

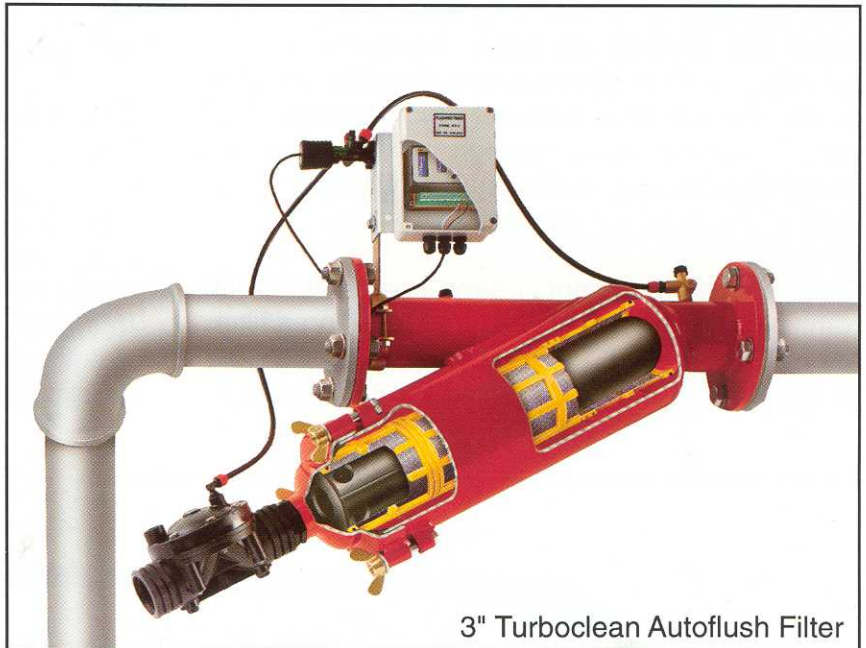
# AMIAD TURBOCLEAN FILTERS

## non-stop clean filters

**Two-in-one:** Combines the benefits of a sand separator and screen filtration into a single unit.

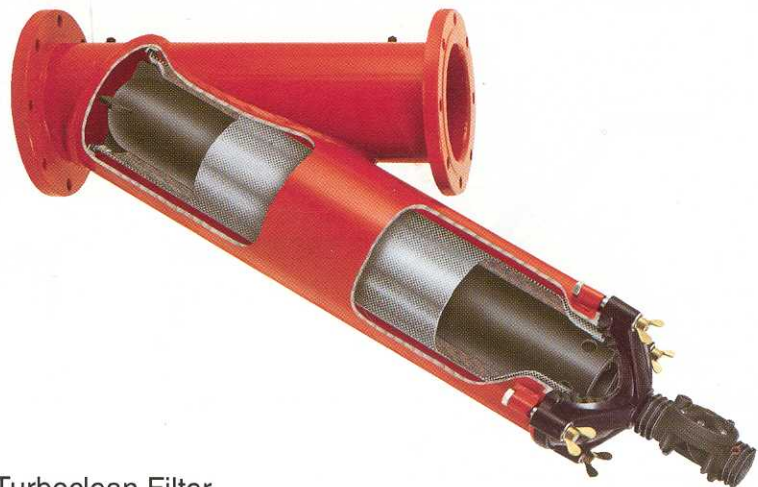


2" Turboclean Filter



3" Turboclean Autoflush Filter

- **A revolutionary solution for non-stop filtration:** Clean screen at all times, with no internal moving parts.
- **Simple operation:** Cleaning is done by manual or automatic opening of a valve for a few seconds.
- **Energy saving:** Hydrodynamic design allows high velocity with minimum head loss.



8" Turboclean Filter

- **Cost effective:** Low head loss compared with other sand separators.
- **Maintenance free:** No routine manual cleaning is necessary. Under normal conditions there is no need to open the filter for cleaning.
- **Ideal for filtration of well water.**
- **Other uses:** Back-up filtration after gravel or sand filters and may be used instead of automatic filters for water with medium particle capacity.

# What are Turboclean filters ?

Amiad Turboclean filters consist of the following components: standard Amiad screen filter from 1" to 14" with a Torpedo inserted inside the screen. Amiad Autoflush Turboclean Filters include in addition to the Torpedo an automatic flushing valve and an electronic timer.

## How do they work ?

The Torpedo is a static hydrodynamic device which fills most of the space inside the screen cylinder and forces the water to flow at a tangent to the screen at a relatively high speed. The unique hydrodynamic design of the Torpedo allows high velocity while causing minimum head loss.

This velocity prevents sand particles from remaining on the screen and from building a filter cake. The particles are pushed towards the end of the screen and collected at the Debris area.

## How do they keep clean ?

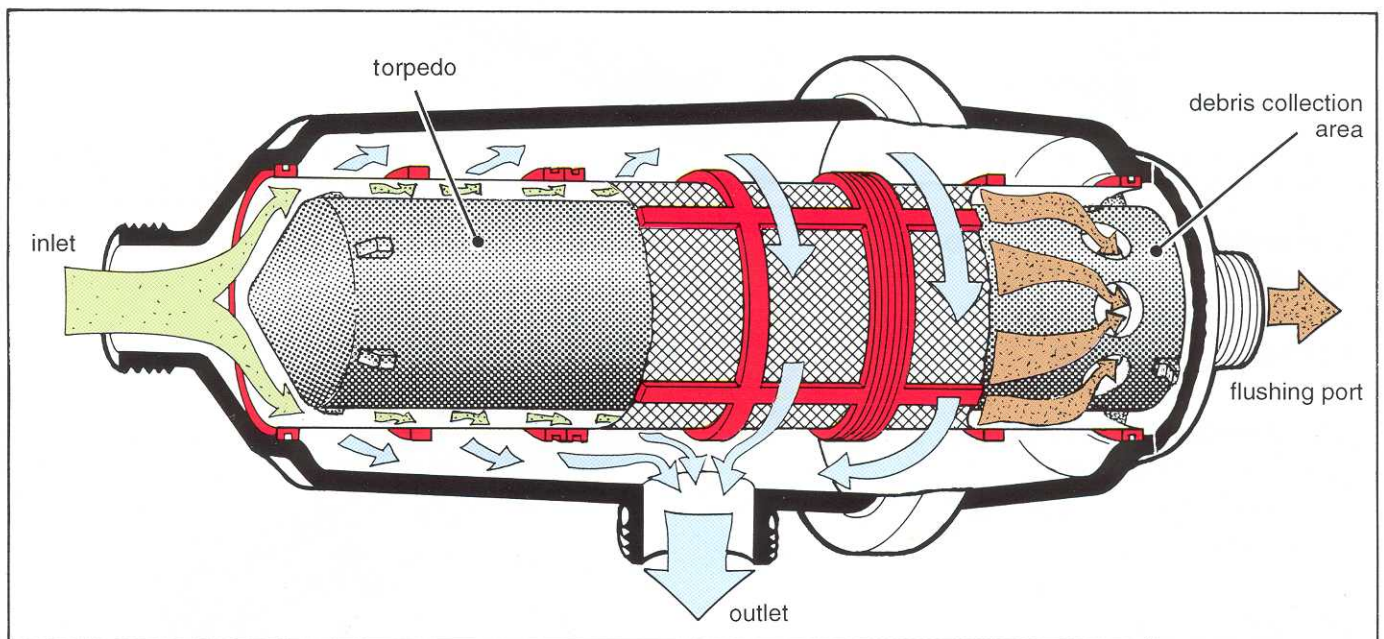
Since the particles are collected at the Debris area, all that is needed is to periodically remove the particles from that area. Near the Debris area is the filter flushing port. Opening the flushing port for a short time without stopping the filtration process, will flush out the particles.

Amiad Autoflush Turboclean Filters are supplied with a hydraulic valve that opens automatically by means of an Electronic Timer.

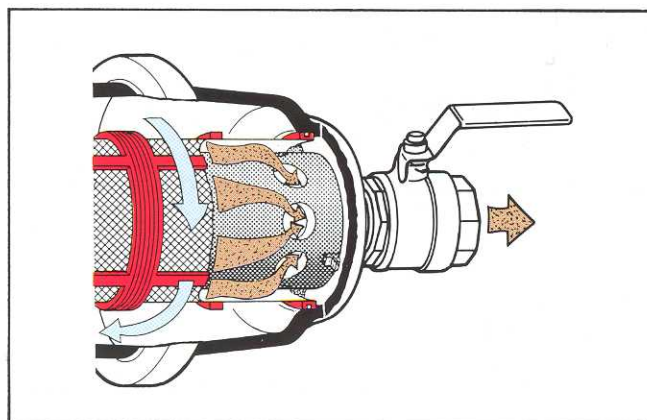
## Working conditions

Best performance is achieved at the high flow rate range of the Turboclean Filters (See Head Loss Graph).

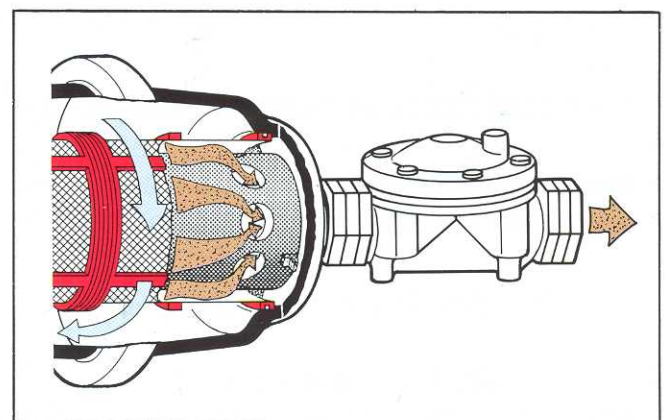
It is possible to work with lower flow rates as long as the flushing process is done at high flow rates. In many cases it is possible to improve the cleaning by closing a valve downstream for the duration of flushing (See drawing).



Turboclean in filtering mode



Manual flushing

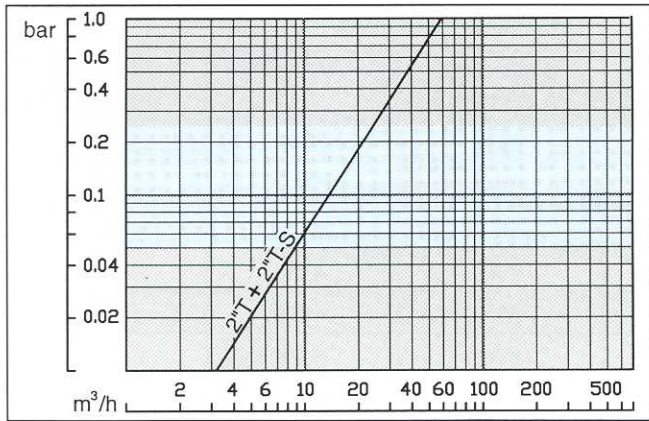


Automatic flushing

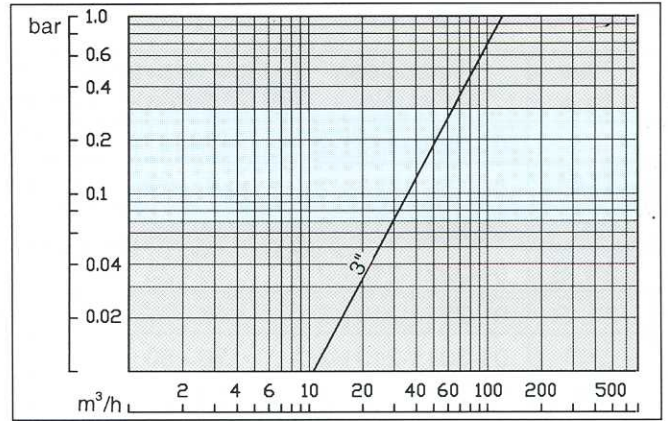
# Pressure Loss Graphs

☐ Recommended working area.

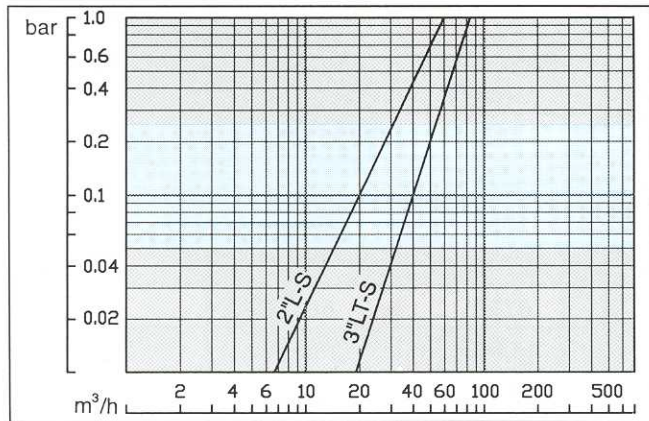
All graphs measured with 130 micron



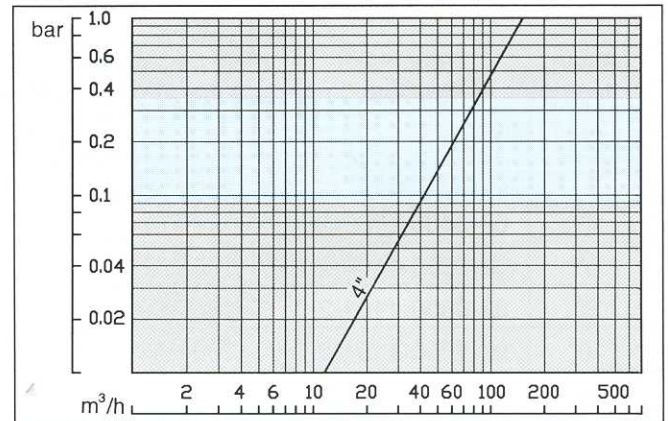
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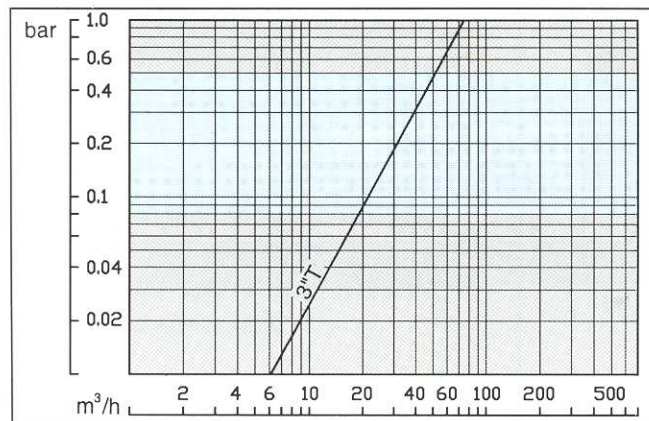
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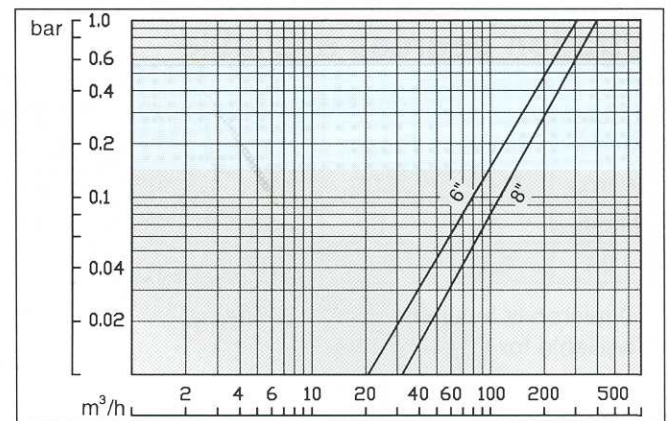
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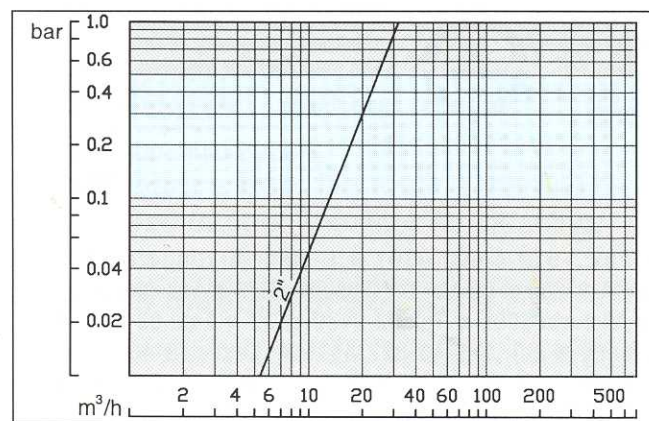
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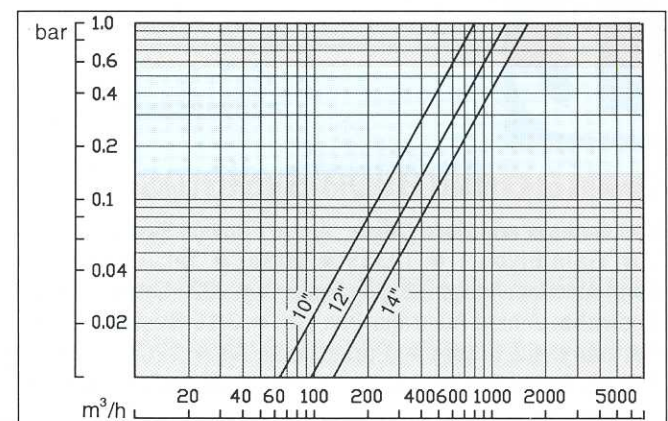
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6\", 8\"/>



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10\", 12\", 14\"/>

# Technical Specifications

## Plastic filters

Filter type	Turboclean Cat. No.	Flow rate range (m <sup>3</sup> /hr)	Head loss range (bar)	Filter area (cm <sup>2</sup> )	Weight (Kg)	Flushing port (mm)
1"S	01-1201-1131-2	3 - 7	0.15 - 0.5	170	0.70	20
1 1/2"	01-1601-1131-2	8 - 15	0.15 - 0.5	340	1.30	20
2"T	01-2021-2131-2	15 - 25	0.05 - 0.25	465	4.00	40
2"T-S	01-2221-2131-2	15 - 25	0.05 - 0.25	700	4.75	40
2"L-S	01-2211-2131-2	15 - 25	0.05 - 0.25	700	4.50	40
3"T	01-3011-2131-2	20 - 50	0.08 - 0.50	700	6.75	40
3"LT-S	01-3011-1131-2	30 - 60	0.05 - 0.25	930	10.00	2 X 40

## Steel filters

Filter type	Turboclean Cat. No.	Flow rate range (m <sup>3</sup> /hr)	Head loss range (bar)	Filter area (cm <sup>2</sup> )	Weight (Kg)	Flushing port (mm)
2"	02-0200-1130-2	15-25	0.10-0.30	465	7.75	40
3"	02-0300-1100-2	30-60	0.08-0.25	930	18.75	40
4"	02-0400-1100-2	40-70	0.09-0.35	1850	31.00	40
6"	02-0600-1100-2	100-160	0.15-0.55	2740	45.00	50
8"	02-0800-1101-2	180-300	0.15-0.55	5720	68.00	50
10"	02-1000-1101-2	300-550	0.15-0.55	11440	200.00	2x50
12"	02-1200-1101-2	500-700	0.15-0.55	17160	290.00	3x50
14"	02-1400-1101-2	700-1000	0.15-0.55	22800	380.00	4x50

## Filtration degrees available

Code	Perforated cylinder**				Weavewire stainless steel screen						
	Brown	Purple	Orange	Gray	Green	Blue	White	Red	Yellow	Black	Orange*
Micron	3500	2500	1500	800	500	300	200	130	100	80	50
Mesh	4	6	10	20	30	50	75	120	155	200	300
MM	3.5	2.5	1.5	0.8	0.5	0.3	0.2	0.13	0.1	0.08	0.05

\* 50 micron is available for 1" - 3" filters.

\*\*Available for 6" - 14" filters.



## amiad filtration systems



AMIAD products undergo constant monitoring for quality control. The manufacturer reserves the right to incorporate changes and improvements in the product without prior notice.

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