rotorflush

RF "A" Series Self-cleaning Filters
Sales Information

Designed for liquids, Rotorflush RF Series filters will remove suspended solids above 50 microns, maintain constant flow rates and keep on working with little or no maintenance.

The filter screen is cleaned continuously by twin, high pressure water jets up to 120 times per minute. The patent protected design is robust and reliable with just one moving part, which operates on the clean side of the filter screen so it is unaffected by suspended material.

Suitable for numerous applications in industry, agriculture, sewage, water treatment, cleaning and plant protection, the Rotorflush RF offers many user benefits at a capital cost well below other self-cleaning products.

Self-cleans continuously

- **No downtime to clean or replace filters** — *Reduced downtime costs*
- **Reduced risk of filter blockage** — *Less risk of pump and plant damage*
- **No flow-rate reduction due to partial blockages** — *Equipment operates more efficiently*

More efficient pre-filtration than coarse strainers

- **Improved pump protection** — *Reduced maintenance costs*
- **Reduces contamination of in-line cartridge/bag filters** — *Reduced replacement costs*; *Reduced disposal costs*

Replaces bag and cartridge filters (above 50 microns)

- **Provides end-user with self-cleaning benefits** — *Reduced operating costs*
- **Provides OEM with an attractive selling feature** — *Increased sales*

More cost-effective than other self-cleaning filter systems

- **Lower capital cost** — *Faster payback*
- **Only one moving part, operating on clean side of filter.** — *Very low maintenance costs*
- **No expensive seals, blades etc to replace or fail** — *Reduced downtime and maintenance costs*
- **Flushed by filtered water which returns to input side** — *No cleaning water cost*

Less need for settlement of solids

- **Replaces or permits smaller settlement tanks** — *Lower capital cost*
- **Requires less water/solvent in circulation** — *Reduced cost of consumables*; *Reduced disposal costs*

Versatile design

- **Compact size**
- **Handles a wide particle range above 50 microns**
- **Easily retro-fitted to a wide range of pumps**

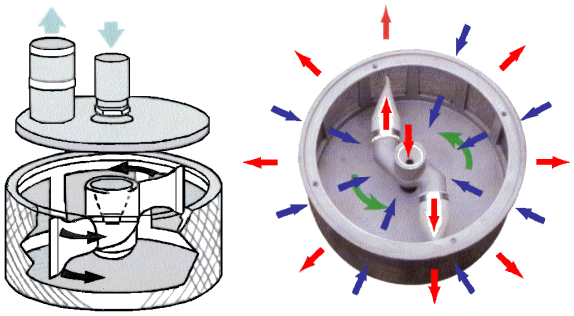
clean solutions

Conventional liquid/solid filtration systems offer a compromise between effective filtration and stable flow rates. As they become clogged, the flow rate progressively falls and could stop altogether. This can lead to reduced production efficiency, stoppages and equipment failure. Frequent filter changes can help maintain efficiency but this increases downtime, cleaning, replacement and disposal costs.

A variety of self-cleaning filters have been developed to address these problems but most of these are complicated pieces of machinery which can be expensive to buy, expensive to operate and expensive to maintain. Those which rely on periodic back-flushing interrupt the flow for a significant period of time and can waste large quantities of water and energy. Those which rely on various forms of mechanical scraping often cannot deal with fibrous materials and can require regular replacement of expensive seals or other components.

Rotorflush Filters …… *the Clean Solution*

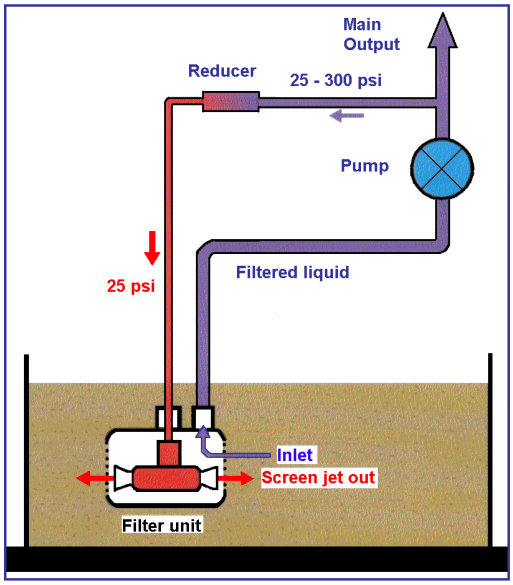
The Rotorflush filter overcomes all of these limitations. Mounted at the end of a suction tube in place of a coarse strainer, the Rotorflush RF Series self-clean continuously, providing a constant flow of filtered water into the pump and protecting it from impeller fouling and damage. By removing solids above 50 microns - 10mm (depending upon application requirements) the Rotorflush can replace or substantially extend the life of fine in-line filters, thereby reducing their replacement and disposal costs.



How it Works

The Rotorflush RF is operated by a small proportion of clean water from the output side of the pump (red), which is passed through a dual-headed rotor to create water jets which flush the filter screen up to 120 times per minute. Any solid material drawn onto the outside of the screen is immediately forced off by the pressure and turbulence of the water jets. The Rotorflush is normally mounted so that solids are concentrated at the bottom of the tank or vessel for manual or automated removal.

- Simple and robust with only one moving part which operates in filtered water, so it cannot become fouled by fibrous materials.
- Copes with high contamination levels, having been designed to handle heavily contaminated farm effluent to enable the efficient spraying of liquid manure.
- Low capital cost delivers a rapid payback for numerous applications in industry, sewage, agriculture, water recycling, vehicle washing etc.
- An optional electronically controlled valve is available if there is a risk that surges in solids levels might suddenly block most of the filter screen. A pressure transducer monitors the output pressure from the pump and if this fails, it actuates a valve which temporarily diverts a greater proportion of the output of the pump to the back-flushing rotor. If necessary, the valve will redirect 100% of the flow to the rotor within 5 seconds and then progressively reinstate the normal flow as the output pressure returns to normal. If this fails to clear the blockage the electronic control will switch off the pump.



Model Reference	RF200A	RF400A
Output *Water @ 2,000 mg/ litre total suspended solids (can vary depending on type of contamination)*	3 - 7m³/hour *(250 micron screen)*	7 - 30m³/hour *(250 micron screen)*
Flow to rotor	0.7 - 2m³/hour	2 - 6m³/hour
Screen sizes	50 micron - 5mm	50 micron - 10mm
Dimensions	98mm - 200mm	195mm - 400mm
Construction	Stainless steel and cast aluminium	

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