

# Clean Master® – Classic

Master Media Filter

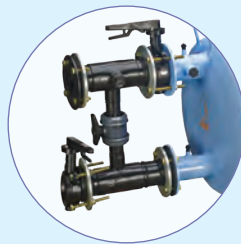


## Features & Benefits



### Standard Epoxy Coating for Protection from Corrosion

Coated with more than 70 micron thick light blue coloured epoxy powder from both inside and outside surface for protection against corrosion and weather effects



### Unique Manifold Design

Unique design of manifold for single tank unit facilitates flushing with filtered water



### High Quality Silica Sand as Media

Filtration media is crushed silica sand/quartz gravel of particle size 1 mm to 2 mm (0.039 to 0.078 inch)



### Innovative Candle Assembly

Innovative Candle assembly provided to pass filtered water in system



### Various Connection Options Available

Threaded connection, Flanged connection or Easy Fix™ connection available



### Various Options for Backwash

Available in manual, semi automatic or fully automatic backwash options

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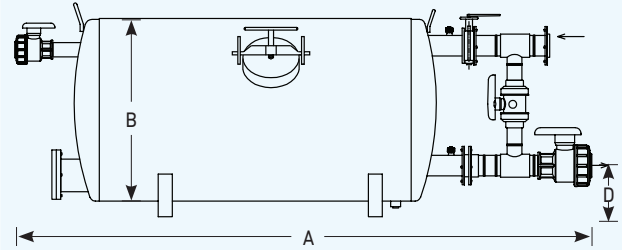
## Additional Features

- Manufactured from mild steel as per international fabrication standards.
- Designed for uniform distribution of incoming raw water over the media bed which ensures very effective filtration & backwash.
- Effective filtration of 75 micron (200 mesh).
- High filtration efficiency due to uniform grade of filtration media (silica sand / quartz gravel) and specially designed outlet candles.
- Maximum pressure rating 10 kg/cm<sup>2</sup> (142 psi).
- Clean-Master can also be supplied with stainless steel body.
- Optional multi tank modules for higher filtration capacities available.

## Applications

- For filtration of water in micro irrigation systems to prevent clogging due to physical and biological impurities.

## Dimensional Specifications



Nominal Flow Rate		Manual			
m <sup>3</sup> /hr	gpm	A mm	B mm	C mm	D mm
25	110	1470	500	310	175
30	132	1520	500	310	175
40	176	1940	500	310	175
40	176	1950	600	370	175
50	220	1950	600	370	175

## Technical Specifications

Nominal Flow Rate		Connection		Flow per unit area	Back Wash Flow	Quantity of Media		Gross Weight			
		Inlet/Outlet	Back Wash / By Pass					Manual		Semi / Fully Automatic	
m <sup>3</sup> /hr	gpm	inch	inch	m <sup>3</sup> /hr/m <sup>2</sup>	m <sup>3</sup> /hr	kg	lbs	kg	lbs	kg	lbs
25	110	2"	1½"	64	16	150	300	74	162	100	220
30	132	2½"	1½"	70	24	200	440	100	220	143	315
40	176	2½"	1½"	70	24	200	440	100	220	143	315
40	176	3"	2"	70	32	300	661	142	312	146	321
50	220	3"	2"	70	32	300	661	142	312	146	321

## Clean Pressure Drop Chart

Size inch	Flow m <sup>3</sup> /hr	K	m	Pressure Drop kg/cm <sup>2</sup> w.r.t. Flow m <sup>3</sup> /hr												
				5	10	15	20	25	30	40	50	60	70	80	90	100
2	25	0.025	0.074	0.04	0.05	0.08	0.11	0.16	0.23	0.48	1.00	2.10	-	-	-	-
2½	30	0.017	0.065	0.02	0.03	0.05	0.06	0.09	0.12	0.23	0.45	0.85	1.64	3.14	-	-
2½	40	0.031	0.05	0.04	0.05	0.07	0.08	0.11	0.14	0.23	0.38	0.62	1.03	1.7	2.8	-
3	40	0.021	0.04	0.03	0.03	0.04	0.05	0.06	0.07	0.10	0.16	0.23	0.35	0.52	0.79	1.18
3	50	0.019	0.42	0.02	0.03	0.03	0.04	0.05	0.07	0.10	0.15	0.23	0.35	0.53	0.80	1.22

Governing equation,  $h = k e^{m \chi}$ ;  $h$  = Pressure drop (kg/cm<sup>2</sup>);  $\chi$  = Flow rate (m<sup>3</sup>/hr);  $K$  = Pressure drop constant;  $m$  = Flow constant (for  $k$  &  $m$  value refer table)

Note: Filters are tested under standard laboratory test conditions.

