

# VTE Filter AWF-S



## Automatic Water Filter Scanner Type



The Experts in Filtration and Oily Water Separation

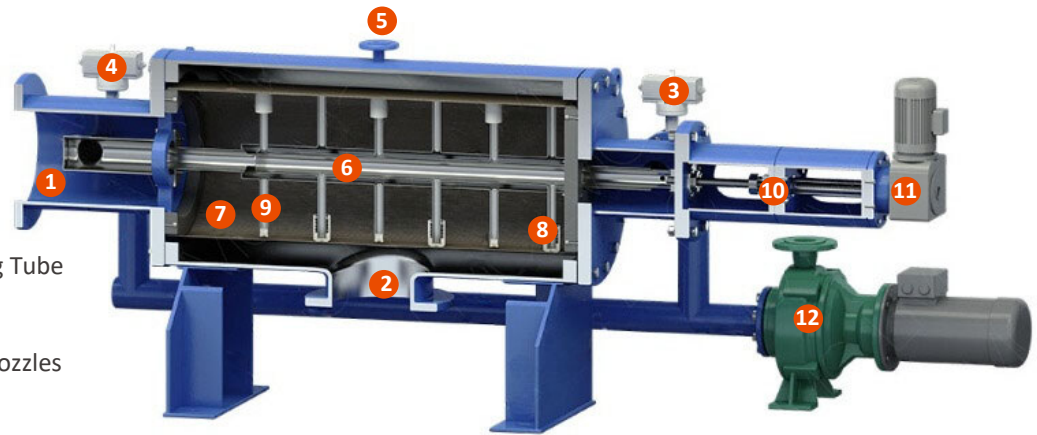
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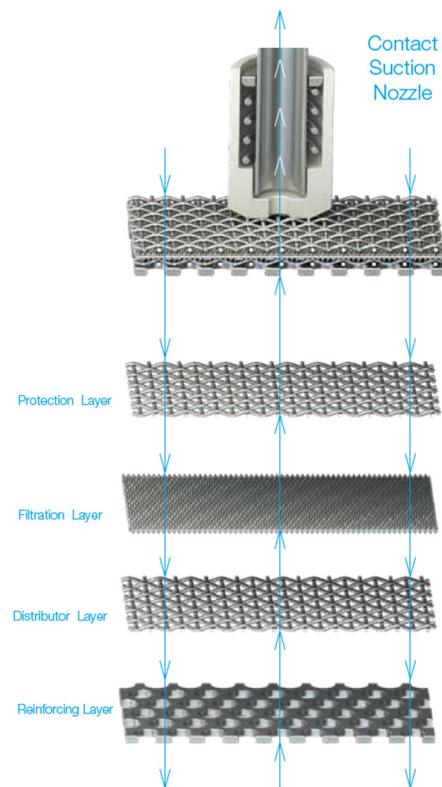
- 1 Inlet
- 2 Outlet
- 3 Back-flushing Valve A
- 4 Back-flushing Valve B
- 5 Vent
- 6 Dual-Channel Back-flushing Tube
- 7 HyperSEP Filter Screen
- 8 Group A Contact Suction Nozzles
- 9 Group B Suction Nozzles
- 10 Reciprocating Scanner
- 11 Gear Motor
- 12 Auxiliary Back-flushing Pump (Optional)



A special 4-layer screen developed for Scanner self-cleaning filters:

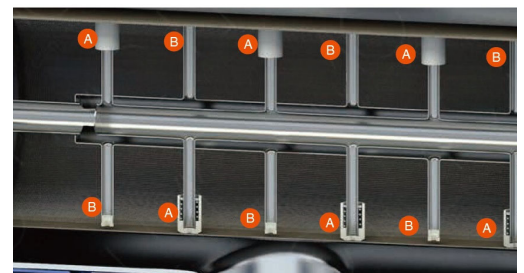
The liquid flows from inside to outside and passes the protection layer, filtration layer, distribution layer and the reinforcing layer. Four layers are optimized and laminated. The protection and distribution layers are designed with large mesh, and the filter layer is rarely blocked. So the filtration layer area can be 100% used. This kind of optimized structure makes sure that the filtration layer is effectively back-flushed clean.

The filtration degree ranges from 15µm-300µm. The filtration layer is precisely weaved and has extremely accurate filtration apertures. It can efficiently remove the suspended solids, sediments, Zooplanktons



The Dual-Channel Back-Flushing for Scanner Self-Cleaning Filter:

Group A nozzles back-flush fine particles between the filtration layer and the inner protection layer by differential pressure mode and group B nozzles back-flush large particles that cannot be removed by group A suction nozzles, which ensures the long-term malfunction-free operation. The two kinds of cleaning function do not interfere with each other and share one auxiliary back-flushing pump. The end users don't have to select the finer sea water strainer or another self-cleaning pre-filter.



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## Flowrate Sizing Chart

Filter Model	Design Flowrate* (m <sup>3</sup> /h)	Inlet and Outlet Size	Design Pressure (bar)	Number of Screen	Back-flush Flowrate (m <sup>3</sup> /h)
GFK50	60	DN80	1.0	1	10
GFK100	90	DN100	1.0	1	10
GFK150	160	DN150	1.0	1	13
GFK250	240	DN200	1.0	1	20
GFK400	390	DN300	1.0	1	27
GFK500	500	DN300	1.0	1	34
GFK800	800	DN350	0.8	1	34
GFK1000	1000	DN350	0.7	1	34
GFK1500	1500	DN400	0.7	3	102
GFK2000	2000	DN500	0.7	4	136
GFK2500	2500	DN600	0.7	5	170
GFK3000	3000	DN600	0.7	6	204

\* Flowrate at 40 µm filtration degree

## Main Technical Information

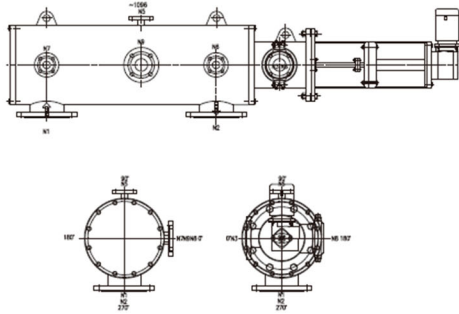
Standard Design Pressure	0.7/0.8/1.0bar (Depending on the Filter Model)
Mini. Working Pressure	0.2bar, 0.16bar (with auxiliary back-flushing pump)
Flowrate Range	50~3000m <sup>3</sup> /h
Applicable Liquid	Sea Water, Fresh Water, Other Raw Water
Back-flushing Liquid	Filtered Clean Water
Filtration Degree	15~300µm
Working Principle	Single Filter Continuous Filtration, Automatic Back-flushing
Design Temperature	0-50 °C
Back-flushing Cycle	Differential Pressure 50kPa and Time
Differential Pressure Instrument	Intelligent Differential Pressure Transmitter
Inlet and Outlet Size	DN80~DN600
Installation Direction	Horizontal or Vertical
Inlet and Outlet Standard	ANSI Flange CLASS150 / DIN Flange PN10
Housing Wet Part Material	CS/304/316L/2205 Duplex SS/GRP
Filter Screen Material	316L/904L
Internal Part Material	PTFE, POM, 316L/2507
Carbon Steel Anticorrosion	Rubber Lining / Rilsan Coating
Sealing Material	NBR/EPDM
Back-flushing Valve	Pneumatic Butterfly Valve
Facility Supply	380V AC, 0.4-0.6bar Clean and Dry Compressed Air
Custom-made Design	Explosion Proof Design Involving Instruments and the Control System

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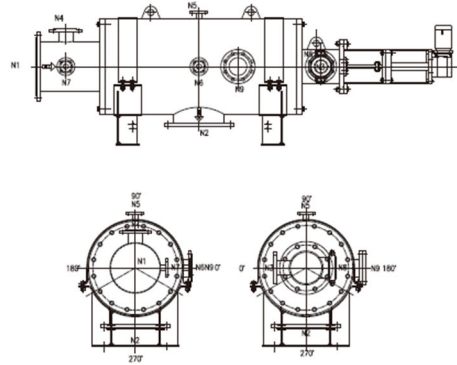


## Main Structure Types

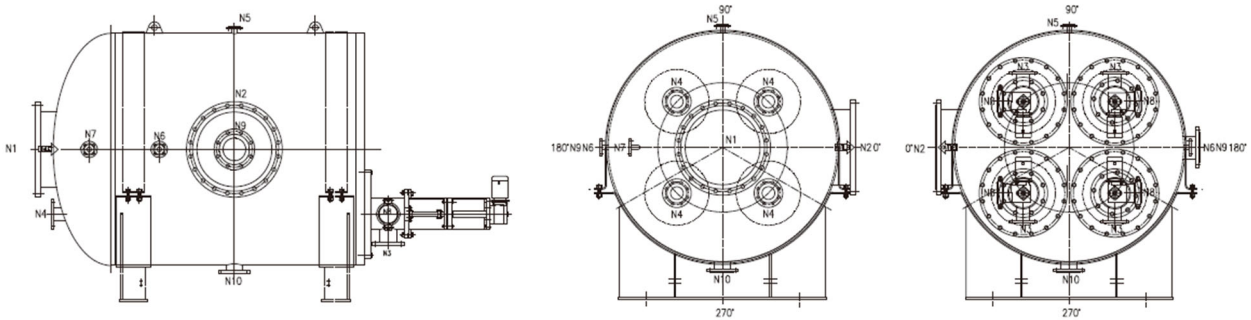
GFK50/100/150



GFK250/300/400/500/800/1000

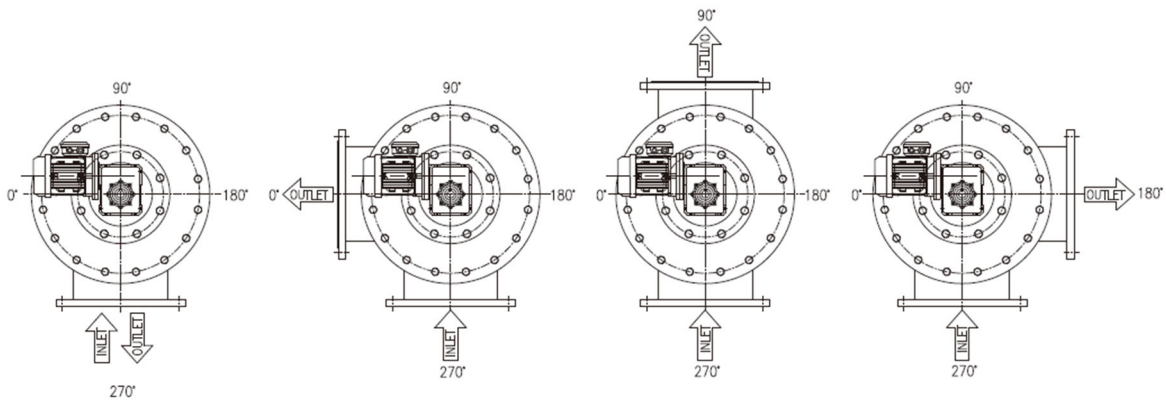


GFK1500/GFK2000/GFK2500/GFK3000



## Various Inlet and Outlet Layouts Convenient Installation

GFK series self-cleaning filter is fabricated according to the modular design concept and can be installed horizontally or vertically. The inlet and outlet direction can rotated and adjusted, which makes the water treatment system skid more compact. We can also offer custom-made pipeline direction and support frame according to the pipeline arrangement convenience.



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