

# FILTROMAX™ Disc

#### Disc Filtration

FILTROMAX™ Disc filtration units are stand-alone, all polymeric automatic disc filtration systems. The filters are based on an innovative disc technology capable of removing contaminants such as suspended solids, fibres, grit, sand and algae. Its technology provides micron-precise depth filtration and long-term operation with minimal maintenance.



















#### **FEATURES & BENEFITS**

- Combines surface filtration and depth filtration to ensure high contaminant removal rates;
- · Compact, modular & highly scalable design;
- Systems covering high flows (up to 300 m $^3$ /h) and choices of filtration grades from 20 to 200  $\mu$ m;
- Automatic backwashing of individual filters based on pressure differential or time;
- Backwash configurations: with water & air (AAF) or water only (IS);
- Reduced backwash water consumption & constant production flow rates. Air assisted backwashing for 2" AAF only;
- Corrosion resistant polypropylene construction;
- Standard connecting flanges exist in PN and ANSI;
- No consumables; low running costs, minimal maintenance (no wear);



## **APPLICATIONS**

- Side & full stream filtration (Cooling tower & Heat exchangers)
- Pre-filtration to softeners, ion exchangers or membrane systems (UF or RO)
- Prevention of corrosion and blockages within pipework, valves, distributors and other equipment
- Re-use & tertiary municipal wastewater
- Feed water for irrigation systems
- Rainwater harvesting post-filtration



#### **OPTIONS**

- Filtromax Controller with associated solenoid valves & pressure switch
- 3x Alternative material configurations: classic (non corrosive), aggressive water and seawater.
- Inlet & Outlet isolation valves Accessory :
- Air Compressor for valves automation and backwash air (AAF only)

### **ASSOCIATED SERVICES**

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plant.





# **System Operating Parameters**

Model		Unit	3x2"	5x2"	8x2"	5x3"	8x3"	4x4"	7x4"		
	20 μm		N/A	20	40	50	80	80	150		
	40 µm		N/A	20	50	50	90	90	180		
Max Feed Flowrate (1)	55 µm	m³/h	20	40	70	70	150	120	260		
	100 µm		20	40	70	90	180	180	300		
	200 μm		20	50	90	120	180	220	>300		
Backwash Flowrate		m³/h	11.00	11.00	11.00	22.00	22.00	55.00	55.00		
Maximum Operating P	ressure <sup>(2)</sup>	bar	8								
Maximum Operating Te	emperature <sup>(2)</sup>	°C	40					40			
Backwash Air		L/min	270 - 311								

<sup>&</sup>lt;sup>(1)</sup> Maximum recommended flow rate are worked out for a good quality water. Please ask SOLYS for more information.

## **System Dimensions**

Model - 2" <sup>(3)</sup>	Unit	2x2"	3x2"	4x2"	5x2"	6x2"	7x2"	8x2"
Total Installed Length	m	1.0   0.8	1.3   1.0	1.5   1.3	1.8   1.6	2.2   1.8	2.3   2.1	2.7   2.3
Total Installed Width	m	0.9   0.7	0.9   0.7	0.9   0.7	0.9   0.7	0.9   0.7	0.9   0.7	0.9   0.7
Total Installed Height	m	1.2   0.8	1.2   0.8	1.2   0.8	1.2   0.8	1.2   0.8	1.2   0.8	1.2   0.8
Empty Weight	kg	70   75	75   110	110   175	135   195	195   250	250   285	285   310

(3) AAF | IS

Model - 3"	Unit	5x3"	6x3"	7x3"	8x3"
Total Installed Length	m	1.50	1.80	2.10	2.80
Total Installed Width	m	0.90	0.90	0.90	0.90
Total Installed Height	m	1.30	1.30	1.30	1.40
Empty Weight	kg	205	235	260	290

Model - 4"	Unit	4x4"	5x4"	6x4"	7x4"	8x4"	10x4"	12x4"
Total Installed Length	m	2.20	2.70	3.30	3.70	2.30	2.80	3.10
Total Installed Width	m	1.00	1.00	1.00	1.00	1.60	1.70	1.70
Total Installed Height	m	1.50	1.50	1.50	1.50	1.60	1.70	1.70
Empty Weight	kg	350	525	600	797	850	950	1052

<sup>&</sup>lt;sup>(2)</sup> These values can be increased to either 10 bars or 60° C. Please ask SOLYS for more information.

## **Pipes Connections**

Model - 2"	Unit	2x2"	3x2"	4x2"	5x2"	6x2"	7x2"	8x2"
Feed	DN	100	100	100	100	100	100	100
Treated water	DN	100	100	100	100	100	100	100
Drain	DN	50	50	50	50	50	50	50

Model - 3"	Unit	5x3"	6x3"	7x3"	8x3"
Feed	DN	150	150	150	200
Treated water	DN	150	150	150	200
Drain	DN	50	50	50	50

Model - 4"	Unit	4x4"	5x4"	6x4"	7x4"	8x4"	10x4"	12x4"
Feed	DN	200	200	250	250	250	300	300
Treated water	DN	200	200	250	250	250	300	300
Drain	DN	50	50	50	50	50	50	50

# **Feed water Requirements**

Parameter	Unit	Value
Nominal Feed Flowrate	m³/h	10 - 15
Maximum Inlet TSS	mg/l	20 for < 55μm 100 for 100 & 200μm

#### **Environmental Conditions**

Parameter	Unit	Value
Minimum ambient temperature	°C	5
Maximum ambient temperature	°C	55
Maximum humidity	%	75

## **Materials of Construction**

Pressure Vessels	Reinforced Polypropylene & Polyamide
Pipework	Polypropylene

## **Air & Power Requirements**

Parameter	Unit	Value
Compressed Air Pressure (4)	barg	6 to 8
Voltage	V	230
Frequency	Hz	50

<sup>&</sup>lt;sup>(4)</sup> Air pressure must be above water feed pressure