Water Deionizers

Mixed-bed Ion Exchangers

Ion exchangers for depressurised operation

behropur® water deionizer for depressurised operation

Thick-walled, robust and practical mixed-bed ion exchangers made of blue polyethylene with free output to the storage tank. Ideal also for subsequent demineralization of reverse osmosis system or for an ambitious aquarist.

- Can be connected directly to the water supply and is immediately ready for use
- Automatic deaeration due to the water being supplied from the bottom
- Minimum risk of microbial contamination due to slit nozzles in the raw water supply
- Nozzles are sturdy and easy to clean, no risk of damage due to mechanical stress
- Extremely secure and leakproof sealing of the nozzles due to the manufacturer's own welding process
- Conductivity meter is mounted directly on top
- B5 and B10 can also be used as wall units (mounting brackets included in the scope of supply)
- Also available with shutoff when the limit value is reached and level control
- Conductance is controlled directly on the unit (installed measuring equipment) or with remote location meter

Specifications

	B5	B10
Exchange capacity* at 10°dH	500 l	1.000 l
Flow max. l/h	50	100
Ø in cm	16	21
Height in cm	53	63

Model	Article description	Art.-No.
B5	Water deionizer, complete with conductivity meter	93 48 20005
B10	Water deionizer, complete with conductivity meter	93 48 20010
B5Z	Spare cartridge for water deionizer	93 48 20050
B10Z	Spare cartridge for water deionizer	93 48 20110
B5A	Water deionizer, conductivity meter with limit switch and electrovalve	93 48 50005
B10A	Water deionizer, conductivity meter with limit switch and electrovalve	93 48 50010

* Limit value 20 µS/cm

Pressure resistant ion exchangers

behropur® water deionizer made of nylon

Convenient and safe mixed-bed ion exchanger for small to medium-sized quantities of high purity water. To supply laboratory glassware washers, for general laboratory maintenance and for small industrial consumers. For subsequent demineralization of reverse osmosis systems.

- Optimum exploitation of the ion exchanger capacity due to absolute uniform water distribution in the unit
- Can be connected to the raw water network directly and without a pressure reducer
- Resistant to alternating pressure
- Conductance is controlled directly on the unit (installed measuring equipment) or with remote location meter
- Also available with shutoff when the limited value is reached and limit control
- Pressure resistant to 8 bar

Specifications

	B10dN	B22dN	B45dN
Exchange capacity* at 10°dH	1.200 l	2.400 l	5.500 l
Flow max. l/h	300	500	800
Ø in cm	21	21	26
Height incl. LF in cm	68	112	125
Height of cartridge alone in cm	55	98	110

Model	Article description	Art.-No.
B10dN	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, complete with conductivity meter	93 48 30011
B10dNZ	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, spare cartridge	93 48 30111
B10dNA	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, conductivity meter with limit switch and electrovalve	93 48 50112
B22dN	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, complete with conductivity meter	93 48 30023
B22dNZ	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, spare cartridge	93 48 30123
B22dNA	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, conductivity meter with limit switch and electrovalve	93 48 50123
B45dN	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, complete with conductivity meter	93 48 30046
B45dNZ	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, spare cartridge	93 48 30146
B45dNA	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, conductivity meter with limit switch and electrovalve	93 48 50146

B22dN

* Limit value 20 µS/cm

Mixed-bed ion exchanger made of stainless steel – pressure resistant to 10 bar

Standard cartridge made of V4A stainless steel for general purpose application: To supply laboratory glassware washers, for general laboratory maintenance and for small industrial consumers. For subsequent demineralization of reverse osmosis systems.

- Optimum exploitation of the ion exchanger capacity due to absolute uniform water distribution in the unit
- Flow rates up to 700 l/h
- The unique behropur® jet nozzle system distributes the raw water over the entire resin bed. This ensures an optimum exchange capacity and quality
- Can be connected to the raw water network directly and without a pressure reducer
- Resistant to alternating pressure
- Hard rubber collars vulcanized to the base and top of the unit offer effective protection
- Convenient transport thanks to the handles embedded into the top part of the unit
- Conductance is controlled directly on the unit (installed measuring equipment) or with remote location meter
- Also available with shutoff when the limited value is reached and limit control

Specifications

	E 28	E 40d
Exchange capacity* at 10°dH	2.800 l	4.000 l
Flow max. l/h	500	700
Ø in cm	24	24
Height incl. LF in cm	74	84
Height of cartridge alone in cm	60	70

Model	Article description	Art. Nr.
E28d	Pressure resistant mixed-bed unit made of V 4A special alloy, permanent pressure resistant to 10 bar, complete with conductivity meter	93 48 40028
E40d	Pressure resistant mixed-bed unit made of V 4A special alloy, permanent pressure resistant to 10 bar, complete with conductivity meter	93 48 40040
E28dZ	Pressure resistant mixed-bed unit made of V 4A special alloy, permanent pressure resistant to 10 bar, spare cartridge	93 48 40128
E40dZ	Pressure resistant mixed-bed unit made of V 4A special alloy, permanent pressure resistant to 10 bar, spare cartridge	93 48 40140
E28dA	Pressure resistant mixed-bed unit made of V 4A special alloy, permanent pressure resistant to 10 bar, conductivity meter with limit switch and electrovalve	93 48 50128
E40dA	Pressure resistant mixed-bed unit made of nylon, permanent pressure resistant to 8 bar, conductivity meter with limit switch and electrovalve	93 48 50140

* Limit value 20 µS/cm

E28d

Particularly robust: Polyurethane-coated stainless steel cartridges

Mixed-bed ion exchanger made of V4A stainless steel with CFC-free polyurethane coating. Top choice when using in unfavourable environmental conditions. The cartridges are impact-resistant, better protected against dents and not exposed to surface rust.

- Optimum exploitation of the ion exchange capacity due to absolute uniform water distribution in the unit
- Flow rate up to 500 l/h
- Can be connected to the raw water network directly and without a pressure reducer
- Resistant to alternating pressure
- Hard rubber collars vulcanized to the base and top of the unit offer effective protection
- Convenient transport thanks to the handles embedded into the top part of the unit
- Conductance is controlled directly on the unit (installed measuring equipment) or with remote location meter
- Also available with shutoff when the limited value is reached and limit control

Specifications

	E 10dK	E 28dK	E 60dK
Exchange capacity* at 10°dH	1.200 l	2.800 l	6.000 l
Flow max. l/h	300	500	500
Ø in cm	24	24	37
Height incl. LF in cm	48	71	76
Height of cartridge alone in cm	32	56	61

Model	Article description	Art. Nr.
E10dK	Pressure-resistant mixed-bed unit made of plastic-coated V 4A special alloy, permanent pressure resistant to 10 bar, complete with conductivity meter	93 48 40010
E28dKZ	Pressure-resistant mixed-bed unit made of plastic-coated V 4A special alloy, permanent pressure resistant to 10 bar, complete with conductivity meter	93 48 40280
E60dK	Pressure-resistant mixed-bed unit made of plastic-coated V 4A special alloy, permanent pressure resistant to 10 bar, complete with conductivity meter	93 48 40060
E10dKZ	Pressure-resistant mixed-bed unit made of plastic-coated V 4A special alloy, permanent pressure resistant to 10 bar, spare cartridge	93 48 40110
E29dKZ	Pressure-resistant mixed-bed unit made of plastic-coated V 4A special alloy, permanent pressure resistant to 10 bar, spare cartridge	93 48 40228
E60dKZ	Pressure-resistant mixed-bed unit made of plastic-coated V 4A special alloy, permanent pressure resistant to 10 bar, spare cartridge	93 48 40160
E10dKA	Pressure-resistant mixed bed unit, permanent pressure resistant to 10 bar, conductivity meter with limit switch and electrovalve	93 48 50111
E28dKA	Pressure-resistant mixed bed unit, permanent pressure resistant to 10 bar, conductivity meter with limit switch and electrovalve	93 48 50280
E60dKA	Pressure-resistant mixed bed unit, permanent pressure resistant to 10 bar, conductivity meter with limit switch and electrovalve	93 48 50160

* Limit value 20 µS/cm

E28dK

Safe and User Friendly

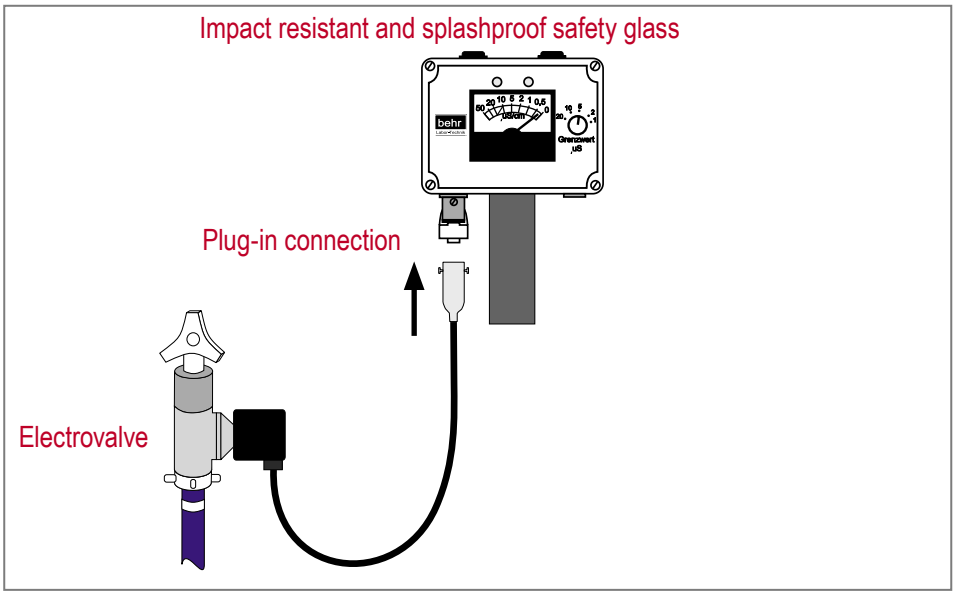
behropur® Conductivity Meter with Automatic Shutoff

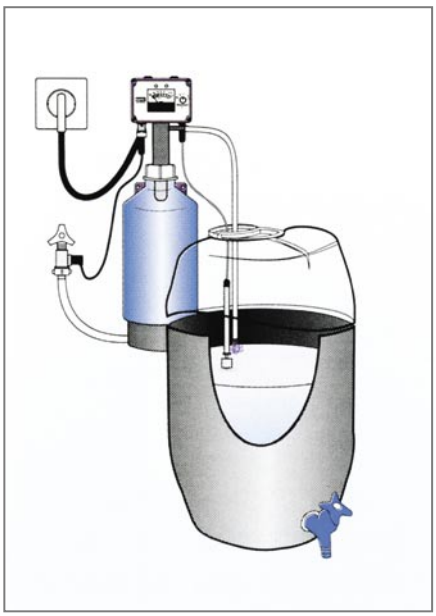
For your safety:

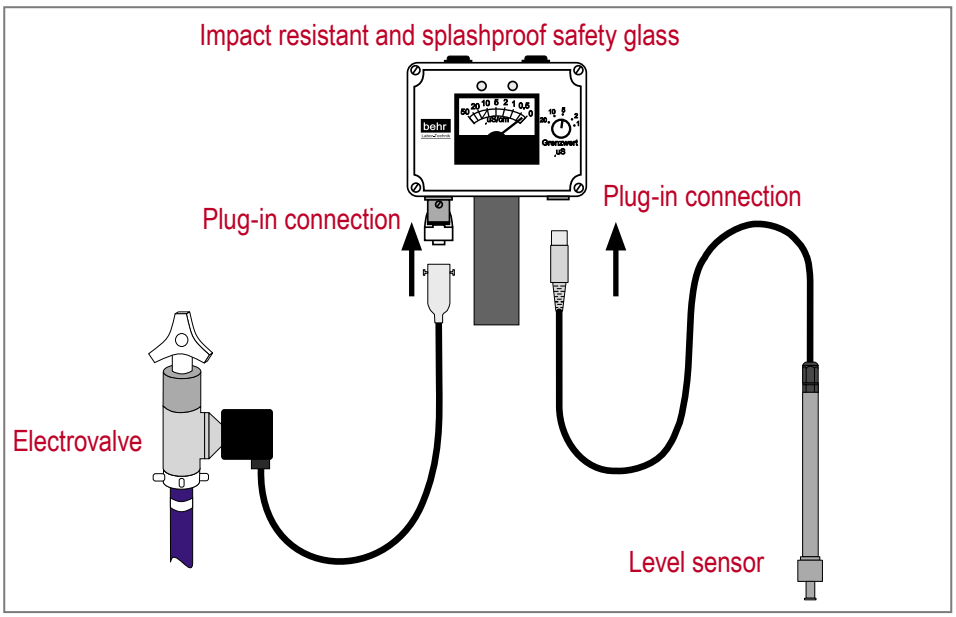
- Indicating instrument and control behind impact resistant and splashproof safety glass
- External operating controls under watertight membrane
- Connections for electrovalve and level sensor secured against unintentional release
- Connections for electrovalve and level sensor protected to a large extent against humidity

User friendly due to

- Pluggable connections for electrovalve and level sensor – instead of the commonly used locking screws
- Colour-coded analog display, which allows a direct orientation of the conductance value. The standard digital number displays require a great deal more attentiveness from the user.
- Setting of the limit value by means of simple control dials







Optimum Water Quality

With behropur® mixed-bed Ion Exchanger

FG 130

behropur® mixed-bed ion exchangers provide deionised water in acc. with the following specifications:

- Quality class 3 in terms of the classification for DIN ISO 3696:1987 – Water for analytical purposes
- Pharmaceutical specification in acc. with VDI guidelines (VDI – Association of German Engineers) VDI 2083 – cleanroom technology, quality, production and distribution of ultra pure water
- European and German Pharmacopoeia (DAB)
- behropur® mixed-bed ion exchangers have resins of certified quality

The optimum exploitation of the ion exchanger capacity due to absolute uniform water distribution in the unit guarantees water with a very low conductance over the full capacity of the water deionizer.

Particle-free water

Do you need water which is free of particles?

FG 130 plus AF 130

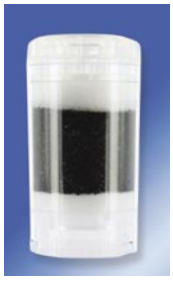
The behropur® FG 130 filter guarantees this with the corresponding filter insert. Added to the ion exchanger, it completely retains even the finest particles and protects your high-quality equipment. Due to the transparent casing of the FG 130, you can inform yourself of the state of the filter insert at any time and at a glance.

Depending on the requirements, you can use a universal filter (5µ) or a carbon filter (20µ). Downstream filters may only be used on pressure-resistant behropur® ion exchangers. Pressure-free exchangers are destroyed by the counter pressure. It could also result subsequently in expensive damage.

Filter for behropur® mixed-bed ion exchanger

Model	Article description	Art.-No.
FG 130	behropur® filter housing for filter inserts with a length of 5“. Transparent casing made of PP. Connections 3/4“, maximum operating pressure 8 bar, max. temp. 50°C	93 48 60260
FE 130	behropur® filter insert, PP, 5µ, length 5“, max. pressure 6 bar, max. temp. 80 °C	93 48 60261
AF 130	behropur® filter insert, carbon, 20µ, length 5“, max. pressure 6 bar, max. temp. 50 °C	93 48 60262

FE 130



AF 130

Optimum safety with behropur® water deionizer

You are safety-conscious. You always turn off the water supply of course if you leave your deionizing unit unsupervised for a longer period of time.

On the other hand: Depending on the application, water deionizers often have to work unsupervised. It is in the nature of things. However it also bears risks.

If you have to leave your behropur® water deionizer to work unsupervised, then you need the behropur® leak detector set with leak sensor.

If your ion exchanger should have a leak, then the vat collects the leaking water. The sensor is activated and interrupts the water flow.

You thus avoid costly damages caused by water.

behropur® Leak detector set

Model	Article description	230 V~ Art.-No.
LS 191	behropur® leak detector set including control unit, water sensor, electrovalve, alarm buzzer	93 48 50701

User of the leak detector set