XF Series Automatic Back-flushing Filter

XF series automatic back-flushing filter (XF Filter for short) is the new generation selfcleaning filter system developed by LIVIC. The filter has a number of slotted filter elements inside. When the filter elements are clogged after working for a period, the back-flushing rotation arm cleans the elements one by one and regenerates the filtration capability. XF filter can automatically and continuously work online with no flow interruption.

Different from the common weave screen type self-cleaning filters, XF series automatic back-flushing filter adopts the rigid V-SLOT slotted stainless steel filter element with a V-shape opening which is easy to be cleaned. It has the unique advantage when filtering dirty water containing oily sludge, soft and viscous particles, high content impurities and few fibers. The filtration degree ranges from 50 to 2000 µm. Large filter area and high flowrate per unit. 2"~40" inlet and outlet nozzle size available. The flowrate of the largest XF filter model XF1700 is up to 10560m³/h.

XF series automatic back-flushing filter can remove the contaminants from water and water-like liquids, ensures that the liquid cleaness meets the requirement of the running system and downstream process. It protects the downstream critical equipment, ensures the running efficiency and reliability and remarkably extends the service life. For example, prevent the nozzles from blocking, protect the pumps from wearing, prevent the heat exchangers from clogging and slow the fouling. XF Filter automatically works continuously on-line and is a kind of advanced automatic filtration solution which can reduces the downtime cost, maintenance cost and labor cost.

As the high end self-cleaning filter, XF series automatic back-flushing filter is designed for the demanding service conditions. Crucial parts, such as filter elements, gear motor, differential pressure transmitter, position sensor, control system and back-flushing valve are the high quality components proven by long term applications. XF Filter has the elaborate design and high reliability.

Besides XF Filter, the powerful filter product line of LIVIC fully meets the automatic selfcleaning filtraiton demand from 3 to 2000 μ m for different fluids in different industries. We are pleased to propose the most advanced and suitable filtration solutions.



Technical Features and Advantages

Continuous automatic online filtration, no flow interruption when back-flushing, reducing downtime and maintenance cost

Compact design, super high filtration capacity in single filter, remarkably saving the installation space and construction cost

Various filter housing materials and filter element materials available, meeting various filtration requirements of raw water, cooling water, process water and sea water

Multi-candle structure, large filter area, high dirt loading capacity, low surface velocity, low pressure drop, lower backflushing frequency and less water waste

■ V-SLOT high performance filter element, V-shape slotted opening, efficient back-flushing performance especially when filtering sticky contaminants

- Rigid structure standing high pressure impact, high reliablity with long service life usually over 10 years
- Impulse back-flushing, quick action, high back-flushing intensity, less flushing water purge

Double open ends of filter element allowing water flowing from both sides, no clogging at one blind end of the element, well-distributed filter cake, high flowrate and low pressure drop

D.P. transmitter with local display as the standard configuration, long term steady and reliable, remote monitor support, much better than the common D.P. switch

Reliable automatic control system, friendly Interface and operation, efficiently control the filter running

