

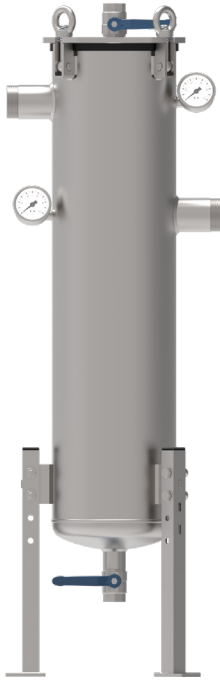
TerTech

# WARDFIL

## Bag Filter Housing



# WARDFIL



WARDFIL is a stainless steel dirt separator which protects closed-circuit systems from circulating impurities. These impurities, mainly consisting of sand and mud, are retained by a wide filtering bag which reduces the frequency of required cleaning operations. Each filter is designed to accommodate Neodymium magnetic candles ideal for removing ferrous contamination. The valve installed on the top cover can be potentially be used to add chemicals for system cleaning.

Thanks to the wide range of available filtering bags, WARDFIL efficiently removes even the smallest particles with minimum pressure loss.

## INSTALLATION

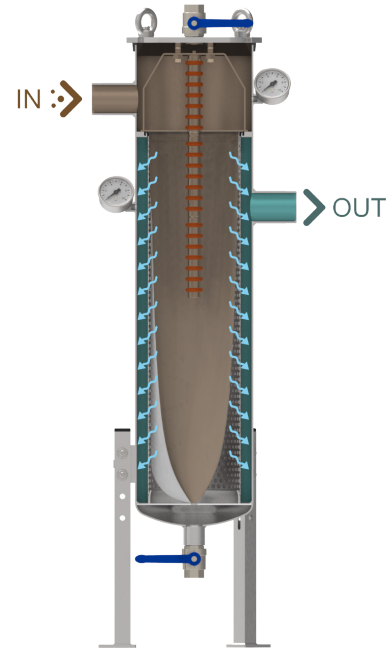
In closed-circuit applications it is advised to install WARDFIL on a side-stream pipe. This layout ensures non-stop protection to the system and no interruptions of the flow to the end users.

## FILTERING PROCESS

Raw water enters through the inlet connection (IN), flows through the filtering bag and exits from the outlet connection (OUT). Separated particles remain trapped inside the filtering bag, while ferrous impurities are captured by the magnets.

## MAINTENANCE

Filtering bags must be cleaned or replaced once the progressive build-up of suspended solids causes an excessive increase of the pressure loss ( $> 0.7\text{bar}$ ) which can be checked on the pressure gauges installed on the filter. To proceed with the maintenance it is sufficient to isolate the filter, remove the cover by loosening the quick-unlock bolts and extract the filtering bag.



## TECHNICAL SPECIFICATIONS

### Design Data

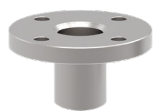
Flow rate	Up to 70 m <sup>3</sup> /h
Design Pressure (bar)	PN 10
Max Temperature (°C)	90
Salinity	< 10.000 ppm
pH range	3-9
Design Code	PED 68/2014/EU

### Materials

Filter Housing	Stainless Steel AISI 304 - AISI 316L
Filter Bag	PET
Gaskets	EPDM*
Drain/Vent Valve	Nickel-plated Brass - AISI 316L
Pressure Gauges	Stainless Steel AISI 304 - AISI 316L
Surface finishing	Microshot Peening and Passivation

\*Certified to comply to the following European Drinking Water regulations: UBA, DVGW standard W-270, WRAS and ACS

## CONNECTIONS



FLANGED  
UNI-EN 1092-1

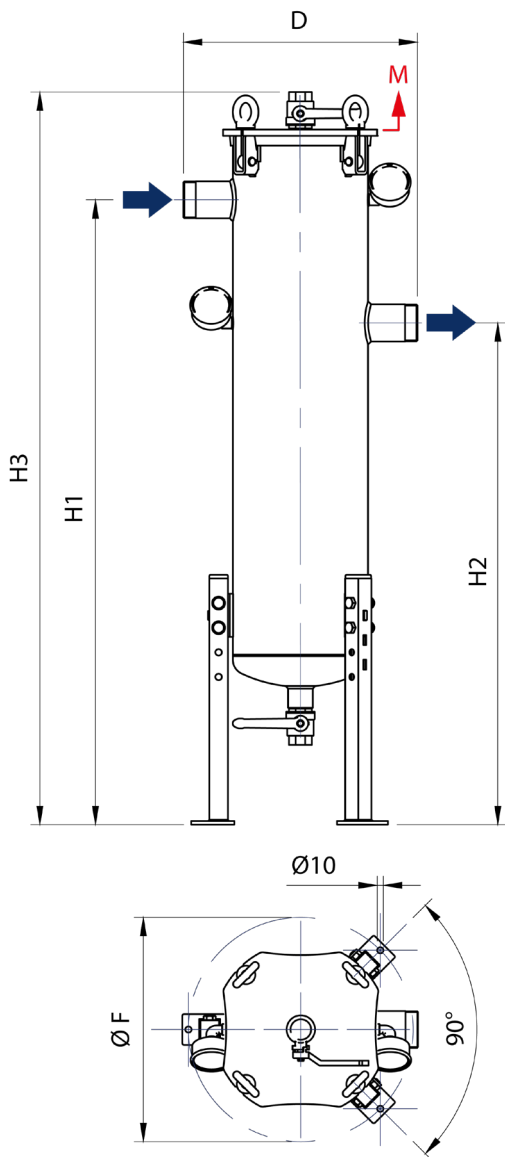


THREADED  
BSPP



GROOVED

WARDFIL's Inlet and Outlet connections can be BSPP Threaded or Grooved. Flanged UNI-EN 1092-1 PN 10/16 connections are also available upon request.



## HOUSING FLOW RATES

MODEL	IN/OUT Ø	MAX FLOW * [m³/h]	FILTERING AREA [cm²]	DRAIN Ø
WDFI 2" Z S2	2" BSPP	38 m³/h	4500	1" BSPP
WDFI 2" Z S2 GR	2" Grooved			
WDFI 50 Z S2	DN50 Flanged			

WDFI 3" Z S2	3" BSPP	70 m³/h	4500	1" BSPP
WDFI 3" Z S2 GR	3" Grooved			
WDFI 80 Z S2	DN80 Flanged			

\* Max flow rates are referred to the filter without filtering element

## DIMENSIONS

MODEL	H1	H2	H3	D	M*	Ø	ØF	WEIGHT [Kg]
WDFI 2" Z S2	1015	815	1190	379	850	2"	364	32
WDFI 2" Z S2 GR	1015	815	1190	379	850	2" Grooved	364	32
WDFI 50 Z S2	1015	815	1190	389	850	DN50	364	32
WDFI 3" Z S2	1015	815	1190	379	850	3"	364	33
WDFI 3" Z S2 GR	1015	815	1190	379	850	3" Grooved	364	32
WDFI 80 Z S2	1015	815	1190	389	850	DN80	364	33

\*M = Minimum free space required for maintenance

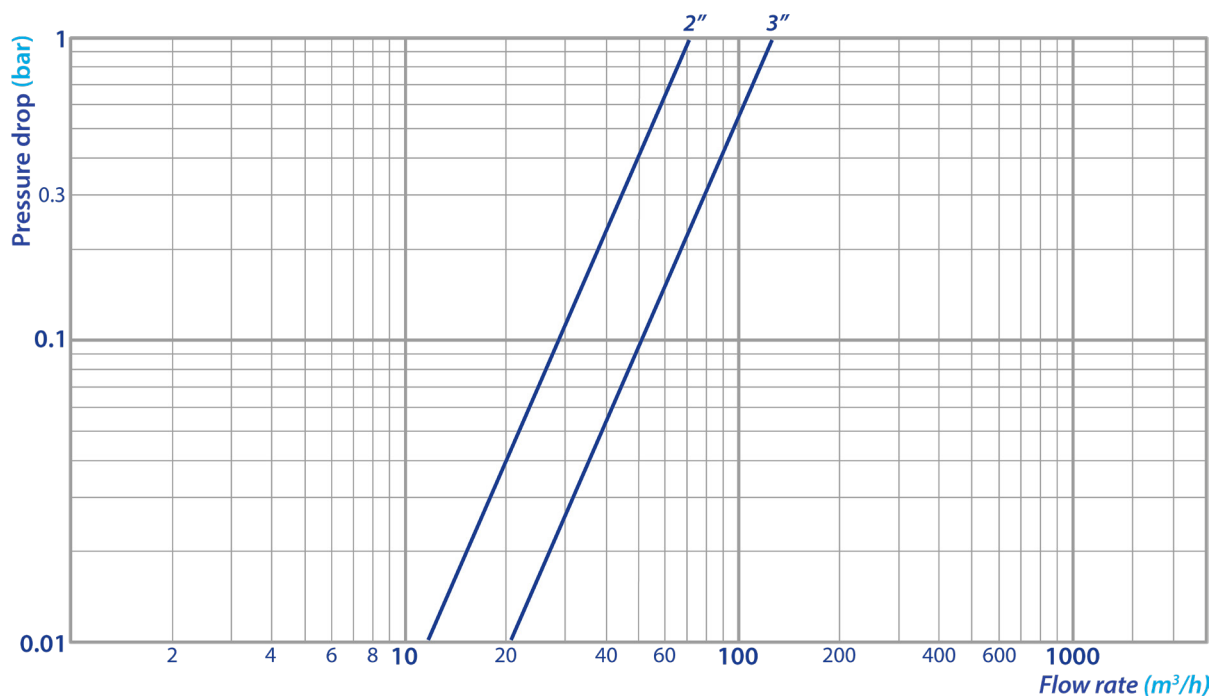
## FILTER BAGS FLOW RATES



Size 02 (Ø178 x L 810 mm)

MODEL	MAX FLOW RATE [m³/h]	FILTERING AREA [cm²]	Ø [mm]	LENGTH [mm]
BAG 1 µm	16	4500	178	810
BAG 5 µm	22	4500	178	810
BAG 10 µm	36	4500	178	810
BAG 25 µm	45	4500	178	810
BAG 50 µm	51	4500	178	810
BAG 100 µm	62	4500	178	810
BAG 200 µm	70	4500	178	810

## HEAD LOSS



Head losses are referred to filters without filtering bag.

## ACCESSORIES



MAGNET KIT

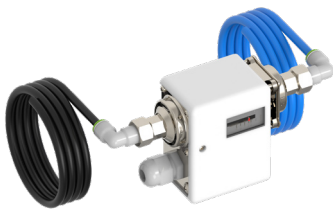
WARDFIL is designed to accommodate special Neodymium magnetic candles, coated in stainless steel to ensure an optimal corrosion resistance, that attract and trap ferrous particles. Modular kits (MGKIT) with different lengths are available to be factory-installed or subsequently purchased.

Magnetic Flux Density: 9000 Gauss (each candle)

WARDFIL can be equipped with an automatic air-relief valve which expels eventual air bubbles that can form inside the pipeline and facilitates emptying and filling operations.



VENT VALVE



DIFFERENTIAL  
PRESSURE KIT

WARDFIL can be equipped with a differential pressure control kit (DPKIT) which detects the pressure difference between the filter's inlet and outlet connections. This greatly facilitates maintenance operations by measuring the degree of clogging of the filtering element and helps the operator plan its replacement.