

MF 8400 - 21000

Media filters

The MF media filter with Clack control valve and front piping on skid is used for the treatment of drinking water, well water and process water. Depending on the chosen filter medium, contaminants such as suspended matter, particles, iron, manganese or organic matter can be removed from the water. This is an automatic single filter system with time-controlled backwashing with raw water. Downstream equipment can be switched off via a potential-free contact during backwashing. The HF versions have an integrated Modbus RTU interface and can be connected in parallel with Modbus cabling. The filter medium is not included and must be ordered separately.

BENEFITS

- Rugged and flexible controller
- Parallel connection possible (size 8400 with option System Controller, sizes 12000 HF and 21000 HF already integrated)
- Modbus connection possible (size 8400 Modbus TCP with option System Controller, sizes 12000 HF and 21000 HF Modbus RTU already integrated)

APPLICATIONS

- Ideal for well and service water treatment and as pre-treatment before reverse osmosis (particularly with AFM filter medium)
- Depending on the filter medium, suitable for the removal of particles, iron, manganese, free chlorine and organics
- With oxidator suitable for the removal of medium to high iron and manganese levels



Media filter MF 2100 HF (pre-release - changes to follow)

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DESCRIPTION

Media filter

- Pressure tank made of GRP with internals for uniform flow
- Front piping on skid with central control valve and other fittings
- Side-mount connection of the central control valve for easier maintenance
- MF 8400: Central control valve made of Noryl with microprocessor control, display and five keys
- MF 12000/21000 HF: Central control valve made of epoxy-coated, lead-free brass with industrial microprocessor control, display, three LEDs and five keys
- Backwash fittings prepared for backwashing with raw water
- Service valve included for filtrate shut-off during backflushing
- Manual fitting for setting the backwash velocity
- Filter medium is not included in the scope of delivery - must be ordered separately and is delivered in bags (filling by customer)

Clack CI controller

- Start time and duration of backwash as well as time interval between backwashes are adjustable
- Parameter storage of the setting data in case of power failure approx. 6 months via buffer battery
- A signal can be output via a potential-free contact during backwashing
- Locking of the keys against unwanted access possible

Additional features of the controller for the HF versions

- Interface Modbus RTU already integrated
- Parallel connection of several filters via Modbus cabling possible (patch cable required)

Available filter media and recommended filter velocities

- Gravel for removal of suspended solids and particles (20 m/h)
- Multimedia for removal of suspended solids and fine particles (20 m/h)
- AFM for removal of suspended solids and finest particles (20 m/h)
- Birm for iron removal (12 m/h)
- Filox for manganese removal (8 m/h)
- Activated carbon for removal of free chlorine and organic matter (20 m/h)

Optionally available

- Backwash with city water for MF 8400 and MF 12000 HF (300 116)
- Backwash with city water for MF 21000 HF (300 115)
- Differential pressure switch DIFF-P (325 525)

CONDITIONS OF USE

In case of higher particle or iron / manganese levels in the raw water, a process engineering design by us is mandatory.

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TECHNICAL DATA OF SERIES

Controller	Clack CI;Clack HF
Operating pressure	3.0 – 6.0 bar
Pressure fluctuation	± 0.5 bar
Operating temperature	5 – 35 °C
Filter velocity	20 m/h
Filter velocity iron removal	12 m/h
Filter velocity manganese removal	8 m/h
Backwash velocity	25 - 40 m/h (depending on filling)
Backwash time	10 min

Product name	Flow rate max. m ³ /h at 20 m/h	Hydraulic connection RW / Filtrate / WW	Dimensions in mm W x D x H	Item number
MF 8400	8.4	DN 50 / DN 50 / DN 32	850 x 1,160 x 2,730	315 145
MF 12000 HF	12.2	DN 50 / DN 50 / DN 32	930 x 1,320 x 2,770	315 146
MF 21000 HF	21.3	Flange DN 65 / Flange DN 65 / Flange DN 65	1,250 x 1,740 x 2,880	315 147