

Jain Hydrocyclone Filter

Technology for Dirt Separation



Features & Benefits



Innovative Convergent Filter Design

Hydrodynamically designed to create maximum centrifugal action to separate particles heavier than water



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



Equipped with Pressure Check Assembly

To check pressure from inlet side and outlet side, additional Pressure check assembly provided



Various Connection Options Available

Threaded connection, Flanged (universal) connection or Easy Fix[™] connection available



Special Rubber Cone

Special rubber cone is provided at the bottom of the cone to prevent wearing



Draining Facility Available

Large volume of dirt collection chamber increases flushing interval

Jain Hydrocyclone Filter

Additional Features

- Mild steel construction.
- Efficiently removes fine sand and silt particles of size higher than 75 microns and specific gravity more than 2.65.
- Dirt can be easily flushed out through dirt collection chamber
- Available in maximum operating pressure of 10 kg/cm² (142 psi).
- Recommended to install before media/screen filters to remove particles heavier than water.
- Improves operational efficiency & life of media / screen filters
- Can also be supplied in stainless steel as a special order.
- Can be supplied in higher flow capacities in multiple batteries option.

Applications

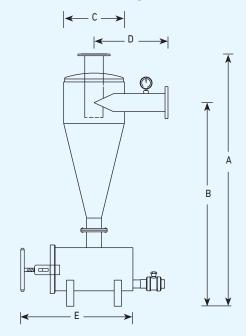
Used in micro irrigation systems to remove sand and silt particles from irrigation water.

Technical Specifications

Nominal Flow Rate		Inlet/ Outlet Connection	Vol.of coll. chamber	Gross Weight		
m³/hr	gpm	inch	litres	kg	lbs	
25	95	2"	5	36	79	
40	151	2½"	10	48	105	
50	189	3"	10	60	132	
80	303	4"	49	89	195	
120	454	6"	78	151	332	
200**	757	8"	300	245	540	
300**	1136	10"	375	350	771	
400**	1514	12"	450	50 455		

^{*} For detailed code, please refer the ordering specifications.

Dimensional Specifications



Nominal Flow Rate		Inlet/ Outlet	АВ		С	D	Е	
(m³/hr)	gpm	(Inch)	(mm)					
25	95	2"	1065	865	204	198	460	
40	151	21/2"	1365	1112	264	258	520	
50	189	3"	1575	1350	323	317	520	
80	303	4"	1950	1745	402	396	500	
120	454	6"	2850	2275	600	594	500	
200	757	8"	3361	2891	750	750	1215	
300	1136	10"	3978	3366	900	940	1515	
400	1514	12"	4676	3891	1000	1120	1815	

Clean Pressure Drop Chart

Size	Flow	К		Pressure Drop(kg/cm²) w.r.t. Flow (m³/hr)												
Size	(m³/hr)	_ ^	m	15	20	25	30	40	50	60	70	80	90	100	120	140
2	25	0.054	0.074	0.16	0.23	0.34	0.49	1.03	2.15	4.51	9.43	-	-	-	-	-
2.5	40	0.049	0.055	0.11	0.15	0.19	0.25	0.44	0.76	1.31	2.26	3.91	6.76	-	-	-
3	50	0.037	0.049	0.08	0.10	0.13	0.16	0.26	0.43	0.71	1.16	1.90	3.11	-	-	-
4	80	0.029	0.027	0.04	0.05	0.06	0.06	0.08	0.11	0.14	0.19	0.25	0.33	0.43	0.73	1.26
6	120	0.018	0.018	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.07	0.09	0.11	0.15	0.21

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 values refer table) - *Note: Filters are tested under standard laboratory test conditions.*

Ordering Specifications

	X	XXX				
	Material	Nominal Flow (m³/hr)				
		025				
JHF	M MILLOL 1	040				
	M - Mild Steel S - Stainless Steel	050				
	3 - Staintess Steet	080				
		120				

Example: JHFM025 - This code represents Jain Hydrocyclone Filter - Deluxe with mild steel construction having 25 m³/hr nominal flow capacity.

- Jain Hydrocyclone Filter of any other size, flow capacity or end connections can be supplied On demand.
- Jain Hydrocyclone Filter can be supplied in Autoflush option. Please specify code as DJHFM025A instead of DJHFM025.

^{**8&}quot;, 10" & 12" Filters are MTO