# Filtro Master™

Vertical High Efficiency Filter





# **Features & Benefits**



# **Vacuum Releasing Facility**

Vacuum breaker provided on top of filter to release air / vacuum at start or end of system (from 2" onwards)



# Standard Pure Polyester / Epoxy coating for Protecting from Corrosion

Coated up to 150 micron thick deep blue colored pure Polyester powder on outer surface & Epoxy coating from inner side for protection against corrosion and weather effects



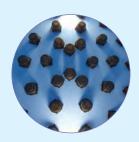
# High Quality Silica Sand as Media

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



# Various Connection Options Available

Threaded connection, Flanged (universal) connection or Easy Fix<sup>™</sup> connection available



## Innovative Mushroom Assembly

Innovative Mushroom assembly provided to pass filtered water in system.



# Various Options for Backwash

Available in semi-automatic or fully automatic backwash options.

# Filtro Master™ - Gold

#### **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
- Maximum pressure rating 10 kg/cm² (142 psi)
- Standard unit consists Filtro-Master tank without manifold and accessories
- Specially designed manifold suitable for different models can be supplied as a special order

## Manifold Options:

- Economical plastic manifold for Filtro-Master single tank unit manual backwash option.
- For other models, manifold assembled using metal pipes are available.
- On demand, manifolds can be supplied in custom sizes to meet the customers requirement.
- Filtro-Master filter can also be supplied with stainless steel body
- Optional multi tank modules for higher filtration capacity available

#### **Applications**

Prevents blockage of irrigation system due to organic impurities.

# Dimensional Specifications 40/60/100 m³/hr 20m³/hr

Nominal I	Flow Rate	Α	В	С	D	
m³/hr gpm		mm	mm	mm	mm	
20	76	1190	500	700	260	
40	151	1060	750	480	300	
60	227	1085	900	480	300	
100	379	1085	1195	490	300	

### **Technical Specifications**

Nominal		Con	nection	F1	Back	0		Gross Weight of Tank (without manifold & media)		
	Rate	Inlet/ Outlet	Back Wash / By Pass	Flow per unit area	Wash Flow	Quantity of Media				
m³/hr	gpm	inch	inch	m³/hr/m²	m³/hr	kg	lbs	kg	lbs	
20	76	2"	1 1/2"	101	8	120	264	67	147.4	
40	151	3"	2"	90	20	240	528	105	231.0	
60	227	3"	2"	94	29	390	858	168	369.6	
100	379	4"	2"	90	28	720	1584	200	440	

# **Clean Pressure Drop Chart**

Size	Flow	V		Pressure Drop(kg/cm²) w.r.t. Flow (m³/hr)												
inch	m³/hr	] <b>^</b>	m	5	10	15	20	25	30	40	50	60	70	80	90	100
2"	20	0.06917	0.074	0.1	0.14	0.21	0.3	0.44	0.63	1.31	2.74	-	-	-	-	-
3"	40	0.0354	0.048	0.04	0.06	0.07	0.09	0.12	0.15	0.24	0.39	0.63	1.02	1.65	2.66	4.3
3"	60	0.03811	0.033	0.04	0.05	0.06	0.07	0.09	0.1	0.14	0.2	0.27	0.38	0.52	0.73	1.01
4"	100															

Governing equation,  $h = k e^{m \chi}$ ;  $h = Pressure drop (kg/cm^2)$ ;  $\chi = Flow rate (m^3/hr)$ ; K = Pressure drop constant; m = Flow constant (for k & m value refer table). Note: Filters are tested under standard laboratory test conditions.

# **Ordering Specifications**

FM	XXX	Х	Х	X			
	Flow	No. of	Type of	Manifold			
	(m³/hr)	Units	Manifold	Option			
	010			M - Manual Backwash			
	020	S - Single	P - Plastic	S - Semi Auto Backwash			
	040	3 - Sirigle	M - Metal	F - Fully Auto Backwash			
	060			F - Fully Auto Backwasii			

Example: FM040SPM - This code represents Filtro- Master having flow rate of 40 m³/hr, single unit, plastic manifold with manual backwash type manifold. Note: Filtro- Master of any other flow capacity or end connections can be supplied 0n demand.