

Continuous Automatic Backflush Filter

GEFA Series MSCF



Data-Sheet

DN 100 (4") – DN 400 (16")

Stand 03.2018



General

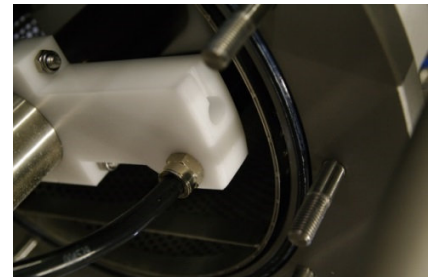
Automatic continuous self-cleaning filter for high flow rates and high dirt loads.

- The only continuous flushing filter operating under line pressure
- High flow rate in a compact design at high dirtload and low differential pressure
- Every 3 seconds complete cleaning of the filter element
- 100% screen cleaning even after millions of flushing cycles
- Wide choice of screen/mesh sizes – down to 35 micron
- Can operate at low working pressure and gives constant flow
- Hydraulic/electric drive
- Easy to install
- Worldwide patents
- Short pay-back period



Applications

- Sewage water for irrigation
- Drinking water – removal of algae, zooplankton and worms
- Pre-filtration of sand filters
- Drip irrigation – high flow high dirt loads
- Intake cooling water – protection from mussels and removal of sand, etc.
- Steel industry – fine filtration of scale
- Seawater – protection from mussels and sand. Eliminates the need for chlorination
- Sugar industry – thin, thick juice filtration; raw juice filtration, heat exchanger protection
- Paper industry – white water
- Plastic industry – product reclamation, cooling water
- Golf course – removal of algae that spoils the color of the turf



General safety instructions



- To prevent accidents, the installation, connection and commissioning of the electrical components may only be carried out by authorized and qualified personnel.

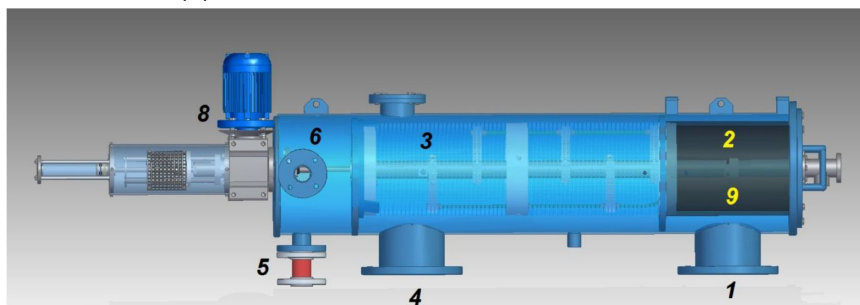


Note:

1. The flush volume is added to the flow volume.
2. The backwash pipe is to be laid against loss and pressure-free.
3. When installed in open air, the filter must be protected from frost.

Function of the filter

At the inlet (1) the water flows through the coarse screen (2) where large particles are stopped. At high dirt loads the coarse filter should be automatic. Fine particles are trapped on fine screen (3) and filtered water flows to outlet (4).



In the constant flush mode, the drain chamber (6) is constantly open to the atmosphere through valve (5) which continuously drains a small flow. This forces a continuous back flush stream from the fine screen through back flush nozzles, collector pipe and drain chamber to atmosphere.

The booster pump (7) delivers filtered water to the hollow shaft of the collector pipe and into spray nozzles (9), jetting onto the screen. The combination of back flush and jet streams creates an efficient cleaning effect that ensures 100% cleaning of both sides of the screen. Electric motor (8) rotates the collector pipe and nozzles (10) while the hydraulic piston moves it back- and forwards. Combined with the rotation effect, this ensures that back flush jet streams sweep and cover the total screen area.

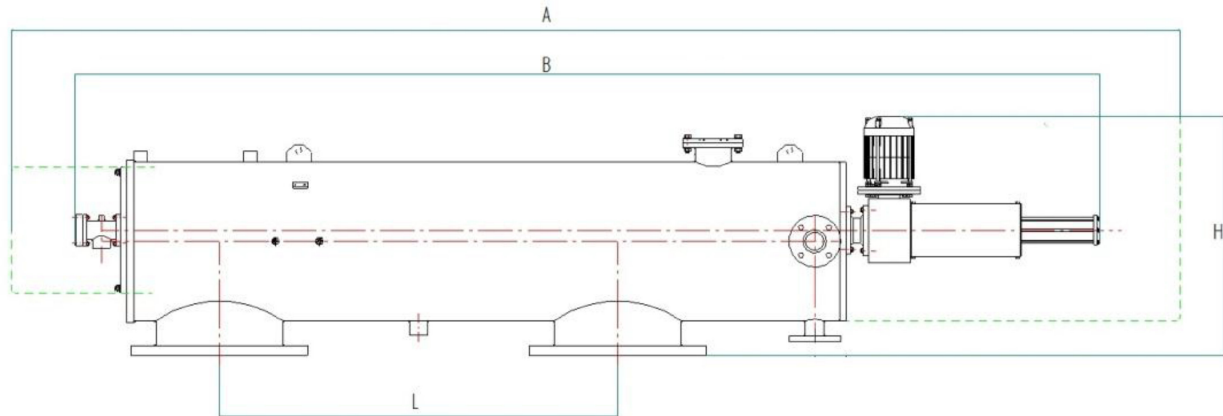
At the time triggered mode, the back flush mechanism operates at triggered intervals.

Product-details

Model	MSCF 04	MSCF 04L	MSCF 04XL	MSCF 06	MSCF 06L	MSCF 06XL	MSCF 08	MSCF 08L	MSCF 10	MSCF 10L	MSCF 12	MSCF 16
Inlet / Outlet	DN100 (4")	DN100 (4")	DN100 (4")	DN150 (6")	DN150 (6")	DN150 (6")	DN200 (8")	DN200 (8")	DN250 (10")	DN250 (10")	DN300 (12")	DN400 (16")
Working pressure	min. 1,2 bar / max. 10 bar											
Temperature	max. 65 °C											
Max. Flow * (m³/h)	120	120	120	250	250	250	375	375	500	500	750	1000
Screen area (cm²)	1784	3568	8035	3568	8035	11934	8035	11934	8035	11934	11934	11934
Filtration degree	50, 80, 100, 120, 150, 200, 400 µm (other on request)											
Automatic Backflush												
Exhaust valve	2 x DN 50 or 1 x DN 65											
Backflush	continuous											
Flow for flushing	ca. 5 – 10% of main flow (depending on operation pressure, micron size and dirt load)											
Electrical loads												
Current consumption	230 V AC 50 Hz (optional 400 V AC)											
Control	24 V DC											
Electric motor	0,75 kW (Current consumption Electric motor 3,08 A)											
Materials												
Filter housing	Stainless Steel AISI-316L											
Cleaning mechanism	Stainless Steel AISI-316L											
Fine screen	Stainless Steel AISI-316L on stainless steel support structure											
Nozzels	HDPE											
Exhaust valve	Stainless Steel AISI-316L											
Seals	EPDM, Buna-N											
Filter lid	Stainless Steel AISI-316L											

*Capacity is depending on dirt load and filter fineness. Please consult with GEFA.

Dimension



Model	Capacity (m ³ /h)	Screen area (cm ²)	L (mm)	A (mm)	B (mm)	H (mm)	Inlet Ø	Outlet Ø	Weight empty (kg)	Weight full (kg)
MSCF04	0-120	1784	450	2900	1713	600	DN100	DN100	145	195
MSCF04L	0-120	3568	600	3275	1990	624	DN100	DN100	165	230
MSCF04XL	0-120	8035	1067	4770	2745	708	DN100	DN100	285	550
MSCF06	0-250	3568	600	3275	1990	660	DN150	DN150	220	310
MSCF06L	0-250	8035	1067	4770	2745	708	DN150	DN150	300	550
MSCF06XL	0-250	11934	1067	5600	3170	705	DN150	DN150	300	570
MSCF08	0-375	8035	1067	4770	2745	755	DN200	DN200	300	550
MSCF08L	0-375	11934	1067	5600	3170	755	DN200	DN200	300	580
MSCF10	0-500	8035	1067	4800	2745	755	DN250	DN250	310	590
MSCF10L	0-500	11934	1067	5600	3170	755	DN250	DN250	360	600
MSCF12	0-750	11934	1067	5600	3172	755	DN300	DN300	370	610
MSCF16	0-1000	11934	1270	5600	3270	800	DN400	DN400	420	900

GEFA-Certificates

ISO 9001 - OHSAS 18001 - ISO 14001

Zusätzlich zum Qualitätsmanagementsystem **ISO 9001** hat die GEFA Processtechnik GmbH jetzt auch für die Bereiche Arbeitsschutz (**OHSAS 18001**) und Umweltmanagement (**ISO 14001**) ein sichtbares Zeichen:



Die **OHSAS 18001** und **ISO 14001** Zertifizierungen sind weltweit anerkannte Standards mit dem Fokus auf Personenschutz, Arbeitssicherheit, Gesundheitsvorsorge und Umweltschutz.