

Demineralized water.



Reverse Osmosis Systems and Electrodeionization.

The economical water
purification for

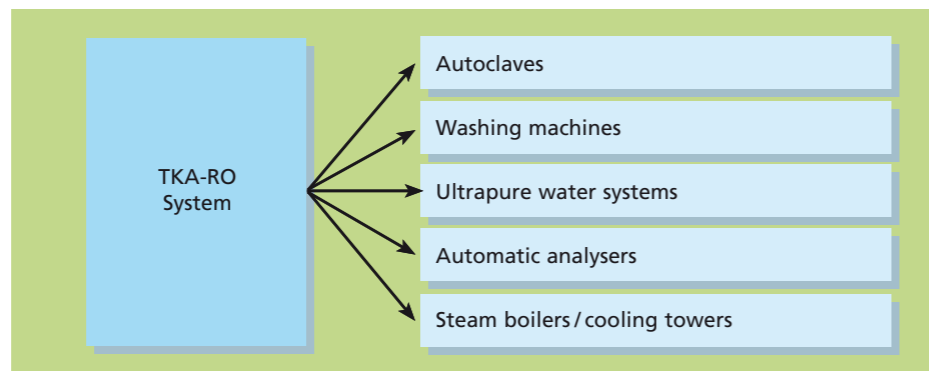
- Autoclaves
- Washing machines
- Automatic analysers
- Ultrapure water systems
- Steam boilers and cooling towers.

Thermo
S C I E N T I F I C



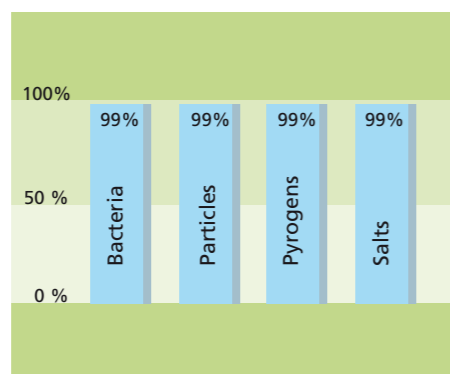
TKA Reverse Osmosis Systems.

Designed to produce laboratory grade high purity water from tap water and so operate as a central water supply for washing machines, autoclaves and ultrapure water systems, with the additional possibility of manual dispensing. They cover a performance range of from 40 l/h to 15,000 l/h.



Efficient performance, economical running!

- For supplying autoclaves, washing machines and automatic analysers when the tap water has a high salt content.
- When ion exchanger regeneration costs are high.
- When reliable handling of the regeneration process cannot be ensured.
- When > 150 l of high purity water are required daily.
- When removal of a high percentage of bacteria, particle and pyrogen is required.
- When a constant water quality is a necessity.
- As central purified water system in storeys or buildings



Dependable high purity water quality!

TKA RO membranes are not only extremely effective in removing salts, but also more than 99% effective in removing incoming bacteria, particles and pyrogens.

The TKA Quality rinse - completely automatic rinsing cycles with permeate-discard before and after use, as well as when not in use - ensures constant high purity water quality.

More water needed? No problem!

Should your high purity water requirement increase (e.g. because of the purchase of further washing machines), then your TKA system can be retrofitted to double its capacity without changing its dimensions!

Saves space and cuts costs

A central water treatment system replaces numerous individual systems and so not only saves space but also eliminates costs for ion exchanger regeneration etc.

Compact but with room for more.

Ready-to-connect systems are available for mounting on a wall or as systems completely contained in a dust-protective and noise reducing cabinet. Pretreatment measures to reduce loss in performance, e.g. due to suspended matter and precipitates of mineral salts or hardness formers, can easily be integrated inside the modular system cabinet.

Downstream treatment measures, e.g. sterile filtration, UV disinfection and tanks, can also be mostly fitted in, according to their size.

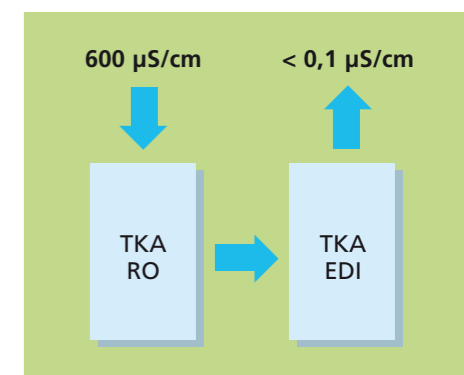
Technical benefits at a glance:

- At least 75% yield of high purity water
- > 99% reduction in salts, bacteria, particles and pyrogens
- Softstart for membrane protection
- Automatic rinsing cycles
- Low cost doubling of capacity on increased need for high purity water
- Siemens compatible PLC-control

High purity water for exceptional cases.

The quality of the high purity water supplied by reverse osmosis is not sufficient when a conductivity below $1 \mu\text{S}/\text{cm}$ is required. For such cases, TKA offers combinations of reverse osmosis with downstream electrodeionisation (EDI).

Results from routine usage show that such a combination with EDI technology allows product water of less than $0.1 \mu\text{S}/\text{cm}$ to be obtained from $600 \mu\text{S}/\text{cm}$ raw water. In addition, the continual self-regeneration of the high purity EDI mixed bed resins effects a very high microbiological purity of the ultrapure water produced.





TKA Reverse Osmosis ECONOMIC



TKA Reverse Osmosis DS, wall mounted



TKA-RO DWI 100-350



TKA-Reverse Osmosis COMBI

TKA Reverse Osmosis ECONOMIC

Ready-to-connect reverse osmosis system assembled on a PP plastic plate for wall-mounting. Complete with activated carbon/prefilter and hardness stabilizer, microprocessor control with digital conductivity measurement of feedwater and permeate, as well as individual limiting value monitoring of the permeate. Display of operating and fault messages, automatic quality rinse, potential-free contact and RS 232 connector as printer output.

TKA ECO	40	60	120
Permeate performance at 10 °C, l/h	40	60	120
Connected load (kW)	0.30	0.30	0.30
Supply voltage (V/Hz)	230/50	230/50	230/50
Operating pressure (bar) max.	14	14	14
Height (mm)	750	750	750
Width (mm)	850	850	850
Depth (mm)	360	360	360
Weight (kg)	23	25	30
Cat. no. plus -ECO (Example: 05.3040-ECO)	05.3040	05.3060	05.3120

TKA Reverse Osmosis DS, wall mounted

Ready-to-connect reverse osmosis system for the demineralization of softened or hardness-stabilized tap water. Compact, low noise and dust-proof cabinet construction with lockable door incorporating an observation window. Possibility of later increase in capacity. Microprocessor control with digital conductivity measurement of feedwater and permeate, as well as individual limiting value monitoring of the permeate. Display of operating and fault messages, automatic quality rinse, potential-free contact and RS 232 connector as printer output.

TKA DS	40	60	120
Permeate performance at 10 °C, l/h	40	60	120
Connected load (kW)	0.30	0.30	0.30
Supply voltage (V/Hz)	230/50	230/50	230/50
Operating pressure (bar) max.	14	14	14
Height (mm)	800	800	800
Width (mm)	600	600	600
Depth (mm)	400	400	400
Weight (kg)	50	52	55
Cat. no. plus -DS (Example: 05.3040-DS, digital control)	05.3040	05.3060	05.3120

TKA RO DWI 100-350, wall mounted

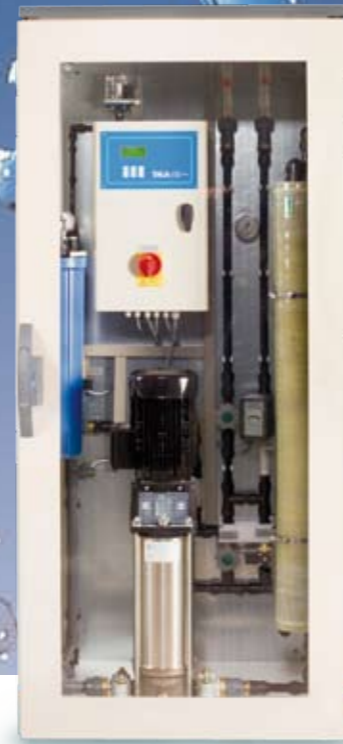
Ready-to-connect reverse osmosis system on a framework coated with synthetic-resin varnish (blue in colour). Possibility of later increase in capacity. Complete unit, including 10" pretreatment filter housing, volume flow meter for permeate/concentrate. Microprocessor control with digital conductivity measurement of feedwater and permeate, as well as individual limiting value monitoring of the permeate. Display of operating and fault messages, automatic quality rinse, potential-free contact and RS 232 connector as printer output.

TKA DWI	100	180	300	350
Permeate performance at 10 °C, l/h	100	180	300	350
Connected load (kW)	0.60	0.60	0.60	0.60
Supply voltage (V/Hz)	230/50	230/50	230/50	230/50
Operating pressure (bar) max.	14	14	14	14
Height (mm)	1300	1300	1300	1300
Width (mm)	600	600	600	600
Depth (mm)	430	430	430	430
Weight (kg)	70	75	90	100
Cat. no. plus -DWI (Example: 05.3100-DWI)	05.3100	05.3180	05.3300	05.3350

TKA Reverse Osmosis COMBI

Ready-to-connect reverse osmosis system for the demineralization of plain potable tap water. The system is complete with all treatment steps required for softening such water. Compact, low noise and dust-proof cabinet construction which has a lockable observation door and holds all components (pretreatment, softening unit, reverse osmosis system, storage tank with level control and pressure booster pump). Possibility of later increase in capacity. Microprocessor control with digital conductivity measurement of feedwater and permeate, as well as individual limiting value monitoring of the permeate. Display of operating and fault messages, automatic quality rinse, potential-free contact and RS 232 connector as printer output.

TKA COMBI	40	60	120
Permeate performance at 10 °C, l/h	40	60	120
Connected load (kW)	1.30	1.30	1.30
Supply voltage (V/Hz)	230/50	230/50	230/50
Operating pressure (bar) max.	14	14	14
Height (mm)	1800	1800	1800
Width (mm)	800	800	800
Depth (mm)	600	600	600
Weight (kg)	200	210	230
Cat. no. plus -COM (Example: 05.3020-COM)	05.3040	05.3060	05.3120



TKA Reverse osmosis cabinet system

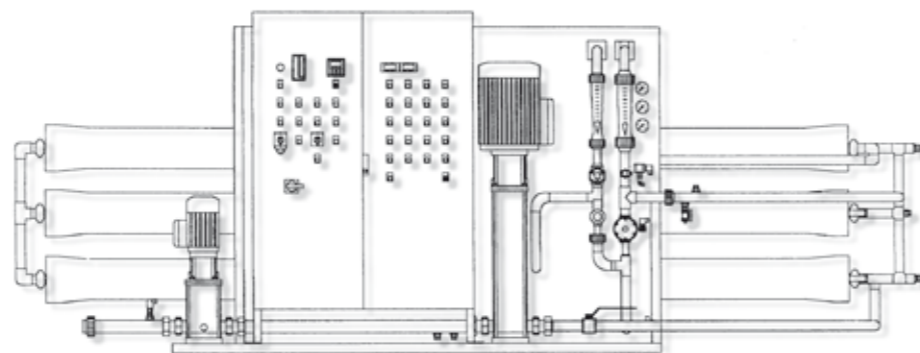
TKA Reverse osmosis Cabinet System

Ready-to-connect reverse osmosis system for the demineralization of softened or hardness-stabilized tap water. Compact, low noise and dust-proof cabinet construction with lockable door and observation window. Possibility of later increase in capacity. Display elements intragrated in the front. Microprocessor control with digital conductivity measurement of feedwater and permeate, as well as individual limiting value monitoring of the permeate. Display of operating and fault messages, automatic quality rinse, potential-free contact and RS 232 connector as printer output.

As version with PLC control also with digital, temperature compensated conductivity meter, potential-free contact for external alarm indication, fault and operation messages in the display, display of raw water conductivity, ion exchanger conductivity, serial interface, display of volume flows of permeate and concentrate as well as WCF factor, salt retention quota and operating hours.

Further performance stages and/or stainless steel tubular frame versions possible on request.

TKA DS	300	600	900	1100
Permeate performance at 10 °C, l/h	300	600	900	1100
Connected load (kW)	1.6	1.6	1.6	1.6
Supply voltage (V/Hz)	400/50	400/50	400/50	400/50
Operating pressure (bar) max.	14	14	14	14
Height (mm)	1800	1800	1800	1800
Width (mm)	800	800	800	1000
Depth (mm)	600	600	600	600
Weight (kg)	220	260	280	300
Cat. no. plus -DS (Example: 05.3300-DS)	05.3300	05.3600	05.3900	05.31100



TKA Reverse osmosis Industrial Solutions

Ready-to-connect reverse osmosis system for the demineralization of softened or hardness-stabilized tap water. Compact, stainless steel tubular frame construction with the possibility of later increase in capacity. Reverse osmosis consisting of a high pressure pump (also a precompressor where necessary), reverse osmosis modules, complete pressure regulation unit, digital or analogue volume flow meter, solenoid valves and pressure gauge. Display elements are integrated in the front of the switchgear cabinet. Microprocessor control with digital conductivity measurement of feedwater and permeate, as well as individual limiting value monitoring of the permeate. Display of operating and fault messages. Automatic quality rinse. Potential-free contact and RS 232 connector as printer output.

All versions are also available with double-stage reverse osmosis and PLC control.



TKA Reverse osmosis, performance 4 m³/h

Type TKA DSR	2000	3000	5000	10000	12000
Permeate performance at 10 °C, l/h	2,000	3,000	5,000	10,000	12,000
Connected load (kW)	4.4	5	5.5-7	13-15	15-18
Supply voltage (V/Hz)	400/50	400/50	400/50	400/50	400/50
Operating pressure (bar) max.	14	14	14	14	14
Height (mm)	1800	1800	1800	1800	1800
Width (mm)	2400	3400	3400	4600	4600
Depth (mm)	800	800	800	900	900
Cat. no. plus -DSR (Example: 05.32000DSR)	05.32000	05.33000	05.35000	05.310000	05.312000



Double-stage reverse osmosis system, 5 m³/h performance



TKA EDI Electrodeionization

The process that is effective in fulfilling highest demands

Electrodeionization, EDI in short, combines two practice-proven procedures for purified water production; electrodialysis and ion exchange (IEX). In

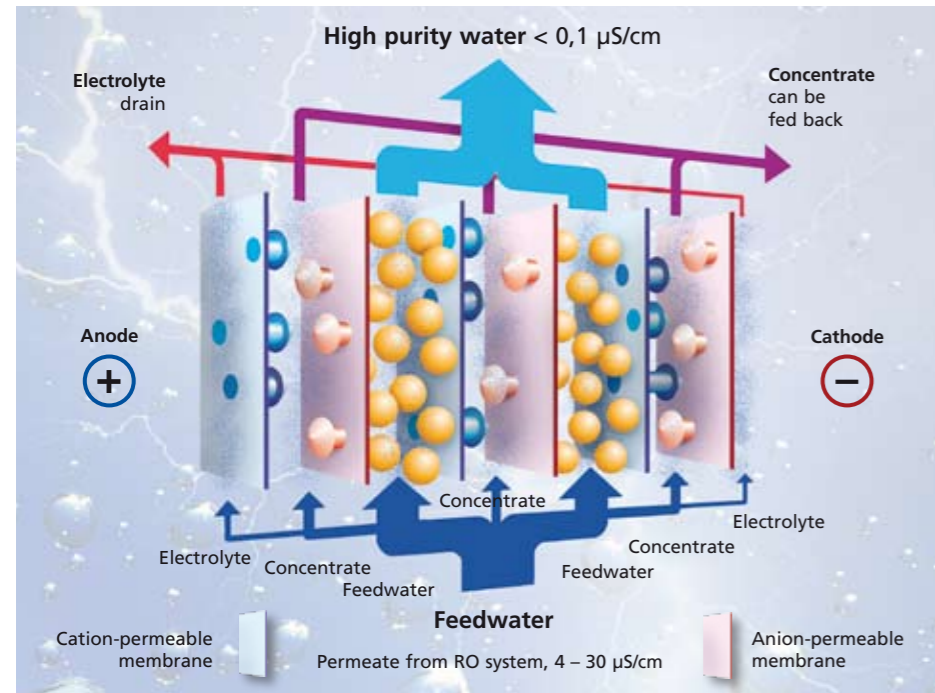
contrast to conventional IEX, in which the resins must be regenerated with chemicals, an electrical current effects a continual resin regeneration in EDI.

Structure

Several layers of ion selective membranes are positioned between an anode and a cathode. The chambers in between these layers alternately either contain mixed bed ion exchanger or are used as concentrate chambers.

Operating principle

On applying an electrical voltage, water (H_2O) within the chambers is split into H^+ and OH^- . Cations, H^+ and Na^+ , can migrate through a cation-permeable membrane and, similarly, anions through an anion-permeable membrane. The ions migrate in the direction of the applied voltage, i.e. anions to the positive pole (anode), cations to the negative pole (cathode). Water ions that migrate through an ion exchange chamber displace salt ions from the ion exchange resin and so continually regenerate it. Salt ions migrate through the appropriate ion-selective membrane and into a concentrate chamber, from which they are rinsed away by water. As all concentrate chambers are rinsed through one after the other, excess H^+ and OH^- ions reform H_2O .



Operating principle of electrodeionization with continual resin regeneration

MaxiTower, performance 80 – 300 l/h

Reverse osmosis system + EDI, performance 600 l/h

TKA EDI modules combined with reverse osmosis systems

TKA MaxiTower 80 – 300 l/h. Reverse osmosis with integrated EDI module.

Compact, low noise and dust-proof cabinet construction with front door which holds all components. Possibility of later increase in capacity. Microprocessor control for fully automatic control and monitoring of the system. Potential-free contact, limiting value setting, quality rinse.

TKA MaxiTower	80	150	230	300
Pure water performance at 10 °C, l/h	80	150	230	300
Pure water quality, $\mu S/cm$	0.1–1.0	0.1–1.0	0.1–1.0	0.1–1.0
Operating pressure (bar) max.	14	14	14	14
Connected load (kW)	0.8	1.1	1.1	1.1
Supply voltage (V/Hz)	230/50	230/50	230/50	230/50
Height (mm)	1380	1380	1380	1380
Width (mm)	560	560	560	560
Depth (mm)	660	660	660	660
Weight (kg)	130	140	150	160
Cat. no. plus -EDI (Example: 07.6080-EDI)	07.6080	07.6150	07.6230	07.6300

TKA RO EDI 500 – 1100 l/h. Reverse osmosis with integrated EDI module.

Compact system with a stainless steel frame that holds all components. Possibility of later increase in capacity. Microprocessor control for fully automatic control and monitoring of the system. Potential-free contact, limiting value setting, quality rinse. Further performance stages available on request.

TKA RO EDI	500	800	1100
Pure water performance at 10 °C, l/h	500	800	1100
Pure water quality, $\mu S/cm$	0.1 – 1.0	0.1 – 1.0	0.1 – 1.0
Operating pressure (bar) max.	14	14	14
Connected load (kW)	2.3	2.3	3.5
Supply voltage (V/Hz)	400/50	400/50	400/50
Height (mm)	1800	1800	1800
Width (mm)	1400	1400	1400
Depth (mm)	600	600	600
Weight (kg)	350	360	390
Cat. no. plus -EDI (Example: 07.3600-EDI)	07.3600	07.3900	07.31200



Accessories for TKA reverse osmosis systems

10" Filter housing with wall mounting and 2 pressure gauges

20" Filter housing with wall mounting and 2 pressure gauges

Pipe divider

Backflushable fine filter

Filter cartridges and filter housings

Pressure-resistant plastic filter housings for holding high quality filter cartridges. Suitable filter cartridges for

prefiltration, particle filtration and sterile filtration. Also as activated carbon filter combined with prefilter.

TKA Filter housing	10"	10"	10"	20"	20"	20"
Pressure gauges	none	1	2	none	1	2
Housing material	PP	PP	PP	PP	PP	PP
Sealing	Buna	Buna	Buna	Buna	Buna	Buna
Operating pressure (bar) max.	8.5	8.5	8.5	8.5	8.5	8.5
Temperature, max., °C	52	52	52	52	52	52
Connector, both sides	R 3/4"	R 3/4"	R 3/4"	R 3/4"	R 3/4"	R 3/4"
Length in mm	311	311	311	568	568	568
Diameter in mm	130	130	130	130	130	130
Weight in kg	1.3	1.4	1.5	2.0	2.1	2.2
Cat. no.	06.5310	06.5311	06.5312	06.5320	06.5321	06.5322

TKA Prefilter cartridges	10"	10"	10"	10"	20"	20"	20"	20"
Pore size in µm	1	3	5	Act. carbon + 5 µm PF	1	3	5	Act. carbon + 5 µm PF
For cartridge types	10"	10"	10"	10"	20"	20"	20"	20"
Flow rate, l/h at $\Delta p = 0.2$ bar	1000	1300	1550	750	1700	2400	3200	1200
Cat. no.	06.5101	06.5107	06.5105	06.5201	06.5106	06.5108	06.5110	06.5202

TKA Particle and sterile filtration	10"	10"	20"	20"
Pore size in µm	0.45	0.20	0.45	0.20
For cartridge types	10"	10"	20"	20"
Flow rate, l/h at $\Delta p = 0.2$ bar	1400	500	2800	1000
Cat. no.	06.5111	06.5555	06.5112	06.5558

Pipe divider

Reliable safety fitting that protects drinking water from a backflow of treated water.

Mount type 1, DVGW certified. DIN EN 1717.

Pipe divider	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Flow rate (m ³ /h) at 0.3 bar	2.5	3.3	4.5	7	10	15
Operating pressure (bar) max.	16	16	16	16	16	16
Response pressure (bar)	0.5	0.5	0.5	0.5	0.5	0.5
Connectors	R 1/2"	R 3/4"	R 1"	R 1 1/4"	R 1 1/2"	R 2"
Width (mm)	151	153	159	216	228	241
Depth (mm)	105	107	105	150	160	165
Height (mm)	105	122	122	162	161	154
Weight (kg)	1.4	1.6	1.8	4.3	4.9	5.3
Cat. no.	15.0079	15.0080	15.0081	15.0082	15.0083	15.0084

Backflushable fine filter

TKA backflushable fine filters protect installations and systems from undissolved substances in water. The brass housing has screw joints at each end. The 100 µm fine filter is made of corrosion-resistant steel (DIN/DVGW certified). Supplied complete with a ring spanner, 63 mm pressure gauge (display range 0 – 16 bar) with marking pointer and a drain valve for switching to backflushing. Other sizes on request.

Backflushable fine filter	3/4"	1"	1 1/4"
Flow rate (m ³ /h) at 0.3 bar	3.0	4.0	7
Pressure drop (bar)	0.2	0.2	0.2
Operating pressure (bar) max.	16	16	16
Filtration cut, µm	100	100	100
Width (mm)	162	162	162
Depth (mm)	170	170	170
Height (mm)	395	395	395
Weight (kg)	3	3.5	4
Cat. no.	06.5529	06.5540	06.5541



Storage tank 100 – 500 l

TKA Storage tanks with a capacity of 100 – 500 litres. Made of polypropylene, opaque to light, closed design, cylindrical, completely cased, including a 400 mm inspection opening for cleaning. The photo shows the 500 l tank with optional accessories; sterile vent filter, sterile overflow and level control. A CO₂ adsorber is available as optional accessory.

Storage tank 1100 – 2000 l

TKA Storage tanks with a capacity of 1100 – 2000 litres for reverse osmosis systems. Made of black PE, closed rectangular design, 400 mm inspection opening with lid and locking ring, upper inlet spout, 2 steel band systems that completely encompass the tank, galvanized. The polyethylene (PE) material used is "physiologically safe" according to recommendation III/B of the German Public Health Office in the sense of German Food Law §2, paragraph 1. Also available completely piped and with optional accessories.

Storage tank 100 – 500 l

Storage tank 1100 – 2000 l

Storage tank	Type 100	Type 200	Type 300	Type 400	Type 500
Material	PP	PP	PP	PP	PP
Capacity (l)	100	200	300	400	500
Colour	gray	gray	gray	gray	gray
Overflow connector	R 3/4"	R 3/4"	R 3/4"	R 3/4"	R 3/4"
Outlet connector	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"	R 1 1/4"
Inlet connector	R 3/4"	R 3/4"	R 3/4"	R 3/4"	R 3/4"
Diameter (mm)	470	560	690	760	780
Height (mm)	680	840	830	1050	1100
Weight (kg, empty)	12	14	16	18	20
Cat. no.	06.5100	06.5200	06.5300	06.5400	06.5500

Storage tank	Type 1100	Type 1500	Type 2000
Material	PE	PE	PE
Capacity (l)	1100	1500	2000
Colour	black	black	black
Overflow connector	R 3/4"	R 3/4"	R 3/4"
Outlet connector	R 1 1/4"	R 1 1/4"	R 1 1/4"
Inlet connector	R 3/4"	R 3/4"	R 3/4"
Length (mm)	1400	2000	2010
Width (mm)	720	720	720
Height (mm)	1380	1380	1660
Weight (kg, empty)	55	76	83
Cat. no.	06.51100-sw	06.51500-sw	06.52000-sw

Activated carbon filter

Activated carbon filter for dechlorination and removal of organic substances. The polyethylene containers have a glass-fibre reinforced epoxy resin wrapping, an ABS Plastic control valve, electronic control unit, freely programmable backwash intervals and backwash times. The filter filling consists of quartz gravel supporting material and activated carbon filter material.

TKA Mix Multi

Mix Multi is a granular filter medium that simultaneously removes hardness, iron, manganese and organic matter from water. Water purification occurs due to combined adsorption and ion exchange mechanisms. Regeneration of Mix Multi is made as by a regular softening unit using a standard saturated (8 – 10 %) sodium chloride solution.



Mix Multi mini

Mix Multi XL

Activated carbon filter

Activated carbon filter	AC 40	AC 70	AC 112	AC 300
Flow rate, m ³ /h, max	1.0	1.7	2.6	6.0
Filter diameter (mm)	257	333	403	616
Operating pressure, min. (bar)	2.50	2.50	2.50	2.50
Operating pressure, max. (bar)	6.0	6.0	6.0	6.0
Ambient temperature (°C)	40	40	40	40
Filter connector	1"	1"	1"	1 1/2"
Supply voltage (V/Hz)	115/60 230/50	115/60 230/50	115/60 230/50	115/60 230/50
Quartz gravel support material 1.0 – 2.0 mm (kg)	12	25	23	100
Activated carbon, 0.5 – 2.5 mm, l	40	50	112	300
Height (mm)	1650	1650	2100	2500
Width (mm)	600	650	800	850
Depth (mm)	300	350	600	850
Cat. no.	06.6040	06.6070	06.6112	06.6300

Technical data	Mix Multi mini	Mix Multi XL
Max. flow rate:	0.5 m ³ /h	1.5 m ³ /h
Filter volume:	5 liter	25 liter
Capacity, m ³ at 10 °dH	2	8
Salt storage:	20 kg	75 kg
Operating pressure, min./max.:	1.4 – 6 bar	1.4 – 6 bar
Water temperature max.:	40 °C	40 °C
Controller:	time controlled	time controlled
Dimensions: W x D x H, mm	230 x 400 x 520	350 x 570 x 1150
Cat. No.	06.1250	06.1252



TKA Water softening systems. For reliable water softening.

Water softening is achieved by utilization of the well known ion exchange principle. Natural science experiments brought the knowledge that ion exchange can occur between an ion in solution and an insoluble solid substance. Procedures based on this principle have already been in use for more than 50 years in domestic technology, in trade and in industry. Cation exchangers are hereby used. They exchange hardness formers in water (calcium and magnesium ions) for sodium

ions. The systems are filled with a synthetic resin that has active exchange groups. Common salt is used to regenerate the resin.

TKA Single softening systems

TKA Single softening systems are specially designed for discontinuous use. Regeneration is automatically initiated when the exchange capacity of the ion exchanger is exhausted, whereby the time for starting regeneration (e.g.

always at 1 a.m.) is set according to the required amount.

TKA Twin softening systems

TKA twin softening systems come to use should a continuous supply of softened water be needed. The two ion exchangers ensure that softened water is always available. Regeneration is carried out immediately when one of the cartridges in use is exhausted.

Fully automatic sensor control

The size of the softening system and type of regeneration are determined by the local water quality, the daily requirements and the application that the softened water is to be used for. TKA therefore offers various softening systems and specific regeneration controls.

Time control

Regeneration of the ion exchanger is carried out at fixed set times, e.g. every 72 hours at 2 am.

Quantity control

The regeneration is carried out after production of a certain quantity of water, which can be individually set.

Sensor control

Regeneration is triggered shortly prior to a hardness breakthrough (particularly economical!). In contrast to customary controls, a measurement and control procedure that continually monitors the water hardness is hereby used.

Sensorcontroller

The Sensorcontroller SE is a control device for the monitoring and quality-controlled operation of softening systems. In contrast to customary controls, such as water volume controls, this device monitors the quantity that is of actual interest, the water hardness.



TKA single softener system Cabinet

Single softener system with time or quantity sensor control, for the production of softened water acc. to the neutralization process. All water connections are R 1".

Standard version: Type WAE with electronic time control. Version WATS with sensor control on request.

Cabinet single softener

Twin softening system

CABINETT WAE-ES (electronic time control)	40	60	80	100
Capacity, m ³ at 10 °dH	4	6	8	10
Flow rate, m ³ /h, max.	1.0	2.0	2.0	2.5
Salt stock (kg)	20	75	75	75
Height (mm)	665	1150	1150	1150
Width (mm)	320	310	310	310
Depth (mm)	450	450	450	450
Cat. no.	06.1272	06.1274	06.1276	06.1278

TKA Twin softening systems

R 1" Twin softening systems with fully automatic alternating control of mechanical water meters with automatic switch-over. Red-brass automatic

valve with 5-stage regeneration process. All water connections standardly either R 1" or R 1 1/2" (R 2" also on request).

All 230 V/50 Hz. Electronic volume control.

TKA WMS-DF-ES (electronic volume control)	60	100	200	300	300	400	600	800
Capacity, m ³ at 10 °dH	2 x 6	2 x 10	2 x 20	2 x 30	2 x 30	2 x 40	2 x 60	2 x 80
Flow rate, m ³ /h, max.	1.5	2.0	2.5	3.0	4.0	4.0	5.5	6.5
Salt stock (kg)	55	105	175	175	175	210	200	250
Connectors	R 1"	R 1"	R 1"	R 1"	R1 1/2"	R1 1/2"	R1 1/2"	R1 1/2"
Height (mm)	1080	1320	1570	1570	1890	1850	1850	1905
Width (mm)	1140	1190	1470	1470	1800	1800	1800	2460
Depth (mm)	480	500	560	560	650	650	650	900
Cat. no.	06.1282	06.1284	06.1286	06.1288	06.1200	06.1202	06.1204	06.1206



TKA Twin softening systems with hard water sensor

R 1" Twin softening systems with hard water sensor that emits signals, e.g. to switch off the user during regeneration. With fault message and switch-off of the user when there is a lack of

salt or a defect in the system. Potential-free contact for connection to a central fault collector. All water connections are R 1". All 230 V/50 Hz.

TKA WAT-DK1"	50	100	150	200	250	300
Capacity, m ³ at 10 °dH	2 x 5	2 x 10	2 x 15	2 x 20	2 x 25	2 x 30
Flow rate, m ³ /h, max.	2.0	2.5	2.8	3.5	4.0	4.0
Salt stock (kg)	55	105	120	175	175	175
Height (mm)	1300	2535	1610	1630	1790	1790
Width (mm)	1050	1185	1265	1370	1400	1590
Depth (mm)	380	490	520	580	580	770
Cat. no.	06.1350	06.1352	06.1354	06.1356	06.1357	06.1358

TKA Sensor controller for water softening monitoring

The TKA Sensor controller SE is a control unit for the monitoring and quality-controlled operation of water softening systems.

TKA Sensor controller SE	1"	1 1/2"	2"
Performance in litres	100 – 3000	3000 – 10000	5000 – 15000
Cat. no.	06.3999	06.3997	06.3998

R 1" Twin softening system with hard water sensor

R 2" Twin softening system with hard water sensor

Top mounted with inlet and outlet pipe bridge fitted with automatic switchover and electronic sensor control. Fault-triggered switch-off with hard water as well as signal output

and potential-free contact for fault messages. Connector for solenoid or membrane valve. Glass-fibre pressure container. Red brass automatic valve with 5-stage regeneration procedure.

Water connections: R 2". All 230 V/50 Hz.

Also available as electronic, volume controlled version (TKA WMS-DF2").

TKA WAT-DF2"	500	800	1000	1200	1500	2000	2500
Capacity, m ³ at 10 °dH	2 x 50	2 x 80	2 x 100	2 x 120	2 x 150	2 x 200	2 x 250
Flow rate, m ³ /h, max.	11	12	12	14	14	18	20
Salt stock (kg)	180	300	300	400	600	500	450
Height (mm)	1970	1905	2150	2150	2470	2345	2345
Width (mm)	2190	2460	2540	2540	2985	3140	3140
Depth (mm)	770	900	900	900	1200	1200	1200
Cat. no.	06.2607	06.2608	06.2609	06.2617	06.2618	06.2619	06.2620

R 2" Twin softening system with hard water sensor

Accessories for water softeners

These original TKA accessories guarantee constant water quality when used with any TKA water softener. They are particularly suitable for fulfilling the highest trade and industry demands.

Total hardness measurement with titration solution	cat. no.	06.1000
Bacteria guard for water softeners	cat. no.	06.2001
Salt tablets for water softeners (1 sack = 25 kg)	cat. no.	06.2000
Flexible connecting hose 1", with stainless steel jacketing, length 1 metre (other lengths and connections on request)	cat. no.	06.1159
Mounting block 1" with blending valve	cat. no.	06.1160
Blending valve OVP for 1" softening systems, for permanent hardness adjustment	cat. no.	15.0111
Blending valve OVP for 1 1/2" softening systems, for permanent hardness adjustment	cat. no.	15.0110



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Thermo

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