AUTOMAT®
Creating a Green World®

Turbo

Innovative self-cleaning technology

UNINTERRUPTED IRRIGATION WITH EFFORTLESS CLEANING!

2”, 2.5” & 3” Turbo
Automatic Screen Filters

- The new Automat “Turbo Series” self-cleaning filter offers high cleaning efficiency with non-stop irrigation while flushing.
- Innovative & efficient cleaning mechanism deliver perfect cleaning even in low pressure applications.
- 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

- Automatic flushing triggered by pressure differential, time or manual flushing feature.
- Equipped with highly sensitive Pressure Differential Switch.
- Low pressure drop.
- Multiple screen areas available to address water quality issues.

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.

Size Available	2”	2.5”	3”
Maximum Flow Rate*	25 m^3/hr	40 m^3/hr	50 m^3/hr
Available Filtration Degrees	200/130/100		
Minimum Recommended Backwash Pressure	2 kg/cm^2		
Maximum Operating Pressure	10 kg/cm^2		
Available Connections	Threaded / Flanged / Grooved		

* Depends on water quality.

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

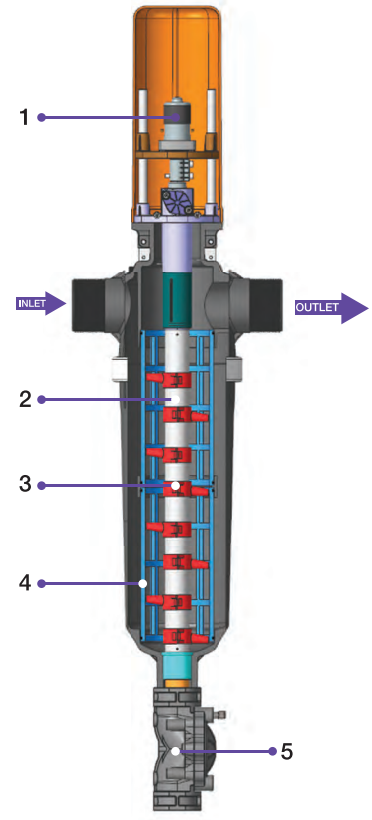
The self-cleaning cycle is initiated by any one of the following conditions:

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

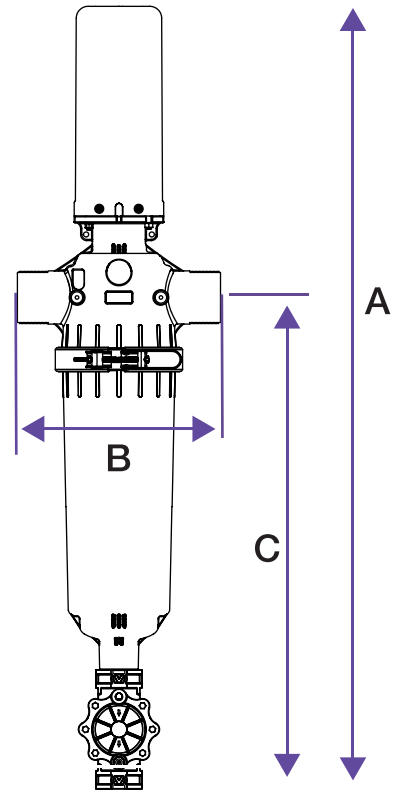
When the flush valve opens to atmosphere it creates a strong "Vacuum" at the scanner nozzles (3), effectively removing accumulated 'cake' from the screen.

Dimensions (cm)

	Dimensions	Turbo 800	Turbo 1200	Turbo 1600
A	Filter Height	111.5	120	132.5
B	Filter Connection	37	37	37
C	Main pipe line centre to flush valve end	62.5	71	83.5



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

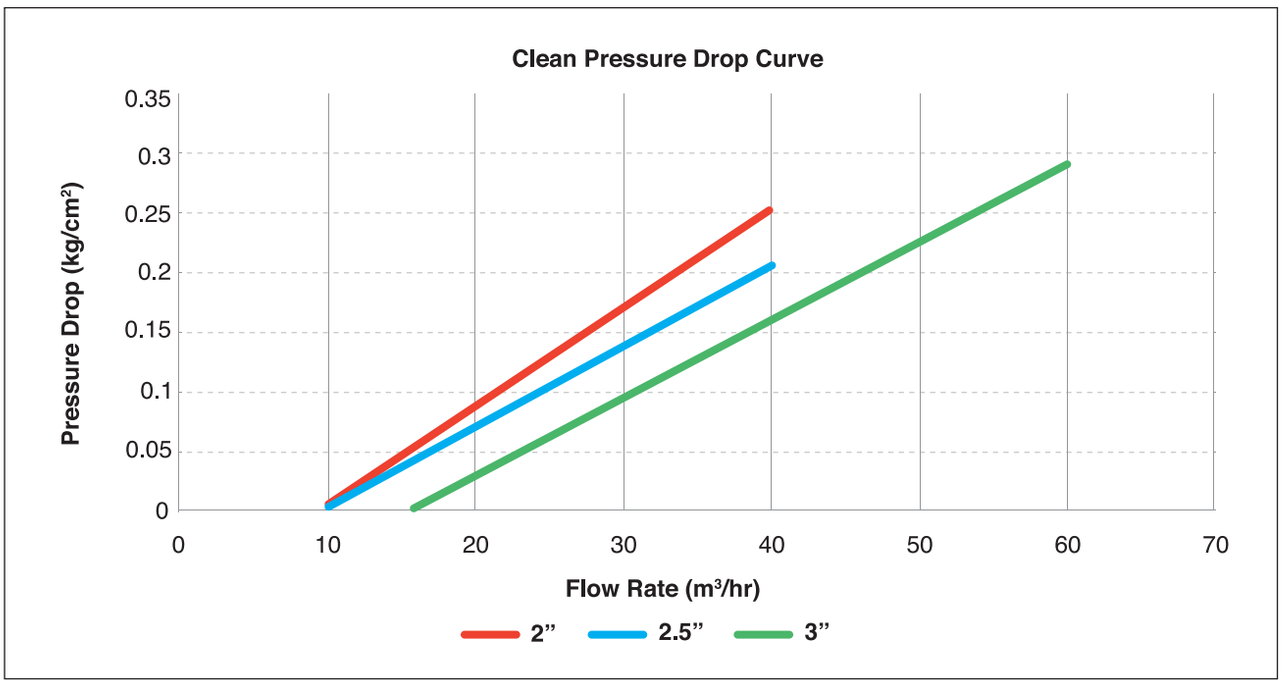


Technical Specifications

General				
Specifications	**Connection Size**	**TURBO 800**	**TURBO 1200**	**TURBO 1600**
Inlet/Outlet Connections	2”	Threaded/Flanged/Grooved	Threaded/Flanged/Grooved	–
	2.5”	Threaded/Flanged	Threaded/Flanged	–
	3”	–	Threaded/Flanged/Grooved	Threaded/Flanged/Grooved
Maximum Operating Pressure		PN10		
Maximum Flow Rate* (m^3/hr)	2”	25	30	-
	2.5”	30	40	-
	3”	–	40	50
Min. Recommended Backwash Pressure		2 kg/cm^2		
Filtration Surface Area		800 cm^2	1200 cm^2	1600 cm^2
Material of Construction		All Polymeric / EPDM / SS		
Available Filtration Degree (Microns)		200/130/100		
Flushing Data				
Flushing Valve		Control Valve (2” / 50 mm)		
Flushing Cycle Time*		15 sec		
Water wasted per cycle (liters)		34	38	42
Control and Electricity				
Rated Input Supply (To Controller)		24V DC		

* Depends on water quality.

Head Loss



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