



TAVLIT

Smart Filtration



ADIR Automatic Disc filters batteries Model TVD

TAVLIT line of automatic disc filters model TVD combines high quality depth filtration with efficient flushing of the disc element. This unique automatic disc filter (patented), enables flushing at a very low pressure of 1.5 bar as compared to 3 bars normally required by such systems.

The innovative technology of the filter uses venturi devices inserted at the spine's inlets that introduce air during the flushing process to enhance it. The mixture of air and water enables more efficient flushing, uses smaller quantities of water for flushing and shortens the flushing time. It also enables proper flushing at a low pressure. The use of air also cushions the discs thereby reducing friction and prolonging the disc element life. The venturi devices insert air from the atmosphere and no external power or compressed air is required. The venturi devices are open only during flushing and do not operate during filtration.

The filter element is composed of highly accurate grooved discs from excellent quality plastic materials. The grooved discs are compressed together to form the filtration element. The intersections between the grooves and the outer surface of the element offer large effective filtration surface with in depth area used to stop debris is especially effective in filtration of organic matter.



Filtration process:

Water enters the filter and flow through the discs from the outer surface into the inner space. The dirt accumulates on the outer surface and between the grooves. and filtered water flow to the outlet of the filter.

Flushing process:

Accumulation of the dirt increases the head loss across the filters' battery. When the head loss reaches a preset value (usually 0.5-0.7 bar; 7-10 psi) the controller performs a flushing cycle flushing one filter after the other. During flushing air is introduced into the spines. The mixture of air and water enables highly efficient flushing, uses smaller quantities of water and shortens the flushing time. Additionally, the controller has a preset time-based flushing as backup.



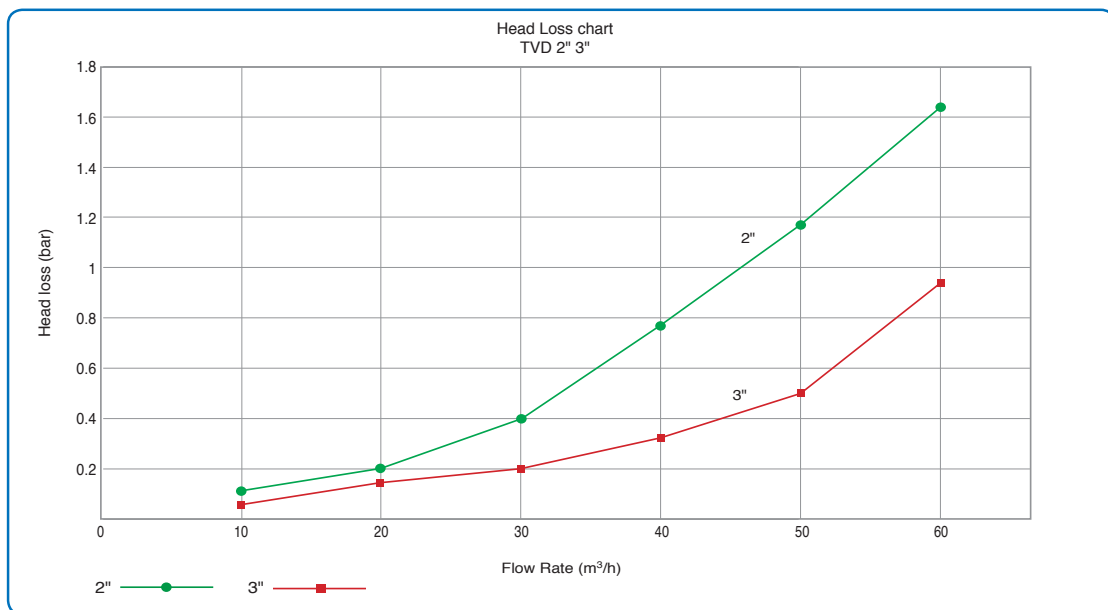
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Applications:

- As main filter battery for AG, Turf and large landscape projects.
- Suitable for low quality water, especially water with high load of organic matter.
- Most suitable for low pressure systems and for users that want to save energy.
- Applicable for industrial application, even when the water is corrosive.
- Used as prefiltration in systems when a high degree of filtration is used to protect the main filters.

Technical information:

- Available in 2" and 3" inlet head size for various flow rates.
- Max. operating pressure 10 bar.
- Min pressure required for flushing 1.5 bar.
- Backflush flowrate: 7.0 m³/h (at 1.5 bar).
- Filtration grade:
20-425 microns (800 – 40 mesh).



Filters Batteries

Filter Battery	Filtration Area Cm ²	Filtration Volume Cm ³	flow rate (m ³ /h)		
			Water Quality		
			Good	Average	Poor
2X2"	2,200	2,870	40	30	20
3X2"	3,300	4,290	60	45	30
4X2"	4,400	5,720	80	60	40
5X2"	5,500	7,150	100	75	50
6X2"	6,600	8,580	120	90	60
7X2"	7,700	10,010	140	105	70
2X3"	2,200	2,870	60	50	40
3X3"	3,300	4,290	90	75	60
4X3"	4,400	5,720	120	100	80
5X3"	5,500	7,150	150	125	100
6X3"	6,600	8,580	180	150	120
7X3"	7,700	10,010	210	175	140

Note:

- Flexibility – Using our inhouse engineering team and fabrication facilities TAVLIT can offer highly customized filtration batteries tailored to your needs.
- Consultation and knowledge.
- Design of complete systems including external products.