic due to automated water exchange
- Micro-fine pure water atomisation through a pulsating hydraulic flow
- Full-service approach



Technical details	HighPur 60	HighPur 120	HighPur 200	HighPur 300
Max hyd. performance	60 l/h	120 l/h	200 l/h	300 l/h
Min inlet pressure	0.5 bar			
Max inlet pressure	3.5 bar			
Operating pressure	75 bar			
Dimensions	578 x 383 x 467 mm (L x W x H)			
Weight	48 kg			
Operating voltage	400 V 3 ph 50/60 Hz			
Electrical power	1.5 kW			



Hygiene first



Flexibility



Energy saving

UV-C sterilisation monitored effect

Additional hygiene functions guarantee the complete sterilisation of the inlet water by means of intense UV-C irradiation in specially designed DRAABE bio-reactors.

100% effective

Maximum efficiency: The design of the system ensures that 100% of the water fed in is discharged into the room air by the pure water atomiser.

Automated fresh water function

The cyclic exchange of water eliminates the risk of contamination through stagnation if no humidification is required over an extended period.

Electronic safety control

With a range of continuous internal checks (such as pump monitoring, inlet/outlet pressure checks, leakage indicator), the central control system guarantees maximum operational reliability and performance.

Efficient

A frequency controller adjusts the pump performance at all times to the level of humidification that is actually needed. This saves resources and reduces operating costs.

CONDUCTANCE SYNTHESIS

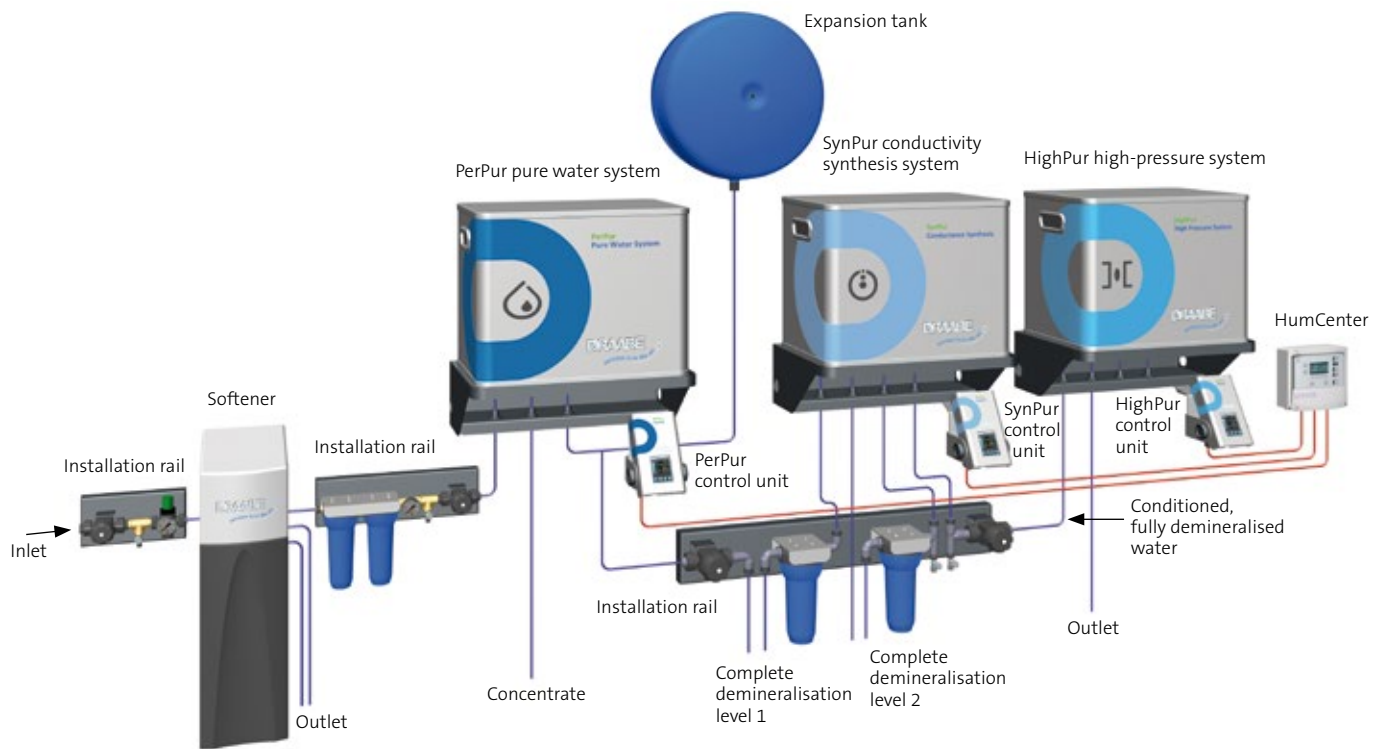
SYNPUR

The DRAABE SynPur conductance synthesis unit is designed to meet the additional requirements for clean room humidification in application areas such as the electronics industry, in museums or in offices. As an optional add-on module, the system conditions the inlet water (reverse osmosis water or fully demineralised water) and provides it to the downstream humidification system. Like the other systems, the SynPur is built into a modern, portable container for easy exchange during servicing.



The benefits to you:

- For use in sensitive applications (e.g. offices, electrical industry) with complete demineralisation
- No additional mineral discharge
- 100% effective
- Full-service approach



Technical details	SynPur 60	SynPur 120	SynPur 200	SynPur 300
Max hyd. performance	60 l/h	120 l/h	200 l/h	300 l/h
Min inlet pressure	2.5 bar			
Max inlet pressure	5 bar			
Operating pressure	2.5 – 3.5 bar			
Dimensions	578 x 383 x 467 mm (L x W x H)			
Weight	22 kg			
Operating voltage	230 V AC 50/60 Hz			
Electrical power	150 W			



Patented humidification of clean rooms

Patented DRAABE synthesis technology extracts all residual minerals from the feed water, guaranteeing that there is no additional mineral discharge into the room to be humidified.

100 % effective

Optimum determination of conductance ensures that 100% of the feed water (pure water) is conditioned.

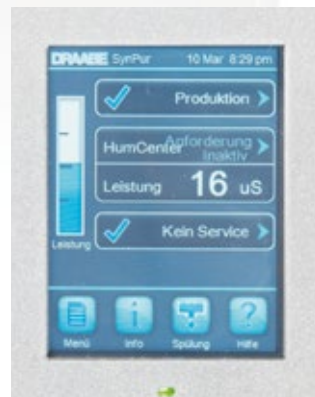
Processor-controlled demineralisation

Our microprocessor control technology guarantees complete demineralisation while at the same time minimising the use of consumables .

CONTAINER CONTROL

PURCONTROL

The DRAABE PurControl unit is the central control and information unit for the Pur container. Its continuous status display allows you to read all of the system's operating states at a glance. The intuitive user interface also gives you access to additional information such as pressure level, conductance or performance history. PurControl's long-term data storage facilitates additional analysis that can provide detailed information on the factors affecting operation over an extended period. With its ergonomic design and touchscreen, operating PurControl is easy and convenient.



The benefits to you:

- All important operating data at a glance
- Detailed analysis function
- Intuitive user interface and ergonomic design

SYSTEM CONTROL

HUMSPOT AND HUMCENTER



HumSpot

The DRAABE HumSpot controls and monitors the humidification of the individual zones (e.g. rooms and working areas). The simple menu navigation and the illuminated colour display guarantee a high level of operating ease and comfort.

The benefits to you:

- Precise activation of the humidifiers when the humidity falls below the setpoint
- High level of measuring precision thanks to digital, capacitive humidity analysis technology
- Continuous status display of relative humidity and room temperature

HumCenter

As the central control system for the entire air humidification system, the DRAABE HumCenter monitors, controls and analyses all humidification zones and the functions of the Pur container.

The benefits to you:

- High level of reliability due to a continuous status display and monitoring of all zones and Pur systems (unit protection)
- Errors and maintenance prompts are clearly displayed
- Extensive analysis functions thanks to long-term data storage
- Connection and data can be transferred to the building services management system



YOUR CUSTOM SOLUTION

THE PUR SYSTEM



Expert advice:

In an initial consultation with our specialists, the objectives are defined, the technical alternatives are presented and discussed, and a water analysis is carried out.

Individual planning:

Your individual system is planned and drawn with CAD in our planning department. You then receive your customised quote.

Full service:

Our customer service puts your system into operation. Thanks to our full-service approach, you can be sure that your DRAABE humidification system is safe and hygienic – at all times.



Hygiene first



Flexibility



Energy saving



Green & lean

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