



# CARTRIDGE FILTER HOUSINGS

## Microfiltration Series





40  
Years  
Drop by Drop

fluytec



CARTRIDGE FILTER HOUSINGS | MICROFILTRATION SERIES

Subject to change without notice

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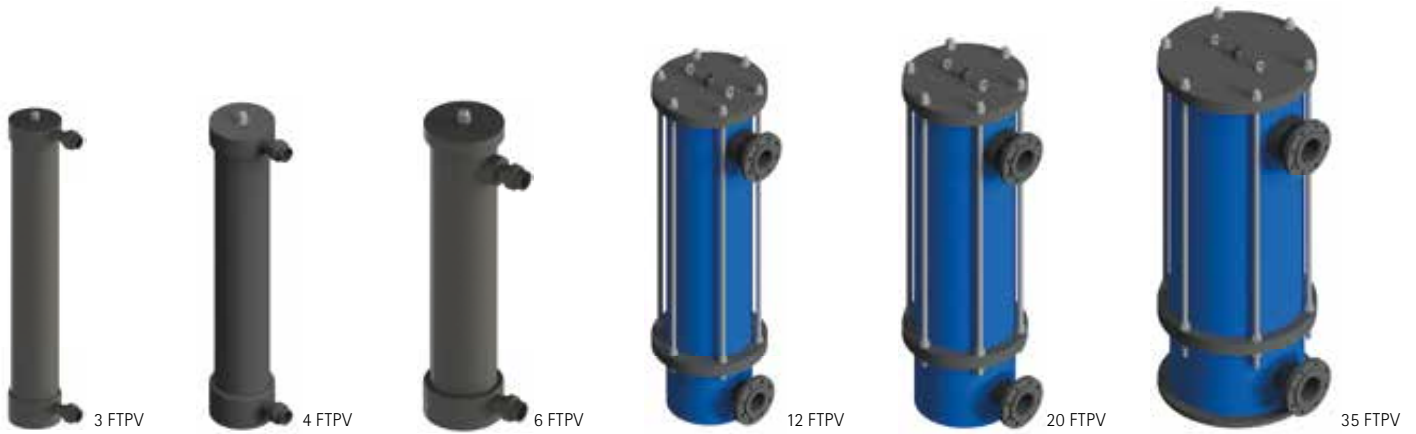
### SS HOUSINGS

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VERTICAL/HORIZONTAL  
0-2.500 m<sup>3</sup>/h  
UNLIMITED DESIGN PRESSURE



# PVC HOUSINGS FTPV SERIES



## Introduction

Fluytec PVC filter housings combine design simplicity with high filtering quality. These are specially suitable in those applications that handle small amounts of salty water, both brackish and sea water: from 3m<sup>3</sup>/h to 150 m<sup>3</sup>/h.

## Standard materials

**Body:** PVC

**FF plate:** PVC

**External nuts and bolts:** SS AISI 316 (A4 Quality)

**Internal elements:** PVC, PP

**Closure Gaskets:** EPDM

**Connections:** Threaded or Flanged (Lap Joint)

\*Orientations customizable by client: 0°-180°

## Cartridge installation

Fluytec's classic FTPV housings are designed with a Traditional Cartridge Filter Housing System, which ensures a perfect water tightness while avoiding raw water bypasses. This is achieved by forcing the fluid to pass through the filtering media thanks to the following:

The bottom of the cartridge is incrustated into the guide tube, the base of which has a perimeter knife edge to seal the bottom end of the cartridge - **Figure 1** -.

The top is closed with a part exclusively designed and manufactured by Fluytec called "nipple", which is pressed against the cartridge by the springs between it and the top and/or filter lid - **Figures 2 and 3** -.

## General description

These filter housings are designed according to the ASME design code for pressure vessels and manufactured according to the 2014/68/EU S.4.3 European Directive of Pressure Vessels.

Standard Design Pressure is 6 Bar and Test Pressure is 9 Bar.

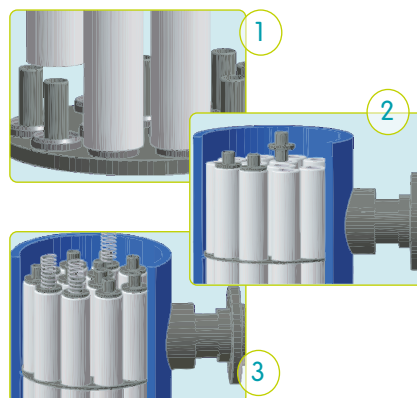
The housings are made of PVC and the internal parts are of plastic materials except for the springs which are made of plastic coated SS.

In smaller items of this family, the inlet and outlet connections are threaded.\* In larger ones, they are of standard DIN 2576 PN10 flanges (unless specifically indicated otherwise).



## Advantages

- High filtering quality.
- Excellent quality/price ratio.
- Easy cartridge replacement.
- Fluid treatment versatility with a simple design.

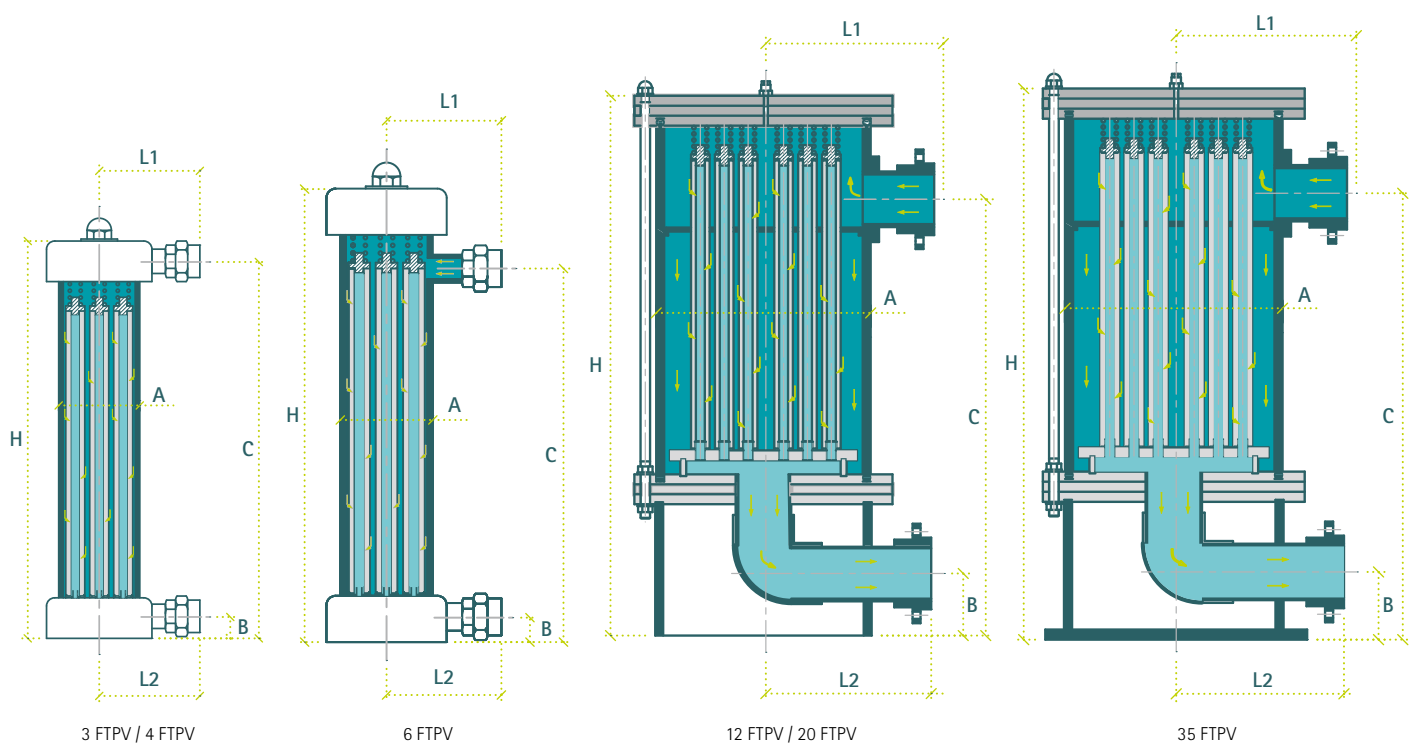


# — MODELS & CHARACTERISTICS

MODEL	CARTRIDGES	QDESIGN m <sup>3</sup> /hour	DIMENSIONS (mm)					
			(DN)	B	C	H	L1/L2	F1/F2
3 FTPV-2	3 of 20"	4	180	70	715	745	210	32
3 FTPV-3	3 of 30"	6	180	70	965	995	210	32
3 FTPV-4	3 of 40"	8	180	70	1,215	1,245	210	32
4 FTPV-3	4 of 30"	8	200	82	995	1,030	230	40
4 FTPV-4	4 of 40"	10	200	82	1,245	1,280	230	40
4 FTPV-5	4 of 50"	13	200	82	1,495	1,530	230	40
6 FTPV-3	6 of 30"	12	250	82	846	1,005	280/265	50
6 FTPV-4	6 of 40"	16	250	82	1,096	1,255	280/265	50
6 FTPV-5	6 of 50"	20	250	82	1,346	1,505	280/265	50
12 FTPV-3	12 of 30"	23	330	122	1,039	1,237	300/261	80
12 FTPV-4	12 of 40"	31	330	122	1,289	1,487	300/261	80
12 FTPV-5	12 of 50"	39	330	122	1,539	1,737	300/261	80
20 FTPV-3	20 of 30"	39	400	140	1,075	1,305	335/350	100
20 FTPV-4	20 of 40"	52	400	140	1,325	1,555	335/350	100
20 FTPV-5	20 of 50"	65	400	140	1,575	1,805	335/350	100
35 FTPV-3	35 of 30"	69	540	175	1,122	1,377	430/420	125
35 FTPV-4	35 of 40"	91	540	175	1,372	1,627	430/420	125
35 FTPV-5	35 of 50"	114	540	175	1,622	1,877	430/420	125

Measurements in mm.

Design flows calculated for a flow rate of 0.65 m<sup>3</sup>/h for every 10" of cartridge.



# FRP/GRP HOUSINGS LOW FLOWS: FTP BL "BOLTLESS" SERIES



## Introduction

In the quest to develop heavy duty equipment for the Industry's most demanding applications, Fluytec has combined Glass-fiber Reinforced Polyester (FRP/GRP) vessels with a Proprietary Boltless Opening. As a result, Fluytec has created a unique Quick Opening and fully **Non-Corrosive** filter.

## General Description

The Boltless filters are designed and manufactured according to the **Ad-Merkblatt (AD2000)** design code. Design pressure is **10 Bar** for all these models, and the Hydrostatic Tests are performed at 14,3 Bar.

All the filter's components have been minutely selected for Heavy Duty applications:

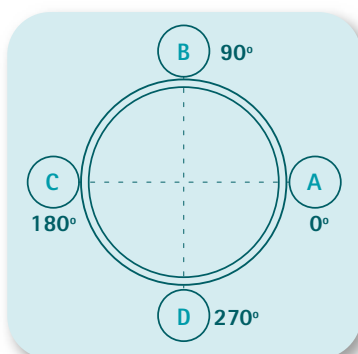
- Vessels / Shells are manufactured in **GRP** with an **Internal Chemical Barrier** for extreme pH applications. Therefore, this standardized product family is perfectly suitable for **CIP (Cleaning in Place)** processes.
- As default, all these standard models are painted with a twin component paint, and **UV protected** for Outdoor Installations.
- All **internal parts** in contact with the fluid are **non-metallic or suitably plasticized**.

The type of closure is a **Boltless Quick Opening** system, where the sealing is obtained through an O-ring gasket and the

resistant plate (FRP/GRP) is fastened to the vessel via thermoplastic sectors.

The absence of bolts means no corrosion and fast cartridge replacement.

Relative orientation for inlet/outlet connections customized\* for each filter



\*Not available option for stocked equipment



## Advantages

- Full Corrosion Resistance for a wide range of applications.
- UV protection for Outdoor Installations.
- Standard 10 Bar design pressure covers a wide range of services.
- Quick and Easy cartridge replacements.

## Standard Materials of Construction

**Shell:** FRP/GRP

**False Bottom Plate:** FRP/GRP

**Internal parts:** Thermoplastic materials (PVC, PP, PA, or Similar)

**Internal finishing:** Internal Chemical Barrier of Vinyl-Ester Resin

**External finishing:** Twin component paint with UV protection + Top coat



# MODELS & CHARACTERISTICS

## FTP BL series

With 7 to 70 cartridges.

- 7 FTP BL.
- 12 FTP BL.
- 20 FTP BL.
- 35 FTP BL.
- 50 FTP BL.
- 70 FTP BL.



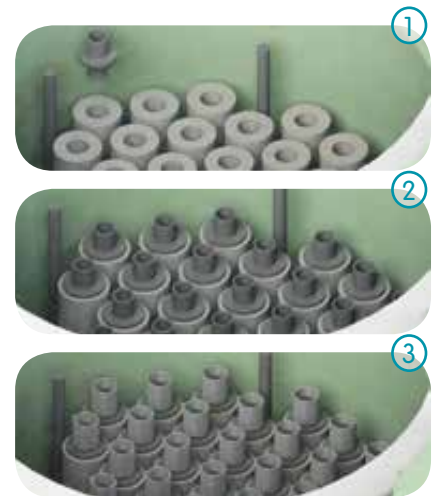
## Cartridge installation

Standard design for these Filter housings is Traditional System with DOE elements\*, in which, and in order to assure reliable water tightness in the cartridge fixing, they are placed in the following way:

In the lower part, the cartridge is settled in the false bottom plate, guided by a guide tube and a circular knife edge that remains incrustated in the cartridge - **Figure 1** -.

In the upper part a special piece, designed by Fluytec and called "nipple" is connected, assuring their water tightness with a plastic coated spring that presses that "nipple" against the closure plate - **Figures 2 and 3** -.

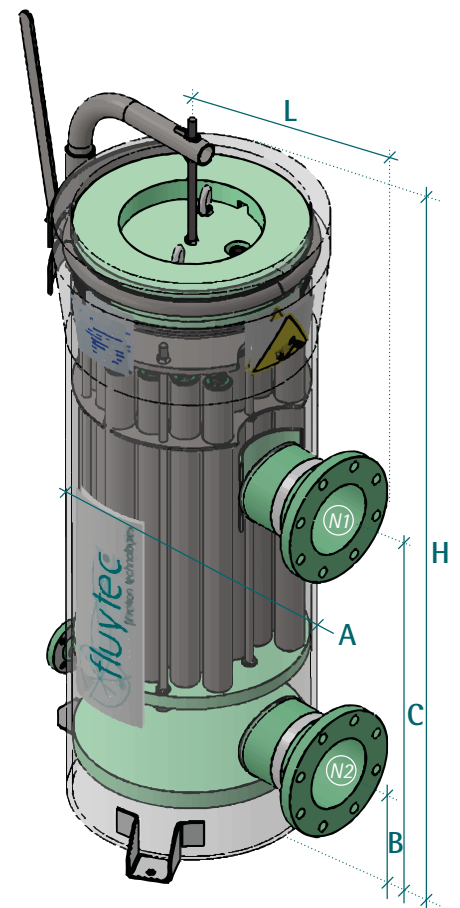
\*Other options available upon request.



## Options

Model	A DN	B	C	H	L	N1/N2 DN	Qdesign m³/hour	No. cartridges	L cartridges
7 FTP-3 BL	250	250	892	1,400	275	80	14	7	762 (30")
7 FTP-4 BL	250	250	1,146	1,650	275	80	19	7	1,016 (40")
7 FTP-5 BL	250	250	1,400	1,905	275	80	23	7	1,270 (50")
12 FTP-3 BL	300	250	892	1,400	320	100	24	12	762 (30")
12 FTP-4 BL	300	250	1,146	1,650	320	100	32	12	1,016 (40")
12 FTP-5 BL	300	250	1,400	1,905	320	100	39	12	1,270 (50")
20 FTP-3 BL	400	250	892	1,450	360	100	39	20	762 (30")
20 FTP-4 BL	400	250	1,146	1,690	360	100	52	20	1,016 (40")
20 FTP-5 BL	400	250	1,400	1,935	360	100	65	20	1,270 (50")
35 FTP-3 BL	500	250	892	1,450	430	150	69	35	762 (30")
35 FTP-4 BL	500	250	1,146	1,690	430	150	91	35	1,016 (40")
35 FTP-5 BL	500	250	1,400	1,935	430	150	114	35	1,270 (50")
50 FTP-3 BL	600	285	892	1,530	480	150	98	50	762 (30")
50 FTP-4 BL	600	285	1,146	1,770	480	150	130	50	1,016 (40")
50 FTP-5 BL	600	285	1,400	2,020	480	200	163	50	1,270 (50")
70 FTP-3 BL	700	285	892	1,530	550	200	137	70	762 (30")
70 FTP-4 BL	700	285	1,146	1,770	550	200	182	70	1,016 (40")
70 FTP-5 BL	700	285	1,400	2,020	550	200	228	70	1,270 (50")

- Measurements in mm (inches).
- FLOWRATE: Recommended flowrate (conservative) of  $\approx 0,65 \text{ m}^3/\text{h}$  per every 10" of cartridge length. Maximum recommended flowrate of  $0,95 \text{ m}^3/\text{h}$  (50" length elements) to  $1,00 \text{ m}^3/\text{h}$  (40" length elements) per every 10" of cartridge length.
- Please, contact Fluytec for technical assistance and sizing guidelines.



# FRP/GRP HOUSINGS MEDIUM/LARGE FLOWS: TRADITIONAL FTP SERIES



## Introduction

With **+20 Million m<sup>3</sup>/day** installed capacity and references with **+25 years** of operation, Fluytec's FTP series are the leading choice for medium and large systems.

Fluytec's FRP/GRP (**Fiberglass Reinforced Polyester**) Cartridge Filters are engineered to operate in heavy duty applications, providing superb filtration efficiency and durability.

Fluytec's continuous development allows introducing new features and functionalities to our products.

## General description

The FTP series are available in two configurations:

- Single Flange (SFL) allows individual cartridge replacement inside the housing and
- Sword System (B) allows for complete filtering package removal outside the housing.

Fluytec FTP Housings are offered according to the most relevant International Codes: **Ad-Merkblatt** or **ASME X** for pressure vessels and are manufactured according

to the **New European Directive of Pressure Vessels 2014/68/EU section 4.3**. Standard design pressures are 10 and 6 bar, however, others are available upon request.

The material selection is based in the stringent operating conditions: corrosive fluids and atmospheres, outdoor installations and marine atmospheres, amongst others.

The hydraulic design minimizes turbulent regimes caused by high flow & pressure inlet currents, avoiding damage to internals / filtering media, enhancing filtration efficiency and minimizing pressure drop.



## Advantages

- Excellent filtration efficiency.
- Perfect corrosion resistance behavior.
- Reduced maintenance during its life span.
- Versatility in design options.

## Standard materials

**Housing:** FRP/GRP Fiberglass Reinforced Polyester

**Internal:**

- Chemical Barrier of Vinyl-Ester Resin
- Super Smooth inner surface minimizes friction, achieving a very low pressure drop

**External:**

- Priming with a two coats of epoxy primer
- Final Painting with a two coats of aliphatic polyurethane painting – UV resistant

**Tubesheet and other internals:**  
Composite/Plastic Materials

**Legs:** Coated CS to C-5i / C-5m grade

**External bolts:** SS 316\* (A4 Quality)

**O-ring:** EPDM\*

\*Other materials available.



General View of Single Flange Filter (FTP SFL).



General View of Sword System Filter (FTP B).



# MODELS

## 1. FTP Single Flange (SFL)

**FTP Single Flange Series (FTP SFL)** is Fluytec's traditional double flange type (FTP FL) evolution to a more simple Housing with a unique flange in the upper part of the housing (the closure).

Mounting, dismounting and cartridge replacement operations will not require disassembling the piping as feed flange is

located on the filter's shell (lateral inlet).

These housings can be equipped optionally with an accessory davit arm which will help when opening the upper lid.

FTP SFL models are available from 80 up to 360 cartridges.



### ADVANTAGES

- > NO NEED OF DISASSEMBLING THE PIPING FOR CARTRIDGE CHANGE OUTS
- > CAN BE EQUIPPED WITH AN HYDRAULIC DAVIT ARM > NO NEED OF OVERHEAD CRANE

## Cartridge installation

The Standard design is based in a Traditional System with DOE\* elements "spring & nipple" fixing, which allows for an extremely rapid installation and removal of the cartridges. The careful design and distribution of the tightening rods ensure a perfect sealing of cartridges.

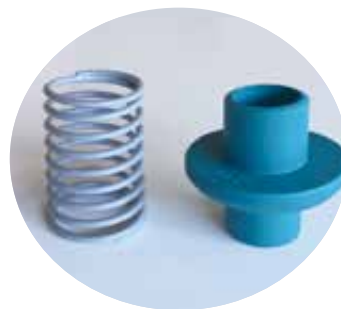
In order to assure reliable water tightness in the cartridge fixing, they are placed in the following way:

- In the lower part, the cartridge is settled in the false bottom plate, guided by a guide tube and a circular knife edge that remains incrustated in the cartridge.
- In the upper part a special piece, designed by Fluytec and called "nipple" is connected, assuring their water tightness with a plastic coated spring that presses that "nipple" against the closure plate.

\*Other options available upon request.

## Options

- Possibility of equipping with a lifting Davit Arm.
- Possibility of equipping with inlet and outlet elbows.
- Possibility of equipping with Inverted Swords System (proprietary technology) upon request.



## Design Options

FTP SFL MODELS	Number of Cartridges	Maximum Flow	DN	Cartridge Length	Design Pressure
FROM	80	Up to 240 m <sup>3</sup> /h	DN800	30" 40" 50" 70"	Up to 10 Bar
UP TO	360	Up to 2,000 m <sup>3</sup> /h	DN1600		

## FTP SFL Naming Codification

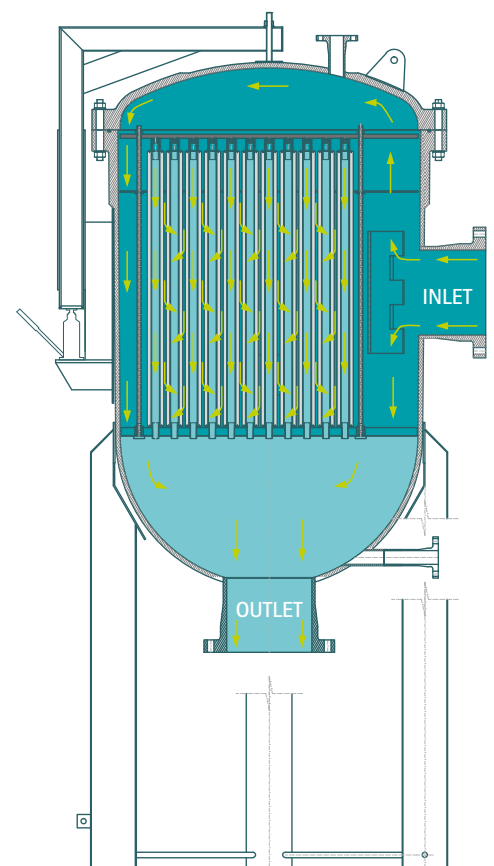
>>>> **NNN FTP-L SFL PNY HTAL/VTAL**

**NNN** > number of cartridges, (80-360) cartridges

**L** > the length of the cartridges, (30"-70" in multiples of 10")

**SFL** > cartridges connection system: SFL (single flange)

**YY** > design pressure rating (4-10 Bar)



# MODEL AVAILABILITY & CHARACTERISTICS

Model	Average Design Flow Recommendation m <sup>3</sup> /hour	Maximum Design Flow Recommendation m <sup>3</sup> /hour	No. Of Cartridges	Length cartridges inches (mm)
80 FTP-4 SFL	208	320	80	40" (1,016)
80 FTP-5 SFL	260	400	80	50" (1,270)
90 FTP-4 SFL	234	360	90	40" (1,016)
90 FTP-5 SFL	293	450	90	50" (1,270)
100 FTP-4 SFL	260	400	100	40" (1,016)
100 FTP-5 SFL	325	500	100	50" (1,270)
120 FTP-4 SFL	312	480	120	40" (1,016)
120 FTP-5 SFL	390	600	120	50" (1,270)
135 FTP-4 SFL	351	540	135	40" (1,016)
135 FTP-5 SFL	439	675	135	50" (1,270)
145 FTP-4 SFL	377	580	145	40" (1,016)
145 FTP-5 SFL	472	725	145	50" (1,270)
180 FTP-4 SFL	468	720	180	40" (1,016)
180 FTP-5 SFL	585	900	180	50" (1,270)
215 FTP-4 SFL	559	860	215	40" (1,016)
215 FTP-5 SFL	699	1,075	215	50" (1,270)
240 FTP-4 SFL	624	960	240	40" (1,016)
240 FTP-5 SFL	780	1,200	240	50" (1,270)
280 FTP-4 SFL	728	1,120	280	40" (1,016)
280 FTP-5 SFL	910	1,400	280	50" (1,270)
330 FTP-4 SFL	858	1,320	330	40" (1,016)
330 FTP-5 SFL	1073	1,650	330	50" (1,270)
360 FTP-4 SFL	936	1,440	360	40" (1,016)
360 FTP-5 SFL	1170	1,800	360	50" (1,270)

| Average Design Flow calculated for a flow rate of aprox. 0.65 m<sup>3</sup>/h per every 10" of cartridge.

| Maximum Design Flow calculated per a flow rate of aprox. 1 m<sup>3</sup>/h per every 10" of cartridge.

>> Please contact Fluytec for TAILOR MADE Options <<



# — MODELS

## 2. FTP Sword System (B)

FTP B Series are Cartridge Filter Housings with extractable **Sword system package and Single body flange** designed for handling large flows.

These filter housings consist on a main body with a unique flange with the inlet connection on the bottom of the body and the outlet in the top lid. The filtering elements (Cartridges) hang from the false bottom plate (located on the main flange of the equipment).

The cartridge replacement is carried out outside of the filter and, having a spare Filtering Extractable Package, the replacement can be instantaneous. In order to extract the filter package it will be necessary to have an overhead crane.

FTP B Models are available from 80 up to 470 cartridges.



### ADVANTAGES

- > VERY QUICK CARTRIDGE CHANGE OUTS > MINIMIZES DOWNSTREAM
- > MINIMUM FOOTPRINT MAXIMIZING FILTRATION SURFACE

## Cartridge installation

The FTP B Series are available for DOE cartridge elements, which are individually mounted on "Swords" (pressed using an internal rod and a nut, both with knife edges). In this case, the Swords are fixed to the top tubesheet, hanging from it.

Additionally, and with the purpose of providing the necessary rigidity to prevent cartridges damage due to internal vibration,

the complete set of Swords is fixed on the lower end with a plastic grating.

All these elements, including the false bottom plate constitute the "Extractable Filtering Package". An extra Filtering Package can be supplied optionally so as to speed up the cartridge change process.

## Options

- Possibility of equipping with an extra Filtering Package.
- Possibility of equipping with inlet and outlet elbows.

## Design Options

FTP B MODELS	Number of Cartridges	Maximum Flow	DN	Cartridge Length	Design Pressure
FROM	80	Up to 240 m <sup>3</sup> /h	DN800	40" 50" 70"	Up to 10 Bar
UP TO	470	Up to 2600 m <sup>3</sup> /h	DN1600		

## FTP B Naming Codification

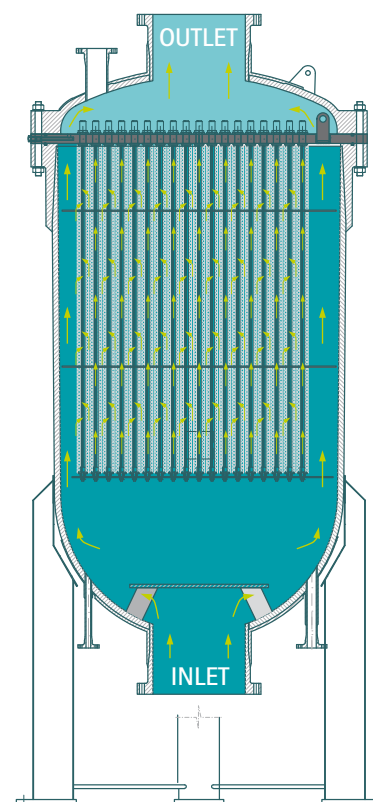
>>>> **NNN FTP-L B PNY HTAL/VTAL**

**NNN** > number of cartridges, (80 – 470) cartridges

**L** > the length of the cartridges, (40"-70" in multiples of 10")

**B** > cartridges connection system: B (Sword System)

**YY** > design pressure rating (4-10 Bar)



# MODEL AVAILABILITY & CHARACTERISTICS

Model	Average Design Flow Recommendation m <sup>3</sup> /hour	Maximum Design Flow Recommendation m <sup>3</sup> /hour	No. Of Cartridges	Length cartridges inches (mm)
120 FTP-4 B	312	480	120	40" (1,016)
120 FTP-5 B	390	600	120	50" (1,270)
120 FTP-7 B	546	840	120	70" (1,778)
150 FTP-4 B	390	600	150	40" (1,016)
150 FTP-5 B	488	750	150	50" (1,270)
150 FTP-7 B	683	1,050	150	70" (1,778)
180 FTP-4 B	468	720	180	40" (1,016)
180 FTP-5 B	585	900	180	50" (1,270)
180 FTP-7 B	819	1,260	180	70" (1,778)
240 FTP-4 B	624	960	240	40" (1,016)
240 FTP-5 B	780	1,200	240	50" (1,270)
240 FTP-7 B	1,092	1,680	240	70" (1,778)
270 FTP-4 B	702	1,080	270	40" (1,016)
270 FTP-5 B	878	1,350	270	50" (1,270)
270 FTP-7 B	1,229	1,890	270	70" (1,778)
310 FTP-4 B	806	1,240	310	40" (1,016)
310 FTP-5 B	1,008	1,550	310	50" (1,270)
310 FTP-7 B	1,410	2,170	310	70" (1,778)
360 FTP-4 B	936	1,440	360	40" (1,016)
360 FTP-5 B	1,170	1,800	360	50" (1,270)
360 FTP-7 B	1,638	2,520	360	70" (1,778)
410 FTP-4 B	1,066	1,640	410	40" (1,016)
410 FTP-5 B	1,333	2,050	410	50" (1,270)
410 FTP-7 B	1,866	2,870	410	70" (1,778)
470 FTP-4 B	1,222	1,880	470	40" (1,016)
470 FTP-5 B	1,258	2,350	470	50" (1,270)
470 FTP-7 B	2,139	3,290	470	70" (1,778)

| Average Design Flow calculated for a flow rate of aprox. 0.65 m<sup>3</sup>/h per every 10" of cartridge.

| Maximum Design Flow calculated for a flow rate of aprox. 1 m<sup>3</sup>/h per every 10" of cartridge.

>> Please contact Fluytec for TAILOR MADE Options <<



# FRP/GRP HOUSINGS HIGH FLOWS: HF FTP SERIES



## Introduction

HF FTP filter housings lodge **high flow** cartridges that optimize designing process in order to obtain the **better flow/ footprint ratio**.

## General Description

The bodies of these filters are designed according to the **Ad-Merkblatt\*** design code from pressure vessels and are made according to the 97/23 CE S. S.3.3 European Standard for Pressure Filters.

The standard pressure is 6 bar and it is possible to design equipment for different nominal pressures under request. They have a natural internal finish while externally they are covered with a twin component paint and finished with a top coat of paint.

The internal parts in contact with the water are made of various plastics and the seals being O-rings are designed for **easy replacement and maintenance**.

All the main connections for the fluid inlet and outlet and the vent and drain are designed with **flanges**.

The equipment is anchored at the base with **Carbon Steel legs**, each with a hole for anchoring studs, not supplied by the manufacturer.

\*Other design codes under request.



## Advantages

- Reduced footprint.
- Easy maintenance and cartridge replacement procedures.
- Savings due to more compact housings.
- Reduced height and therefore very suitable for containerized RO plants.

## Standard Materials

**Body:** GRP

**FB plate:** GRP

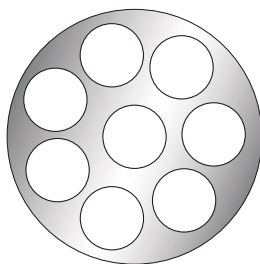
**Closing plate:** Polypropylene

**Baskets:** Polypropylene

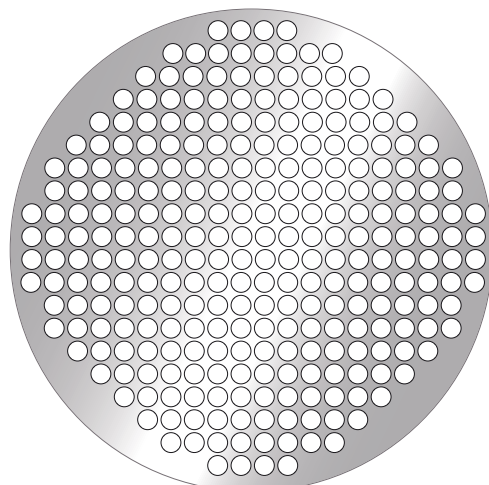
**External bolts:** Stainless Steel

**O-ring:** EPDM

**Legs:** Carbon Steel



High flow cartridges false bottom plate.



Traditional cartridges false bottom plate.

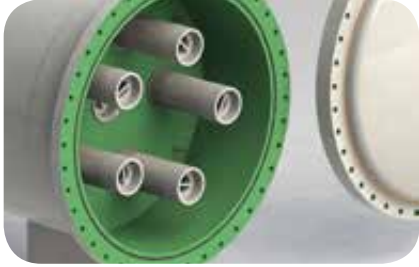
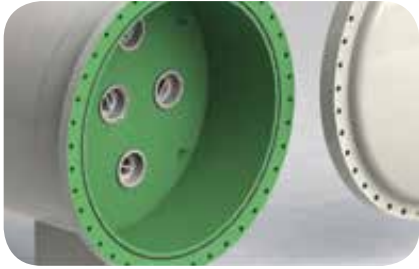
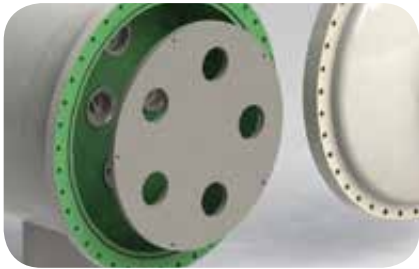
## High Flow Cartridges

Most characteristic features for high flow cartridges lodged in HF FTP Series Filters.

Specifications	
Retention Rating	1, 3, 5, 10, 20, 40 microns*
Outer diameter	6" (152 mm)
Length	40" (1,016 mm), 60" (1,524 mm)
Filtration surface	7.9 m <sup>2</sup> (40"), 11.9 m <sup>2</sup> (60")
Recommended flow rates	40 m <sup>3</sup> /h (40"), 60 m <sup>3</sup> /h (60")
Maximum differential pressure (recommended change out)	2.1 bar

Materials	
Filter media	Depth type pleated 100% polypropylene
Core / Cage	Polypropylene / Polypropylene cage
O-ring	EPDM*

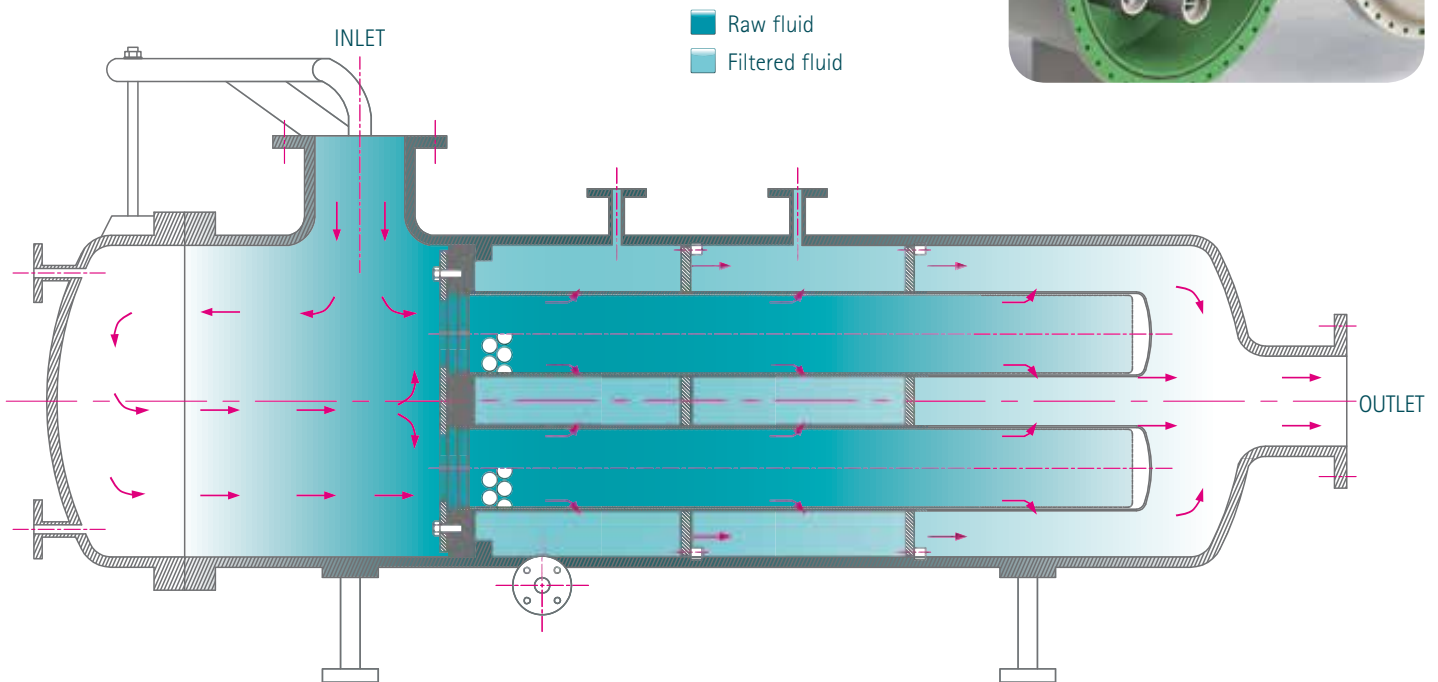
\*Other options available under request.



## Advantages

- Individual flow capacity per filter element up to 70 m<sup>3</sup>/h (60") or higher, depending on each particular application\*.
- FITO flow pattern, capturing and retaining all contaminants inside the filter element, preventing dirt release at cartridge changing operations.

\*Please, contact Fluytec for technical assistance and sizing guidelines.



# STAINLESS STEEL HOUSINGS ALL FLOWS: FTI SERIES



## Introduction

Fluytec **Steel Filters** are especially suitable for applications in which, because of their specific needs (high pressures and/or temperatures of the fluid to be treated) plastic materials cannot be used to manufacture the filter bodies.

## General description

The bodies of these filters are designed according to the **ASME**, Section VIII, Division 1 design code for pressure vessels and manufactured according to the **97/23 CE S. S.3.3 European Standard for Pressure Vessels**.

The standard design pressure is 6 bars and it is possible to design equipment for different design pressures to order.

There are made **entirely of steel** except for the internal parts and the internal lining in those cases (carbon steel) in which lining is required. The quality of the material can be varied in the case of stainless steel (AISI304,

AISI316, AISI904) and for carbon steel (ASJ 2505, etc).

The inlet and outlet connections are of **standard DIN 2576 PN10 flanges** unless specifically indicated otherwise.

There are also **emptying drains per chamber** (treated and untreated water) as well as an **upper vent on the top lid** to which the chosen safety device can be connected (safety valve or rupture disc).



General view.

## Advantages

- High filtering quality.
- Excellent quality/price ratio.
- Easily changed cartridges.
- Possibility of hinged nuts and bolts.

## Standard materials

**Body:** Steel (Stainless/Carbon)

**FF plate:** SS/GRP/PVC

**Legs:** Steel (Stainless/Carbon)

**External nuts and bolts:** Steel (Stainless/Carbon)

**Internal parts:** PVC

**Gasket:** EPDM\*

**Interior lining:** Ebonite/Natural rubber/Neoprene \*

\*Other materials available.



View of top opening.

## 1. FTI AISI Low Flow series

Cartridge filters made of stainless steel to the relevant specified AISI quality.

### Cartridge installation

The bottom of the cartridge is located on the guide pipe, the base of which has a perimeter flange to seal the bottom end of the cartridge - **Figure 1** -.

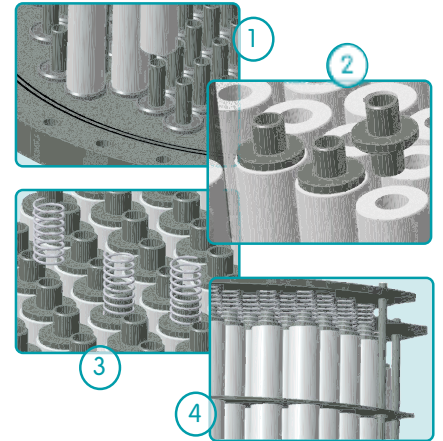
The top is closed with a part exclusively designed and manufactured by Fluytec called "teat" which is pressed against the cartridge by the spring between it and the

top and/or filter lid - **Figures 2 and 3** -.

This system ensures the perfect sealing of the cartridge, making it impossible for the fluid to pass through any place other than the filtering medium (the end purpose of the filter) - **Figure 4** -.



Installation in Cuevas de Almanzora, Almería.



### Advantages

- Versatility for treating fluids at high temperatures and/or pressures.

### Options

- Possibility of fitting hinged nuts and bolts and lifting arm.
- Possibility of anchoring to bracket or manufacture of support legs.
- Possibility of equipping with Inverted Swords System (proprietary technology) upon request.



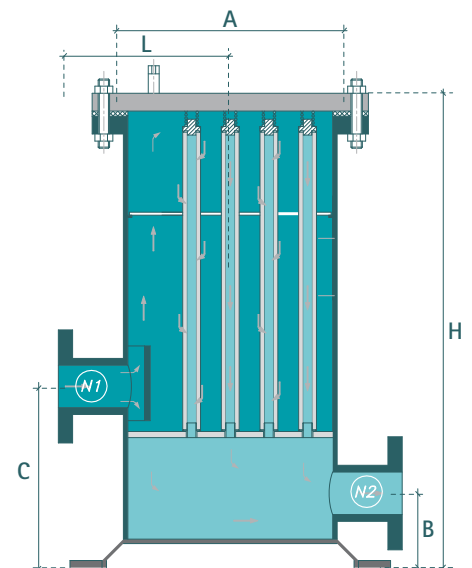
Details of the hinged nuts.

Model	A DN	B	C	H	L	N1/N2 DN	Qdesign m³/hour	No. cartridges	L cartridges
3 FTI-2	168.3	85	168	715	209	25	4	3	500
3 FTI-3	168.3	95	187	980	209	32	6	3	750
3 FTI-4	168.3	100	198	1,237	209	40	8	3	1,000
5 FTI-3	204	100	198	989	227	40	10	5	750
5 FTI-4	204	105	215	1,250	227	50	13	5	1,000
5 FTI-5	204	105	215	1,500	227	50	16	5	1,250
7 FTI-4	254	145	287	1,305	252	65	18	7	1,000
7 FTI-5	254	145	287	1,555	252	65	16	5	1,250
12 FTI-4	355	145	287	1,305	302.5	80	31	12	1,000
12 FTI-5	355	145	287	1,555	302.5	80	39	12	1,250
19 FTI-4	406	157	323	1,330	328	100	49	19	1,000
19 FTI-5	406	157	323	1,580	328	100	62	19	1,250
21 FTI-4	406	157	323	1,330	328	100	55	21	1,000
21 FTI-5	406	157	323	1,580	328	100	68	21	1,250
27 FTI-4	450	162	328	1,392	350	100	70	27	1,000
27 FTI-5	450	189	450	1,642	350	125	88	27	1,250
35 FTI-4	500	200	460	1,415	375	125	91	35	1,000
35 FTI-5	500	200	460	1,665	375	150	114	35	1,250

• Measurements in mm.

• Measurements for a design pressure of 6 bar. Other measurements/flows to order.

• Design flows calculated for a flow rate of 0.65 m³/h for every 10" of cartridge.





# — MODELS & CHARACTERISTICS

## 2. FTI AISI Medium Flow series

Cartridge filters made of stainless steel to the relevant specified AISI quality.

### Cartridge installation

The bottom of the cartridge is located on the guide pipe, the base of which has a perimeter flange to seal the bottom end of the cartridge - **Figure 1** -.

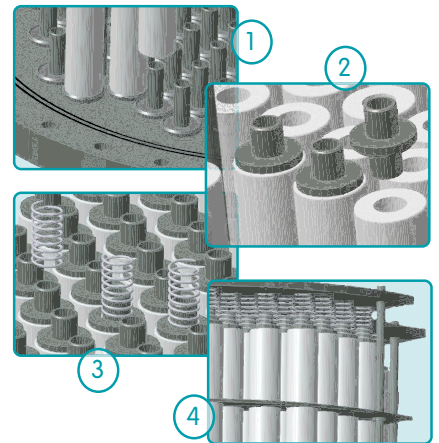
The top is closed with a part exclusively designed and manufactured by Fluytec called "teat" which is pressed against the

cartridge by the spring between it and the top and/or filter lid - **Figures 2 and 3** -.

This system ensures the perfect sealing of the cartridge, making it impossible for the fluid to pass through any place other than the filtering medium (the end purpose of the filter) - **Figure 4** -.



Installation in Abrera, Barcelona.

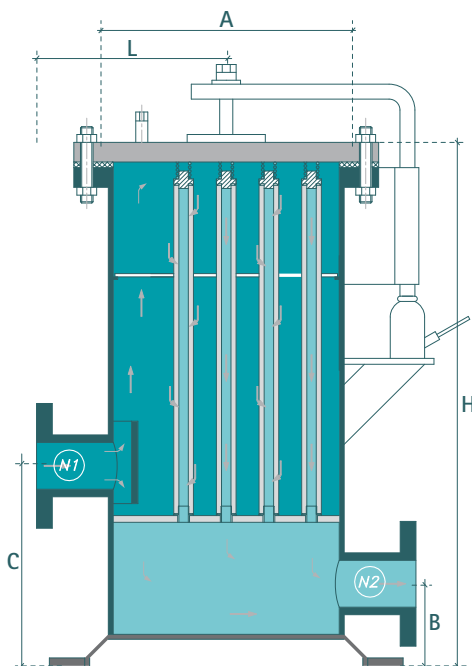


### Advantages

- Versatility for treating fluids at high temperatures and/or pressures.

### Options

- Possibility of fitting hinged nuts and bolts and lifting arm.
- Possibility of anchoring to bracket or manufacture of support legs.
- Possibility of equipping with Inverted Swords System (proprietary technology) upon request.



Model	A DN	B	C	H	L	N1/N2 DN	Qdesign m <sup>3</sup> /hour	No. cartridges	L cartridges
40 FTI-4	558	200	460	1,415	375	150	104	40	1,000
40 FTI-5	558	200	460	1,665	375	150	130	40	1,250
50 FTI-4	600	200	460	1,415	425	150	130	50	1,000
50 FTI-5	600	230	460	1,725	425	150	163	50	1,250
60 FTI-4	655	230	675	1,480	453	150	156	60	1,000
60 FTI-5	655	230	675	1,730	453	200	195	60	1,250
70 FTI-4	700	235	680	1,485	475	200	182	70	1,000
70 FTI-5	700	235	680	1,740	475	200	228	70	1,250
80 FTI-4	770	240	685	1,495	510	200	208	80	1,000
80 FTI-5	770	240	685	1,750	510	200	260	80	1,250
90 FTI-4	820	245	690	1,500	535	200	234	90	1,000
90 FTI-5	820	275	750	1,805	535	250	293	90	1,250

- Measurements in mm.
- Measurements for a design pressure of 6 bar. Other measurements/flows to order.
- Design flows calculated for a flow rate of 0.65 m<sup>3</sup>/h for every 10" of cartridge.

# OTHER PRODUCTS

MACROFILTRATION

## STRAINERS & BAG FILTERS

### FTC/B FTP SERIES

SIMPLEX | DUPLEX  
50 -1,000 µm  
AD MERKBLATT - ASME  
FRP | STAINLESS STEEL | CSRL | DUPLEX  
MESH: STAINLESS STEEL, DUPLEX, SUPERDUPLEX



## SELF CLEANING FILTERS

### FTAUR/FCP SERIES

AUTOMATIC BACKWASH SCF/NO MOTORS  
50 -1,000 µm  
AD MERKBLATT - ASME  
FRP | STAINLESS STEEL | CSRL | DUPLEX  
MESH: STAINLESS STEEL, DUPLEX, SUPERDUPLEX



MICROFILTRATION

## FILTERING CARTRIDGES

STRING WOUND



MELT BLOWN



PLEATED HIGH FLOW



ULTRAFILTRATION



## c-UF CONTINUOUS ULTRAFILTRATION

CONTINUOUS PERMEATE PRODUCTION BY CLEANING EACH MODULE AT A TIME  
LOWER FOOTPRINT  
1-240 m<sup>3</sup>/h



## i-UF INTEGRATED ULTRAFILTRATION

AUTOSCREENING & ULTRAFILTRATION STAGES INTEGRATED IN THE SAME VESSEL  
SCREENING + UF MEMBRANE CARTRIDGES  
OUTDOORS INSTALLATION  
FRP | STAINLESS STEEL | CSRL  
8-310 m<sup>3</sup>/h  
UNLIMITED DESIGN PRESSURE



OTHERS

## DMF COLLECTING NOZZLES

POLYPROPYLENE NOZZLES FOR MULTI MEDIA FILTERS  
RATINGS: 0,2 / 0,5 mm  
DIFFERENT LENGTH OPTIONS



## FRP STATIC MIXERS

LOW PRESSURE DROP  
HOMOGENEOUS & EFFECTIVE MIXTURE IN VERY SHORT DISTANCE  
DN250-DN1500



ULTRA PURE WATER



## EDI & EDR





40  
Years  
Drop by Drop

fluytec



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