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Automatic Micro-Finefilter

Series MT-IBA



Data-Sheet

DN 20 ($\frac{3}{4}$ "") – DN 40 (1 $\frac{1}{2}$ "")

Stand 05.2018

General

- High tech solution for pre-filtration of RO membrane technology
- Automatic self-cleaning micro fiber filter on 3 micron
- Produced and designed under ISO9001 and with CE mark
- All materials are suitable for drink- and waste water
- No filter media consumption / no waste filters
- Compact system
- Low maintenance costs

Applications

- polishing of sewage water after settler
- cleaning of flush systems and wash installations such as carwash, crates, fruits and vegetables
- pre-filtration of RO membranes
- recycling of wastewater
- cleaning of gas / air wash system
- filtration of rinse bath in the galvanizing industry
- removal of heavy metals (non-solved) from industrial waste water
- removal of cysts, parasites (such as cryptosporidium) from drinking water and fish farming ponds
- removal of legionella from cooling water and shower systems



Biological waste water treatment on board of pipe lay vessel "Lorelay" (HMSA)

Features

- Filtration degree: 3, 5, 7, 10 µm

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.



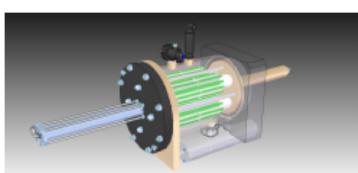
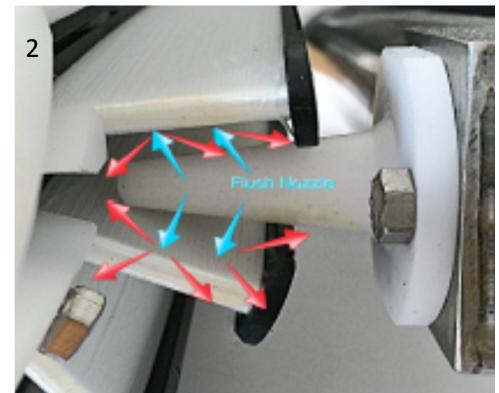
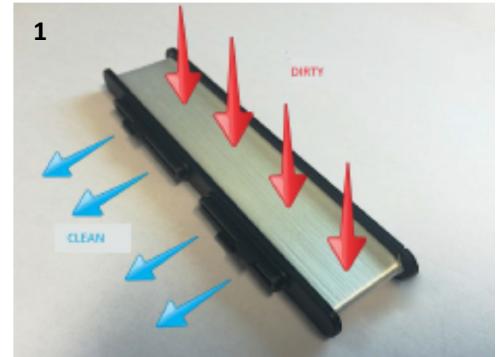
Note:

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

Through the inlet dirty water flows into the filter housing. Normal pollution rates are 1-10 mg/l or 1-5 NTU. The filter elements on the rolls (MT-IBA-1: 1 roll, MT-IBA-2: 2 rolls, MT-IBA-4: 4 rolls) filter down to 0.5 micron depending on the flux rate. For waste water treatment at a flux of 200l/m²/h this results in a filtration level of 0.5 micron and for drinking water at 3000-6000l/m²/h it gives 3-5 micron. Each roll consists of 24 cassettes with multi core polyester fibers.

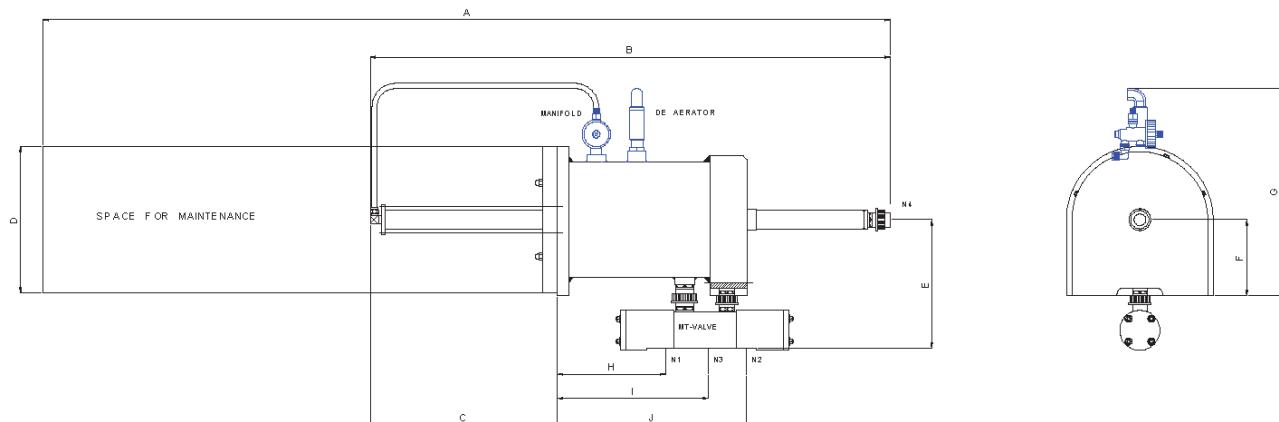
The small particles will be filtered by the fiber layers on a plastic drain support (1). Through this support the water flows into a pipe and down to the outlet chamber. When a given dP has been reached the flush pump starts and the common valve block based on a shifting device, closes the in/outlet and opens the drain. The content of the housing is drained. The flush valve opens and through high pressure nozzles (2), which run forced by water pressure along the cassette fibers, water with 5-7 bar cleans the fibers. The nozzle block runs 6 times up and down, turning each roll at the end of each stroke. After this flush cycle the flush valve closes and the valve block opens in/outlet and closes the drain. The flush pump stops and the filter is in service.



Product-details

Model	MT-IBA 1	MT-IBA 2	MT-IBA 4	MT-IBA 8
Inlet / Outlet N1/N2	¾" BSP	1" BSP	1" BSP	1 ½" BSP
Flush outlet N3	¾" BSP	1 ½" BSP	1 ½" BSP	2" BSP
Max. Flow*	0,375 m³/h	1,5 m³/h	3 m³/h	6-9 m³/h
Operating pressure			0,5 – 4 bar	
Design pressure			6 bar	
Pressure drop			0,05 bar at clean filter 0,3 bar at polluted filter	
Max. temperature			max. 40 °C	
Number rolls	1	2	4	8
Screen area	0,0625 m²	0,25 m²	0,5 m²	1 m²
Flush water	30 l	50 l	70 l	70 l
Flush time	40 sec.	60 sec.	80 sec.	140 sec.
Control			Differential pressure or Timer PLC-Siemens or Timer-relay	
Flushing pump (optional)	Centrifugal pump 1-70 with Motor 0,75 kW 230/400 V AC, 50 Hz	Centrifugal pump 2-70 with Motor 1,1 kW 230/400 V AC, 50 Hz	Centrifugal pump 4-70 with Motor 1,5 kW 230/400 V AC, 50 Hz	Centrifugal pump 4-70 with Motor 1,5 kW 230/400 V AC, 50 Hz
Weight empty	19	42	44	64
Weight full	30	74	76	106
Dimension				
A (mm)	1590	2300	2300	2500
B (mm)	930	1415	1415	2341
C (mm)	345	510	510	1500
D (mm)	310	400	400	400
E (mm)	210	355	355	410
F (mm)	134	204	204	206
G (mm)	465			
H (mm)	197	295	295	567
I (mm)	277	410	410	706
J (mm)	352	514	514	835

* Filtration level depends on dirt load and micron range.



GEFA Certificates

ISO 9001 - OHSAS 18001 - ISO 14001

Zusätzlich zum Qualitätsmanagementsystem **ISO 9001** hat die GEFA Prozesstechnik 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.