

# Operation Manual

## ROLLERMAT XC



**Automatic mechanical filter for fresh and saltwater aquariums and garden ponds**

The Rollermat removes waste particles from the water. Biofilter and protein skimmer are relieved and the result is crystal clear water.

## 1. Construction



Front view: The motor and the level switch are on the back side

## 2. Working principle

The polluted water passes the filter fleece and enters into the drum. From here it flows back into the filter sump. If the fleece is loaded with dirt, the flow through the fleece decreases and the water level outside of the drum rises. If it reaches a certain level, a level switch starts the motor, the drum rotates and a small part of fresh fleece is loaded on the drum. Fully automatically. It will take 4 – 6 months, depending on the waste production in the system until the complete fleece is used and has to be replaced.



The Fleece is very fine. Even smallest particles are removed. The dirt is filtered out of the system, before it is metabolized biologically. This relieves the biofilter and the protein skimmer in seawater.

The pores of the fleece are even fine enough to retain many protozoa, like fish parasites in fresh and saltwater. They cannot pass the fleece. This is unique.

1. Features of the Rolleramat:

- Efficient mechanical filtration by fine filter fleece
- Automatic transport of the fleece.
- Easy changing of the used fleece roll.
- The rolls are easy to change, up to 100 m length.
- The roll is 15 cm wide, for flow rates up to 10.000l/h, depending on the water quality.
- Minimum power uptake. Average below 0,3w.
- 12V safety voltage

The fleece is transported from the releasing roll to the accepting roll. The rolls are driven by gear wheels by gear wheels.



If the accepting roll is full – or the releasing roll empty, it can be taken out of the filter easily. Both parts can be separated and the fleece can be discarded.



1. motor housing
2. accepting roll
3. fleece directing rolls
4. drum

2. Inserting a new fleece roll

If the fleece roll is replaced, it must be taken care, that the O-rings at the left and right side of the new roll are mounted in the right way. See the arrow on the figure at the left. They prevent, that the roll is turning freely. This keeps the fleece always taut.

The fleece is directed from the releasing roll over the first directing roll (see fig No 9). The end of the fleece can now be fixed to the drum (by a tape) or just pressed into the drum. The drum is

rotated carefully until the fleece can be reached from the other side.  
 Now, it is directed over the second directing roll and fixed on the accepting roll. This can be done with tale as well. If the accepting roll is in place and the transformer is plugged in the mains, the level switch can be lifted lightly by hand. The motor starts and the fleece is pulled taut.



### 5. Set Up

Aquarium: The RollerMat can be placed into the filter sump below the aquarium.

Alternatively, it can be placed above the water level, so that the purified water can flow freely back into the aquarium. If it is placed inside of the filter sump, the water level in the sump is always kept maximum 5 cm below the level of the water outlet. The water flows freely through the filter.

Garden pond: The **RollerMat** is placed above the water level and is supplied with water by a pump. The purified water flows freely back into the pond.

The motor of the RollerMat has a power uptake of 4W and is operated with 12V= safety voltage. A transformer is included.

For fresh and saltwater aquariums from 300 to 3000 l volume and garden ponds up to a volume of 5000 l

### 6. Technical data

Power supply motor	12V, 50/60Hz , 4 Watts
Transformer	230V/50 Hz
Water inlet	D 63 glue connection, 1 3/4" thread
Water outlet	D 90 glue connection, 1 3/4" thread
overflow	D 40 glue connection, 1 " thread
Width opf the fleece roll	42 cm
Maximum water level, if placed in a filter sump	16 cm above the bottom oft he RollerMat
Dimensions (L x B x H	90 x 60 x 70 cm

### 7. Accessories: Spare fleece rolls

Article number: 3051100191 spare roll Aquarium „Fine“, 40g/m<sup>2</sup>, 45m long

Article number: 3051100192 spare roll Pond „Standard“, 20g/m<sup>2</sup>, 90m long

## ROLLERMAT: Connections

Connections:

Water inlet	63 mm tank union/glue fitting
Water outlet	90 mm tank union/glue fitting
overflow	40 mm tank union/glue fitting

## Water inlet

### 1. Water inlet by Gravity

If operated by gravity, the Roller mat is placed below the aquarium or below the water level of the pond in the filter sump.

From the overflow chamber of the aquarium or from the skimmer of the pond a pipe with a diameter of 63 mm is connected to the water inlet of the Roller mat (1).

It is important, that the 63 mm pipe is just pressed into the tank union. If it is glued, it the Roller mat cannot be disassembled for maintenance.



### 2. Water inlet by pump pressure.

If the Roller mat is supplied with water by a pump, the maximum flow is 10.000l/h (e.g. River 8.000). The water inlet has to be reduced by a reduction fitting to a 1.5" hose connector. This connections should be glued.

The Roller mat is placed above the water level of the aquarium or pond. The water flows back by gravity into the aquarium or the pond.

## Water outlet

The water outlet may not be reduced. A 90 mm PVC pipe should be presses into the tank union. From here a PVC pipe can be directed to the filter sump or pond. The pipe should not be glued into the tank union. If it is glued, the Roller mat cannot not be disassembled.

Alternatively a 90 mm hose fitting can be pressed into the tank union and a hose may be directed to the pond or aquarium.

In any case, the water must flow freely away from the outlet. Neither a PVC pipe nor a flexible hose may be directed higher than the outlet of the Roller mat.

## Overflow

The emergency overflow is a 40mm tank union. Here, you can press in a 40 mm PVC pipe. From here the pipe is directed downwards in a free flow pipe. Alternatively a 40 mm hose connection can be pressed into the tank union and a hose can be directed to the pond or aquarium.

## **8.Warranty**

Should any defect in material or workmanship be found within 12 months of the date of purchase, Theiling GmbH undertakes to repair or, at our option, replace the defective part free of charge – always provided the product has been installed correctly, is used for the purpose that was intended by us, is used in accordance with the operating instructions and is returned to us carriage paid. The warranty term is not applicable on the all consumable products. Proof of Purchase is required by presentation of an original invoice or receipt indicating the dealer's name, the model number and date of purchase, or a Guarantee Card if appropriate. This warranty may not apply if any model or production number has been altered, deleted or removed, unauthorized persons or organisations have executed repairs, modifications or alterations, or damage is caused by accident, misuse or neglect. We regret we are unable to accept any liability for any consequential loss. Please note that the product is not defective under the terms of this warranty where the product, or any of its component parts, was not originally designed and / or manufactured for the market in which it is used. These statements do not affect your statutory rights as a customer. If your Theiling GmbH product does not appear to be working correctly or appears to be defective, please contact your dealer in the first instance. Before calling your dealer, please ensure you have read and understood the operating instructions. If you have any questions your dealer cannot answer, please contact us. Our policy is one of continual technical improvement and we reserve the right to modify and adjust the specification of our products without prior notification.

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