Multi Function Filter MF₂



There are different modes of filter operation. Everyone has its pros and cons. For example, it makes sense to operate high-quality phosphate adsorbers in a fluidized bed or in the Vertical Flow Filter (VFF); for other materials such as activated carbon, this mode of operation would not be recommended as the coal would be crushed.

AquaCare has now managed to implement all operating modes with only one filter. This filter can be used in many ways and is prepared for the future. You can easily convert it to another mode.

↑	Upstream: here the water flows from bottom to top through the filter. Suitable for most filter materials. Not maintenance-free!	
\	Downstream: the water flows from top to bottom; fine filter materials can filter out particles. Not maintenance-free!	
	trickling filter: the water trickles in an atmosphere from top to bottom over trickling filter material.	
†	Moving bed: in the fluidized bed process, the water flows from bottom to top and moves the filter material in order to allow optimum reaction and prevent clogging	Aggrafia
1	Circulation filter: here the filter material is conveyed in a central tube from bottom to top; then it falls down again in the outer tube; also called vertical flow filter (VFF).	Made in Germany
}	Reverses Moving Bed: corresponds to the fluidised bed method, except that filter material is used which is lighter than water.	
1	Reverse circulation filter: corresponds to the VFF, only with lighter filter material than water.	
	Incubation tube (egg tumbler) for eggs for hatching larvae (not included). Not maintenance-free!	
	The MF ₂ filter can also be equipped as a phytoplankton and zooplankton tube.	

The MF₂ filter is made of high quality acrylic glass and can be placed **in the filter sump** as well as **outside the aquarium** (underneath, above or on the side). With the MF₂ holder it can be **hung on or in** the aquarium/filter tank. **Wall mounting** is also possible. The suction feet provide maximum stability. The lid is equipped with the unique **hybrid closure**. It is simply fixed with the integrated magnets - no screwing necessary! For higher pressures or sensitive environments, additional polyamide screws can be added to cover these areas of application. The main pipe can be turned in 90° steps.

Technical data of the MultiFunctionFilter

Type		MF_2 -50				
Order number		MF2-050-40 (-70; -100)				
Effective volume		0.5 (1.0; 1.5) litres				
Height		40 (70; 100) cm				
Necessary height		+5 cm				
Footprint size		14 × 10 cm				
Diameter		50 mm				
Connectors		1/4" femals thread (8 mm nozzles are scope of delivery)				
Functional possibilities (Filter materials are not included and must be ordered separately) * Additional parts are required		Downstream filter, upstream filter, moving Bed, circulation filter / vertical flow filter VFF, trickling filter*, reverse moving bed*, reverse vertical flow filter / RVFF*, egg & larvae incubator*, phytoplankton tube*, zooplankton tube*, air dryer, carbon dioxide adsorber				
Scope of delivery		MF ₂ -50-Filter with suction feed, lid with hybrid closure, upper screen with filter sponge, bottom screen 3 mm and filter sponge, central tube for VFF and RVFF, 8 mm nozzle fittings, stainless steel rod for removing the internal filter parts				
Available accessories						
	<u>k</u>	vall bracket	Upper sieve plate for trickling filter operation, also reverse fluidized	upper sieve plate for reverse circulation filters, also reverse		



hang-On support

5 mm screen



valve 1/4" (practical as drain valve or for fast venting of downstream or trickle filters)

bed (RMB)

fluidized bed (RMB)



Incubation tube set: lower sieve 1000 µm + upper sieve (for large eggs / larvae)



Incubation tube set: lower sieve 200 µm + upper sieve (for small eggs / larvae)

Spare parts can be found on the Internet: www.aquacare-shop.de

Maximum aquarium size in litres**

Filter material	MF ₂ -50	MF ₂ -70
Quartz sand, Zeolite 0.8-1.5 mm (bio filter)	350	790
Activated carbon filter (pellets)	250	570
Phosphate adsorber, simple	110	250
Phosphate-X-Globuli (high grade adsorber)	110	250
Trickling filter material PE black, sintered glass	50	
Sulphur granulate (nitrate filter)	130	90
Lime material (neutralization of calcium reactor)	50	115
Organic pellets (N-P reduction, Bakterioplankton)	250	570
AquaCare +Globuli (MarineSnow, plankton replacement, coral food, etc.)	100	230

^{**} The maximum aquarium size depends on the type of filtration or filter material. The indicated sizes are guide values for average reef aquariums with live rock and good coral fillings. In individual cases, a variation can make sense - please ask us.