Reverse osmosis and electro-deionisation.



The efficient way to produce and supply pure water on a centralised purified water supply.





stakpure pure water systems. Planning + realisation + after sales.



stakpure pure water systems provide an efficient and cost-effective way of producing a centralised supply of pure water as required in laboratories, health care, pharmaceutical companies and industry.

stakpure pure water systems are configured to meet specific needs within a capacity range of 20 l/h to 6,000 l/h. This makes it possible to supply individual laboratory and medical systems, floors or even entire buildings. Our product range spans from conventional reverse osmosis systems, two-step reverse osmosis systems (optional with concentrate treatment), electro-deionisation right up to a combination of different treatment processes. Your application decides on the type of treatment. Reliably and always in constantly high quality.

Equipped with the most modern technology, our systems are also available with control unit and touch panel with process visualisation. All relevant operating and performance parameters can be transferred to the building and central service management system via bus systems such as BACnet.

Thorough introduction and commissioning are as important as after sales service. Just as you like, we are at your disposal with service according to contract or service on demand.

Planning

Whether small quantities of a few litres, as are required in doctors' surgeries or laboratories on a daily basis, or thousands of litres for large laboratory facilities, hospitals and use in pharmacy and industry – we make sure that your investment remains profitable for a long time to come. It always starts with an in-depth consultation and establishing your requirements before we prepare and submit a well-founded solution. The result may be a standard device, an individual equipment configuration or a solution planned and realised on an engineering basis. The main requirement for a successfully planned system is the personal meeting with you. Ideally on site, of course. That is the best way to establish your requirements; the system parameters are defined together, and often it is possible to give a rough idea of the costs. Please do not hesitate to contact us (at no obligation to yourself) – we're here for you!

Realisation

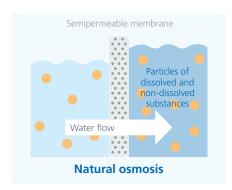
Now it's all about the smooth interlinking of the preparatory measures. stakpure works with highly-qualified, motivated staff, every one of whom "lives" their responsibility for the success of the project and the complete satisfaction of our customers. You can rely on our delivery dates just as much as on our systems and service! Your new appliance will be commissioned on site by our trained technicians, who will also instruct your staff in using it.

Service

Service is not an empty promise at stakpure, but an important field of activity in achieving customer satisfaction. Because only the reliable support for a system, whether large or small, will ensure that it runs smoothly and safely, and protect against incalculable risks resulting from downtimes. Detailed instruction and commissioning are just as important to us as the subsequent service. Whatever you wish: we are at your disposal to provide contract-based service or service on demand. Anywhere in Germany, and even in our 24-hour express service if required. We will also undertake the planning and execution of all service tasks. It goes without saying that we will also replace cartridges and filters, as well as ensuring professional reconditioning of the mixed-bed resins.

stakpure reverse osmosis systems. Safe and economical.

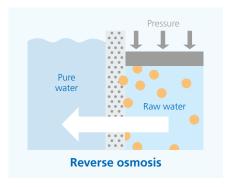
Reverse osmosis removes up to 99% of all water pollution, such as minerals, bacteria and any further particles. The typical WCF rate (utilisation rate) of reverse osmosis systems is 70/30 or rather optimally 75/25. Adaptation of concentrate treatment can increase the yield up to 85%.



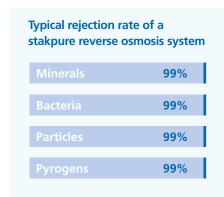
Principle and mode of operation

Osmosis is based on a natural process such as plants use their root cells to gain moisture from soil. The same process takes place in the human body and causes an exchange of substances through the cell membrane.

If you separate two different loaded liquids by a cell membrane, liquid molecules will move towards the less concentrated solution according to the principle of Brownian motion. This leads to osmotic pressure. In order to gain as pure water as possible, considerably higher pressure is generated on the loaded side. Hence the process is reversed and therefore it is called reverse osmosis.



Reverse osmosis systems are ideal for supplying pure water to entire building wings in laboratory (Type III), cleaning and disinfection devices in medical technology (DIN EN ISO 15883) as well as industrial applications.



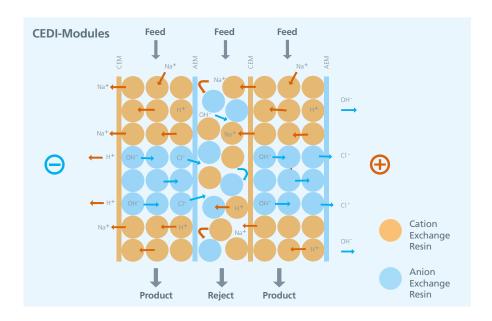
Benefits at a glance

- One central system space-saving
- No regeneration costs
- No use of chemicals
- Free from particles and bacteria
- High pure water yield
- Modular capacity upgrade

stakpure electro-deionisation ED. For the highest of demands.

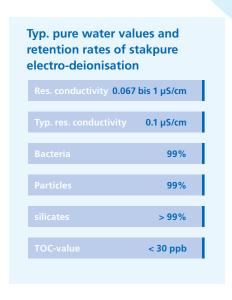
Electro-deionisation combines two processes for producing ultrapure water, the electrodialysis and ion exchanger processes (IEP).

Whereas the conventional ion-exchanger process involves chemically regenerating the resins on a regular basis after longer time use, electro-deionisation continuously regenerates the resins using electric current.

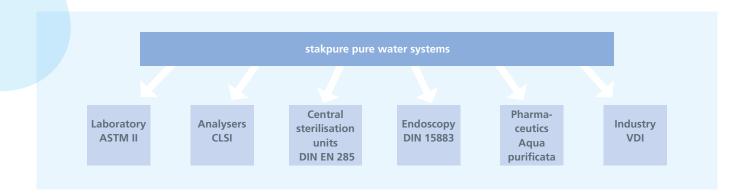


Principle and mode of operation

With electro-deionisation, water is split into H⁺ and OH⁻ ions by applying an electric voltage within the cells. This creates a process that continuously regenerates the mixed-bed resins without adding chemicals. Ions are held back on the mixed-bed resins and flushed out through selective membranes that only let anions or cations through. This process rules out any occurrence of impurities and the risk of "impure mixed-bed resins" contaminating the pure water that is produced. Electro-deionisation systems produce a constantly high water quality, making them ideal for supplying pure water to entire building wings in the laboratory (Type II), central sterilisation units in clinics (DIN EN 285) as well as for many pharmaceutical and industrial applications.



Pure water of all grades. For laboratory and medical technology.



Whether supplying pure water in hospitals & clinics for central sterilisation, in medical practices for endoscopy or for large laboratory facilities and clinical analysis supply – we offer the ideal solution for any need.

Pure water for laboratory technology (ASTM)

The ASTM* D1193-06 (2011) deals with the requirements for chemical analyses and physical tests. For central laboratory water supply, i.e. feedwater for laboratory washers, autoclaves and ultrapure water systems, pure water of Type II is needed.

| | Туре | Grade | Conductivity | Resistance | рН | тос | Sodium | Chloride | Silicon | Bacteria | Endotoxins |
|-----------|------|-------|---------------|-------------------------|---------|--------------|--------------|--------------|--------------|----------------|---------------|
| | | | (μS/cm), max. | (M Ω x cm), min. | | (µg/l), max. | (μg/l), max. | (µg/l), max. | (µg/l), max. | (CFU/ml), max. | (EU/ml), max. |
| water | ** | | 0.056 | 18.0 | - | 50 | 1 | 1 | 3 | - | _ |
| e Wa | ** | А | 0.056 | 18.0 | - | 50 | 1 | 1 | 3 | 10/1000 | 0.03 |
| Ultrapure | ** | В | 0.056 | 18.0 | - | 50 | 1 | 1 | 3 | 10/100 | 0.25 |
| | ** | С | 0.056 | 18.0 | - | 50 | 1 | 1 | 3 | 100/10 | - |
| <u></u> | II | | 1.0 | 1.0 | - | 50 | 5 | 5 | 3 | - | - |
| water | II | А | 1.0 | 1.0 | - | 50 | 5 | 5 | 3 | 10/1000 | 0.03 |
| Pure 1 | II | В | 1.0 | 1.0 | - | 50 | 5 | 5 | 3 | 10/100 | 0.25 |
| Δ. | II | С | 1.0 | 1.0 | - | 50 | 5 | 5 | 3 | 100/10 | _ |
| | Ш | | 0.25 | 4.0 | _ | 200 | 10 | 10 | 500 | - | - |
| water | III | А | 0.25 | 4.0 | - | 200 | 10 | 10 | 500 | 10/1000 | 0.03 |
| Pure \ | III | В | 0.25 | 4.0 | - | 200 | 10 | 10 | 500 | 10/100 | 0.25 |
| ₫. | III | С | 0.25 | 4.0 | - | 200 | 10 | 10 | 500 | 100/10 | - |
| | IV | | 5.0 | 0.2 | 5.0-8.0 | _ | 50 | 50 | - | _ | - |
| water | IV | А | 5.0 | 0.2 | 5.0-8.0 | _ | 50 | 50 | - | 10/1000 | 0.03 |
| Pure v | IV | В | 5.0 | 0.2 | 5.0-8.0 | _ | 50 | 50 | - | 10/100 | 0.25 |
| Ā | IV | С | 5.0 | 0.2 | 5.0-8.0 | _ | 50 | 50 | - | 100/10 | _ |

^{*} American Society for Testing and Materials

^{**} Using an appropriate 0,2µm membrane filter.



Pure water for the supply of analysers of Clinical Laboratory Standards Institute (CLSI)

This institute defined the quality requirements of water for clinical laboratories. The regulations that were valid up to 2006 (NCCL types 1, 2 and 3) but were then invalidated by the requirement that water must be suitable for the intended usage. Only the degree of purity of so-called "Clinical laboratory reagent water" (CLRW) is described.

| Parameter | CLRW | | |
|------------------|----------------------|--|--|
| Resistance | 10 MΩ x cm | | |
| TOC | < 500 ppb | | |
| Bacteria | < 10 CFU/ml | | |
| Particle content | Inline 0.2 µm-filter | | |



Pure water for the supply of cleaning and disinfection devices (DIN EN ISO 15883)

At least the use of softened water or reverse osmosis water can prevent lime deposits. Using acidic disinfectants, such as based on peracetic acid, a low chloride content can also lead to pitting corrosion. Therefore, a chloride value limit of < 50 mg/l is recommended. For the final rinse, fully demineralised water is suggested. However, for process optimisation it is advisable to use fully demineralised or at least softened water for pre-wash, cleaning and intermediate wash steps. The water quality according to DIN EN 285 proves itself for the final rinse step in mechanical instrument reprocessing.

| Minimum requirements water | | | | | |
|----------------------------|---------------------------|--|--|--|--|
| Total hardness | < 3°dH (< 0,5 mmol CaO/l) | | | | |
| Total minerals | < 500 mg / l | | | | |
| Chloride content | < 100 mg / l | | | | |
| pH value | 5 up to 8 | | | | |

| Minimum requirement demineralised water | | | | | |
|---|--|--|--|--|--|
| Conductivity: | \leq 15 μ S/cm (differ from table of DIN EN 285) | | | | |
| pH value: | 5 – 7 | | | | |
| Total hardness: | ≤ 0.02 mmol CaO/l | | | | |
| Total minerals: | ≤ 10 mg/l | | | | |
| Phosphate content (P ₂ O ₅): | ≤ 0.5 mg/l | | | | |
| Silicate content (SiO ₂): | ≤ 1 mg/l | | | | |
| Chloride content : | ≤ 2 mg/l | | | | |
| Microbiological : | min. drinking water quality according to TrinkwV | | | | |



Pure water for steam and large-size sterilisers (DIN EN 285 – Annex B)

Proposed maximum values for feed water pollution:

| Substance / Feature | Feed water | | |
|---|------------------------------------|--|--|
| Evaporation residue | ≤ 10 mg/l | | |
| Silicates (SiO ₂) | ≤ 1 mg/l | | |
| Iron | ≤ 0.2 mg/l | | |
| Cadmium | ≤ 0.005 mg/l | | |
| Lead | ≤ 0.05 mg/l | | |
| Heavy metal residue except iron, | ≤ 0.1 mg/l | | |
| cadmium and lead | ≤ 0.1 mg/l | | |
| Chlorides (CI) | ≤ 2 mg/l | | |
| Phosphates (P ₂ O ₅) | ≤ 0.5 mg/l | | |
| Conductivity (at 25°C) | ≤ 5 µS/cm | | |
| pH value (degree of acidity) | 5 bis 7.5 | | |
| Appearance | colorless, clear, without deposits | | |
| Hardness (sum of alkaline earth ions) | ≤ 0.02 mmol/l | | |
| | | | |

Note: Compliance should be checked using recognised analytical methods.















stakpure reverse osmosis systems. Compact units for decentralised supply. Type III + 15883 Water.

stakpure RO ready

"All in one" unit in a cabinet with lockable door and observation window. All components (pretreatment, water softening, reverse osmosis, pure water tank with level control and pressure booster) are integrated and premounted ready to connect. Multilingual microprocessor controller with LCD display for controlling and monitoring RO systems. Display of permeate conductivity, fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO ready | 60 | 150 | 200* | 300* | | |
|-------------------------------|----------------|----------|----------|-----------|--|--|
| Permeate performance at 10 °C | 60 l/h | 150 l/h | 200 l/h | 300 l/h | | |
| Power consumption | 1.2 kW | | | | | |
| Mains voltage | 230/50-60 V/Hz | | | | | |
| Max. operating pressure | 14 bar | | | | | |
| Dimensions mm (W x D x H) | 820 x 60 | 0 x 1870 | 1020 x 6 | 00 x 1870 | | |
| Weight | 200 kg | 215 kg | 240 kg | 250 kg | | |
| Order no. | 15200060 | 15200120 | 15200200 | 15200300 | | |





stakpure RO ready mini

"All in one" unit for space-saving integration into a 90s base. All components (pretreatment, reverse osmosis, pure water tank with level control and pressure booster) are integrated and premounted ready to connect. Multilingual microprocessor controller with LCD display for controlling and monitoring RO systems. Display of permeate conductivity, fully automatic rinsing cycles. Module-based capability of increasing capacity at a later stage.

| stakpure RO ready mini | 60 | 120 |
|------------------------------|----------|----------|
| Permeate performance at 10°C | 60 l/h | 120 l/h |
| Power consumption | 0.6 | 5 kW |
| Mains voltage | 230/50 | -60 V/Hz |
| Max. operating pressure | 14 | bar |
| Dimensions mm (W x D x H) | 800 x 6 | 00x800 |
| Weight | 50 kg | 55 kg |
| Order no. | 15200061 | 15200121 |



stakpure reverse osmosis systems. For centralised supply. Type III + 15883 Water.



stakpure RO cabinet

Ready-to-connect, compact RO system in a cabinet for wall-mounting. Digital micro-processor controller with LCD display for controlling and monitoring all operating and performance parameters as well as for displaying permeate conductivity. Fully automatic rinsing cycles. Module-based capability of increasing capacity at a later stage.

| stakpure RO cabinet | 20 | 40 | 60 | 120 | |
|--------------------------------|----------------|----------|----------|----------|--|
| Permeate performance at 10°C | 20 l/h | 40 l/h | 60 l/h | 120 l/h | |
| Power consumption | | 0.30 |) kW | | |
| Electrical requirements | 230/50-60 V/Hz | | | | |
| Max. operating pressure 14 bar | | 14 | bar | | |
| Dimensions mm (W x D x H) | | 600 x 4 | 00x800 | | |
| Weight | 50 kg | 55 kg | 55 kg | 60 kg | |
| Order no. | 15300020 | 15300040 | 15300060 | 15300120 | |
| | | | | | |



stakpure RO easy

Ready-to-connect RO system on stainless-steel frame. Multilingual microprocessor controller with LCD display for controlling and monitoring RO systems. Display of permeate conductivity, fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO easy | 100 | 150 | 200 | 300 | 350 | |
|------------------------------|----------------|----------|-----------|----------|----------|--|
| Permeate performance at 10°C | 100 l/h | 150 l/h | 200 l/h | 300 l/h | 350 l/h | |
| Power consumption | | | | | | |
| Mains voltage | 230/50-60 V/Hz | | | | | |
| Max. operating pressure | 14 bar | | | | | |
| Dimensions mm (W x D x H) | | 600 x 60 | 00 x 1600 | | | |
| Weight | 80 kg | 85 kg | 100 kg | 110 kg | 118 kg | |
| Order no. | 15400100 | 15400150 | 15400200 | 15400300 | 15400350 | |
| | | | | | | |

RO easy systems with 600 and 900 l/h are also available on request.

stakpure RO central

RO-Cabinet version with lockable door and observation window. Multilingual micro-processor control with LCD display for controlling and monitoring RO systems. Display of raw and pure water conductivity with limiting value setting capability and temperature compensation. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO central | 300 | 600 | 900 | 1200 | |
|------------------------------|----------|------------------|----------|-------------------|--|
| Permeate performance at 10°C | 300 l/h | 600 l/h | 900 l/h | 1200 l/h | |
| Power consumption | | 3.3 k | (W | | |
| Mains voltage 380/50-60 V/Hz | | | | | |
| Max. operating pressure | 14 bar | | | | |
| Dimensions mm (W x D x H) | | 800 x 600 x 1850 | | 1000 x 600 x 1850 | |
| Weight | 230 kg | 250 kg | 270 kg | 290 kg | |
| Order no. | 15300300 | 15300600 | 15300900 | 15301200 | |



stakpure RO central small

Ready-to-connect RO system on stainless-steel frame. Multilingual microprocessor controller with LCD display for controlling and monitoring RO systems. Display of permeate conductivity, fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO central small | 1600 | 2200 | 2800 |
|-------------------------------|----------|----------------|----------|
| Permeate performance at 10 °C | 1600 l/h | 2200 l/h | 2800 l/h |
| Power consumption | | 4.5 kW | |
| Electrical requirements | | 380/50-60 V/Hz | |
| Max. operating pressure | | 14 bar | |
| Dimensions mm (W x D x H) | | 1350x660x1930 | |
| Weight | 270 kg | 290 kg | 310 kg |
| Order no. | 15301610 | 15302010 | 15303010 |
| | | | |

RO systems with control unit and bus systems such as BACnet are also available on request.





stakpure RO central

Ready-to-connect RO system on stainless-steel frame. Multilingual microprocessor control with LCD display for controlling and monitoring RO systems. Display of permeate conductivity, fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO central | 2000 | 3000 | 4000 | 5000 | 6000 |
|------------------------------|----------|----------|-----------------|----------|----------|
| Permeate performance at 10°C | 2000 l/h | 3000 l/h | 4000 l/h | 5000 l/h | 6000 l/h |
| Power consumption | | | 4.5 - 8.5 kW | | |
| Mains voltage | | : | 380/50-60 V/H | Z | |
| Max. operating pressure | | | 14 bar | | |
| Dimensions mm (W x D x H) | | 2 | 800 x 900 x 190 | 00 | |
| Weight | 450 kg | 480 kg | 490 kg | 520 kg | 530 kg |
| Order no. | 15302000 | 15303000 | 15304000 | 15305000 | 15306000 |
| | | | | | |

RO systems with control unit and bus systems such as BACnet are also available on request.

stakpure two-step reverse osmosis systems. For centralised supply. Type II + 285 Water.



stakpure RO duo central

Two-step reverse osmosis system on stainless-steel frame. Multilingual microprocessor control with LCD display for controlling and monitoring RO systems. Display of permeate conductivity, fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO duo central | 2000 | 3000 | 4000 | 5000 | 6000 |
|------------------------------|----------------|----------|----------|----------|----------|
| Permeate performance at 10°C | 2000 l/h | 3000 l/h | 4000 l/h | 5000 l/h | 6000 l/h |
| Power consumption | 9–16 kW | | | | |
| Mains voltage | 380/50-60 V/Hz | | | | |
| Max. operating pressure | 14 bar | | | | |
| Dimensions mm (W x D x H) | 2950x850x1800 | | | | |
| Weight | 570 kg | 600 kg | 630 kg | 660 kg | 700 kg |
| Order no. | 15702000 | 15703000 | 15704000 | 15705000 | 15706000 |
| | | | | | |

RO systems with control unit and bus systems such as BACnet are also available on request.

stakpure reverse osmosis systems & electro-deionisation.

Compact units for decentralised supply. Typ II + 285 Water.

stakpure RO ED ready

"All in one" unit in a cabinet with lockable door and observation window. All components (pre-treatment, water softening, reverse osmosis, electro-deionisation, pure water tank with level control and pressure booster) are integrated and premounted ready to connect. Multilingual microprocessor controller with LCD display for controlling and monitoring pure water systems. Display of permeate and pure water conductivity, fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO ED ready | 50-80 | 130-170 | 270-300 |
|--------------------------------|------------------|-------------|-------------|
| Pure water performance at 10°C | 50-80 l/h | 130-170 l/h | 270-300 l/h |
| Pure water quality | 0.1 – 1.0 μS/cm* | | |
| Power consumption | 1.5 kW | | |
| Mains voltage | 230/50-60 V/Hz | | |
| Max. operating pressure | 14 bar | | |
| Dimensions mm (W x D x H) | 1020×600×1850 | | |
| Weight | 270 kg | 280 kg | 290 kg |
| Order no. | 17600080 | 17600170 | 17600300 |

^{*} depending on feed water quality

RO ED ready systems with circulation modules for ring line connection are also available on request.

stakpure RO ED ready mini

"All in one" unit for space-saving integration into a 90s base. All components (pre-treatment, reverse osmosis, electro-deionisation, storage tank with level control and pressure booster) are integrated and pre-mounted ready to connect. Multilingual microprocessor controller with graphic display for controlling and monitoring pure water systems. Display of permeate and pure water conductivity as well as tank volume in %. Module-based capability of increasing capacity at a later stage.

| stakpure RO ED ready mini | 20 | 40 | |
|---------------------------------|------------------|----------|--|
| Pure water performance at 15 °C | 20 l/h | 40 l/h | |
| Pure water conductivity | 0.1 – 1.0 μS/cm* | | |
| Power consumption | 1.1 kW | | |
| Mains voltage | 230/50-60 V/Hz | | |
| Max. operating pressure | 6 bar | | |
| Dimensions mm (W x D x H) | 800×600×800 | | |
| Weight | 65 kg 70 kg | | |
| Order no. | 17800020 | 17800040 | |
| | | | |

^{*} depending on feed water quality

RO ED ready mini systems with circulation modules for ring line connection are also available on request.





stakpure reverse osmosis systems & electro-deionisation.

Compact units for decentralised supply of Type II + 285 Water.



stakpure RO ED cabinet

RO system with integrated electro-deionisation. Cabinet version with lockable door and observation window. Multilingual microprocessor control with LCD display for controlling and monitoring electro-deionisation systems. Display of permeate and pure water conductivity with limiting value setting capability and temperature compensation. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO ED cabinet | 50-80 | 130-170 | 270-300 | | |
|--------------------------------|----------------------|------------------|-------------|--|--|
| Ultrapure water output at 10°C | 50-80 l/h | 130-170 l/h | 270-300 l/h | | |
| Ultrapure water quality | | 0.1 – 1.0 μS/cm* | | | |
| Max. operating pressure | | 14 bar | | | |
| Power consumption | | 0.9 kW | | | |
| Mains voltage | | 230 V/50-60 Hz | | | |
| Dimensions mm (W x D x H) | | 600×610×1670 | | | |
| Weight | 148 kg 158 kg 171 kg | | | | |
| Order no. | 17400080 | 17400170 | 17400300 | | |
| | | | | | |

^{*} depending on feed water quality



stakpure RO ED ultra

RO system with integrated electro-deionisation and recirculation module (polisher). Multilingual microprocessor control with LCD display for controlling and monitoring electro-deionisation systems. Display of permeate and pure water conductivity with limiting value setting capability and temperature compensation. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO ED ultra | 50-80 | 130-170 | 270-300 | |
|---------------------------------|----------------------|-------------|-------------|--|
| Ultrapure water output at 10 °C | 50-80 l/h | 130-170 l/h | 270-300 l/h | |
| Ultrapure water quality | 0.067 – 0.1 μS/cm* | | | |
| Max. operating pressure | 14 bar | | | |
| Power consumption | 0.9 kW | | | |
| Mains voltage | 230 V/50-60 Hz | | | |
| Dimensions mm (W x D x H) | 600×610×1670 | | | |
| Weight | 172 kg 184 kg 197 kg | | | |
| Order no. | 17500080 | 17500170 | 17500300 | |
| | | | | |

^{*} depending on feed water quality

RO ED systems with control unit and bus systems such as BACnet are also available on request.

RO ED systems with control unit and bus systems such as BACnet are also available on request.

stakpure RO ED central

RO system with integrated electro-deionisation on stainless-steel frame. Multilingual micro-processor control with LCD display for controlling and monitoring electro-deionisation systems. Display of permeate and pure water conductivity with limiting value setting capability and temperature compensation. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO ED central | 500 | 800 | 1100 | |
|--------------------------------|------------------------|----------|----------|--|
| Ultrapure water output at 10°C | 500 l/h 800 l/h 1100 l | | | |
| Ultrapure water quality | 0.1 – 1.0 μS/cm* | | | |
| Max. operating pressure | 14 bar | | | |
| Power consumption | 3.5 kW | | | |
| Mains voltage | 380/50-60 V/Hz | | | |
| Dimensions mm (W x D x H) | 1400×600×1800 | | | |
| Weight | 360 kg 370 kg 400 kg | | | |
| Order no. | 17300500 | 17300800 | 17301100 | |
| | | | | |



RO systems with control unit and bus systems such as BACnet are also available on request.



stakpure RO ED central

RO system with integrated electro-deionisation on stainless-steel frame. Multilingual micro-processor control with LCD display for controlling and monitoring electro-deionisation systems. Display of permeate and pure water conductivity with limiting value setting capability and temperature compensation. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| stakpure RO ED central | 2000 | 3000 | 4000 | 5000 | 6000 |
|---------------------------|------------------|-----------|-----------|-----------|-----------|
| Ultrapure water output at | 2000 l/h | 3000 l/h | 4000 l/h | 5000 l/h | 6000 l/h |
| 10°C | 2000 1/11 | 3000 1/11 | 4000 //11 | 5000 1/11 | 6000 1/11 |
| Ultrapure water quality | 0.1 – 1.0 μS/cm* | | | | |
| Max. operating pressure | 14 bar | | | | |
| Power consumption | 3.5 kW 5.5 kW | | | | kW |
| Mains voltage | 380/50-60 V/Hz | | | | |
| Dimensions mm (W x D x H) | 2800×900×1800 | | | | |
| Weight | 520 kg | 570 kg | 580 kg | 610 kg | 650 kg |
| Order no. | 17302000 | 17303000 | 17304000 | 17305000 | 17306000 |
| | | | | | |

^{*}depending on feed water quality



RO systems with control unit and bus systems such as BACnet are also available on request.

stakpure reverse osmosis systems. For supply of analysers. CLRW (CLSI).



RO medical mini

"All in one" unit in a cabinet with emergency supply for safe supply of analysers. All components (pre-treatment, reverse osmosis, pressurised tank, polisher for residual desalination as well as 0.2 μ m sterile filter) are integrated and pre-mounted ready to connect. Optionally available with UV-disinfection and degassing unit. Multilingual microprocessor controller with LCD display for controlling and monitoring pure water systems. Display of permeate and pure water conductivity. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| 60 | 120 | 140 | | |
|------------------------------------|-------------------------------------|---|--|--|
| 60 l/h | 120 l/h | 140 l/h | | |
| 0.1 – 1.0 μS/cm / 10 – 1 MΩ x cm | | | | |
| Inline 0.2 µm-Filter / < 10 KbE/ml | | | | |
| yes | | | | |
| optional | | | | |
| optional | | | | |
| 0.3 kW | | | | |
| 230/50-60 V/Hz | | | | |
| | 14 bar | | | |
| 600×610×1670 | | | | |
| 230 kg | 240 kg | 240 kg | | |
| 15600060 | 15600120 | 15600140 | | |
| 15600061 | 15600121 | 15600141 | | |
| | 60 l/h 0.1 - Inline 230 kg 15600060 | 60 l/h 0.1 – 1.0 μS/cm / 10 – 1 MS Inline 0.2 μm-Filter / < 10 K yes optional optional 0.3 kW 230/50-60 V/Hz 14 bar 600 x 610 x 1670 230 kg 240 kg 15600060 15600120 | | |



RO medical

"All in one" unit in a cabinet with emergency supply for safe supply of analysers. All components (pre-treatment, reverse osmosis, storage tank, pressure booster, external polishers for residual desalination as well as 0.2 µm sterile filter) are pre-mounted ready to connect. Multilingual microprocessor controller with LCD display for controlling and monitoring pure water systems. Display of permeate and pure water conductivity. Fully automatic rinsing cycles, potential-free fault reporting relay. Module-based capability of increasing capacity at a later stage.

| RO medical | 100 | 180 | 300 | |
|------------------------------------|------------------|---------------------------|----------|--|
| Pure water performance at 10°C | 100 l/h | 180 l/h | 300 l/h | |
| Pure water conductivity/Resistance | 0.1 - | - 1.0 μS/cm / 10 – 1 MΩ | 2 x cm | |
| Particle content/Bacteria | Inlin | e 0.2 µm-Filter / < 10 Kl | bE/ml | |
| Emergency supply | yes | | | |
| UV-disinfection unit | yes | | | |
| Degassing unit | optional | | | |
| Power consumption | 1.2 kW | | | |
| Mains voltage | 230/50-60 V/Hz | | | |
| Max. operating pressure | 14 bar | | | |
| Dimensions mm (W x D x H) | 600 x 610 x 2130 | | | |
| Weight | 230 kg | 240 kg | 250 kg | |
| Order no. | 15600100 | 15600180 | 15600300 | |





stakpure accessories. For reverse osmosis systems.



Filter housings and filter cartridges

Pressure-resistant filter casings made of plastic with wall mount as well as appropriately sized filter cartridges for pre-filtration, particle and sterile filtration. Also as activated carbon filter combined with pre-filter.

| 10" | 10" | 10" | 20 | |
|----------|----------|--|---|--|
| without | 1 | 2 | with | |
| | PP | | | |
| | Buna | | | |
| | | | | |
| 52°C | | | | |
| R ¾" | | | | |
| | 130x311 | | | |
| 1.2 kg | 1.3 kg | 1.4 kg | 1.9 | |
| 16531000 | 16531100 | 16531200 | 1653 | |
| | without | without 1 PP Buna 8.5 bar 52 °C R ¾" 130 x 311 1.2 kg 1.3 kg | without 1 2 PP Buna 8.5 bar 52°C R¾" 130x311 1.2 kg 1.3 kg 1.4 kg | |

| 20" | 20" | 20" |
|----------|-----------|----------|
| without | 1 | 2 |
| | PP | |
| | Buna | |
| | 8.5 bar | |
| | 52°C | |
| | R ¾" | |
| | 130 x 568 | |
| 1.9 kg | 2.0 kg | 2.1 kg |
| 16532000 | 16532100 | 16532200 |

| 10" | 10" | 10" | 10" |
|----------|-----------------|-------------------------------------|--|
| 1 μm | 3 µm | 5 μm | Activated carbon +5 μm PF |
| | 10 |)" | |
| 750 l/h | 1000 l/h | 1500 l/h | 750 l/h |
| 16510100 | 16510700 | 16510500 | 16520100 |
| | 1 μm 750 l/h | 1 μm 3 μm 10 750 l/h 1000 l/h | 1 μm 3 μm 5 μm 10" 750 l/h 1000 l/h 1500 l/h |

| 20" | 20" | 20" | 20" |
|----------|----------|----------|---------------------------------|
| 1 μm | 3 µm | 5 μm | Activated carbon +5 μm PF |
| | 20 | O" | |
| 1500 l/h | 2000 l/h | 3000 l/h | 1500 l/h |
| 16510600 | 16510800 | 16511000 | 16520200 |

| stakpure particle and sterile filtrati | on 10" |
|--|----------|
| Pore size | 0.20 μm |
| Approx. flow rate at 0.15 bar Δp | 800 l/h |
| Order no. | 16555500 |

| 20" |
|----------|
| 0.20 μm |
| 1600 l/h |
| 16555800 |

System separator

Safety device that is compliant with EN 1717 and DIN 1988 – DVGW (German drinking water specifications). It prevents non-potable water from flowing into the public water supply should back-pressure, reverse flow or suction occur in the system.

| stakpure ST FK4 | ST 20 | ST 25 | ST 32 | ST 40 | ST 50 |
|-------------------------|----------|----------|----------|----------|-----------|
| Flow rate at 0.7 bar Δp | 2.0 m³/h | 3.0 m³/h | 4.0 m³/h | 6.0 m³/h | 10.0 m³/h |
| Connections | R ¾" | R 1" | R 1 1/4" | R 1 ½" | R 2" |
| Width mm | 208 | 247 | 272 | 315 | 345 |
| Depth mm | 140 | 168 | 180 | 220 | 230 |
| Height mm | 218 | 263 | 263 | 446 | 446 |
| Weight | 1.55 kg | 1.65 kg | 4.6 kg | 4.7 kg | 4.8 kg |
| Order no. | 25014000 | 25014100 | 25014200 | 25014300 | 25014400 |
| | | | - | | |



Backflushable fine filter + household water station

Filter combinations with backflushable fine filter and pressure reducer in one unit – DVGW-tested (German Association for Gas and Water). The fine filter prevents foreign particles from being washed in, such as rust particles, hemp remnants and grains of sand. The pressure reducer prevents pressure damage and lowers water consumption.

| stakpure Type RF + HS | RF 20 | RF 25 | RF 32 | RF 40 HS | RF 50 HS |
|-------------------------------|----------|----------|----------|----------|-----------|
| Flow rate at 0.2 – 0.6 bar Δp | 2.0 m³/h | 3.0 m³/h | 4.0 m³/h | 6.0 m³/h | 10.0 m³/h |
| Connections | R ¾" | R 1" | R 1 1/4" | R 1½" | R 2" |
| Width mm | 150 | 150 | 150 | 370 | 408 |
| Depth mm | 178 | 178 | 182 | 150 | 150 |
| Height mm | 415 | 415 | 415 | 590 | 590 |
| Filtration down to | | | 100 μm | | |
| Weight | 2.3 kg | 2.6 kg | 3.9 kg | 8.1 kg | 10.0 kg |
| Order no. | 16552900 | 16553000 | 16553100 | 16554000 | 16554100 |
| | | - | | | - |



stakpure accessories. For reverse osmosis systems.



Storage tanks 100 - 500 l

Storage tanks in grey PP for storing purified water from reverse osmosis systems. Closed and opaque design, round, including manhole for cleaning. The tank comes completely piped and is available with optional accessories. On request, also available with sloping tank bottom for completely discharging and effective disinfection.

| stakpure storage tank | Type RT 100 PP | Type RT 200 PP | Type RT 300 PP | Type RT 400 PP | Type RT 500 PP | |
|------------------------------------|----------------|----------------|----------------|----------------|----------------|--|
| Material | | | PP | | | |
| Volume | 100 l | 200 l | 300 l | 400 l | 500 l | |
| Colour | | grey | | | | |
| Overflow connection | | R ¾" | | | | |
| Outlet connection | | R 1 ¼ " | | | | |
| Inlet connection | | | R ¾" | | | |
| Dimensions mm (Ø x height) | 470×680 | 560×840 | 690×830 | 760 x 1050 | 780×1100 | |
| Weight | 12 kg/empty | 14 kg/empty | 16 kg/empty | 18 kg/empty | 20 kg/empty | |
| Order no. | 16500100 | 16500200 | 16500300 | 16500400 | 16500500 | |
| Order no. with sloping tank bottom | 16500101 | 16500201 | 16500301 | 16500401 | 16500501 | |
| | | | | | | |

Further tank sizes and custom-made solutions are available on request.

Storage tanks 1100 – 3000 l

Storage tanks in black PE for storing pure water from reverse osmosis systems. Closed rectangular design, including 400 mm manhole with lid and tension ring as well as galvanised steel bandages.



| stakpure storage tank | Type RT 1100 PE | Type RT 1500 PE | Type RT 2000 PE | Type RT 3000 PE |
|---------------------------|-------------------|-----------------|-----------------|-----------------|
| Material | | F | E | |
| Volume | 1100 l | 1500 l | 2000 | 3000 l |
| Colour | | bla | ack | |
| Overflow connection | R ¾" | | | |
| Outlet connection R 1 | | R 1 | 1/4" | |
| Inlet connection | | R : | 3/4" | |
| Dimensions mm (L x W x H) | 1400 x 720 x 1400 | 1560×720×1640 | 2070x720x1690 | 2230x995x1650 |
| Weight | 55 kg/empty | 70 kg/empty | 110 kg/empty | 165 kg/empty |
| Order no. | 16501100 | 16501500 | 16502000 | 16503000 |

Further tank sizes are available on request.



stakpure water softening systems. For softening water the reliable way.



stakpure stand-alone softeners

The System is either volume or time-controlled, for softening iron and manganese-free drinking water, in compliance with the German Drinking Water Ordinance, fully automatic with 5-stage central control valve and microprocessor with integrated blending valve and water meter. Pressurised tank made of non-corroding GFP, including top-quality cation exchanger, built into cabinet container with float valve.

| 32 | 60 | 100 |
|-------------|---|---|
| 3.2 m³ | 6 m³ | 10 m³ |
| 0.32 m³ | 0.6 m³ | 1.0 m³ |
| 25 kg | 75 kg | 75 kg |
| 320×500×670 | 320x500x1120 | 320×500×1120 |
| 16127200 | 16127400 | 16127800 |
| | 3.2 m ³ 0.32 m ³ 25 kg 320×500×670 | 3.2 m³ 6 m³ 0.32 m³ 0.6 m³ 25 kg 75 kg 320x500x670 320x500x1120 |

Sensor-controlled water softening systems are also available on request.



stakpure twin water softening system

A twin system, volume-controlled, for softening iron and manganese-free drinking water, in compliance with the German Drinking Water Ordinance, fully automatic with 5-stage central control valve with intelligent control electronics, made of red brass. 2 pressurised tanks made of non-corroding GFP, including top quality cation exchanger. 1 salt water tank with sieve bottom and float valve.



Image: Double softener with brine tank

| stakpure WEA Duo | 60 | 100 | 200 | 440 | 600 | 800 |
|--------------------|----------|-----------------------|-----------------------|-----------|-----------------------|-----------------------|
| Capacity at 10 °dH | 2 x 6 m³ | 2 x 10 m ³ | 2 x 20 m ³ | 2 x 44 m³ | 2 x 60 m ³ | 2 x 80 m ³ |
| Nominal flow rate | 0.6 m³/h | 1.0 m³/h | 2.0 m³/h | 4.4 m³/h | 6.0 m³/h | 8.0 m³/h |
| Salt charge | 75 kg | 75 kg | 150 kg | 200 kg | 200 kg | 300 kg |
| Connection | R 1" | R 1" | R 1" | R 1 ½" | R 1 ½" | R 2" |
| Height mm | 1200 | 1200 | 1650 | 2000 | 2000 | 2200 |
| Width mm | 1110 | 1200 | 1300 | 1800 | 1900 | 2700 |
| Depth mm | 500 | 500 | 600 | 800 | 800 | 950 |
| Order no. | 16128200 | 16128400 | 16128600 | 16120200 | 16120400 | 16130600 |

Sensor-controlled water softening systems are also available on request.

stakpure accessories for water softeners

The use of genuine products from the stakpure range of accessories for water softeners is recommended where higher standards are required on constant water quality.

| stakpure accesso | ries | Order no. |
|---------------------|--|-----------|
| Total hardness me | asuring instrument | 16100000 |
| Salt tablets for wa | ter softeners (1 sack = 25 kg) | 16200000 |
| 1" mounting bloc | with blending valve and test tap | 16115900 |
| 1 1/2" mounting | plock with blending valve and test tap | 16116000 |
| Blending device 1 | 1/4" | 25011200 |
| Blending device 2 | , | 25011300 |

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