

Turbo

Innovative self-cleaning technology



**UNINTERRUPTED
IRRIGATION WITH
EFFORTLESS
CLEANING!**

Turbo Automatic Screen Filters

2", 2.5", 3" & 4"

- The new Automat “Turbo Series” self-cleaning filter offers high cleaning efficiency with non-stop irrigation while flushing.
- Innovative & efficient cleaning mechanism deliver perfect water cleaning even in low pressure conditions.
- Easy to install and maintain.
- Controlled by the new and dedicated Automat controller.
- Manufactured with high quality engineering plastics for longevity and corrosion free life.

Features

- Self cleaning process triggered by pressure differential, time or manual flushing feature.
- Equipped with highly sensitive Pressure Differential Switch.
- Low pressure drop compared to other filters.
- Multiple mesh sizes available to address physical impurities in water.

Benefits

- Slow and controlled spiral movement of the suction scanner provides excellent cleaning and reduce the wear and tear.
- Continuous uninterrupted irrigation during the flushing process.
- Can be operated on electric or solar power.
- Minimal water wasted during flushing process.

Applications

- Drip and micro irrigation systems.
- Turf irrigation.
- Industrial wastewater.

FilterSmart' Bluetooth Controller

- FilterSmart' is a Bluetooth enabled smart phone operated controller that controls flushing process of 'Turbo' filters allowing user to monitor and control flushing cycles conveniently.
- 'FilterSmart' App enables user to control filter flushing processes directly from Smart Phone. 'Turbo' filter's performance data can be easily accessed by 'FilterSmart' App. The app is available to download on Android Google Play store and Apple IOS store as well.
- Flushing cycles can be triggered by 3 different modes DP Only/ DP Time & Manual. Can get these cycle counts whenever required on your fingertips.
- Flexible settings allow the user to fine tune flush process to system requirements.
- Controller can optionally handle a pressure sustaining valve where ever need arises.



Filtration Process

- Water from the source enters through the inlet into the screen area and flows inside out and the filtered water gets discharged from the outlet.
- The dirt gradually builds upon the screen's (4) inner surface and forms a filter 'cake' resulting in a gradual increase in pressure difference across the filter.
- A pressure differential (PD) switch senses the pressure difference across the filter and when it reaches a pre-set value (0.5 bar), the self-cleaning process begins.

Flushing Control System

- 'Turbo' filter's control system comprises of a controller, a pressure differential switch, and a solenoid that controls the flush valve (5).
- The PD switch senses the pressure difference across the filter and when it reaches the preset value (0.5 bar), it gives a signal to the controller to initiate the cleaning process.
- The controller first activates the flushing valve (5) then the motor (1) for a set duration of the flushing cycle.
- In addition to PD-based cleaning, the controller also offers manual and time-based cleaning.

Auto Cleaning Process

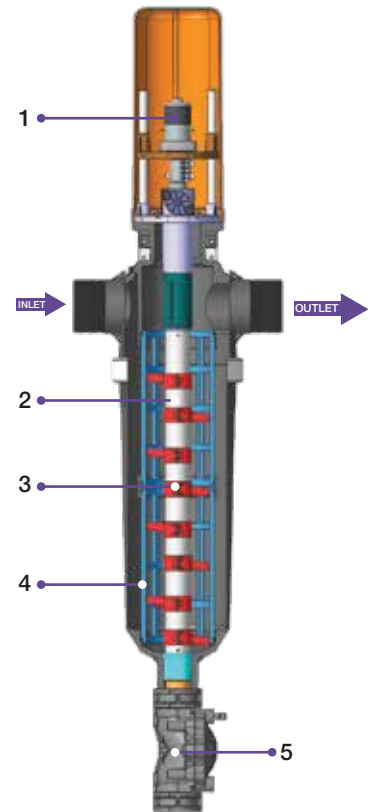
The self-cleaning cycle is initiated by any one of the following conditions:

- Signal from PD switch.
- Time interval set at the controller.
- Manual start; by pressing "MANUAL" button located on the controller.

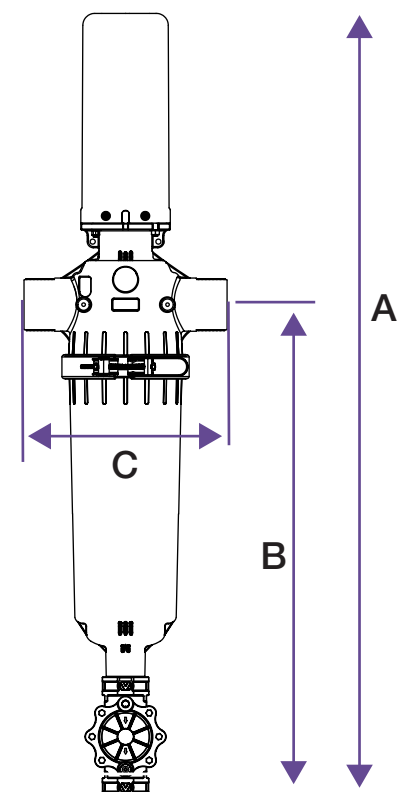
When the flush valve opens to atmosphere it creates a strong "Vacuum" at the scanner nozzles (3), effectively removing accumulated 'cake' from the screen.

Dimensions

Dimensions		Turbo 800	Turbo 1200	Turbo 1600	Turbo 2000	Turbo 2400
A	Filter Height (cm)	111.5	120	132.5	150.50	163.50
B	Filter Connection (cm)	37	37	37	39.50	39.50
C	Main pipe line centre to flush valve end (cm)	62.5	71	83.5	100.50	112.50



Sl. No.	Description
1	Motor
2	Suction Scanner Assembly
3	Suction Nozzles
4	Filter Screen Cartridge
5	Flushing Valve





Technical Specifications

General Data	2"/2.5" Turbo 800	2"/2.5" Turbo 1200	3" Turbo 1200	3" Turbo 1600	4" Turbo 2000	4" Turbo 2400
Connection Size & Type	2"/50mm & 2.5" /65mm (Threaded (BSP/NPT)/Grooved)		3"/80mm Threaded (BSP/NPT) /Flanged/Grooved		4"/100mm (Flanged/Grooved)	
Max. Flowrate* (130 micron)	25m ³ /hr (110 gpm)	30m ³ /hr (132 gpm)	40m ³ /hr (176 gpm)	50m ³ /hr (220 gpm)	70m ³ /hr (308 gpm)	80m ³ /hr (352 gpm)
Maximum Operating Pressure	10 Bar/145 psi				8 Bar/116 psi	
Min. Recommended Flushing Pressure	2 Bar/30 psi					
Max. Operating Temperature	60 C/(140 F)					
Filtration Surface Area (cm ² /inch ²)	831/129	1270/197		1662/258	2101/326	2540/394
Material of Construction	All Polymeric / EPDM / St. St.					
Available Filtration Degree Mesh (Microns)	80 (200) /120 (130) /150 (100)					
Flushing Data						
Flushing Cycle Time*	15 Sec					
Flushing Flow Rate at 2 bar	8.1m ³ /hr 35.6 GPM	9.1m ³ /hr 40 GPM		10m ³ /hr 44 GPM	10.5m ³ /hr (46 GPM)	15m ³ /hr (66 GPM)
Control and Electricity						
Rated Input Supply (To Controller)	24V DC					

*Depends on water quality.

Head Loss Chart

