

RFH Backflushing Filters

The backflushing high pressure RFH filter/strainer is an easy-to-operate backflushing filter/strainer for water-based fluids at operating pressures of up to 5076 psi (350 bar).

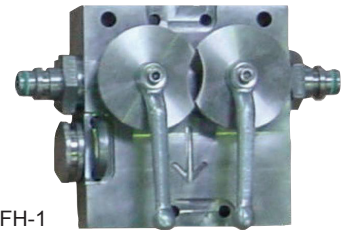
Designed for
Longwall
Shields

Introduction

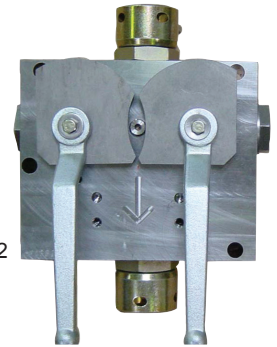
The main application of this filter/strainer is to protect shield hydraulics in mining. However, other applications are possible, such as, in the rotary valve hydraulics of pumped storage hydrostations, paint filtration or the protection of high pressure nozzles. Three sizes are available and flow rates of up to 210 gpm (800 L/min) can be achieved. The back flushing is carried out manually using switch levers. To some extent the filters/strainers can also be controlled electrohydraulically or purely hydraulically. Robust filter/strainer materials in stainless steel are available, such as slotted tube or multi-layered wire mesh.

Features

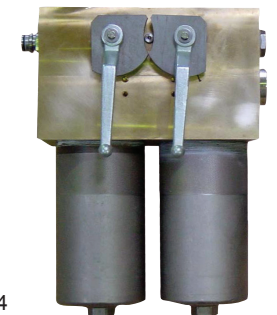
- Rugged design for mining
- Large process connections and filter cross section provide a lower pressure drop
- Easy operation of back flush valves
- Optimized design of the actuator reduces wear and to increase filter reliability



RFH-1



RFH-2



RFH-4

Operating Pressure: 5076 psi (350 bar)

Control Options: Manual \ Hydraulic \ Electrohydraulic

Process Connections: Steck-O DN25/DN50

Materials: Stainless or stainless/brass combination

| | RFH - 1 | RFH - 2 | RFH - 4 |
|------------------------------|--|--|---|
| Backflush Connection: | Steck-O DN 12 | Steck-O DN 12 | Steck-O DN 19 |
| Weight: | 19 lbs (8.5 kg) | 45 lb (20.5 kg) | 210 lb (95 kg) |
| Flow Rate: | 106 gpm (400 L/min) | 158 gpm (600 L/min) | 211 gpm (900 L/min) |
| Filtration Area: | 7.75 in ² (50 cm ²) | 12.4 in ² (80 cm ²) | 170 in ² (1094 cm ²) |

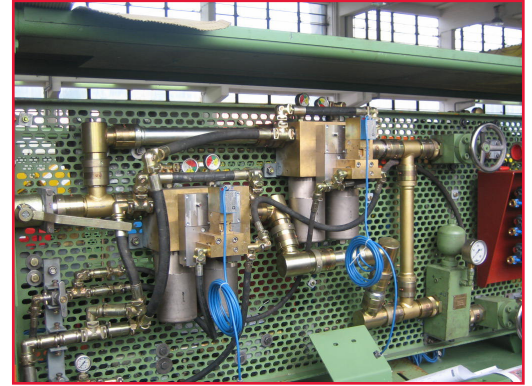
Schroeder
INDUSTRIES

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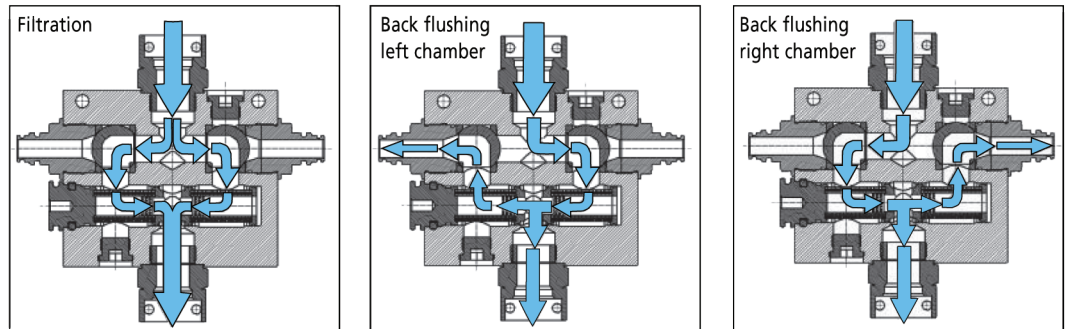
Construction and Function

Sizes RFH-1 and RFH-2 consist of stainless steel housing blocks which can be mounted to the supporting structure by means of the bore holes in the corners of the housing.

On the RFH-4, just the filter head is designed as a housing block; in this version the elements are in two screw-in cylinder bowls. The inlet and outlet connections are opposite each other (inline model). The back flushing ports are on the side. Ensure connection of the back flushing lines to these ports is secure because of the high pressures. A slotted tube or a wire mesh element, which is divided into two filter chambers, is fitted in the filters/strainers RFH-1 and RFH-2, respectively. In the RFH-4 two divided elements are fitted. Each filter chamber or each element is back flushed manually by switching a ball valve.



Filtration Process Figure

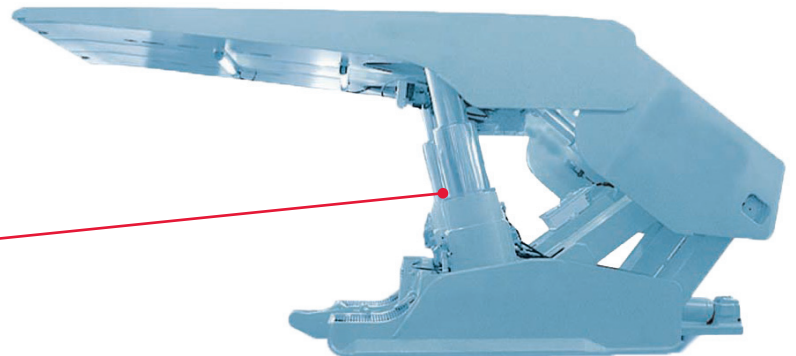


MSB Shield Elements

- Provides superior protection for the valves on the shields
- Quality media construction results in lower pressure drop
- Factory and field support dedicated specifically to the mining industry
- Proven Schroeder quality



MSB Elements



Longwall Shield