



TITAN SERIES

AUTOMATIC SELF-CLEANING SCREEN FILTER



Up to **2,800 m³/h**
High Flow Rate

10-500 µm
Filtration Degree

10 & 16 bar
Max. Operating Pressure

Low
Flush Flow

2 bar (30 psi)
Min. Operating Pressure

7,000-40,000 cm²
Screen Area

AD 2000
Design Code

Max. Operating Temp
60°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.

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



High-End Agricultural Project



The **TITAN** incorporates Smart design for easy maintenance

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 Prefiltration for cooling tower water
- o Surface water intake for irrigation
- o Mining
- o Metallurgical industriesr
- o Aquaculture & fish ponds
- 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

TITAN SERIES

PATENTED TECHNOLOGY

- ✓ **EVERCLEAR** - Unmatched Cleaning Technology
- ✓ **nozzleX** - Patented Self Balancing Proximity Nozzle
- ✓ **smartweave** - 4 Layer Sintered Screen with High Effective Area and Strength

SMART DESIGN

- ✓ Largest Screen Area in a Horizontal Filter
- ✓ Easy Maintenance - No Need for Walkways and Lifting Cranes
- ✓ Safe & Speedy 1 Person Screen Maintenance

BUILT FOR ENDURANCE

- ✓ Designed for High TSS Applications
- ✓ Full 316 Stainless Steel Construction
- ✓ Cleans While In Operation



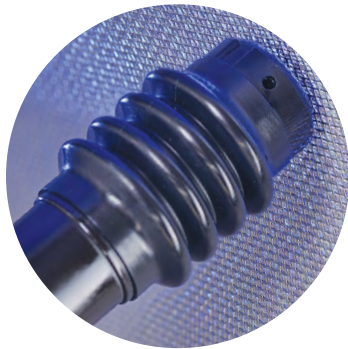
The Filtersafe **TITAN** Automatic Screen Filters offer superior and reliable filtration technology that is well suited for removal of suspended solids from water in industrial, agricultural and municipal sectors down to 10 microns. The **TITAN** filter offers the largest screen area in a horizontal configuration, which results in: lower installation and operational costs, easier service and maintenance, and increased safety.

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Our Patented Technology



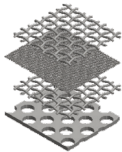
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smartweave™



High performance filtration screens:

1. Multi-layered sintered structure
2. Enhanced strength & durability
3. Available in 316L, 904L, SMO254

nozzlelex®

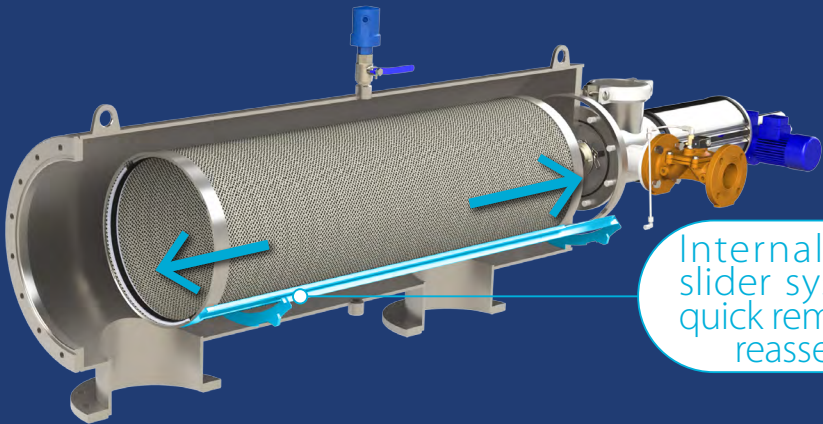
Self-cleaning cycle for maximum removal efficiency:

1. Self balancing cleaning nozzle
2. High Efficiency clean
3. Zero screen wear + reduced nozzle wear
4. Low pressure operation

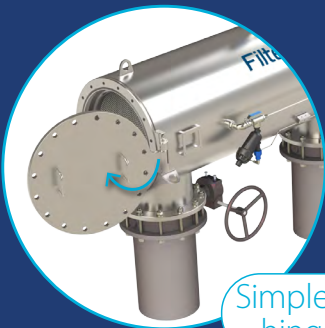
EVERCLEAR™

An unparalleled automatic filtration cycle.

Ease of Maintenance



Internal screen slider system for quick removal and reassembly



Simple access hinged lid



External screen service stand for easy maintenance (optional)



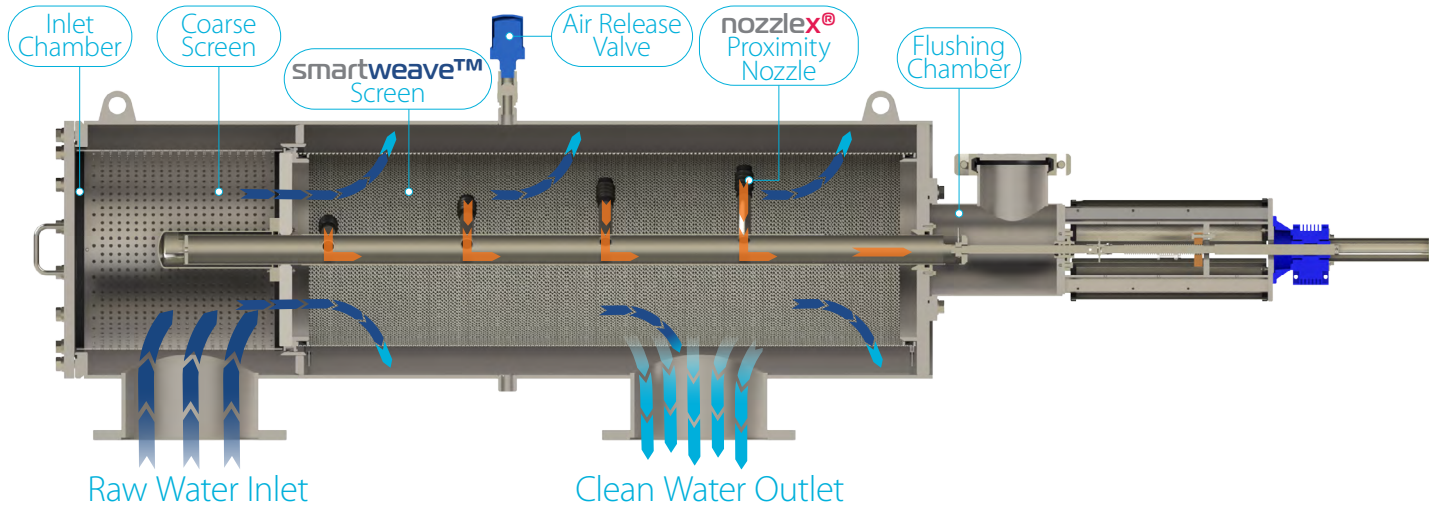
No need to disassemble electrical components for maintenance

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Cleans While In Operation:

1. Cleaning is initiated by either differential pressure (DP) build-up across the **smartweave** fine screen when it's dirty, by a timer, or by manual flush which is controlled by an external PLC controller.
2. The cleaning cycle starts by opening the flush valve, allowing water from the clean side of the screen to reverse back through the screen surface at high velocity, dislodging entrapped particles off the screen to the **nozzlelex** cleaning nozzles and expelled from the filter.
3. The cleaning mechanism is rotated by a drive motor and moved laterally with the cleaning nozzles to completely clean the screen. The filter remains online during the cleaning process allowing for a continuous flow of clean filtered water downstream without any interruption.

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



Robust Controller

The Unitronics PLC Jazz Controller automatically manages the flushing of your TITAN filters.

- One board can control up to 4 filters.
- Quick & intuitive setup
- Wide voltage range, 3 phase 190 – 480V, 50/60Hz + PE.
- Useful hard-wire interface for customer monitoring and operation.

Optional:

- Modbus TCP (Ethernet) communication interface for detailed system monitoring.

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Technical Specifications

1 | GENERAL DATA

Model Name Catalog number	TITAN 7K #TTN0070	TITAN 10K #TTN0100	TITAN 20K #TTN0200	TITAN 40K #TTN0400
Max Capacity* (m³/hr.)	350	500	800	1,600
Inlet/Outlet***	Standard	6" Flange	8" Flange	12" Flange
	Per Request	4"-8" Flange	6"-12" Flange	8"-16" Flange
Configuration	Horizontal	Horizontal	Horizontal	Horizontal
Filtration Degrees	10-500 µm			
Cleaning Mechanism	Patented nozzlex Proximity nozzle. turbo scanner upgrade available.			
Min. Pressure	2 bar			
Pressure Rating	10 & 16 bar			
Design Code	AD 2,000			
Power Supply	380/415 VAC; 3 Ph; 50 Hz			
Weight (Dry) kg	200	250	700	1,850
Weight (Wet) kg	400	480	1,200	3,900

2 | OPERATION

Min. Flush Flow Rate*	14 m³/hr	21 m³/hr	28 m³/hr	35 m³/hr
Min. Flush Volume (@ 1bar)	164 L	245 L	420 L	1,020 L
Flush Duration	42 sec.	42 sec.	54 sec.	105 sec.
Flushing***	2"	2"	3"	3"

3 | SCREEN DATA

Screen Area (cm²)	7,000	10,000	20,000	40,000
Filtration Medium	smartweave™ 4-layer sintered weaved screen fine filter, protected by coarse 6mm Pre screen			
Screen Material	SS 316L, 904L or SMO254			

4 | CONTROL & ELECTRICITY

Motor	1,500 Rpm, 0.18 Kw (MS 6324) For B5/63, 0.5-0.65 Amp.	1340 Rpm, 0.25 Kw, 0.5-0.65 Amp.
Controller Type	Unitronics**	
Control Voltage	24V DC	

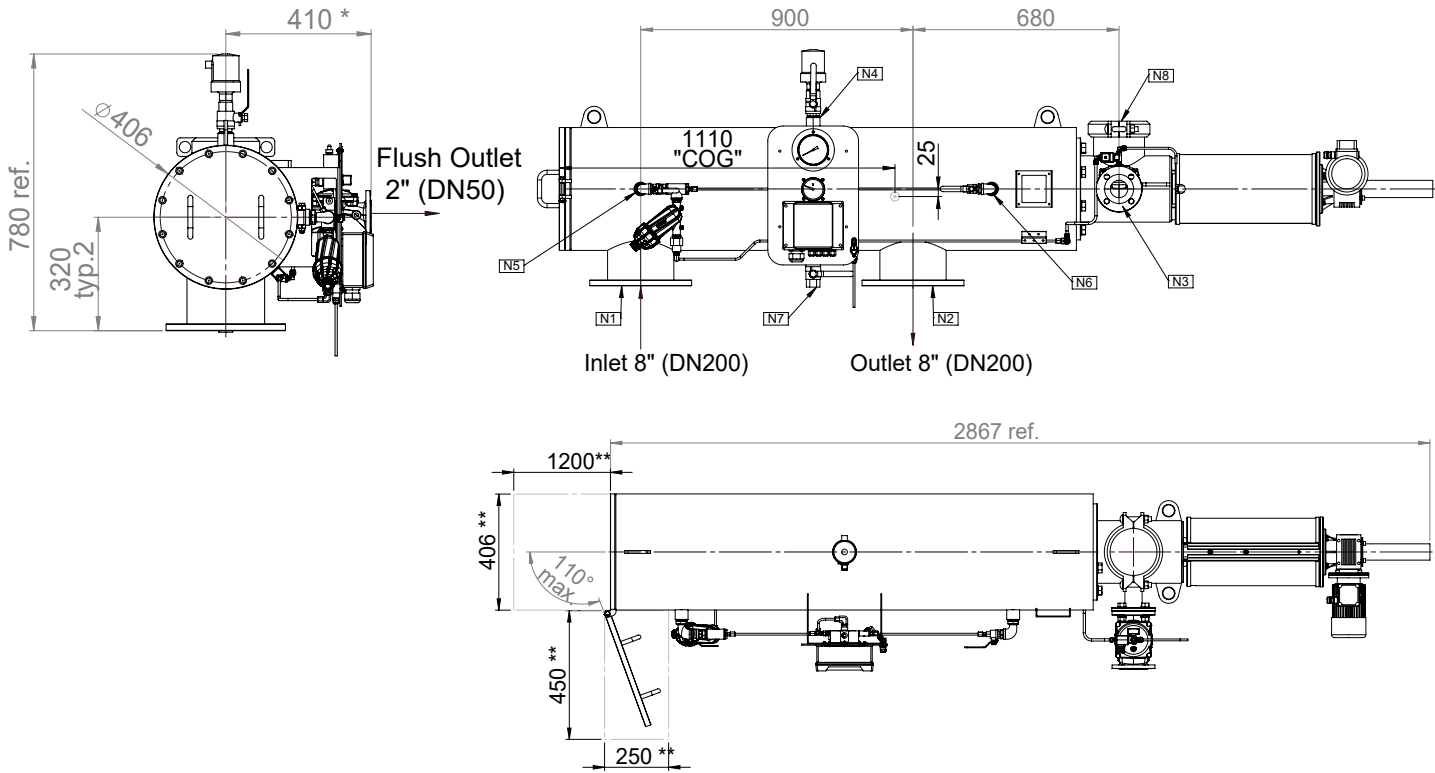
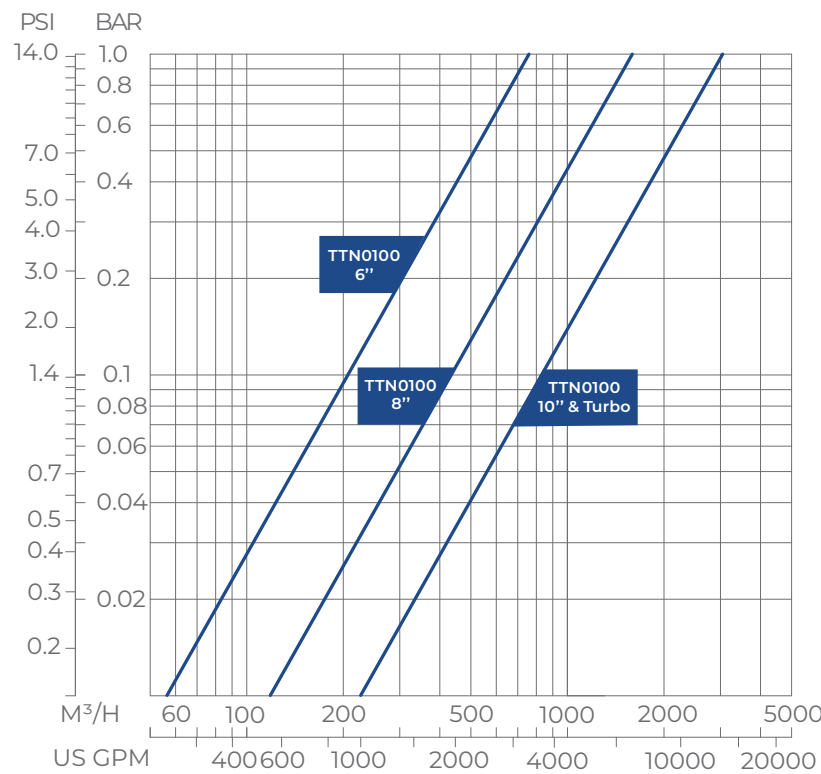
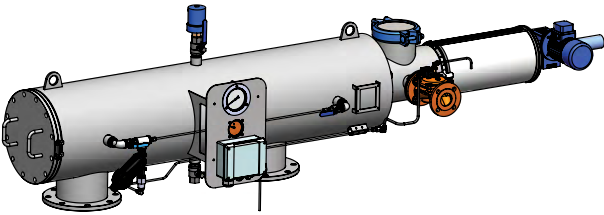
5 | CONSTRUCTION MATERIALS

Body	AISI 316L
Internal & External Finish	Passivation & Pickling
Internals	SS 316L (904L or SMO254 optional), POM, EPDM or NBR
Seals	EPDM/NBR

* Dependent on filtration degree, water quality and inlet size. Contact us for more information.
** Other Equipment & Materials are available on request.
*** Available in DIN PN10/16, British standard BSTD/E, ANSI B16.5 150PSI. For additional standards contact us.

TITAN 10K #TTN0100

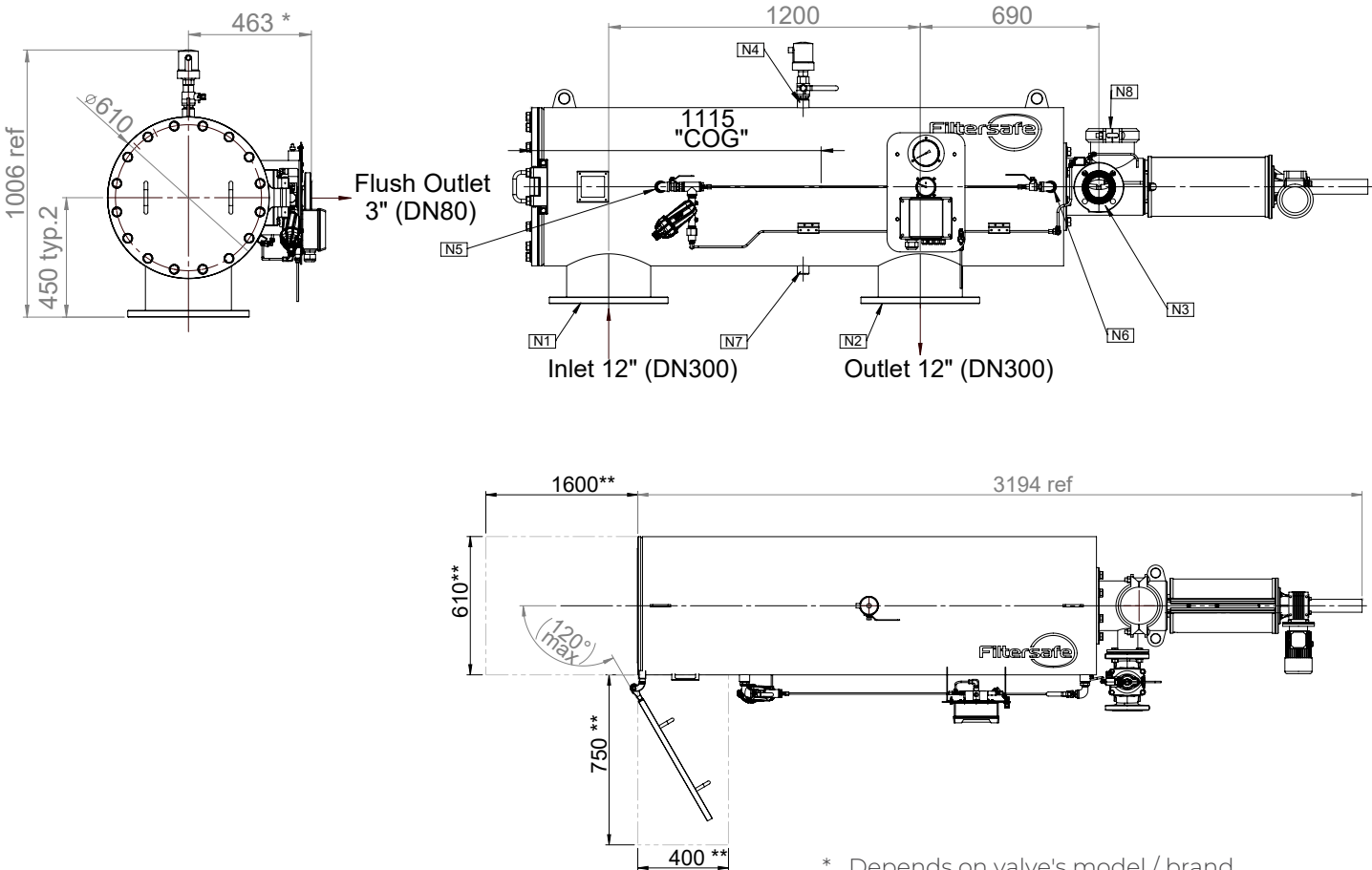
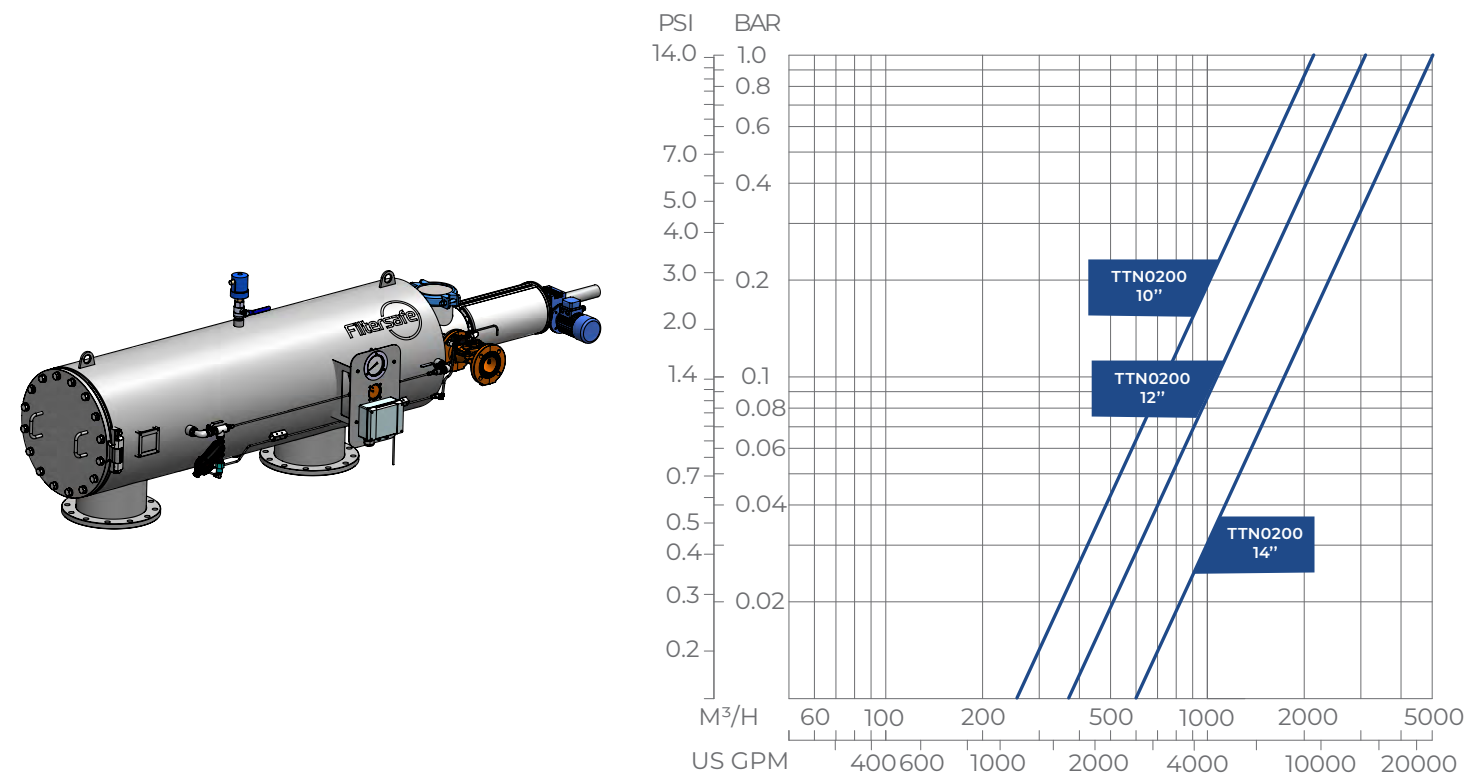
Dimensions and Headloss



* Depends on valve's model / brand.
** Keep this space clear for maintenance.

TITAN 20K #TTN0200

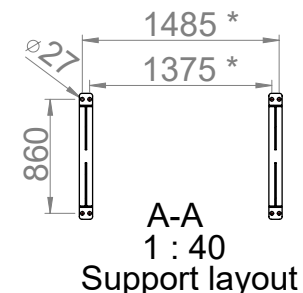
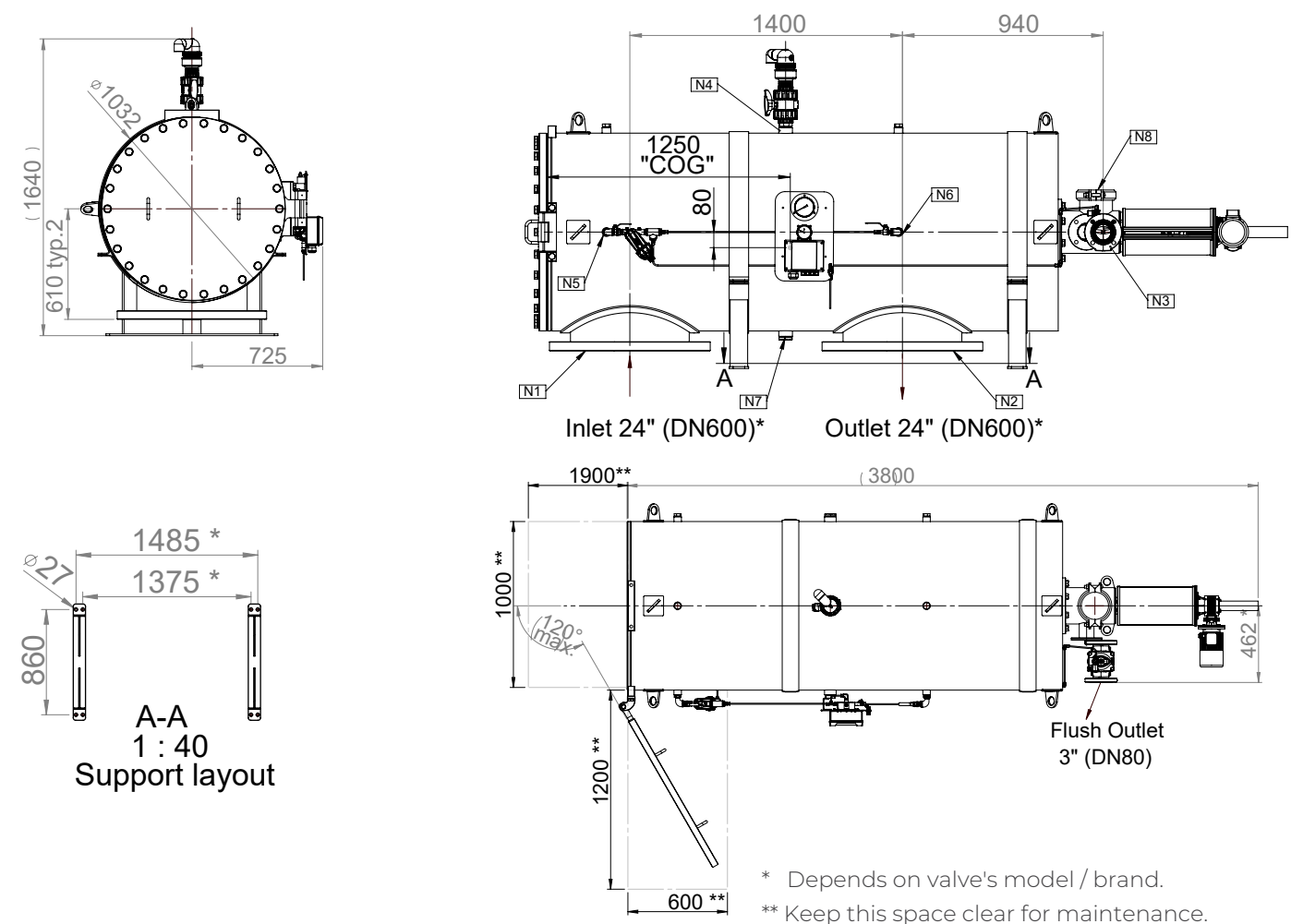
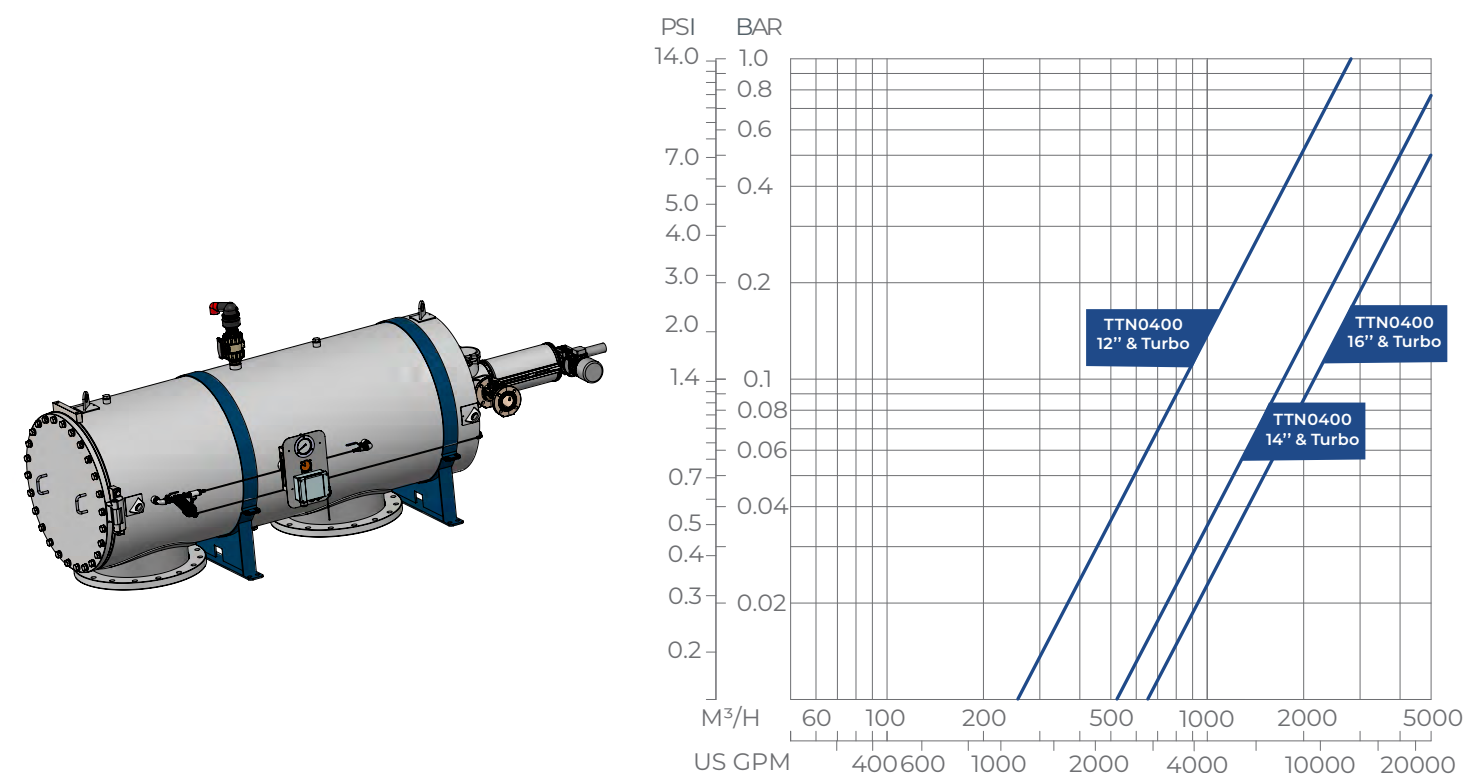
Dimensions and Headloss



* Depends on valve's model / brand.
** Keep this space clear for maintenance.

TITAN 40K #TTN0400

Dimensions and Headloss



* Depends on valve's model / brand.
** Keep this space clear for maintenance.



● 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.

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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



www.filtersafe.net



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