

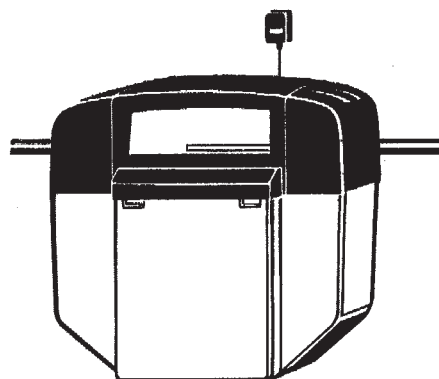
Fitting instructions

BioQuell-K

Water softener



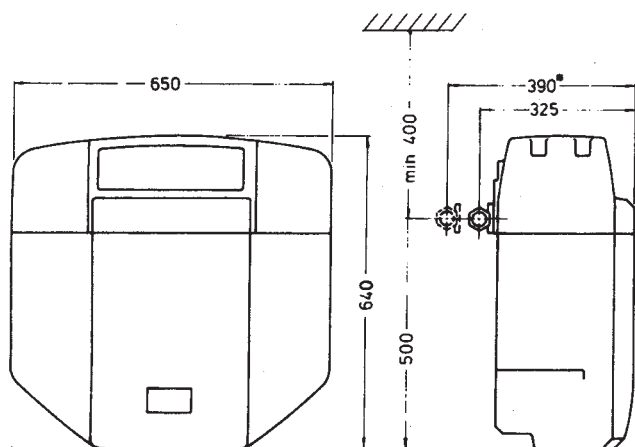
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Technical Data:

	Europe	N-America
Nominal flow:	2 m ³ /h	528 US gallons
Temporary max. flow	3.5 m ³ /h	924 US gallons
Pipe connection (External thread)	1 Inch, on request also available with 1 1/4 Inch	1 1/4 Inch
Nominal capacity	2 x 1.6 mol	2 x 1.6 mol
Maximum pressure	PN 10	PN 145 psi
Operating pressure max.*	7 bar	100 psi
Flow pressure with nominal flow min.	2 bar	30 psi
Operating temperature max.	30 °C	86 °F
Salt supply (Block salt)	40 kg	88 pds
Salt consumption per regeneration	0.24 kg	0.53 pds
Sewage per regeneration with 4 bar/58 psi	20 liters	5.28 US gallons
Electrical connection:		
Service weight complete	230 V/50 Hz/10 VA 85 kg	110 V/60 Hz/10 VA 187 pds
Shipping weight complete	32 kg	71 pds

Space required:



* With modern sanitary installations (especially when ball valves are used) pressure peaks of more than 30 bar often occur despite normal nominal pressures. This may possibly lead to the damage of operational inside parts of the control. The optimum service pressure for the BioQuell-K is 3 - 5 bar/45 - 73 psi at which pressure it runs most efficient.

* With Quickset-X-Single lever By-pass valve (Accessories)

We therefore recommend to install a pressure reducer with higher pressures. The following device (combinations) provide optimum solutions: JUDO safety block in connection with the JUDO PROF-PLUS or the JUNIOR-backwashing protection filter, Check-Point KERFI or Check-Point SPÜLI.

Installation

Install the BioQuell-K in a dry and frost-resistant room with floor drain. The ambient temperature should not exceed 30 °C.

A power supply (Europe 230 V/50 Hz, America 110 V/60 Hz) has to be available which is constantly alive and therefore not dependent from the light switch, as well as a connection to the sewage system for the sewage water and the safety overflow of the salt tank. Usually, the BioQuell-K is installed behind the water meter, pressure reducer and the JUDO-backwashing protection filter and in front of the JUDO-Julia-dosing pump and the distributor (figure 4). In case considerable damage could occur at the location because of leakage of the unit or the supply line (e.g. in office stores, doctor's practices, etc.), it has to be made sure that the water and power supply is disconnected when staff is not present at the unit. However, this is not to be effected as long as the device is still in its regeneration position. The BioQuell-K can be installed in vertical or horizontal conducts. The fitting height depends on the run of the conduct. Minimum fitting height from floor to the rotary flange: 50 cm/20 inch. A clearance of 30 cm/12 inch min. should be available above the BioQuell-K (or 40 cm/16 inch) above the connection flange for maintenance and refilling of salt.

CAUTION

Never connect drain lines directly into a drain, sewer line or trap.

All this allow an air gap between the drain line and the waste water to prevent the possibility of sewage being back siphoned into conditioner.

1. BioQuell-K
2. JUDO-Quickset-E built-in rotary flange
3. JUDO-Quickset-X single lever by-pass valve
4. Assembly cover
5. Covering hood
6. Covering caps
7. Wall mounting
8. Supporting plate
9. Sewage hose (5/16")

10. Safety overflow hose (1/2")
11. Power supply units
12. JUDO backwashing protection filter
13. JUDO Julia dosing pump with mineral solution JUL-W for softened water
14. Garden pipe
15. Semi-softened, uninjected water for the swimming pool (plastic pipe)
16. Distributor for semi-softened water injected against corrosion
17. Holding hook for salt tank

Assembly

The BioQuell-K is **DVGW-tested**, i.e. it can be connected **without** any safety fittings (e.g. pipe disconnecter).

1. Base assembly:

The BioQuell-K is connected by means of the mounting kit JUDO-Quickset-E. This kit consists of the rotary flange (2), the annular joint and the assembly cover (4). The rotary flange, suitable for both horizontal and vertical tubings, has to be installed in flow direction which is marked by a casted in arrow. The flange surface of the rotary flange has to be in vertical position. The tubing can be squeezed. The assembly cover (4) is then screwed on prior to the final assembly (Figure 1).

2. Wall mounting:

Mount the wall mounting (7) centered and directly **adjacent** below the Quickset-E rotary flange (2) so that it is supported by the wall mounting. The complete weight of the softener (max. 85 kg/187 pds), then rest on the wall mounting (Figure 2).

3. Quickset-X-Single lever by-pass valve (Accessories):

The mounting of a by-pass valve can be dispensed with Quickset-X-single lever by-pass valve with double flange (order no. 873210) is installed between the Quickset-E-installation rotary flange in the tubing and the BioQuell-K. Mount the wall mounting as described in 2.

3.1 Screw the flange of the Quickset-X-single lever by-pass valve marked with „R“ (Tube) to the Quickset-E rotary flange. The BioQuell-K is then screwed onto the other flange marked with the letter „G“ (Device).

3.2 The hand lever of the Quickset-X-single lever by-pass valve (3) can be at any position above or lateral. Installation has to be effected in a way as to ensure that the local conditions provide easy access to the hand lever.

4. Final assembly:

4.1 Slide supporting plate (8) onto the struds of the wall mounting (Figure 2).

4.2 Place the BioQuell-K (1) onto the wall mounting and screw it onto the JQE flange (2) or the JQX flange „G“ (3) by means of the interposed joint (Figure 3).

4.3 Pull supporting plate out up to the upper edge of the salt tank so that this is supported by its entire floor area.

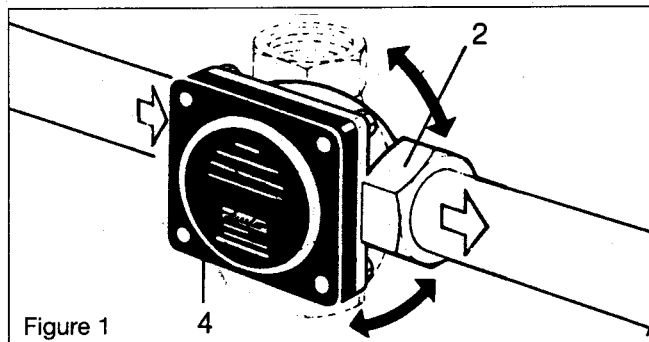


Figure 1

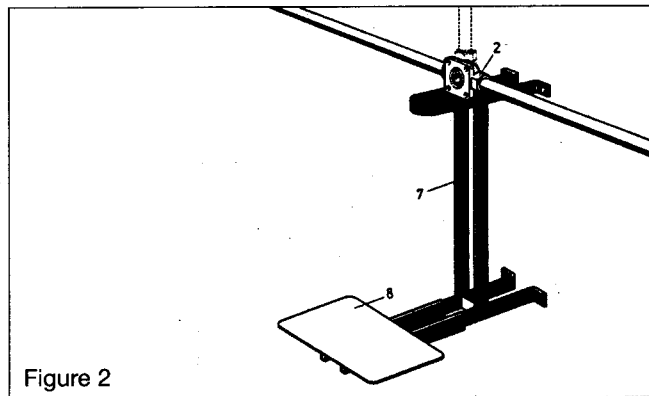


Figure 2

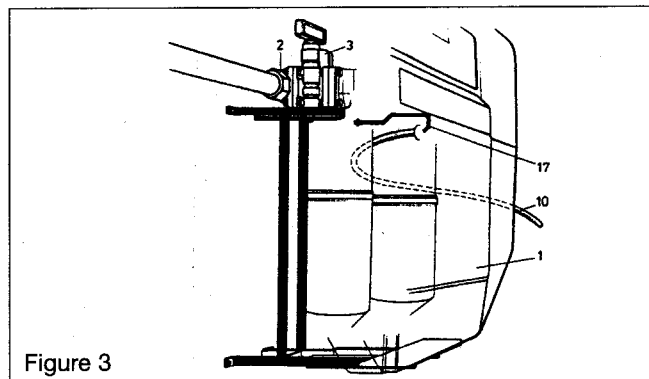


Figure 3

5. Sewage connection:

The hoses for the regeneration sewage water (9) as well as the safety overflow (10) have to be both layed to the channel providing a free discharge above the sewage trough or the floor drain.

5.1 The sewage hose (9) with an outer diameter of 10 mm may be lead up to 1 above the device. Attach the loose end of the hose to the tubing or similar using the adhesive tape provided (Figure 4).

5.2 The overflow hose (10) with an outer diameter of 19 mm **has to be** layed to the channel at a steady **gradient**.

CAUTION

When putting unit into service do not open valves too rapidly or too far, resin may be lost or lodged in the control valve resulting in a malfunction.

SAFETY INSTRUCTIONS: Please strictly adhere to!
No water pressure has to be available at the BioQuell-K up to commissioning (JQX on by-pass).
For commissioning, please see separate operating instructions!

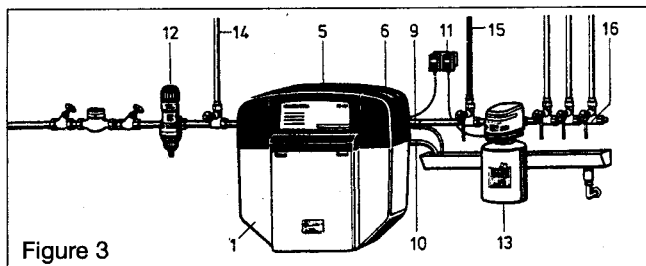


Figure 3