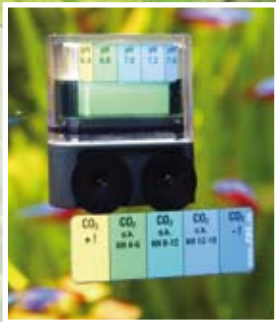


# JBL

## CO<sub>2</sub> fertilization

### 5 START PLUS

Step 5 of the JBL 7 step success concept for perfect aquarium plants



Vorsprung  
durch Forschung  
Ahead through research  
L'avancée par la recherche



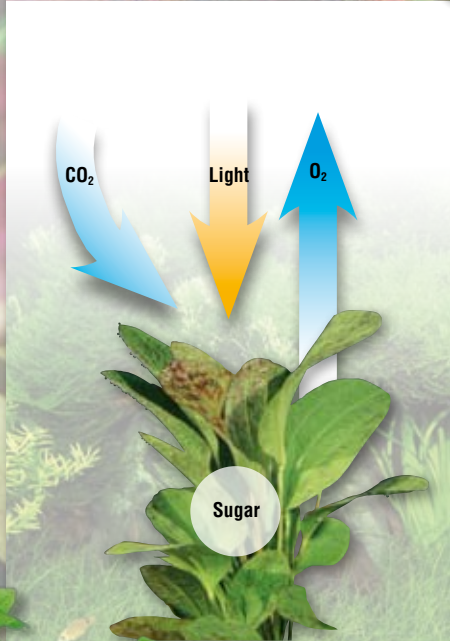
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## Why CO<sub>2</sub>?

All plants need carbon dioxide (CO<sub>2</sub>) as a basic nutrient, supplemented by minerals from fertilizers (e.g. **JBL Ferropol**). During photosynthesis, the energy of light combines CO<sub>2</sub> with water, producing sugar (nourishment for plants). In the course of this process, oxygen (O<sub>2</sub>) is released which is needed by other creatures. Incidentally, plants also need a certain amount of oxygen at night, which is why night-time ventilation is really a good idea for densely planted aquariums.

## Can an aquarium run without CO<sub>2</sub>?

In an aquarium there is not sufficient CO<sub>2</sub> available for plants; that's why aquarium-keepers have to lend a helping hand by installing a CO<sub>2</sub> fertilization system. Some aquarium-keepers find that their aquarium can function

without a CO<sub>2</sub> system. However, it needs to be said that there are only a few species of plants which can survive in the long-term without additional CO<sub>2</sub> fertilization. Any sensitive plant, and in particular red plants, will waste away without additional CO<sub>2</sub> fertilization. And even "hardy" plants will grow noticeably faster and stronger with CO<sub>2</sub>!



## Why does CO<sub>2</sub> help combat algae?

Plants and algae compete for food in an aquarium. If plants flourish, there is not enough nutrition left for algae and they waste away. CO<sub>2</sub> fertilization encourages plant growth, leaving no chance for algae to grow. Even in aquariums which usually have few plants, for example Lake Malawi-Tanganyika aquariums, these few plants should be particularly well-nourished to actively combat the growth of algae. By the way, in comparison to the availability of nutrients, light plays a very minor role!



Hair algae ►



## Does CO<sub>2</sub> fertilization mean less oxygen in the water?

Many people believe that CO<sub>2</sub> reduces oxygen levels in the water. This is not correct! However, the link needs to be explained in more detail. If, despite adding CO<sub>2</sub>, the surface of the water is strongly agitated by air stones or the spray bar from a filter, the oxygen level in the water will increase, but the CO<sub>2</sub> will be expelled at the same time (like shaking a bottle of Coca Cola). The calmer the surface of the water, the more CO<sub>2</sub> will remain in the water. Both gases (CO<sub>2</sub> and O<sub>2</sub>) can be present together in high concentrations in the water.

## How much CO<sub>2</sub> is needed?

The right amount of CO<sub>2</sub> depends on the carbonate hardness (KH) and the pH level. The harder the water (the higher the KH), the more CO<sub>2</sub> is required to reduce the pH level. However, CO<sub>2</sub> cannot be arbitrarily dissolved in the water to reduce the pH level. The proportions are shown in the table. The green sector shows the optimum CO<sub>2</sub> levels.



CO<sub>2</sub> overdosed

Suitable dose of CO<sub>2</sub>

CO<sub>2</sub> underdosed

KH \ pH	6,3	6,4	6,5	6,6	6,7	6,8	6,9	7,0	7,1	7,2	7,3	7,4	7,5
2	32	25	20	16	13	10	8	6	5	4	3	3	2
3	48	38	30	24	19	15	12	10	8	6	5	4	3
4	64	51	40	32	25	20	16	13	10	7	6	5	4
5	80	63	50	40	32	25	20	16	13	10	8	6	5
6	96	76	60	48	38	30	24	19	15	12	10	8	6
7	111	80	70	56	44	35	28	22	18	14	11	9	7
8	127	101	80	64	51	40	32	25	20	16	13	10	8
9	143	114	90	72	57	45	36	29	23	18	14	11	9
10	158	128	100	80	63	60	40	32	25	20	16	13	10
11	175	139	110	88	70	55	44	35	28	22	18	14	11
12	191	152	121	96	76	60	48	38	30	24	19	15	12
13	207	164	131	82	82	65	52	41	33	26	21	16	13
14	223	177	141	112	89	70	56	44	35	28	22	18	14

## The right CO<sub>2</sub> level in the aquarium

The optimum CO<sub>2</sub> level is colour-coded in the table. It can be seen that each level of water hardness is linked to a certain CO<sub>2</sub> level which in turn determines the pH level. So although even at high degrees of hardness (e.g. 14 KH) a pH level of 6.3 can be attained by adding CO<sub>2</sub>, the amount of CO<sub>2</sub> (223 mg/l) this would require is lethal for the inhabitants of an aquarium. If an aquarium-keeper wants to attain a low

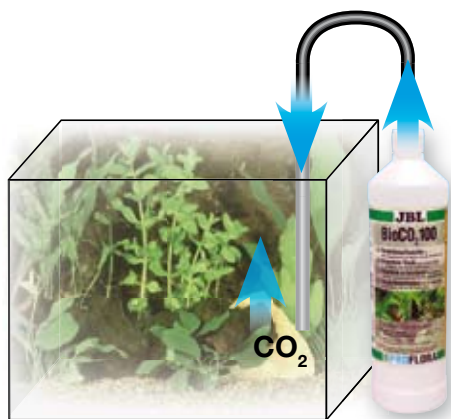
pH level of 6.3, for example, he must first reduce the carbonate hardness to 2. Conversely, the table also shows when too little CO<sub>2</sub> is available. If an aquarium has a KH of 5 and a pH level of 7.5, the CO<sub>2</sub> content is only 5 mg/l. By adding CO<sub>2</sub>, a CO<sub>2</sub> level of 16–32 mg/l should be aimed for, which will then reduce the pH level to 7.0–6.7.



## First steps in CO<sub>2</sub> fertilization: JBL ProFlora BioCO<sub>2</sub>

The JBL ProFlora BioCO<sub>2</sub> system is ideally suited to aquariums up to 120 litres. Reasonably priced and simple to install, it gives everyone the opportunity to see for themselves the advantages of CO<sub>2</sub>-fertilization. Then you have a choice: either to continue with JBL ProFlora BioCO<sub>2</sub> and only buy refills or to change to the gas cylinders of the JBL ProFlora u or m systems. In the JBL BioCO<sub>2</sub> system two com-

ponents are combined in a reaction flask (nutrient-micro organism system), which then produce CO<sub>2</sub> for 45 days, which is then simply dissolved into the water via an air stone or a short JBL ProFlora Taifun (reactor).



# Is CO<sub>2</sub> alone sufficient or do I need other fertilizers?

A comparison with our own diet explains the situation well: CO<sub>2</sub> forms the basic nutrient (like carbohydrates for animals), but it is vital that this is supplemented. We humans need vitamins, minerals and fibre; plants “only” need minerals and light to grow.

## 1 START Ground fertilizer

The basis for plant roots with **JBL AquaBasis plus** (ready-mixed) or **JBL Florapol** (concentrate to mix yourself). This gives the plant roots all the vital nutrients over the long-term.



## 2 START Basic fertilizer

**JBL Ferropol** provides aquarium plants with all the essential nutrients which can be given on a weekly basis. JBL Ferropol is thus the liquid basic fertilizer.

## 3 START Supplementary daily fertilizer

**JBL Ferropol 24** contains all the sensitive trace elements which have to be added daily and cannot be given as a dose to be held in stock.



## 4 START PLUS The right light

Light with similar properties to sunlight from JBL full-spectrum tubes (rated excellent by the scientific IFM Geomar Institute and specialist aquatic magazines). **JBL SOLAR Tropic** for warm colours and **JBL SOLAR Natur** for bright light.



## 5 START PLUS CO<sub>2</sub>- fertilizing

Provides plants with the main nutrient, carbon dioxide (CO<sub>2</sub>), dissolved in the water. Promotes plant growth, combating algae!



## 6 PROFESSIONELL Ground heating

Warm feet for the plants with **JBL ProTemp Basis**, ensuring good current flow through the ground material. Nutrients reach the plant roots more quickly and the ground-covering material is always actively rinsed.



## 7 RESTART Re-fertilizing the roots

**JBL The 7 Balls** re-charges the ground fertilizer with nutrients, minerals and trace elements after several months, so that plant growth is boosted further.



Is CO<sub>2</sub> alone sufficient or do I need other fertilizers?

CO<sub>2</sub> fertilization

## Why select the JBL CO<sub>2</sub> fertilizer system?

Many of the advantages are in the small, but fine, details, whilst some of the advantages are obvious:

- The reactor (JBL ProFlora Taifun), which dissolves the CO<sub>2</sub> in the water, can be extended. If more plants are added or the pH level reduced, the JBL Reactor can be extended by simply adding modules.
- No separate pump is needed for the JBL ProFlora Taifun and it can be positioned anywhere in the aquarium (in the water current or not), as it produces its own micro-currents through the micro-slits between the modules.
- The JBL ProFlora u001/m001 (pressure regulator) can be used with refillable as well as disposable cylinders (fitting or

removing adapter (accessory)). This means that for holiday periods (as a precaution) the system can simply be changed to disposable cylinders with reserve cylinders.

- The 500 g refillable cylinder (JBL ProFlora m500) does not require any complicated holder screwed or drilled into the cupboard, instead it is simply placed on the JBL Cylinder Base.
- The JBL CO<sub>2</sub>/pH Permanent Test takes the water hardness (KH) into account! As described above, the optimum CO<sub>2</sub> amount varies depending on the carbonate hardness of the water. Therefore the optimum CO<sub>2</sub> level is colour-coded according to the hardness of the water. That means a CO<sub>2</sub> overdose cannot happen!





## Installing the JBL ProFlora u-m systems is as simple as this:

Installation is simple, anyone can do it in just a short time. In brief, this is how you install the system:



**1** The pressure regulator is screwed onto the CO<sub>2</sub> storage cylinder, which is then connected by hose to a reactor in the aquarium.

**2** CO<sub>2</sub> is fed through this into the aquarium, where it is dissolved in the water with the help of the reactor.

**3** A solenoid valve can be connected to interrupt the CO<sub>2</sub> supply at night (plants only need CO<sub>2</sub> during the day). This is available separately and is already included in the JBL ProFlora u402 and JBL ProFlora m602.

**4** If you would like to control the CO<sub>2</sub>-supply and the pH level automatically, you can install the JBL ProFlora pH-Control (available separately or included in the JBL ProFlora u403, m603 and m1003). This computer measures and regulates the CO<sub>2</sub> supply.





# JBL CO<sub>2</sub> Plant Care: Product Range



## JBL ProFlora BioCO<sub>2</sub> 100

### Complete set for newly set up aquariums

- Provides sufficient CO<sub>2</sub> for aquariums of up to 100 litres (26 US gal.) for approx. 45 days.
- Simple to install in only a few minutes.
- No gas bottle.
- Each component available individually.



## JBL ProFlora BioCO<sub>2</sub> vario

### Complete and professional BioCO<sub>2</sub> system for aquariums of up to 120 litres.

- Contains 5 diffuser modules for the effective and loss-free CO<sub>2</sub> enrichment of aquarium water.
- Supplies aquariums holding up to some 120 litres, with CO<sub>2</sub> over about 45 days.
- No compressed gas bottle.
- Each component is available individually.
- The vario diffuser of the system does not require a separate pump!



## JBL ProFlora BioCO<sub>2</sub> 100

### Component 1

- Reaction flask with nutrients for micro-organisms.



## JBL ProFlora BioCO<sub>2</sub> 100

### Component 2

- Micro-organism, sufficient for a minimum of 5 applications.





### JBL ProFlora u401

#### CO<sub>2</sub>-fertilizer system with 500 g disposable cylinder

- Complete system with: 500 g CO<sub>2</sub> cylinder, pressure regulator, CO<sub>2</sub> diffusion reactor JBL Taifun 190 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CO<sub>2</sub>/pH Permanent Test.
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to multiple use system).
- The system is ready to use and designed for aquariums from 50 to 400 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).



### JBL ProFlora u402

#### CO<sub>2</sub>-fertilizer system with 500 g disposable cylinder and night switch-off

- Complete system with: 500 g CO<sub>2</sub> cylinder, pressure regulator, night switch-off, CO<sub>2</sub> diffusion reactor JBL Taifun 190 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CO<sub>2</sub>/pH Permanent Test.
- With night switch-off which interrupts the CO<sub>2</sub>-supply by means of a time-switch (not included) as plants do not need CO<sub>2</sub> in the darkness (halves CO<sub>2</sub> consumption!).
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to multiple use system).
- The system is ready to use and designed for aquariums from 50 to 400 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).



### JBL ProFlora u403

#### CO<sub>2</sub>-fertilizer system with 500 g disposable cylinder and pH control instrument

- Complete system with: 500 g CO<sub>2</sub> cylinder, pressure regulator, pH control instrument, CO<sub>2</sub> diffusion reactor JBL Taifun 190 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CH Test
- With pH control instrument (JBL pH Control), which automatically regulates CO<sub>2</sub> supply and adjusts to the pH level selected (incl. calibration solution but without pH electrode!).
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to multiple use system).
- The system is ready to use and designed for aquariums from 50 to 400 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).



### JBL ProFlora u001

#### Pressure regulator for disposable CO<sub>2</sub> cylinders

- Precision pressure regulator, regulates cylinder pressure from 60 to 1.5 bar. The correct bubble count (amount of CO<sub>2</sub>) is then adjusted on the fine needle valve.
- Preset working pressure (1.5 bar) means no need for complicated re-adjusting (adjustment possible, if required).
- 2 pressure gauges display working pressure and cylinder pressure.
- Can be converted to refillable cylinder system using adapter.



### JBL ProFlora Adapt u-m

#### Converts pressure regulator from disposable to refillable system

- For simple, problem-free conversion of the JBL CO<sub>2</sub> pressure regulator u001 to refillable cylinders (such as the JBL m-System).
- Conversion can be reversed at any time.
- Using a 6 Allen key (not included), the adapter is screwed in to the JBL u pressure regulator. Time taken: 20 seconds.





### JBL ProFlora m601

#### CO<sub>2</sub>-fertilizer system with 500 g refillable cylinder

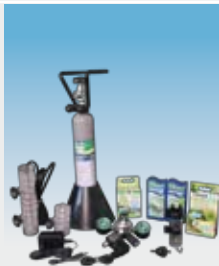
- Complete system with: 500 g CO<sub>2</sub> cylinder with stand, pressure regulator, CO<sub>2</sub> diffusion reactor JBL Taifun 270 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CO<sub>2</sub>/pH Permanent Test.
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to disposable system).
- The system is ready to use and designed for aquariums from 100 to 600 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).



### JBL ProFlora m602

#### CO<sub>2</sub> fertilizer system with 500 g refillable cylinder and night switch-off

- Complete system with: 500 g CO<sub>2</sub> cylinder with stand, pressure regulator, night switch-off, CO<sub>2</sub> diffusion reactor JBL Taifun 270 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CO<sub>2</sub>/pH Permanent Test.
- With night switch-off which interrupts the CO<sub>2</sub>-supply by means of a time-switch (not included) as plants do not need CO<sub>2</sub> in the darkness (halves CO<sub>2</sub> consumption!)
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to disposable system).
- The system is ready to use and designed for aquariums from 100 to 600 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).



### JBL ProFlora m603

#### CO<sub>2</sub>-fertilizer system with 500 g refillable cylinder and pH control instrument

- Complete system with: 500 g CO<sub>2</sub> cylinder with stand, pressure regulator, pH control instrument, CO<sub>2</sub> diffusion reactor JBL Taifun 270 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CH Test.
- With pH control instrument (JBL pH-Control), which automatically regulates CO<sub>2</sub> supply and adjusts to the pH level selected (incl. Calibration solution but without pH electrode!)
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to disposable system).
- The system is ready to use and designed for aquariums from 100 to 600 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).



### JBL ProFlora m1003

#### CO<sub>2</sub>-fertilizer system with 2 kg refillable cylinder and pH control instrument

- Complete system with: 2 kg CO<sub>2</sub> cylinder with stand, pressure regulator, pH control instrument, CO<sub>2</sub> diffusion reactor JBL Taifun 430 mm, 2 meter CO<sub>2</sub> special hose, CO<sub>2</sub> non-return valve, CH Test.
- With pH control instrument (JBL pH-Control), which automatically regulates CO<sub>2</sub> supply and adjusts to the pH level selected (incl. calibration solution but without pH electrode!)
- Professional pressure regulator with pre-set working pressure (= no adjustment required, but possible if required) and 2 pressure gauges displaying the residual pressure in the cylinder and the working pressure set (can be adapted to disposable system).
- The system is ready to use and designed for aquariums from 300 to 1000 litres.
- With JBL Ferropol (liquid fertilizer) and JBL Ferropol 24 (daily fertilizer).





### JBL ProFlora m001

#### Pressure regulator for refillable CO<sub>2</sub> cylinders

- Precision pressure regulator, regulates cylinder pressure from 60 to 1.5 bar. The correct bubble count (amount of CO<sub>2</sub>) is then adjusted on the fine needle valve.
- Preset working pressure (1.5 bar) means no need for complicated re-adjusting (adjustment possible, if required).
- 2 pressure gauges display working pressure and cylinder pressure.
- Can be simply converted to disposable cylinder system.



### JBL ProFlora Taifun

#### CO<sub>2</sub> High-diffusion reactor

- Dissolves CO<sub>2</sub> gas in aquarium water without loss.
- Suitable for aquariums from 30 cm high to max. 400 litres with 4° CH (to 200 l for 10° CH).
- Can be extended for higher hardness levels or larger aquariums.
- Operates without additional pumps.
- No separate bubble counter required.
- Can be completely dismantled, easy to clean (with JBL PowerClean).



### JBL ProFlora Taifun extend

#### Extension module for JBL Taifun CO<sub>2</sub> Reactor

- If the capacity of the JBL Taifun is no longer sufficient (changed to larger aquarium or higher water hardness levels), JBL Taifun can be extended by adding this module.
- Increases capacity by 100 litres at 10° GCH or 200 litres at 4° GCH.
- Extends the diffusion length of CO<sub>2</sub> by 50 cm.



### JBL ProFlora u500

#### CO<sub>2</sub> disposable 500 g storage cylinder

- Ready-filled with 500 g CO<sub>2</sub>.
- Height: 29 cm, diameter: 7.5 cm.
- With integrated stand.
- High safety, tested to 165 bar.
- Thread connection: M 10 x 1.

### JBL ProFlora m500

#### CO<sub>2</sub> refillable 500 g storage cylinder

- Ready-filled with 500 g CO<sub>2</sub>.
- Overall dimensions: 43 x 11 cm (with stand: 45 x 16 cm).
- With external international valve (W 21.8 x 1/14).
- Safety valve protection (cage).

### JBL ProFlora m2000

#### CO<sub>2</sub> refillable 2000 g storage cylinder

- Ready-filled with 2 kg CO<sub>2</sub>.
- Overall dimensions: 46 x 11.5 cm.
- With external international valve (W 21.8 x 1/14).
- Safety valve protection (cage).
- Free-standing, no stand required.



# JBL CO<sub>2</sub>-fertilizing system - The

## JBL ProFlora m001

### JBL ProFlora u001

#### CO<sub>2</sub> pressure regulator

Reduces the high pressure of the gas bottle from approx. 50 bar to a lower working pressure of 1 bar. The working pressure is pre-set and displayed on the pressure gauge on the right. The amount of CO<sub>2</sub> required can be adjusted using the small handwheel.

Art. No. 63332

Art. No. 63333

## JBL ProFlora m2000

### 2 kg Filled Gas Bottle

With cage and safety release panel. Large refillable gas storage bottle with 2000 g CO<sub>2</sub>-CE (TÜV) approved.

Art. No. 63202

## JBL ProFlora m500

### 500g Gas Bottle

This CE (TÜV) approved bottle contains 500 g carbon dioxide (CO<sub>2</sub>). The valve is protected by a safety bar (cage). The bottle can be refilled at a specialist pet shop.

Art. No. 63172

## JBL ProFlora v002

### Solenoid valve

The solenoid valve is designed to interrupt the CO<sub>2</sub> supply. This is useful at night as plants only require CO<sub>2</sub> during the lighting phase.

Art. No. 63413

## JBL ProFlora u500

### 500 g CO<sub>2</sub> storage bottle

This disposable bottle cannot be refilled. It contains 500 g CO<sub>2</sub> gas. CE (TÜV) approved.

Art. No. 63174

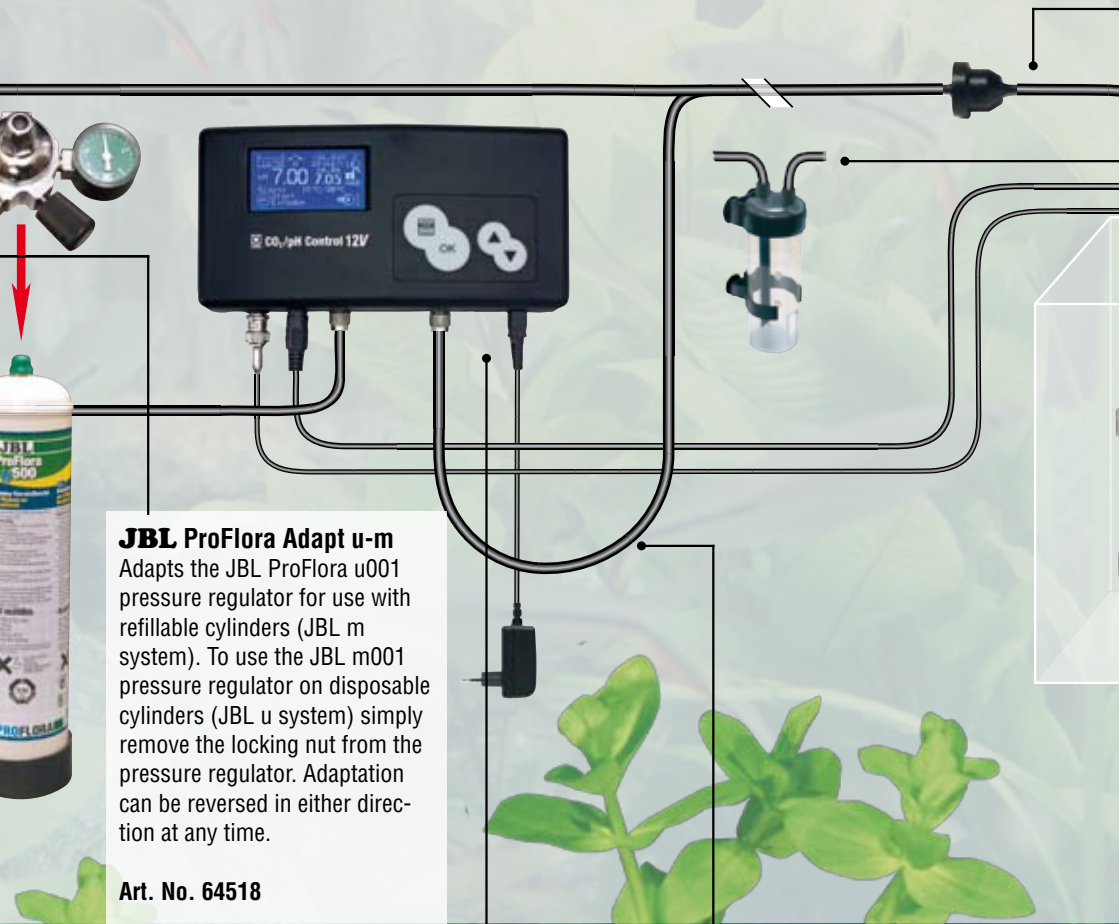
## JBL Stand for JBL ProFlora m500

Provides a firm base for a 500 g gas bottle. CO<sub>2</sub> bottles should always be placed in an upright position when in use.

Art. No. 63176



# Easy Way of Professional Plant Care



## **JBL ProFlora Adapt u-m**

Adapts the JBL ProFlora u001 pressure regulator for use with refillable cylinders (JBL m system). To use the JBL m001 pressure regulator on disposable cylinders (JBL u system) simply remove the locking nut from the pressure regulator. Adaptation can be reversed in either direction at any time.

**Art. No. 64518**

## **JBL ProFlora CO<sub>2</sub>/pH Control 12 V**

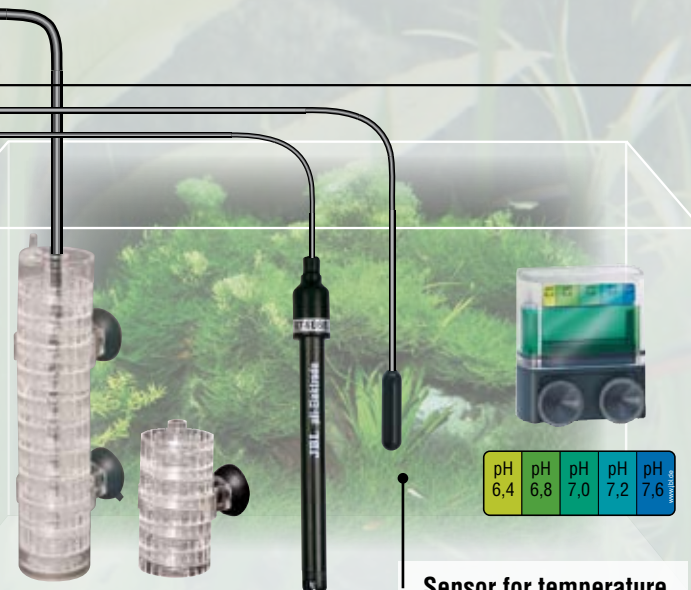
The latest measurement and monitoring technology measures the pH value and temperature and reliably regulates the pH value and supply of CO<sub>2</sub> fully automatically. This ensures luxuriant plant growth and healthy fish. The JBL CO<sub>2</sub>/pH control 12 V has an integral solenoid valve as well as offering a whole range of useful features never before incorporated in equipment of this class. A simple multi-lingual menu guides you safely through all the functions. The complete equipment runs on 12 V low voltage, providing the highest possible safety.

**Art. No. 63418**

## **JBL ProFlora T3 CO<sub>2</sub>-hose**

This special hose is designed to connect the individual devices. It is made of CO<sub>2</sub>-resistant material. CO<sub>2</sub> gas leaks through the walls of normal hose.

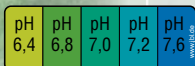
**Art. No. 63462**



### Sensor for temperature

Checks the water temperature for the

**JBL ProFlora CO<sub>2</sub>/pH Control 12 V**



### **JBL ProFlora SafeStop Non-return valve**

Prevents a flowback of aquarium water into the gas bottle, solenoid valve and pressure reducer. It should be installed directly before the diffuser (JBL ProFlora CO<sub>2</sub> vario). Check the direction of installation.

**Art. No. 64515**

### **JBL ProFlora Count**

Bubble counter. Using the bubble counter, the amount of CO<sub>2</sub> gas added can be precisely counted. The bubble counter is only required if the vario-Reactor is hidden behind decorative objects and cannot be seen.

**Art. No. 63483**

### **JBL Permanent Test CO<sub>2</sub> plus pH**

This device displays the CO<sub>2</sub> content and the pH level of the aquarium water. In the case of too high or too low CO<sub>2</sub> content, re-adjust the CO<sub>2</sub> supply on the pressure reducer.

**Art. No. 25388**

### **JBL ProFlora Taifun CO<sub>2</sub> diffuser**

This dissolves the CO<sub>2</sub> gas in water. The CO<sub>2</sub> bubbles slowly rise inside the 1 meter long coil, dissolving in the water. The diffuser is sufficient for aquariums of up to 400 litres, given a carbonate hardness of max. 4° dCH.

**Art. No. 63473**

### **JBL ProFlora Taifun extend diffuser extension set**

This set extends your JBL Taifun reactor for an aquarium of over 400 litres. The extension set is simply to install between the two modules of your JBL Taifun diffuser, extending the contact area to the aquarium by 50 cm.

**Art. No. 63474**

### **JBL ProFlora pH Sensor**

Gel electrode to measure the pH level. The temperature influence on the pH level is automatically compensated for. The electrode should be checked every 3 months using a calibrating liquid, and adjusted as necessary.

**Art. No. 63414**



# JBL

## CO<sub>2</sub> fertilization

### 5 START PLUS

Step 5 of the JBL 7 step  
success concept for perfect  
aquarium plants

Your specialist retailer

GB Art.No. 9721310 V01



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