

GENO-mat® F 500/600/610 H; AC/RC

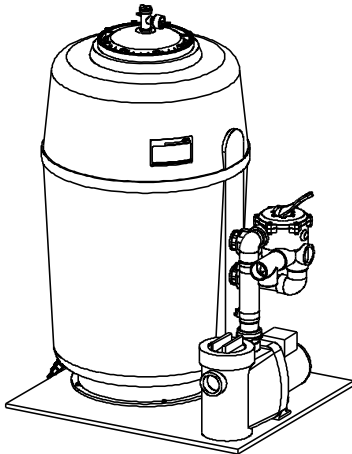


Fig. 1: Filter system GENO-mat® F 600 H

Designated application

The system is designed for the filtration of pool water in private swimming pools, whirlpools or ornamental pools. Other applications (e. g. well or circulation filtration) are possible after prior consultation with Grünbeck.

Function

Filtration

The pool water sucked in by means of a circulation pump is delivered into the filter via the distribution system at the top. The pool water flows through the filter layers from top to bottom, and the top and the bottom distribution systems make sure that the filter material is flown through equally. While flowing through the filter layers, even the finest dirt particles are being filtered from the water. The filtered water flows through the bottom distribution system which is equipped with small slots and is then returned to the pool.

Backwash

Due to the dirt retained, the indicated pressure (pressure gauge) at the filter system increases. If the pressure increases by 0.2 – 0.3 bar above the initial pressure, the filter has to be backwashed. For hygienic reasons, however, a backwash has to take place at least once a week. Depending on the degree of pollution, the backwash process takes about two to three minutes. Furthermore, we recommend a backwash before and after longer periods of standstill. A backwash is initiated by the appropriate setting at the multi-way hand valve. The multi-way hand valve deviates the rinsing water in a way that it flows into the filter via the bottom distribution system.

That way, the various filter layers are lifted, flown through and the dirt particles are discharged to the drain via the top distribution system.

The backwash water flowing from the tank can be monitored through a transparent piece of pipe. According to DIN EN 1717, the rinsing water pipe leading to the drain pipe must have a free outlet.

Rinsing

During the rinsing process (approx. 0.8 min.), the remaining dirt as well as abrasions of the filter material are discharged to the drain. This process works from top to bottom, in the same way as during filtration.

Circulation

The pool water is delivered by means of the circulation pump and the multi-way hand valve, however, does not pass through the filter.

Closed

All ways of the multi-way hand valve are closed.

Draining

By means of the circulation pump, the pool volume is delivered to the drain. Avoid suction of air.

Design

Filter tank made of glass fibre reinforced plastic (GRP), completely pre-assembled, manual aeration and de-aeration.

Multi-way hand valve DN 40 (Ø 50 mm).

Circulation pump made of plastic, low-noise model with integrated hair and fibre strainer. The circulation pump should be installed below the water surface. In exceptional cases, the circulation pump may be installed max. 2 m above the water surface.

Scope of supply

Complete filter system, pre-assembled on base plate, incl. circulation pump, multi-way hand valve and operation manual.

Accessories

Quartz sand filter filling F 500
Order no. 200 840

AFM filter filling F 500
(glass granulate)
Order no. 240 180

Quartz sand filter filling F 600
Order no. 200 560

AFM filter filling F 600
(glass granulate)
Order no. 241 800

Hydro-anthrasite filter filling F 600
Order no 200 565

Quartz sand filter filling F 610
Order no. 242 185

AFM filter filling F 610
(glass granulate)
Order no. 242 180

Hydro-anthrasite filter filling F 610
Order no. 242 190

Timer topica 200 S

to switch the AC pumps on and off
Order no. 913 010 045

Installation requirements

Please observe local installation directives, general guidelines and technical specifications. The installation has to be performed by a specialist. The installation site must be sufficiently ventilated, should be frost-proof and must not be prone to flooding. Drainage respectively a floor drain (DN 100) is required. The system must be easily accessible for maintenance and repair purposes. A minimum room height of 1200, 1600 or 1800 mm is required for the replacement of the filter material.

Technical specifications/Dimensions	Filter system GENO-mat® F					
	500 H; RC	500 H; AC	600 H; RC	600 H; AC	610 H; RC	610 H; AC
Connection data						
Nominal connection diameter	R 2" / DN 40			R 2" / DN 50		
Nominal diameter of drain connection	DN 100					
Filter pump	GENO®-Top 8		GENO®-Top 14		GENO®-Top 20	
Power supply [V]/[Hz]	400 / 50	230 / 50	400 / 50	230 / 50	400 / 50	230 / 50
Protection/protection class	IP 54/I					
Power input of motor [kW]	0.48	0.58	0.90	0.97	1.32	1.37
Current input* [A]	1.2	3.2	2.1	5.7	3.0	7.4
Fuse protection by others [A]	6	10	6	10	6	10
Performance data						
Max. nominal pressure [bar]	2					
Filter/backwash capacity [m³/h]	6/8		12/15		15/20	
Pump capacity (at 8 mWC) [m³/h]	8.5		14		20	
Max. pool volume [m³]	35		70		100	
Max. suction height [m]	2					
Dimensions and weights						
A Height of filter system [mm]	895		1222		1420	
B Width of filter system [mm]	517		700		741	
C Depth of filter system [mm]	831		900		946	
D Height of drain connection [mm]	692		523		723	
E Min. room height [mm]	1200		1600		1800	
F Height of suction connection [mm]	198					
G Height of pool return [mm]	692		523		723	
H Offset of suction connection/pool return [mm]	-		71		71	
J Operating height [mm]	895		725		950	
Empty weight [kg]	30		42		54	
Filter tank Ø [mm]	510		630			
Ambient data						
Max. temperature [°C]	40					
Order no.	240 400	240 420	241 400	241 420	242 400	242 420

* According to the standards, the nominal power of pumps (< 1.3 kW) may be 20 % above the indications by the manufacturer (indicated on the type designation plate); this tolerance has been taken into consideration in above table.

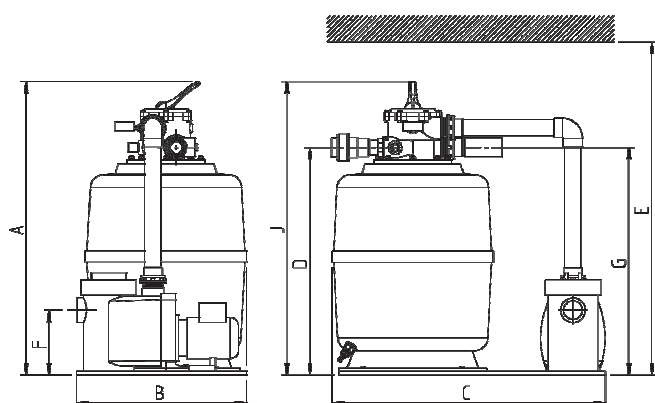


Fig. 2: Dimensional drawing of filter system GENO-mat® F 500 H

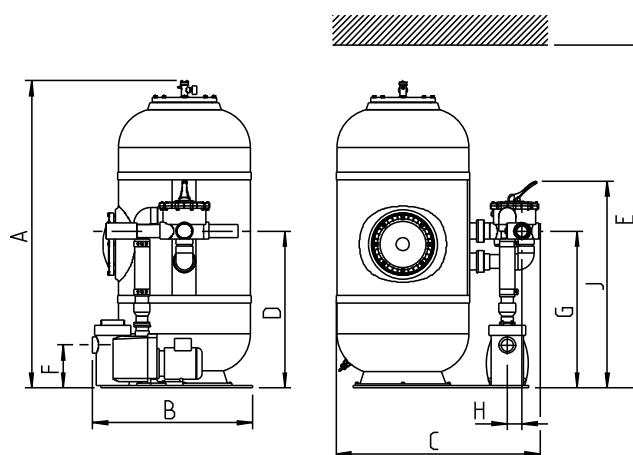


Fig. 3: Dimensional drawing of filter system GENO-mat® F 610 H