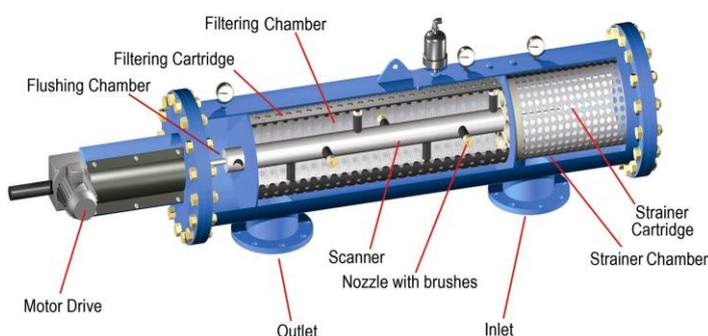


Fully automatic back flush filter FMA

Assembly and functioning

The **FMA-Filter** consists of three different chambers. The first chamber serves for coarse filtration and protects the filter against coarse contamination. The water enters the inlet pipe and flows through the coarse filter from the outside to the inside. Then the water enters the second filter chamber where the actual filter element is situated. The filter element is flowed through from the inside to the outside.



The dirt particles in the water are held back on the screen surface and form a filter cake, which results in an increase of the differential pressure. The cleaning cycle initiates, when a specific differential pressure has been reached. The cleaning may also be triggered time-controlled.

The cleaning

The cleaning is performed via the suction nozzle unit which is connected with the third chamber (the so-called dirt chamber). If the drain valve of the dirt chamber at a certain differential pressure receives the command to open, a powerful suction arises at the suction nozzles caused by the pressure drop (pressure drop between the system pressure inside the filter and the atmospheric pressure outside the filter). Thereby the filter cake, which is located inside the filter sieve, is carried away and taken outside via the dirt chamber. The motor drive at the same time rotates the suction nozzle unit and, moreover, moves it in longitudinal direction, so that a complete cleaning of the whole sieve is guaranteed.



The special design of the suction nozzles ensures that a bypass between suction nozzle and filter unit cannot be generated during the cleaning process. This leads to two decisive advantages compared to competitive products:

- Lower water discharge per cleaning cycle
- Stronger suction and therefore better cleaning effect

Fully automatic back flush filter FMA

Technical Data

operating pressure:	2 - 10 bar
flushing:	25 sec.
maximum operating temperature:	80°C
material housing:	polyester-coated steel or stainless steel
material filter unit:	stainless steel
filter finenesses:	10 / 20 / 34 / 63 / 75 / 100 / 125 / 200 / 300 / 500 / 800 / 1000 µm
outlet valve:	2"
sealing's:	NBR
electrical output:	230 / 400 V
control voltage:	24 V
motor drive:	0.37 kW, 50 Hz

Filter	maximum flow (m³/h)	flow (m³/h) at light pollution	flow (m³/h) at medium pollution	flow (m³/h) at serious pollution
FMA 2003	95	60	48	34
FMA 2004	235	110	90	70
FMA 2006	450	215	173	129
FMA 2008	700	320	256	192
FMA 2010	1150	580	464	348
FMA 2012	1400	700	560	420
FMA 2014	1800	900	720	540

Filter	connections inlet / outlet	filter surface (cm²)	water consumption when cleaning (liter)	weight (kg)
FMA 2003	3"	2200	35	261
FMA 2004	4"	4390	70	304
FMA 2006	6"	6900	105	382
FMA 2008	8"	9400	140	439
FMA 2010	10"	11900	175	495
FMA 2012	12"	14700	140	675
FMA 2014	14"	19150	175	753

The specified values apply to a filter fineness of 125 µm.

Industries

- ✓ plant construction
- ✓ water treatment
- ✓ steel industry
- ✓ chemical industry
- ✓ water treatment facilities
- ✓ food production
- ✓ electronics industry
- ✓ mining
- ✓ farming

Applications

- ✓ cooling water
- ✓ process water
- ✓ wastewater
- ✓ water supply systems