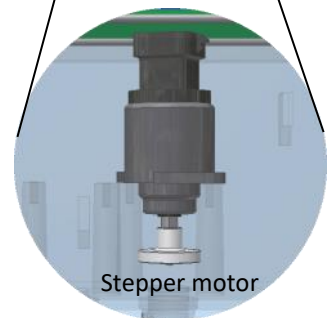
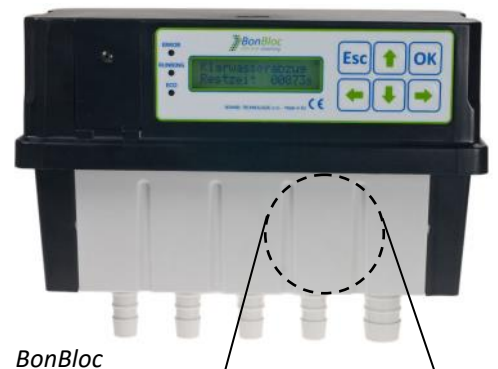


Energy-saving valve unit with integrated programmable controller for small wastewater treatment plants

- 4 motor-driven valves
- 1 air inlet: 3/4"
4 outlets: 1/2"
- Easily programmable control unit
- Up to 4 relay outputs
- Water-level control for up to 2 tanks using pressure sensors
- GSM-module as option

Why use the BonBloc?

- Outstanding price-performance ratio due to the integrated design and the absence of 230V solenoid valves
- Easy to install and connect
- Quiet valve operation
- Saves approx. 95% energy compared to units using standard solenoid actuated valves
- Water-level control without float switch (using a pressure sensor)
- Up to 4 relay outputs offer a comfortable connection of accessory devices
- Individually equipped (display, keypad, connectors) according to customer requirements
- Sequence program can be easily created and modified with the PC software MenuMaker
- Password protected operating levels and up-dateable firmware and software
- IP54 casing, optionally UV-resistant for outdoor installation



BonBloc details

Idea:

SBR wastewater treatment plants normally use a **control unit** and a **valve module**. These are installed separately and have to be connected using costly cables and connectors.

The **BonBloc** integrates both, the **controller** and the **valves into a single compact and easy to install device**.

Nevertheless we can offer you the well-equipped **BonBloc** with its wide functionality for a **competitive price**.

Valves:

Instead of conventional solenoid valves we use reliable stepper motors from the automotive industry. These new valves have been **successfully tested since 2008 in real waste water treatment plants**.

Why **stepper motors**? First, they consume energy only during opening or closing of the valve, therefore **saving 95% of energy** when compared to conventional valves. That is about 90kWh **per year** or 15€, and the trend is rising.

Secondly, our valves are, due to the smoother and slower movement, **much quieter** than solenoid actuated valves.

Control unit:

The control unit of the **BonBloc** has already **proved itself** as a separate device in thousands of wastewater treatment plants all over Europe.

The **extend of the system functionality** can be tailored to match your individual needs.

We can offer you zero to six push buttons; anything from three LEDs to a graphical LCD display; from a **simple sequence control up to a event-driven control system** with water-level controls utilizing pressure sensors; analog / digital inputs, relay outputs, GSM-module and a handy **memory stick** for programming the control and the readout of the protocols - we are flexible!

The **BonBloc** is also available with features, such as, **acoustic signaling** of predefined conditions, a **sequence program permanently saved in the EEPROM** and additional EEPROM memory for event-logging. To ensure continuous signaling **during power outage** or the function of the GSM-module, a set of NiMH **rechargeable batteries** can be supplied.

All electrical connections are implemented using cost-effective and universally compatible screw type terminals.

Technical data

Attribute	Value
Dimensions (l x w x h); weight	118mm x 241mm x 181mm; 1.9kg
Ambient temperature	-20°C to +50°C
Protection classification / UV-Resistance (casing)	IP 54 / UV-resistant casing as option
Functions, sequence program, alarms, GSM-communication, display messages (also foreign-languages)	All according to customer request and requirement. Sequence programs are designed and adapted by the wastewater treatment plant manufacturer by means of a clear and easy-to-use PC-software.
Display / LED	According to customer request, illuminated (backlit) graphical or alphanumeric LCD, alternatively numeric LED display (e.g. 6-digit) Additionally up to 3 LED (colors as requested)
Signal-input	Up to 4 x digital inputs <i>or</i> a combination of digital and analog (0-10V) inputs
Data interface	RS-232 (using adapter-cable)
Electrical output	According to customer request, up to 4 relays e.g. 230V / 300VA
Power supply during mains failure	2x NiMH rechargeable batteries (size AA), optionally mignon batteries
Compressed air inlet	3/4" or 1" fittings
Compressed air outlet	1/2" or 3/4" fittings
Maximum pressure	450mbar
Power supply	230VAC, 12W max.