BonBloc
efficient cleaning

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

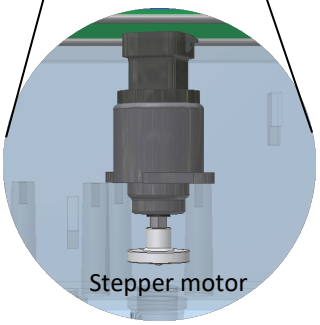
→Up to 4 relay outputs

→Water-level control for up to 2 tanks using pressure sensors

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 updateable firmware and software
- IP53 casing, optionally UV-resistant for outdoor installation

BonBloc



BONNEL TECHNOLOGIE

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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 and a handy memory stick for programming the control unit - 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 53 / 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 *or* 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" fittings
Compressed air outlet	1/2" fittings
Maximum pressure	450mbar
Power supply	230VAC, 12W max.