

Phoenix GT

The Phoenix GT filters all pathogens, turbidity, and particles from the water at the point where the city water enters your building. Leaving behind no residues and drastically reducing the bacterial growth in your building's pipe systems.

Ideal for legionella removal in hospitals and residential buildings.



Removal of pathogens*

The Phoenix GT systems filters pathogens*, turbidity, and particles from the water at the point where the city water enters your building entrance, leaving behind no residues and dramatically reducing the bacterial growth in your building's pipe systems. The number of legionella, pseudomonas, and other pathogens measured at the sampling points decreases noticeably within just a few weeks after installation. The Phoenix GT's patented self-running membrane test, usually performed as part of the annual customer service, discovers even the smallest damage to the filter to ensure the long-term containment of the microbes coming into your system.

Remote access

The Phoenix GT offers optional remote access and connection to existing building automation networks. The modular design of the Phoenix makes it possible to install even in confined spaces and allow the system to be upgraded later on.

Unique system technology

As the only ultrafiltration system in its class, the Phoenix GT has a self-running membrane integrity test that exceeds the stringent filter testing requirements of the DVGW, the German gas and water supply association. In addition, the Phoenix GT can be integrated into your existing building control systems using the modern bus technology. Only the Phoenix has the ability to determine the contamination level of the filter and automatically perform filter rinses. This allows the Phoenix filter to last for many years and offer low operating costs that are unrivaled.

Phoenix GT in brief:

- for building operators
- for water already pre-filtered by the public water supply
- installed directly on the building water input
- removes legionella, viruses, parasites, pathogens, turbidity, and particles without any residues
- optional integrated membrane test

*99.99+% removal of pathogens

NOTE: INTEGRATION OF A PHOENIX ULTRAFILTRATION SYSTEM INTO FACILITY ALONE DOES NOT GUARANTEE ADEQUATE CONTROL OF BACTERIAL LEVELS. ADDITIONAL MEASURES INCLUDING ELIMINATION OF PIPING DEADLEGS, REGULAR FLUSHING OF PIPES, RE-DESIGN OF CIRCULATION SYSTEMS, FILTRATION OF HOT WATER RECIRCULATION LINES, AND/OR CHEMICALS MAY ALSO BE REQUIRED. EVERY FACILITY IS DIFFERENT. RISK ASSESSMENT AND REGULAR TESTING/MONITORING BY A QUALIFIED SERVICE PROVIDER IS CRITICAL TO ENSURING OCCUPANT SAFETY.

Warning: Never exceed the maximum operating pressure of 5 bar. Make sure that no water hammer occurs, which might exceed the maximum operating pressure!

Max. operating pressure	5.0 bar (73 psi)
Operating temperature	1°C to 40 °C (34 °F to 104 °F)
Water temperature	4°C to 40 °C (39 °F to 104 °F)
Storage temperature	0 °C to +40 °C (32°F to 104°F)
pH-range	1 to 13 (during cleaning) 2 to 11 (during operation)
Chlorine tolerance	In regard to free chlorine: Total tolerance 200,000 ppmh 200 ppm max. concentration
Max. trans-membrane-pressure (TMP) during filtration	2,5 bar or 36,26 psi

The filtration performance of the system among other depends on the following parameters:

- The utilized filter surface area of the system,
- the flux rate, i.e. the surface load (throughput per filter surface area)

The filtration performance of the system can vary widely and depends on the quality of the raw water, the volumetric flow filtered as well as the cleaning strategy selected. The table below gives an example of filtration capacity of each system type in city water applications:

System	# of membranes	Configuration	GPM FLOW THROUGH HUF SYSTEM ¹					Standard Hydro Tank Volume	Est. Short Term Peak Draw (GPM) ³	Inlet/Outlet Connections	Flush GPM ⁵	Flush Duration
			5psid	10psid	15psid	20psid	25psid					
Virex Pro	2	Wall-Mount	6	8	10	12	13	106gal	38.5	1" NPT	7	10sec.
Phoenix GT-1	1	Floor Skid	40	56	69	79	N/A ²	158gal	119	2" FLG	26	10sec.
Phoenix GT-2	2	Floor Skid	71	101	124	143	159	211gal	196	3" FLG	52	10sec.
Phoenix GT-3	3	Floor Skid	94	132	162	187	209	211gal X 2	249	3" FLG	78	10sec.
Phoenix GT-4	4	Floor Skid	108	153	187	215	241	211gal x 3	373	4" FLG	104	10sec.

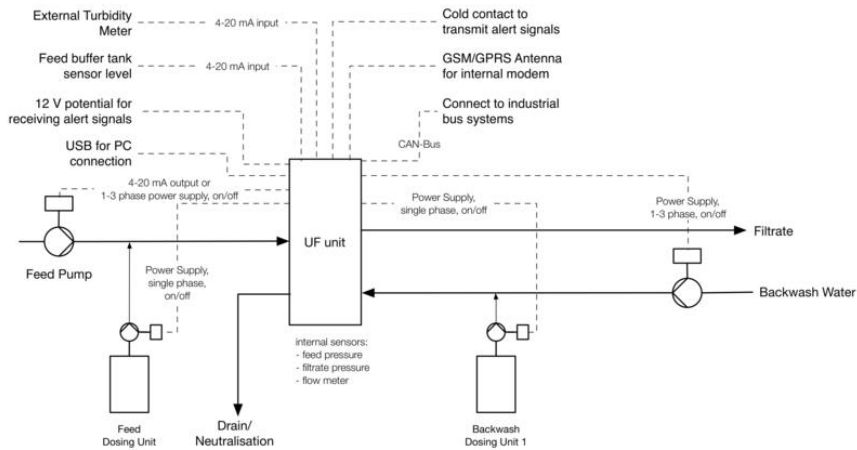
¹Assumes 50°F water supply and reasonable-quality city water

²Exceeds maximum possible membrane flux rate

³Equals GPM FLOW @20psid and 25% of nominal hydro tank volume x 1 min. (piping must be sized adequately)

⁴Space required includes 100 micron pre-filter(s) and standard volume hydropneumatic tanks

⁵Incoming water pressure must range from 30 - 73 psi



a chemical dosing pump in the backwash line.

Hydraulic connections

Hydraulic connections	Description	Connection
Feed	Connection of the raw water. A pre-filter with max. 100 µm (preferable flushable) needs to be installed upstream of the system.	2" - 4" Flange*
Filtrate	Filtrate outlet, supplies pure water.	2" - 4" Flange*
Drain	Rinse water of the system. The rinse water from a flush of the system needs to go through a free outlet into the drain or canalization.	2" - 4" Flange*

*Connection size is dependent upon peak flow rate

The Seccua Phoenix GT needs for operation, e.g. switching valves or performing an Integrity Test, only a power supply of 230 V (225 W).

The Seccua Phoenix GT is able to control peripheral equipment via I/O signals, even peripheral equipment which needs a three phase power supply, e.g. feed pump or backwash pump. Therefore the Seccua Phoenix GT provides a three phase power inlet, as well as three phase outlets for those type of equipment. Each phase can be used for a maximum of 16 Amper.

Voltage	Power (max.)	Frequency
120 V	225 W	50/60 Hz
230 V	225 W	50/60 Hz
400 V	225 W	50/60 Hz

Note:

The required power connection of 120 V must be explicitly ordered. The units can only be supplied with 120 V or 230 V!

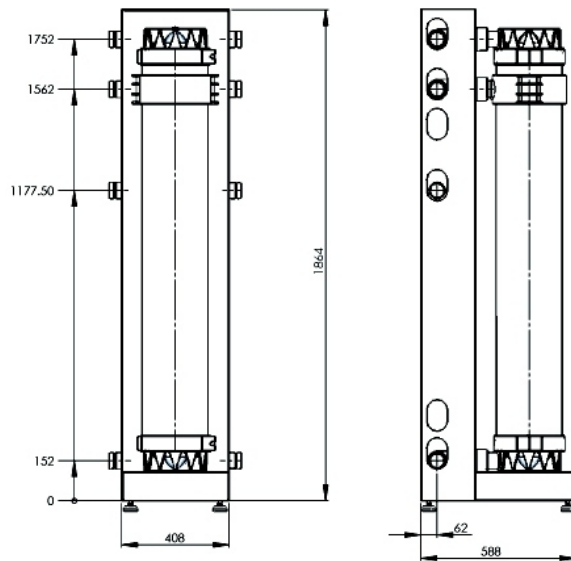
Warning:

Electrical voltage!

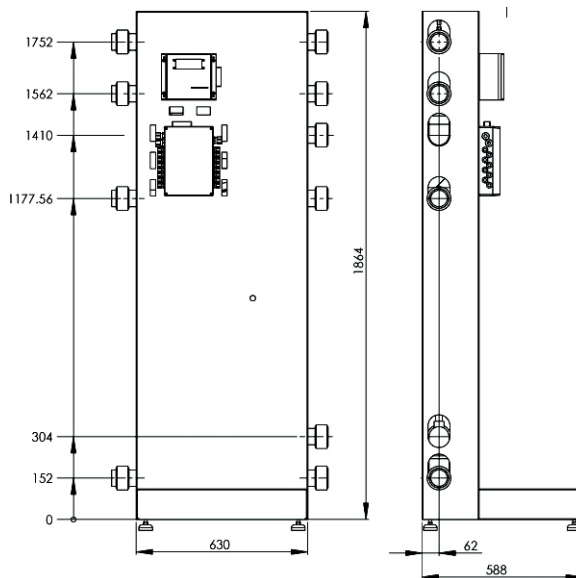
Follow the instructions given in the manual! Failure to comply these instructions may result in serious injury or death! All electrical connections must be matched to the local installations and comply with the existing guidelines! Do not change the connection plug or the connection cable! Do not use an extension cable! Always, first disconnect the system from the mains before opening the cover (pull the main power supply)!

Control and Filter Unit

The Phoenix GT has a control unit and one to four filter units. For transport, the system comes as disassembled delivery, the filter modules can not be transported while connected to the system. The filter modules are packaged separately and enclosed with the system.



Filter unit (dimensions in mm)



Control unit (dimensions in mm)

Assembled units

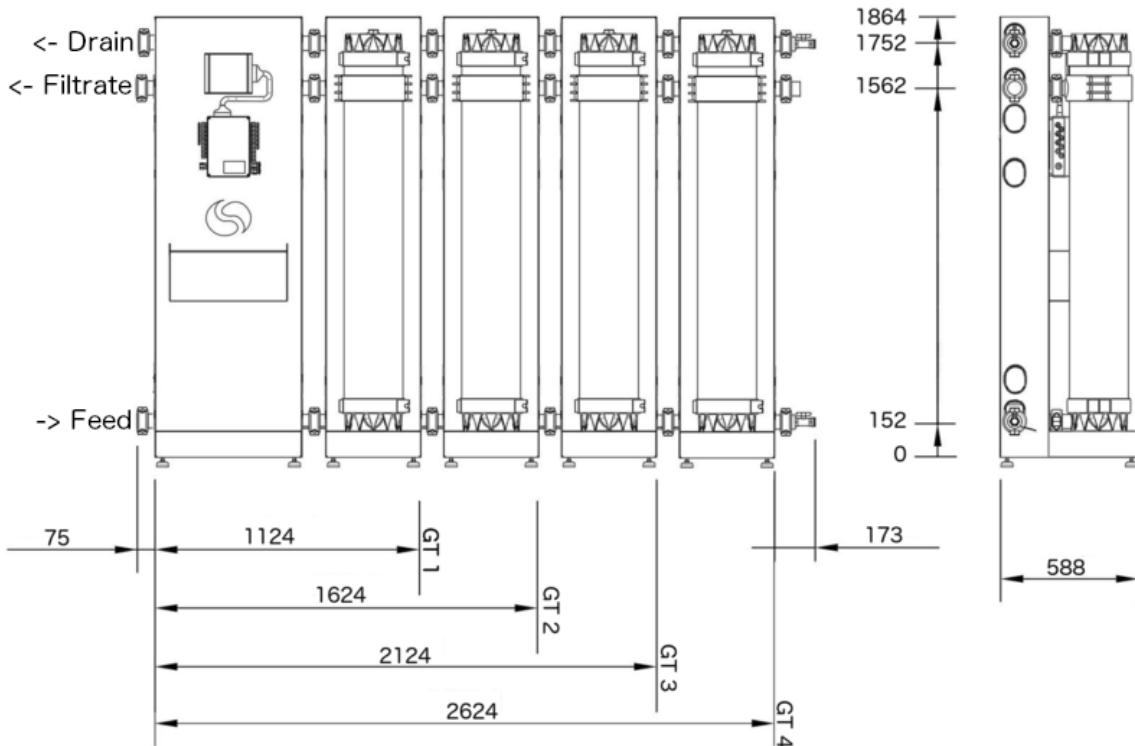
Typ	Width (cm)	Depth (cm)	Height* (cm)	Weight** (kg)
Phoenix GT1	ca. 138	ca. 60	ca. 191	ca. 180
Phoenix GT2	ca. 188	ca. 60	ca. 191	ca. 260
Phoenix GT3	ca. 238	ca. 60	ca. 191	ca. 340
Phoenix GT4	ca. 288	ca. 60	ca. 191	ca. 420

Type	Width (in)	Depth (in)	Height* (in)	Weight** (lb)
Phoenix GT1	ca. 55 in	ca. 24 in	ca. 75 in	ca. 400 lb
Phoenix GT2	ca. 75 in	ca. 24 in	ca. 75 in	ca. 600 lb
Phoenix GT3	ca. 95 in	ca. 24 in	ca. 75 in	ca. 800 lb
Phoenix GT4	ca. 115 in	ca. 24 in	ca. 75 in	ca. 1000 lb

*) The Units are height adjustable.

**) Filters filled with water

Dimensions of assembled Phoenix GT systems*



*) dimensions in millimeters

Note:

The Phoenix GT systems have adjustable feet, so eventually an extra height of up to 40 mm (1.6 in) needs to be added.



We have team members throughout the US and Canada who are ready to serve you. To get started, please talk with your local sales representative, or contact our Technical Support Department at: 1-866-405-1268 or techsupport@watercontrolinc.com

