



TRIDENT H SERIES

AUTOMATIC HYDRAULIC
SELF-CLEANING SCREEN FILTER



Up to **600 m³/h**
Max. Flow Rate

80-500 µm
Filtration Degree

10 bar
Max. Operating Pressure

Less than 1%
Backwash Water
Consumption

2 bar (30 psi)
Min. Operating Pressure

Up to **12,000 cm²**
Filter Area

AD 2000
Design Code

Max. Temp
65°C

ENGINEERED FILTRATION.

Filtersafe



ENGINEERED FILTRATION

With over three decades of experience in automatic water filtration, Filtersafe filters are equipped not only with state-of-the-art patented technology, but also the know-how to successfully integrate our solutions in Industrial and Agricultural water applications.

Filtersafe filters can deal with the most challenging filtration situations. That's why we are one of the top global filtration manufacturers worldwide.

- **High-End Agriculture Sector**
- **Aquaculture Sector**
- **Industrial Filtration**
- **Municipal Water Treatment**
- **Other Industrial Needs**



High-End Agricultural Project



The Trident 7200H - Our Automatic Hydraulic Self-Cleaning Filter

Reliable Filtration Durable Filters

Filtersafe brings you unrivaled value, effectiveness and durability. Our filters effectively remove high volumes of TSS and organic matter. The variety of our filter series provides functionality for a range of applications:

Typical Installations Includes:

- **Surface water Intake for irrigation**
- **Protection for Drip & sprinkler systems**
- **Aquaculture & Fish ponds**
- **Prefiltration for cooling tower water**
- **Wastewater treatment plants**
- **Seawater filtration**

With several global support hubs and two strategically placed manufacturing facilities, Filtersafe provides fast and reliable service in pre- and post-sales situations.



For smaller installations we have the Vertical Trident 2400H

TRIDENT H SERIES

The Filtersafe Trident Automatic Screen filters are reliable filters that work hard for you and are designed for near zero maintenance. The Trident provides an uninterrupted supply of clean filtered water even during the flushing cycle.

- ✓ **Full 316 Stainless Steel Construction**
- ✓ **4-Layer Sintered Screen with Class Leading Effective Screen Area**
- ✓ **Highly Effective Cleaning with Over 99% Recovery Rate and Full Screen Recovery**
- ✓ **Horizontal and Vertical Models Available**
- ✓ **Easy Access to Internal Parts**
- ✓ **The Filters are Plug & Play**
- ✓ **Failsafe NC Flush Valve**
- ✓ **Bluetooth AC/DC Powered Controller**



Robust Controller

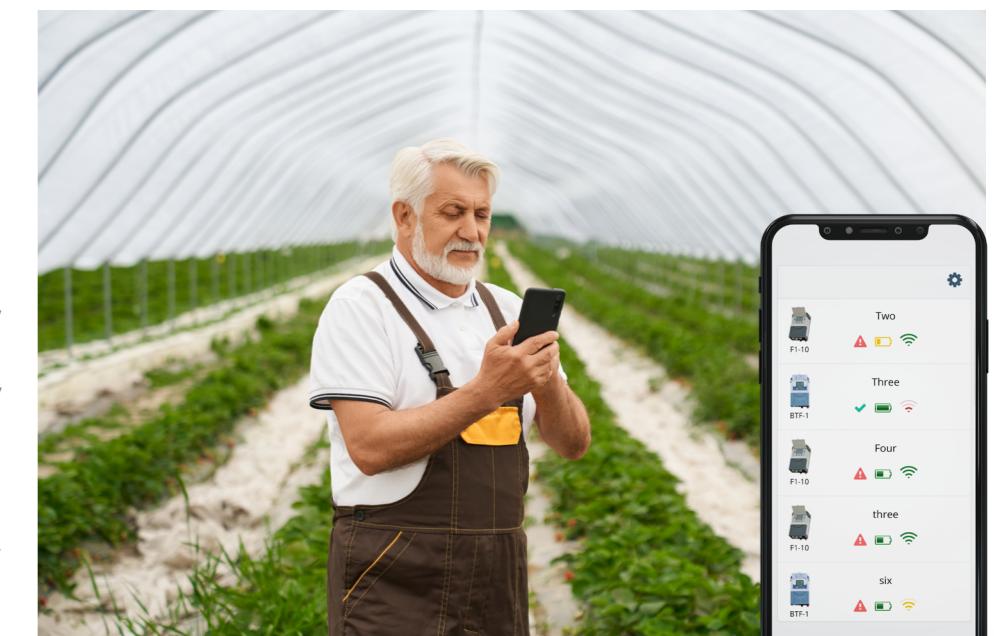
The Filtron 1-10 & BT Controller automatically manages the flushing of your Trident H filters. Giving you easy access and control.

- Large LCD display and 4 keys built for simplicity.
- Robust and accurate embedded differential pressure sensor (durable up to 18 bar).
- BLE (Bluetooth low energy) transmitter for easy programming with smartphone App for up to 10 meters away.
- Backflushing triggered by time, DP, or both.
- Easy manual backflush button.
- 24VAC and 12V DC latch solenoid operation.

Bluetooth Controller app

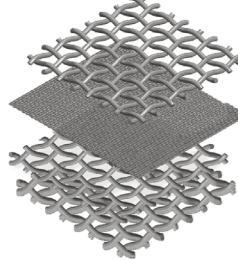
The clear and user-friendly Controller App allows to remotely:

- Supervise current backflush / irrigation status
- Make changes in backflush / irrigation programs
- Detect hardware problems such as looping warning
- Open / Close outputs manually
- Displays the Bluetooth reception, Controller name, Flush state, and batteries voltage level.



TRIDENT H SERIES

Automatic Hydraulic Self-Cleaning Screen Filter | Our Technology



smartweave™ high performance filtration screens

- 4 layer sintered structure
- Enhanced strength and durability
- High Effective area
- Available in 80-500µm
- 316 Stainless Steel



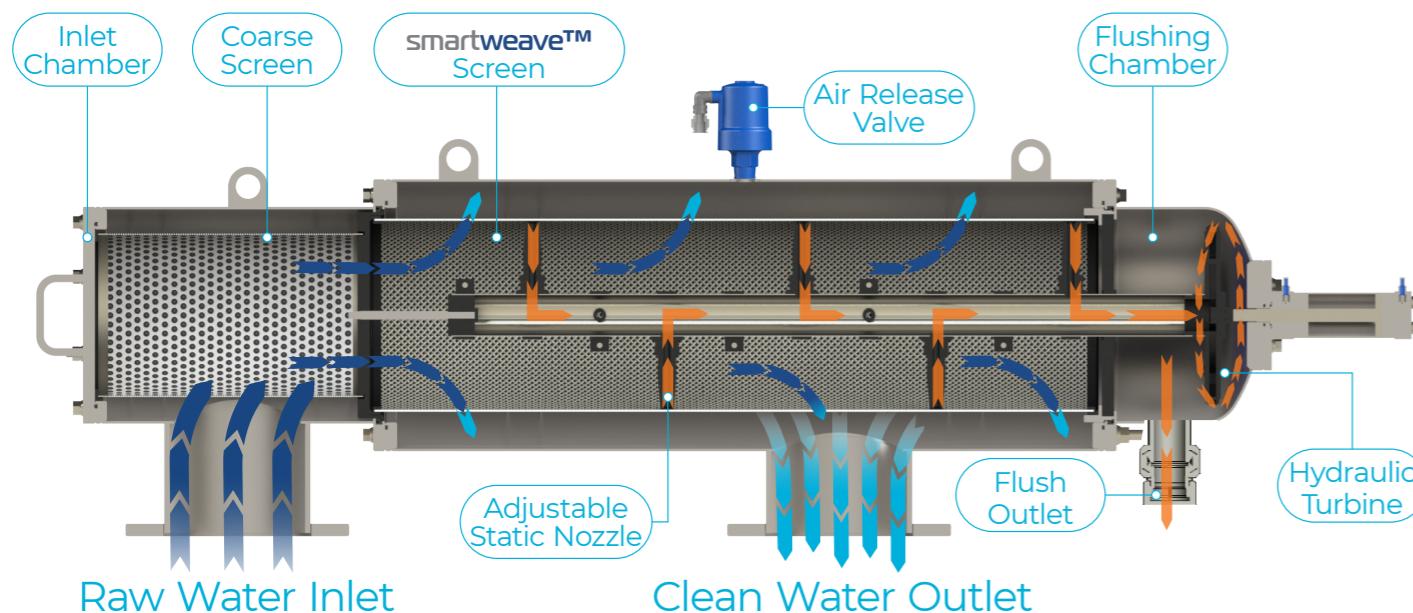
Cleaning: Hydraulic Drive

- Reliable Turbine Drive System
- Helical Scanner
- Low Water Use
- Low Pressure Operation 2 Bar
- Large Nozzle Size
- Low Maintenance
- Filtration Process Continues During Flush Cycle

Cleans While In Operation:

1. The **smartweave™** screen traps unwanted particles. The differential pressure (DP) between inlet and outlet triggers the flush cycle via a solenoid*.
2. The flush enables water from the clean side of the screen to flow back through the screen into the scanner nozzle, removing captured particles on the screen surface.
3. At the same time the hydraulic turbine rotates the scanner, and the piston moves the scanner in a linear motion ensuring full coverage of the screen.
4. All debris leave the filter through the scanner and flush valve. The flushing cycle ends and the filter returns to its original state.

* All settings determined by controller. Cleaning cycle initiation possible via preselected DP level, specific time, or combination of both. Length of flush is customizable.



TRIDENT H SERIES

Automatic Hydraulic Self-Cleaning Screen Filter | Technical Specifications

1 | GENERAL DATA

	Trident 4800H #TRH0048	Trident 7200H #TRH0072	Trident 9600H #TRH0096	Trident 12000H #TRH0120
Max Capacity** (m³/hr.)	180	280	400	600
Inlet/Outlet	4"-6" Flange	6"-8" Flange	8"-10" Flange	10"-12" Flange
Configuration	Horizontal	Horizontal	Horizontal	Horizontal
Filtration Degrees			80-500 µm	
Cleaning Mechanism			Suction Scanner	
Min. Pressure			2 bar	
Pressure Rating			10 bar*	
Design Code			AD 2000	
Power Supply			AC - built in 220/220v / DC - Battery 4x1.5V Type C	
Weight (Dry) kg	120	160	180	210
Weight (Wet) kg	210	320	380	450

2 | OPERATION

Min. Flush Flow Rate (5 m³/hr. per nozzle)*	25 m³/hr	35 m³/hr	50 m³/hr	60 m³/hr
Min. Flush Volume (@ 1bar)	110 L	160 L	220 L	270 L
Flush Duration			16 sec.	
Flushing			2" BSPT	
No. of Nozzles	5	7	10	12

3 | SCREEN DATA

Screen Area (cm²)	4,800	7,200	9,600	12,000
Filtration Medium	smartweave™ 4-layer sintered weaved screen fine filter			
Screen Material	AISI 316L			

4 | CONTROL & ELECTRICITY

Motor	Hydraulically powered
Controller Type	Filtron 1-10 & BT Controller**
Control Voltage	24V AC / 12V DC

5 | CONSTRUCTION MATERIALS

Body	AISI 316L
Internal & External Finish	Passivation & Pickling
Internals	NBR, PPH, POM-C, PP, PVC, AISI 316
Seals	NBR

* Dependent on filtration degree, water quality and inlet size. Contact us for more information.

** Other Equipment & Materials are available on request.

Contact Us for More Info:

sales@filtersafe.net | www.filtersafe.net

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TRIDENT H SERIES

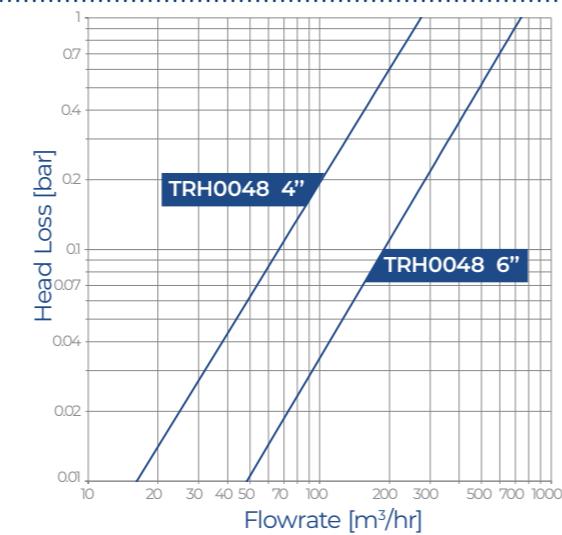
Dimensions and Headloss

Trident 4800H

#TRH0048

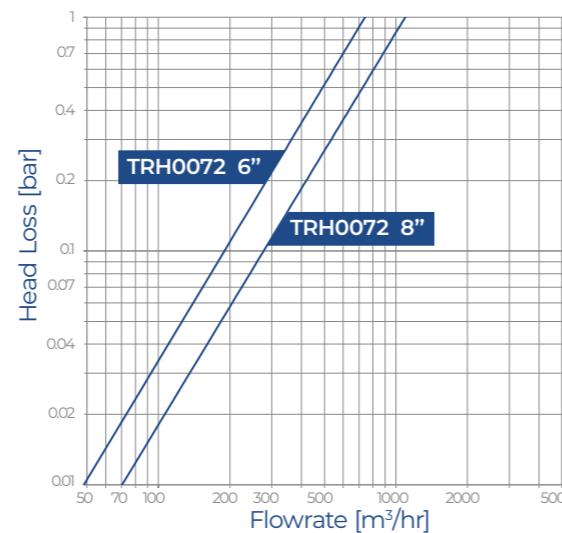


* Vertical filter orientation available on request



Trident 7200H

#TRH0072



MODEL

DIMENSIONS (mm.)

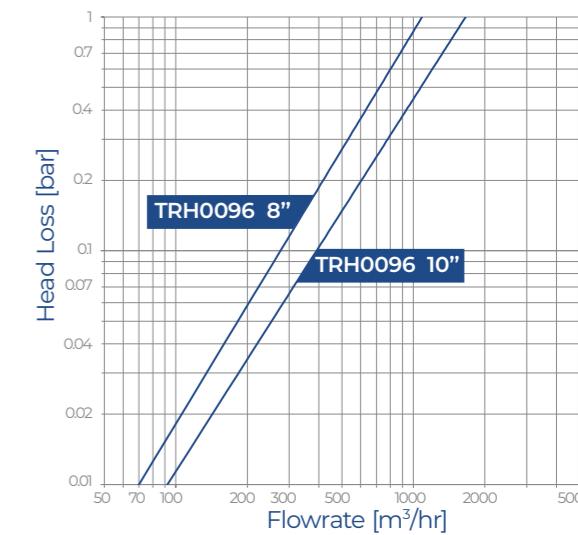
MODEL	L	W	D	B	T	C	E	P	M
Trident 4800H #TRH0048	1,513	694	793	620	330	368	222	800	400
Trident 7200H #TRH0072	1,789	694	793	900	330	368	247	1,050	400
Trident 9600H #TRH0096	2,064	694	793	900	330	368	475	1,300	400
Trident 12000H #TRH0120	2,339	694	793	1,100	330	368	545	1,600	400

TRIDENT H SERIES

Dimensions and Headloss

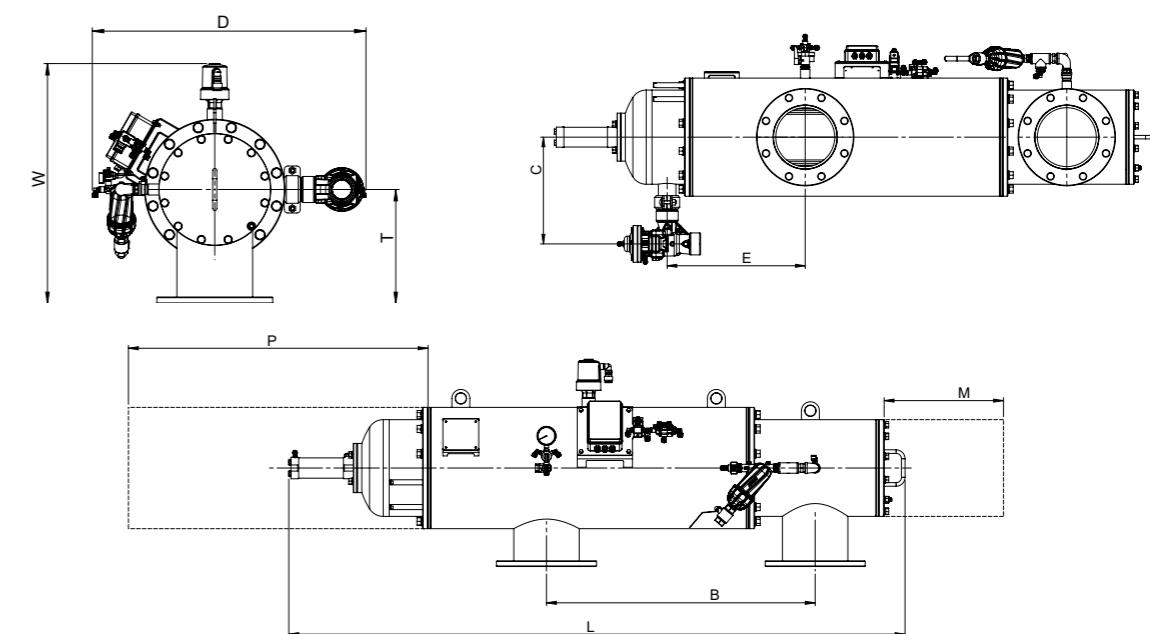
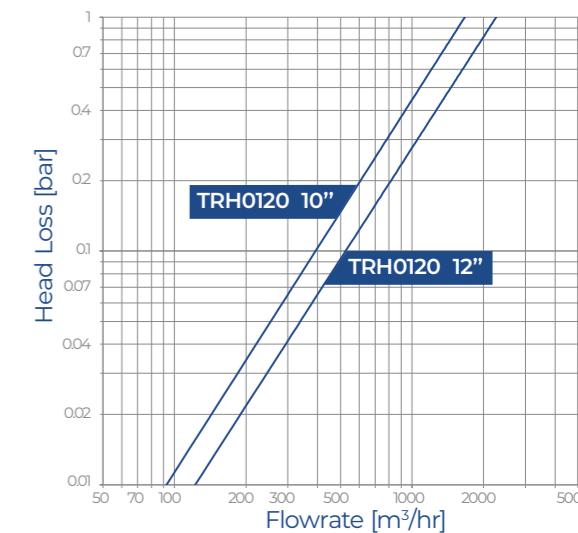
Trident 9600H

#TRH0096



Trident 12000H

#TRH0120





● OUR HEADQUARTERS

Our flagship factory. The 4,000 m² building contains our regional sales offices, R&D facilities and manufacturing and assembly plant. The facility is capable of handling very large volumes of production with an incredibly fast lead time.

sales@filtersafe.net

ASIA

● HONG KONG

Our Hong Kong manufacturing and assembly plant produces our entire line of products to the region, and is supported by a world-class steel fabrication facility.

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● Filtersafe Offices

● Filtersafe Manufacturing Facilities



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