Filtermat selfcleaning liquid filters

Introduction

Filtermat Holland started selling automatic filters in 1983. Nowadays the company is specialized in liquid and air-filtration, cleaning devices etc. and has a very broad delivery program.

The accent lies on selfdeaning filters and fully automatic systems, however also manual filters like bagfilters etc. can be delivered.

Thanks to her long experience and product range, **Filtermat** Holland can offer solutions for many of your filtration problems.

ABF[®] water filters are automatically self cleaning and have been developed to provide a trouble free way to remove suspended solids from liquids.



By using modern production and design techniques, ABF[®] is a flexible product that can be used in a wide variety of applications. Thanks to unique properties of the filter - high efficiency, reliability, cost savings, ease of use and little maintenance required - it has found its way in many industries. You can find ABF[®] filters in chemical industry, food and beverage, plastics industry, agriculture, drinking water, sewage treatment etc.

ABF[®] is backed by a worldwide network of sales and service personnel. All dealers are specialists in the field of filtration; they will be pleased to utilize their experience to help you select the best filtration system for your application. Furthermore, they will provide an excellent after-sales service, to guarantee that the filters you buy will function trouble free for many years.

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Working principle

The ABF[®] is a fully automatic self cleaning water filter, operating by the line pressure alone.

The filter consists of 3 compartments, the coarse screen compartment, the fine screen compartment and the lower compartment, on this side of the filter is also the hydraulic or electric motor located, depending on the kind of filter.

Water enters through the inlet in the coarse screen compartment and flows through the coarse screen from the outside to the inside.

From the coarse screen, the water enters the fine screen, where it then flows from the inside to the outside. The contaminated liquid is separated from the clean liquid by means of O-ring seals. The clean liquid then leaves the filter through the outlet.

The coarse screen traps the large particles (like bolts, nuts, little stones etc.) and protects the fine screen and inner parts against damage; it has to



Normal operation

be cleaned manually on certain time intervals, depending on the quantity of large particles that are accumulated on the screen.

The fine screen consists of a support body with 316 woven stainless steel meshwire. Water flows through the fine screen from the inside to the outside, leaving behind particulate matter on the woven meshwire. Particles trapped by the fine screen begin to form a filter cake. The filter cake gradually causes a pressure

differential between the inlet and outlet of the filter. When the variance reaches 0,8 Barg, ABF[®]'s pressure differential monitor initiates a cleaning cycle.

Upon a signal from the P monitor, the flushing valve(s) open to the drain. Since the drain is at atmospheric pressure, a low pressure path is created through the dirt collector and lower compartment. The debris that is "vacuumed-off" the fine screen travels through the dirt collector and lower compartment to the drain. This action causes the hydraulic motor to rotate the nozzles and the dirt collector.



Cleaning mode

Filtermat Holland