

POOL FILTRATION 01/27

REGENERATIVE MEDIA FILTER

The AQUA Advanced mechanism Regenerative Media Filter System is an eco-friendly, energy-saving filtration solution. Automated control filtration system it, which efficiently recycles perlite powder without backwashing and utilizes frequency conversion technology to reduce electricity consumption



✓ Technical features

- Patented JET WASH Technology which efficiently removes captured impurities from the filter element.
- Activated Regeneration Process Reintegrates filter media, eliminating the need for backwashing.
- Reduces water consumption by up to 90% compared to conventional sand filters.
- Lowers expenses for heating and chemical dosing of new water.
- NSF/ANSI 50-2019 Compliant, Ensures high-quality filtration standards.
- Filtration Rate: $3\text{m}^3/\text{m}^2/\text{hr}$ with fine filtration accuracy of 1 micron.
- Achieves post-filtration turbidity levels below 0.1 NTU, delivering clear water without flocculants

DESIGN & CONSTRUCTION FEATURES

- Made from 304 or 316 stainless steel, ensuring corrosion resistance and high mechanical strength.
- Customizable Configurations, available in different heights with adjustable flange orientations for easy installation.
- Ideal for Retrofitting. Compact design allows for shorter pipelines, making it easier to install in space-constrained machine rooms.
- Advanced Control System developed by expert team with 30+ years of experience
- User-Friendly Interface Features with touchscreen control panel and remote monitoring for ease of operation. Designed to meet the operational demands of plant rooms with stable and reliable

OPTIMIZED FOOTPRINT & SUSTAINABILITY FEATURES

- Each filter element functions independently, providing 4× the filtration area of traditional sand filters for attaining high-efficiency in filtration.
- Lowers water treatment chemical consumption by 30% compared to sand filters.
- Low Water Head Loss & Energy Efficiency, operates at $<100\text{kPa}$ pressure, requiring 30% less energy due to optimized design.
- Frequency Conversion Technology enables precise control of pump speed, further reducing energy consumption by 50%.
- Reduces floor space, construction, and piping costs by 75% at the same filtration flow rate.



CODE	TANK SIZE	FLOW RATE	AREA	PERLITE	INFLUENT EFFLUENT VALVES	PRECOAT JET WASH VALVES	DRAIN VALVES	MEDIA LOAD VALVES	VENT	PACKING	WEIGHT	VOLUME
	MM	(m³/h)	m²	kg	DN	DN	DN	DN	DN		kg	m³
AQFS-450	Ø 450 X 1320	17	6.0	2.0	80	50	50	50	50	1		
AQFS-500	Ø 500 X 1320	21	7.0	3.0	80	50	50	50	50	1		
AQFS-550	Ø 550 X 1320	27	9.0	4.0	80	50	50	50	50	1		
AQFS-600	Ø 600 X 1320	33	11.0	4.0	100	50	50	50	50	1		
AQFS-660	Ø 660 X 1320	39	13.0	5.0	100	80	50	50	50	1		
AQFS-710	Ø 710 X 1320	46	15.0	6.0	100	80	50	50	50	1		
AQFS-760	Ø 760 X 1320	54	18.0	7.0	150	80	50	50	50	1		
AQFS-810	Ø 810 X 1320	62	21.0	8.0	150	80	50	50	50	1		

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	MM	(m³/h)	m²	kg	DN	DN	DN	DN	DN		kg	m³
AQFM-660	Ø 660 X 1570	55	18	7.0	150	80	80	50	50	1		
AQFM-710	Ø 710 X 1570	65	22	9.0	150	80	80	50	50	1		
AQFM-760	Ø 760 X 1570	76	25	10.0	150	100	80	50	50	1		
AQFM-810	Ø 810 X 1570	88	29	12.0	150	100	80	50	50	1		
AQFM-860	Ø 860 X 1570	101	34	13.0	150	100	80	50	50	1		
AQFM-920	Ø 920 X 1570	114	38	15.0	200	150	80	50	50	1		
AQFM-970	Ø 970 X 1570	128	43	17.0	200	150	80	50	50	1		
AQFM-1020	Ø 1020 X 1570	144	48	19.0	200	150	80	50	50	1		

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	MM	(m³/h)	m²	kg	DN	DN	DN	DN	DN		kg	m³
AQFT-810	Ø 810 X 2070	140	47	18.0	200	150	80	50	50	1		
AQFT-860	Ø 860 X 2070	160	53	21.0	200	150	80	50	50	1		
AQFT-920	Ø 920 X 2070	181	60	23.0	200	150	80	50	50	1		
AQFT-970	Ø 970 X 2070	204	68	26.0	250	150	80	50	50	1		
AQFT-1020	Ø 660 X 2070	228	76	29.0	250	150	100	50	50	1		
AQFT-1070	Ø 1070 X 2070	253	84	33.0	250	150	100	50	50	1		
AQFT-1120	Ø 1120 X 2070	280	93	36.0	250	150	150	50	50	1		
AQFT-1180	Ø 1180 X 2070	308	103	40.0	250	150	150	50	50	1		
AQFT-1230	Ø 1230 X 2070	337	112	43.0	250	200	150	50	50	1		
AQFT-1280	Ø 1280 X 2070	368	123	47.0	250	200	150	50	50	1		
AQFT-1330	Ø 1330 X 2070	400	133	52.0	250	200	150	50	50	1		
AQFT-1380	Ø 1380 X 2540	434	145	56.0	300	200	200	50	50	1		
AQFT-1440	Ø 1440 X 2540	469	156	60.0	300	200	200	50	50	1		
AQFT-1490	Ø 1490 X 2540	505	168	65.0	300	200	200	50	50	1		

Note: Maximum Filtration rate 3.0 m³/m²/hr

ADVANCED CONTROLLER FEATURES

- **Intuitive Touchscreen Interface** – 10-inch high-resolution LCD touch screen with a user-friendly menu for quick and easy operation. Simplifies plant room management and reduces maintenance efforts.
- **Remote Monitoring & Connectivity** – Internet-enabled controller allows real-time status monitoring via mobile phones or computers. Supports multiple operator accounts and device integration for centralized management.
- **Automated Alerts & Cloud Backup** – Automatically records operational data and stores backups in the cloud. Sends instant notifications via email or SMS for abnormal conditions, enabling quick troubleshooting.
- **Energy-Saving Optimization** – Uses historical data analysis to identify peak and off-peak usage times, enabling efficient scheduling and reduced energy consumption.

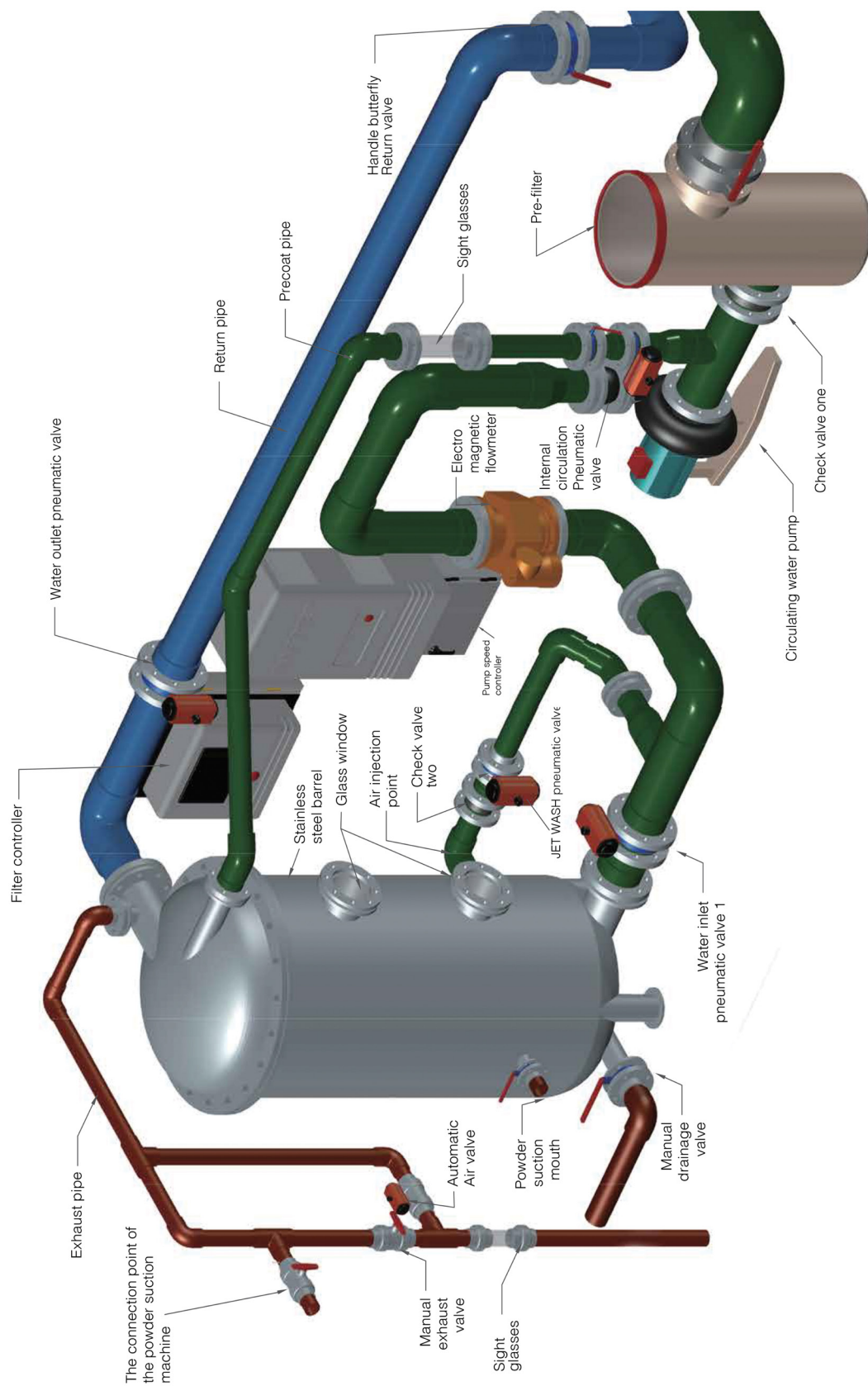


Models

Controller main power supply	AC 220-240V 50/60HZ
General power	1500W
Pneumatic valve solenoid valve	DC24V
Water/ Air pressure sensor	Power Supply: DC24V analog output: 4-20mA.
Electromagnetic flowmeter	Power supply PD024V supports Modbus RTU communication protocol Connected by RS485
Pump speed regulating frequency converter	Power supply: 380VAC, control the speed of the water circulation pump, communication protocol with RS485 interface, Modbus RTU.
Temperature sensing of the control cabinet	Thermal resistance
Vacuum	Operating Voltage: 220V, Power: 1200W
Operating temperature	0-40 Deg C
Moisture content	10%-90% (no frost)
Waterproof rating	IP55
Communication protocol	Support RS485 interface and Ethernet interface, standard Modbus protocol.



SCHEMATIC DIAGRAM





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