# TRIDEN H SERIES

## AUTOMATIC HYDRAULIC

Up to **600** m³/h Max. Flow Rate

**2 bar** (30 psi) Min. Operating Pressure **80-500 μm** Filtration Degree

Up to **12,000** cm<sup>2</sup> Filter Area **10 bar** Max. Operating Pressure

> AD 2000 Design Code

**Less than 1%** Backwash Water Consumption

Filtersa

Max. Temp **65°C** 



## **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
- o Aquaculture Sector
- o Industrial Filtration
- o Municipal Water Treatment
- o 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:**
- o Surface water Intake for irrigation
- o Protection for Drip & sprinkler systems
- o Aquaculture & Fish ponds
- Prefiltration for cooling tower water
- o Wastewater treatment plants
- o 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 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 programing with smartphone App for up to 10 meters away.
- Backflushing triggered by time, DP, or both.
- Easy manual backflush button.
- 24V AC 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.



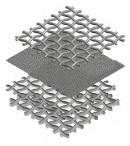






## TRIDENT H SERIES

Automatic Hydraulic Self-Cleaning Screen Filter | Our Technology



## smartweave<sup>™</sup> high performance filtration screens

4 layer sintered structure Enhanced strength and durability

High Effective area Available in 80-500µm · 316 Stainless Steel



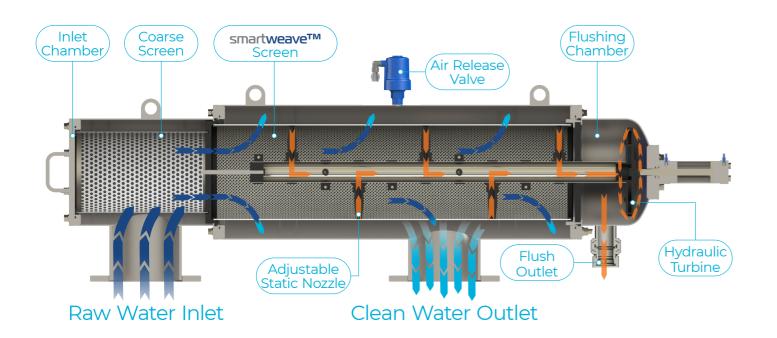
### Cleaning: Hydraulic Drive

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

 Low Maintenance Filtration Process Continues

## Cleans While In Operation:

- 1. The **smartweave<sup>™</sup>** 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

## **GENERAL DATA**

	<b>Trident 4800H</b> #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	Vertical	Horizontal	Horizontal	Horizontal	
Filtration Degrees		80-50	)0 µm		
Cleaning Mechanism		Suction	Scanner		
Min. Pressure		2 bar			
Pressure Rating	10 bar*				
Design Code	AD 2,000				
Power Supply	L.	AC - built in 220/220v / D	C - Battery 4x1.5V Type	С	
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 m <sup>3</sup> /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 s	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	smai	smartweave <sup>™</sup> 4-layer sintered weaved screen fine filter			
	AISI 316L				
Screen Material		AISI	316L		
	CTRICITY	AISI	316L		
Screen Material	CTRICITY		316L		
Screen Material  CONTROL & ELE Motor	CTRICITY	Hydraulica			
Screen Material	CTRICITY	Hydraulica Filtron 1-10 & E	lly powered		
Screen Material  CONTROL & ELE Motor Controller Type		Hydraulica Filtron 1-10 & E	lly powered 3T Controller**		
Screen Material  CONTROL & ELE  Motor  Controller Type  Control Voltage  CONSTRUCTION		Hydraulical Filtron 1-10 & E 24V AC	lly powered 3T Controller**		
Screen Material  CONTROL & ELE  Motor  Controller Type  Control Voltage  CONSTRUCTION Body		Hydraulica Filtron 1-10 & E 24V AC	lly powered BT Controller** / 12V DC		
Screen Material  CONTROL & ELE Motor Controller Type Control Voltage		Hydraulica Filtron 1-10 & E 24V AC AISI Passivatior	lly powered 3T Controller** / 12V DC 316L		

	<b>Trident 4800H</b> #TRH0048	Trident 7200H #TRH0072	Trident 9600H #TRH0096	<b>Trident 12000</b> #TRH0120			
Max Capacity** (m³/hr.)	180	280	400	600			
Inlet/Outlet	4"-6" Flange	6"-8" Flange	8"-10" Flange	10"-12" Flange			
Configuration	Vertical	Horizontal	Horizontal	Horizontal			
Filtration Degrees		80-50	)0 µm				
Cleaning Mechanism		Suction	Scanner				
Min. Pressure		2 bar					
Pressure Rating	10 bar*						
Design Code	AD 2,000						
Power Supply		AC - built in 220/220v / D	C - Battery 4x1.5V Type	С			
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			
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Flush Duration		16 s	Sec.				
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3 SCREEN DATA							
JUSCKLEIN DAIA			9,600	12,000			
	4,800	7,200	51000	smartweave <sup>™</sup> 4-layer sintered weaved screen fine filter			
Screen Area (cm²)				filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material		rtweave™ 4-layer sinter		filter			
Screen Area (cm²) Filtration Medium	sma	rtweave™ 4-layer sinter	red weaved screen fine	filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material	sma	r <b>tweave™</b> 4-layer sinter AISI	red weaved screen fine	filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material CONTROL & ELE	sma	rtweave™ 4-layer sinter AISI Hydraulica	red weaved screen fine 316L	filter			
Screen Area (cm²) Filtration Medium Screen Material	sma	r <b>tweave™</b> 4-layer sinter AISI Hydraulica Filtron 1-10 & E	red weaved screen fine 316L Ily powered	filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material CONTROL & ELE Motor Controller Type	Smar	r <b>tweave™</b> 4-layer sinter AISI Hydraulica Filtron 1-10 & E	red weaved screen fine 316L Ily powered 3T Controller**	filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material (A) CONTROL & ELE Motor Controller Type Control Voltage	Smar	rtweave™ 4-layer sinter AISI Hydraulica Filtron 1-10 & E 24V AC	red weaved screen fine 316L Ily powered 3T Controller**	filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material A CONTROL & ELE Motor Controller Type Control Voltage Control Voltage Body	Smar	rtweave™ 4-layer sinter AISI Hydraulica Filtron 1-10 & E 24V AC	red weaved screen fine 316L Ily powered 3T Controller** / 12V DC	filter			
Screen Area (cm <sup>2</sup> ) Filtration Medium Screen Material CONTROL & ELE Motor Controller Type Control Voltage	Smar	rtweave™ 4-layer sinter AISI Hydraulica Filtron 1-10 & E 24V AC AISI Passivatior	red weaved screen fine 316L Ily powered 3T Controller** / 12V DC 316L	filter			

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Configuration	Vertical	Horizontal	Horizontal	Horizontal
Filtration Degrees		80-50	)0 µm	
Cleaning Mechanism		Suction	Scanner	
Min. Pressure	2 bar			
Pressure Rating	10 bar*			
Design Code	AD 2,000			
Power Supply	A	AC - built in 220/220v / D	C - Battery 4x1.5V Type	С
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'' E	3SPT	
No. of Nozzles	5	7	10	12
3   SCREEN DATA				
Screen Area (cm²)	4,800	7,200	9,600	12,000
Filtration Medium	smar	rtweave™ 4-layer sinter	red weaved screen fine	filter
Screen Material	AISI 316L			
4   CONTROL & ELEC	CTRICITY			
Motor	Hydraulically powered			
Controller Type	Filtron 1-10 & BT Controller**			
Control Voltage	24V AC / 12V DC			
5   CONSTRUCTION	MATERIALS			
•	MATERIALS	AISI	316L	
Body	MATERIALS		316L n & Pickling	
<b>5</b> CONSTRUCTION Body Internal & External Finish Internals	MATERIALS	Passivatior		



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Screen Material	_	AISI 316L			
4   CONTROL & ELE	ECTRICITY				
Motor		Hydraulically powered			
Controller Type		Filtron 1-10 & BT Controller**			
Control Voltage		24V AC / 12V DC			
5   CONSTRUCTION	N MATERIALS				
Body		AISI	316L		
Internal & External Finish		Passivation	n & Pickling		
Internals		NBR, PPH, POM-0	C, PP, PVC, AISI 316		
Caala	NBR				
Seals			BIT		





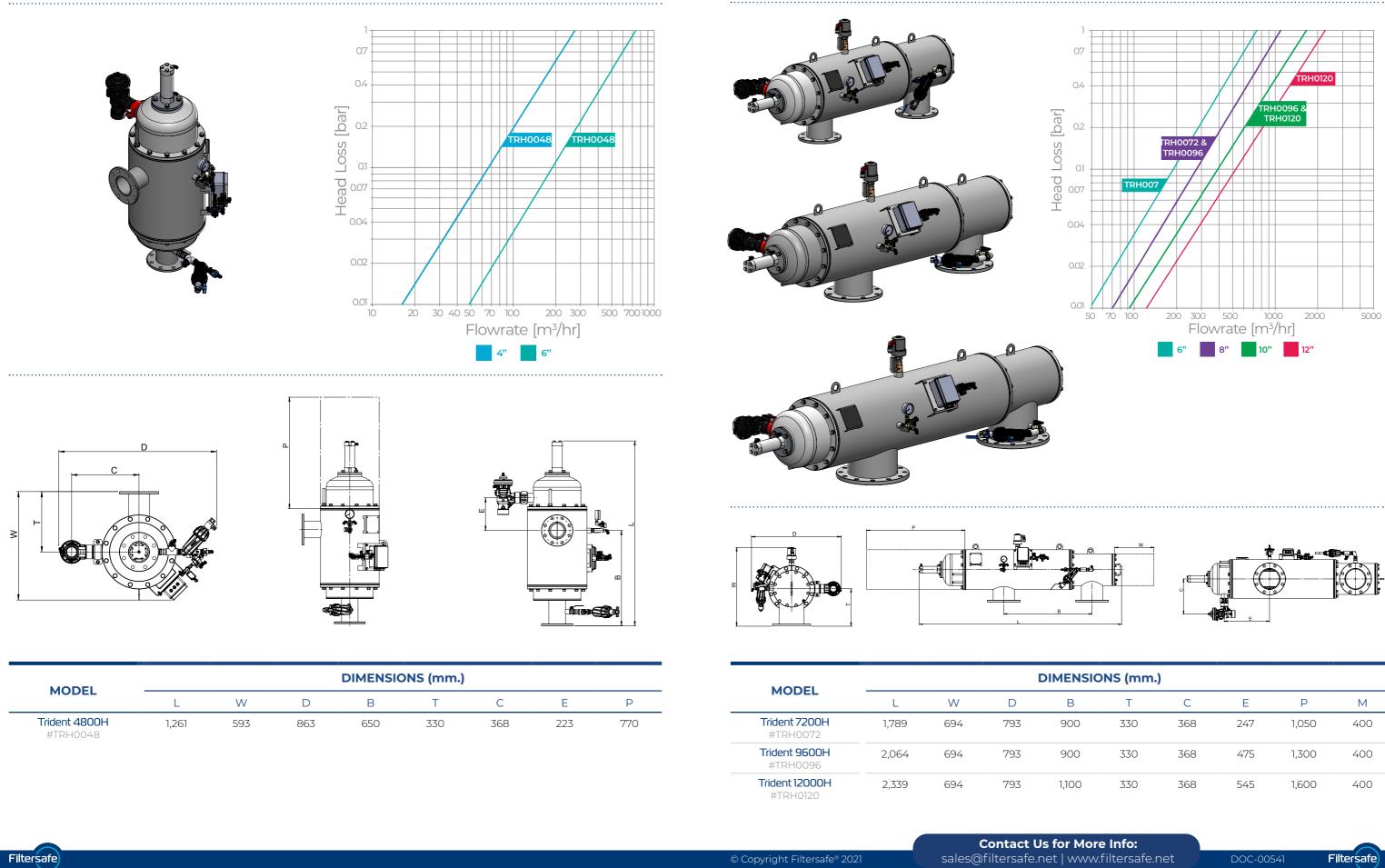
## TRIDENT H SERIES

Vertical Models | Dimensions and Headloss



# TRIDENT H SERIES

Horizontal Models | Dimensions and Headloss





ENSIONS (mm.)					
В	Т	С	E	Р	М
900	330	368	247	1,050	400
900	330	368	475	1,300	400
,100	330	368	545	1,600	400



## 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 **BRAZIL, Rio de Janeiro** facility.

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### SINGAPORE

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## **OUR HEADQUARTERS**

Our flagship factory. The 4,000 m<sup>2</sup> 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.

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