Automatic Self-Cleaning Disc Filter

Highly Efficient Filtration

Less head loss and backflush frequency by large filtration area size and centrifugal water inlet.

Less Maintenance Effort

Reduces manual maintenance via a grooved autoflush disc, enabling dual surface and depth filtration.

Saving Water and Energy

Maximum filtration efficiency based on minimum backflushing pressure required.

Reliable and Durable

Produced by excellent raw material which is of corrosion, chemical and UV resistant.

T Type

Item No.	Size	Filtering Surface cm^2	Max. Flow m^3/h	Mesh	Disc Color
T2AD080V	2"	1052	22	80	
T2AD120V	2"	1052	20	120	
T2AD150V	2"	1052	15	150	
T3AD080V	3"	1492	32	80	
T3AD120V	3"	1492	30	120	
T3AD150V	3"	1492	20	150	

H Type

Item No.	Size	Filtering Surface cm^2	Max. Flow m^3/h	Mesh	Disc Color
H3AD080V	3"	2104	44	80	
H3AD120V	3"	2104	40	120	
H3AD150V	3"	2104	30	150	
H4AD080V	4"	2984	64	80	
H4AD120V	4"	2984	60	120	
H4AD150V	4"	2984	40	150	

Technology:

● Filtration

Discs are compressed by a pre-loaded spring. The entering water passes through centrifugal structure, then being centrifugal effect flowing. The flowing enforce large contaminants away from discs. The water then passes efficiently through the discs thus small contaminants be trapped.

● Backflush

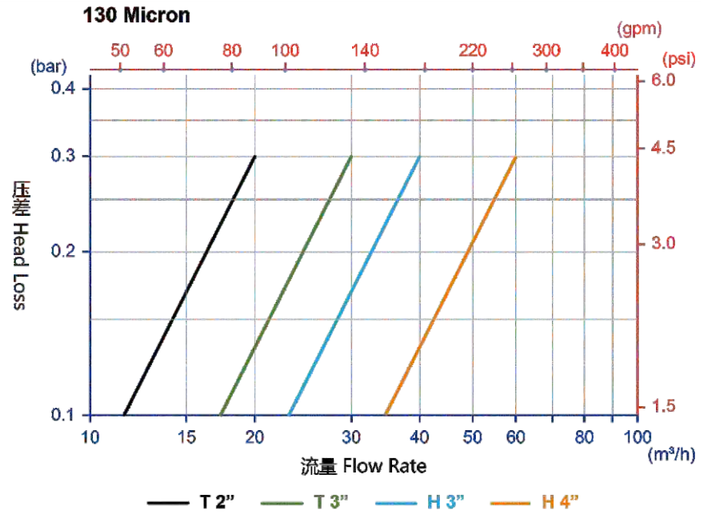
Water enters the filter from the opposite direction and discs are released after spring elevating. Water are then forced through the nozzles on the spine and jetting forward to discs. At this stage the discs spin freely, loosening the trapped solids which are then flushed out.

Technical Data:

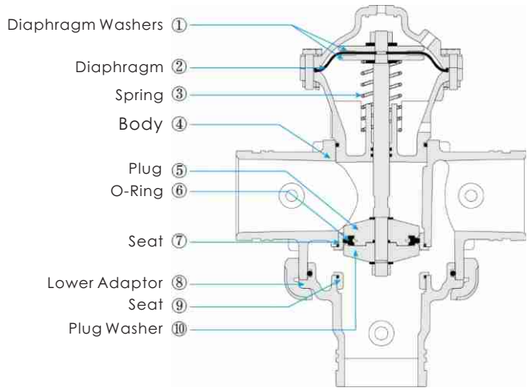
- Maximum Temperature: 60℃
- Maximum Pressure: 10 Bar (145 Psi)
- End Connections: Grooved

Filter Size	Min. Backflushing Pressure per Filter	Min. Backflushing Flow Rate per Filter
T2"	0.8Bar, 11.6Psi	$7m^3/h$, 31gpm
T3"	1.2Bar, 17.4Psi	$8m^3/h$, 35gpm
H3"	0.8Bar, 11.6Psi	$14m^3/h$, 62gpm
H4"	1.2Bar, 17.4Psi	$16m^3/h$, 70gpm

Head Loss Data:



Filter Backwash Hydraulic Valve



Reliable Performance

Change flow direction smoothly based on short travel hydraulic actuation design.

Easy Installation

Two flow direction modes, Angle flow (A) and Straight flow (S), to fit various automatic filtration system.

Durable Performance

Produced by excellent engineered plastic which is of corrosion and UV resistant.

Double Chambered

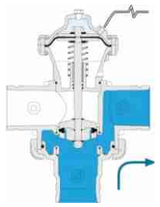
Low actuation pressure required, extend the lifetime of the diaphragm.

Technical Data:

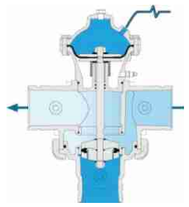
- End Connections: Grooved
- Working Pressure: 0.7-10 Bar (10-145 Psi)
- Maximum Temperature: 65℃
- External Operating Pressure: 85%-100% of operating pressure
- Control Chamber Displacement Volume: 0.13L of 2", 0.34L of 3", 0.55L of 4"

Operation:

- **Angle Flow**

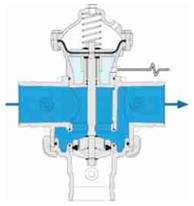


Filtration

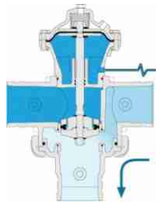


Backwash

- **Straight Flow**



Filtration



Backwash

2" Angle

Item No.	Size	Filtration Kv	Filtration Cv	Backwash Kv	Backwash Cv
BHV0150A	2", VIC	52	60	48	56

2" Straight

Item No.	Size	Filtration Kv	Filtration Cv	Backwash Kv	Backwash Cv
BHV0150S	2", VIC	46	53	60	70

3" Angle

Item No.	Size	Filtration Kv	Filtration Cv	Backwash Kv	Backwash Cv
BHV0180A	3", VIC	110	127	100	115

3" Straight

Item No.	Size	Filtration Kv	Filtration Cv	Backwash Kv	Backwash Cv
BHV0180S	3", VIC	93	107	122	141

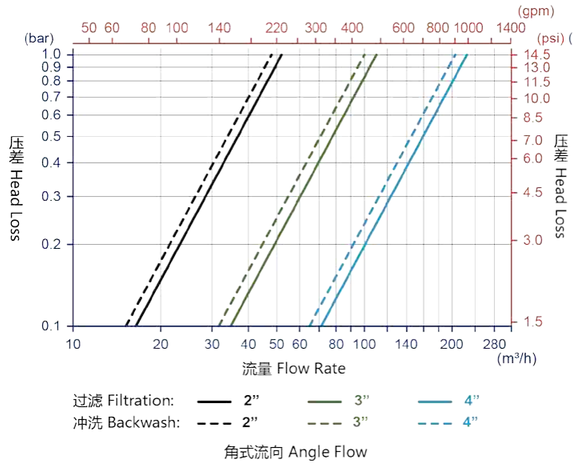
4" Angle

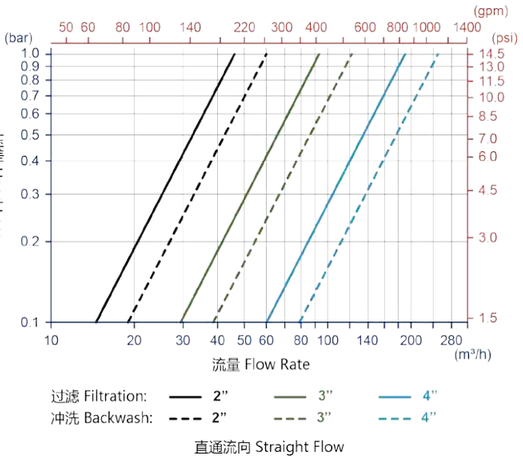
Item No.	Size	Filtration Kv	Filtration Cv	Backwash Kv	Backwash Cv
BHV01100A	4", VIC	225	260	205	237

4" Straight

Item No.	Size	Filtration Kv	Filtration Cv	Backwash Kv	Backwash Cv
BHV01100S	4", VIC	190	220	250	290

Head Loss Data:





T Automatic Self-Clean Filtration System

Easy UI, Easy Operation

Easy Operation

Graphical UI with simple and easy to operate.

Saving Labor

Program setting automatic backwash, less manual maintenance requirement.

Saving Energy

Max. filtration efficiency based on min. back flushing pressure required.

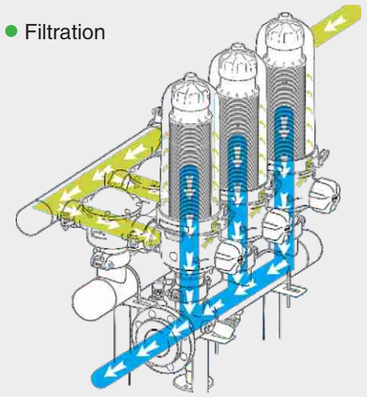
Reliable & Durable

Produced by excellent raw material which is of corrosion, chemical and UV resistant.

Item No.	Size of Filter Units	Number of Filters	Manifold Dia.	Max. Flow m^3/h	Max. Flow gpm	Connection	Controller
T202-3	2"	2	3" (Dn80)	40	176	Flange	12VDC Latch/10Unit
T203-3	2"	3	3" (Dn80)	60	264	Flange	12VDC Latch/10Unit
T204-4	2"	4	4" (Dn100)	80	352	Flange	12VDC Latch/10Unit
T302-4	3"	2	4" (Dn100)	60	264	Flange	12VDC Latch/10Unit
T303-4	3"	3	4" (Dn100)	90	393	Flange	12VDC Latch/10Unit
T304-6	3"	4	6" (Dn150)	120	524	Flange	12VDC Latch/10Unit
T305-6	3"	5	6" (Dn150)	150	655	Flange	12VDC Latch/10Unit
T306-6	3"	6	6" (Dn150)	180	786	Flange	12VDC Latch/10Unit

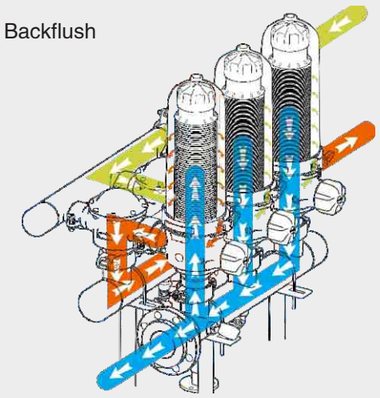
Technology:

● Filtration



The controller controls the direction of the backwash valve to make the filter enter the filtration stage: The source water enters the filter passing through the system inlet pipe, backwash valve, and filter inlet one after another. Then the dirts stopped by disc and clean water pass through filter outlet to system outlet pipe.

● Backflush

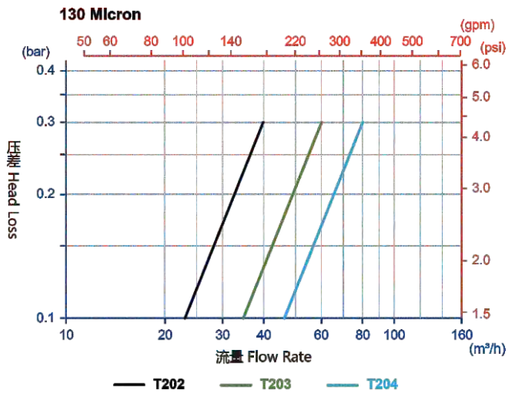


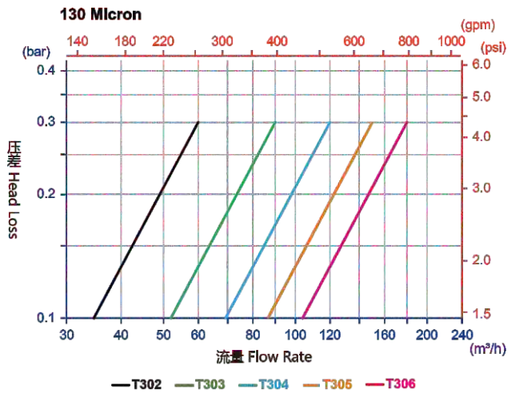
After the controller detects that the pressure difference between the inlet and outlet is greater than set value, it controls the backwash valve to change direction, so that the filter enters the flushing stage: The clean water filtered by other filters passes through the system outlet pipe to the filter outlet and flushing the discs, then the dirty water passes through the filter inlet, the backwash valve and discharged to the system sewage pipe.

Technical Data:

- Flow Rate: 40-180m³/h (176-786gpm)
- Maximum Pressure: 10 Bar (145 Psi)
- Min. Backflushing Flow Rate of each unit Filter: T2" Filter - 7m³/h, T3" Filter - 8m³/h
- Min. Backflushing Pressure(at Outlet): T2" Filter - 0.8Bar, T3" Filter - 1.2Bar

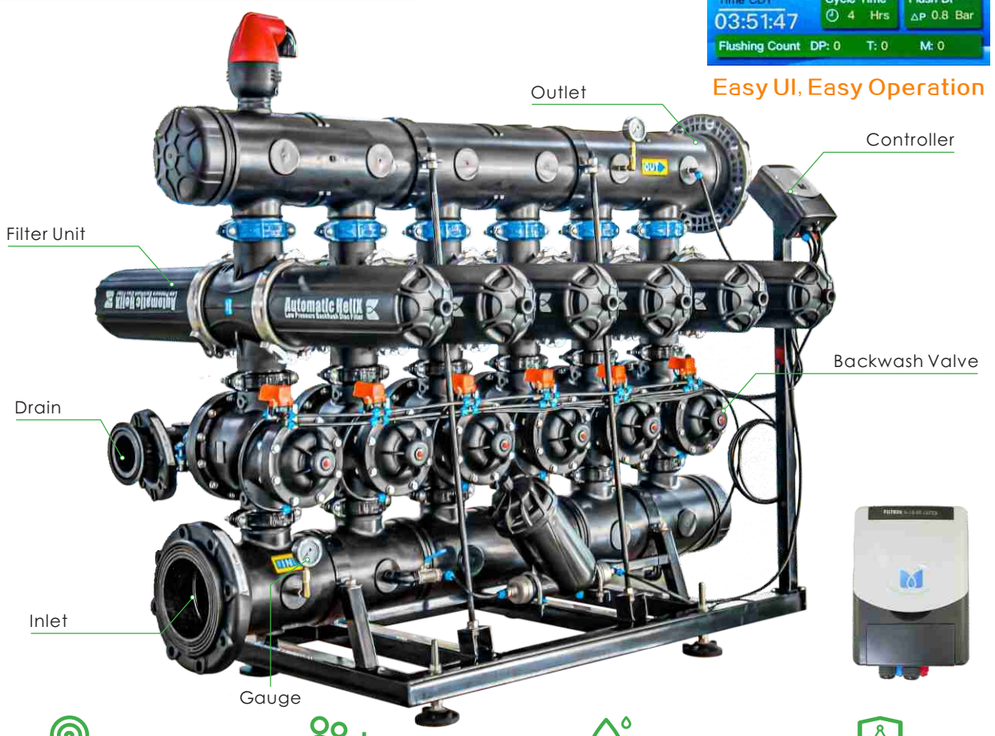
Head Loss Data:





H Automatic Self-Clean Filtration System

Easy UI, Easy Operation



Easy Operation

Graphical UI with simple and easy to operate.

Saving Labor

Program setting automatic backwash, less manual maintenance requirement.

Saving Energy

Max. filtration efficiency based on min. back flushing pressure required.

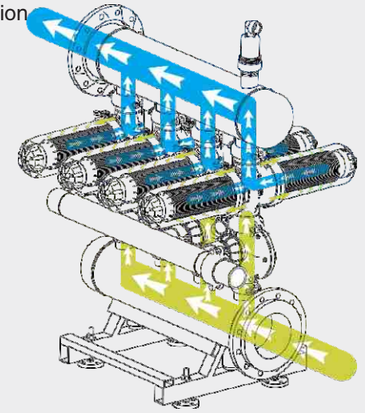
Reliable & Durable

Produced by excellent raw material which is of corrosion, chemical and UV resistant.

Item No.	Size of Filter Units	Number of Filters	Manifold Dia.	Max. Flow m^3/h	Max. Flow gpm	Connection	Controller
H303-6	3"	3	6" (Dn150)	120	524	Flange	12VDC Latch/10Unit
H304-6	3"	4	6" (Dn150)	160	698	Flange	12VDC Latch/10Unit
H305-6	3"	5	6" (Dn150)	200	874	Flange	12VDC Latch/10Unit
H403-6	4"	3	6" (Dn150)	180	786	Flange	12VDC Latch/10Unit
H404-6	4"	4	6" (Dn150)	240	1048	Flange	12VDC Latch/10Unit
H405-6	4"	5	6" (Dn150)	300	1310	Flange	12VDC Latch/10Unit
H406-8	4"	6	8" (Dn200)	360	1572	Flange	12VDC Latch/10Unit
H407-8	4"	7	8" (Dn200)	420	1834	Flange	12VDC Latch/10Unit
H408-8	4"	8	8" (Dn200)	480	2096	Flange	12VDC Latch/10Unit
H409-10	4"	9	10" (Dn250)	540	2358	Flange	12VDC Latch/10Unit
H410-10	4"	10	10" (Dn250)	600	2620	Flange	12VDC Latch/10Unit

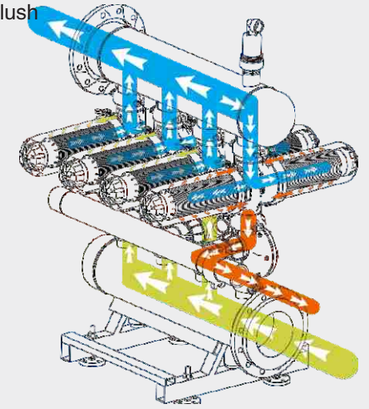
Technology:

- Filtration



The controller controls the direction of the backwash valve to make the filter enter the filtration stage: The source water enters the filter passing through the system inlet pipe, backwash valve, and filter inlet one after another. Then the dirts stopped by disc and clean water pass through filter outlet to system outlet pipe.

- Backflush

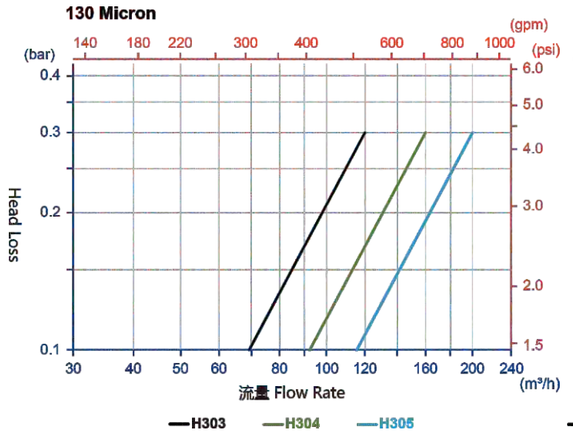


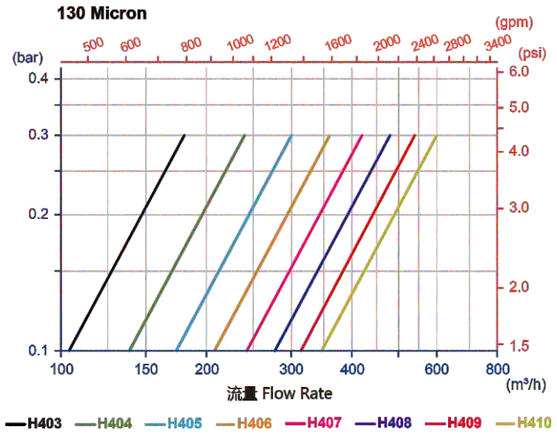
After the controller detects that the pressure difference between the inlet and outlet is greater than set value, it controls the backwash valve to change direction, so that the filter enters the flushing stage: The clean water filtered by other filters passes through the system outlet pipe to the filter outlet and flushing the discs, then the dirty water passes through the filter inlet, the backwash valve and discharged to the system sewage pipe.

Technical Data:

- Flow Rate: 120 -600m³/h (524 -2620gpm)
- Maximum Pressure: 10 Bar (145 Psi)
- Min. Backflushing Flow Rate of each unit Filter: H3" Filter - 14m³/h, H4" Filter - 16m³/h
- Min. Backflushing Pressure(at Outlet): H3" Filter - 0.8Bar, H4" Filter - 1.2Bar

Head Loss Data:





T Manual Backflush Filtration System

Manual Operation

Manual handling but automatic flushing with one step operation to clean the filter.

Affordable

High efficient filtering with competitively price, suitable for small and medium-sized irrigation system.

Reliable & Durable

Filtration system with less components for easy to use, also lower failure rate.

Item No.	Size of Filter Units	Number of Filters	Manifold Dia.	Max. Flow Rate m^3/h	Max. Flow Rate gpm	Connection
MT302-4F	3"	2	4" (Dn100)	60	264	Flange
MT303-4F	3"	3	4" (Dn100)	90	393	Flange
MT304-6F	3"	4	6" (Dn150)	120	524	Flange
MT305-6F	3"	5	6" (Dn150)	150	655	Flange
MT306-6F	3"	6	6" (Dn150)	180	786	Flange

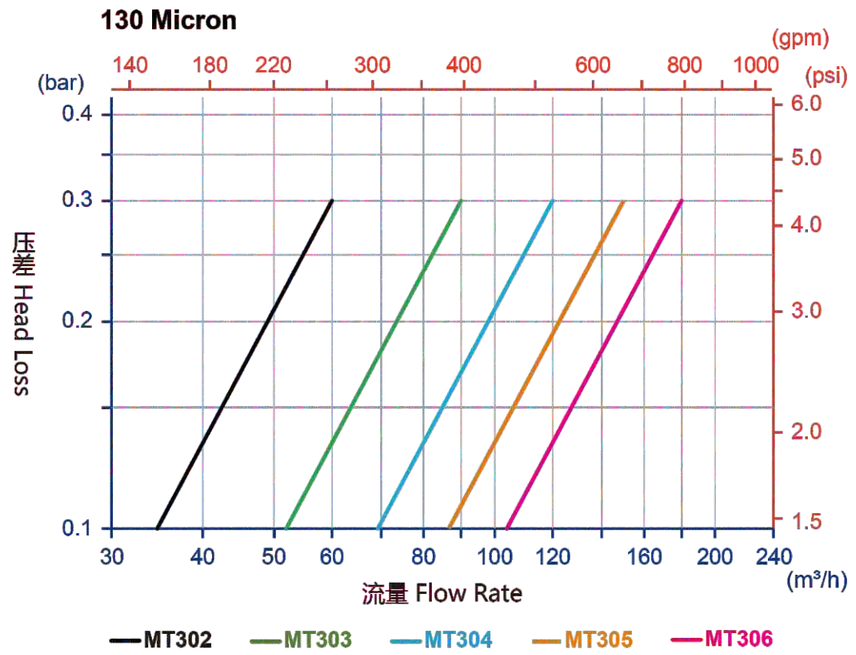
Features:

The manual backflushing filtration system is equipped with durable manual three-way valves, eliminating the need for complex controllers or solenoids. This simplified yet highly efficient design reduces maintenance costs while ensuring reliable performance.
Ideal for small and medium-sized farms, its budget-friendly price lowers the barrier to entry for advanced filtration technology. Farmers can now access labor-saving automation without compromising affordability.
Beginner-friendly operation is a key highlight: even those new to irrigation systems can master it within minutes. The process requires only one manual step to initiate the automatically cleaning the filters.

Technical Data:

- Flow Rate: 60-180m³/h (264-786gpm)
- Maximum Pressure: 10 Bar (145 Psi)
- Min. Backflushing Flow Rate of each unit Filter: 8m³/h
- Min. Backflushing Pressure(at Outlet): 1.2Bar

Head Loss Data:



Manual Disc Filter

Highly Efficient Filtration

Less head loss and backflush frequency by large filtration area size and centrifugal water inlet.

Less Maintenance Effort

Reduces manual maintenance via a grooved autoflush disc, enabling dual surface and depth filtration.

Reliable and Durable

Produced by excellent raw material which is of corrosion, chemical and UV resistant.

T Type

Item No.	Size	Filtering Surface cm^2	Max. Flow m^3/h	Mesh	Disc Color
T2MD080	2"	1198	34	80	
T2MD120	2"	1198	30	120	
T2MD150	2"	1198	26	150	
T3MD080	3"	1699	56	80	
T3MD120	3"	1699	50	120	
T3MD150	3"	1699	38	150	

H Type

Item No.	Size	Filtering Surface cm^2	Max. Flow m^3/h	Mesh	Disc Color
H3MD080	3"	2396	69	80	
H3MD120	3"	2396	60	120	
H3MD150	3"	2396	51	150	
H4MD080	4"	3398	113	80	
H4MD120	4"	3398	110	120	
H4MD150	4"	3398	75	150	

Technology:

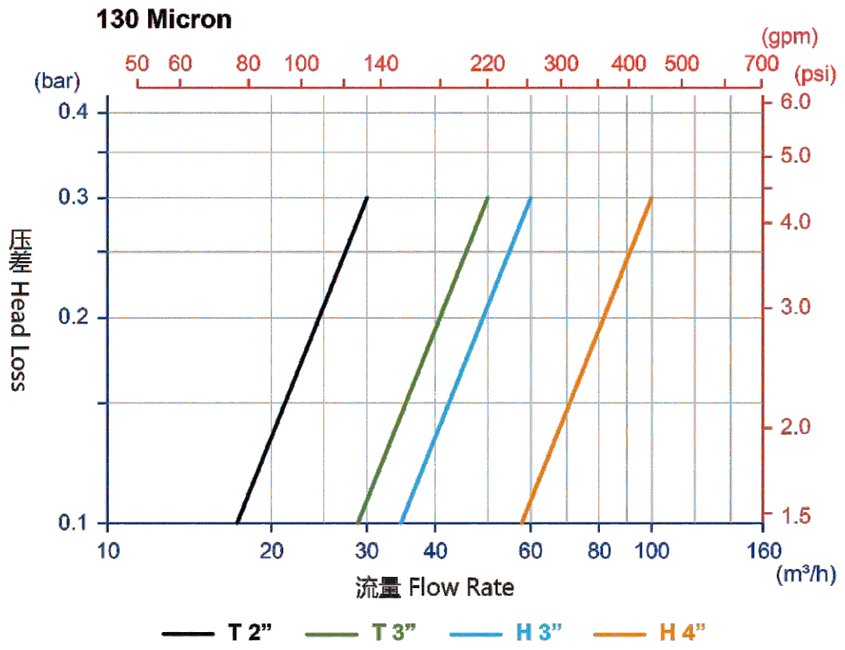
- Filtration

The entering water passes through centrifugal structure, then being centrifugal effect flowing. The flowing enforce large contaminants away from discs. The water then passes efficiently through the discs thus small contaminants be trapped.

Technical Data:

- Maximum Temperature: 60℃
- Maximum Pressure: 10 Bar (145 Psi)
- End Connections: Threaded, Flange, VIC Grooved

Head Loss Data:



Y Type Micro Filter (Filtration Grade:120mesh)

3/4"

Item No.	Size	Type	Max. Flow	Filtration Surface	Max. Pres.
1725S120B/N	3/4"	Screen	5m³/h	95cm²	8bar
1725D120B/N	3/4"	Disc	4m³/h	150cm²	8bar

1"

Item No.	Size	Type	Max. Flow	Filtration Surface	Max. Pres.
1732S120B/N	1"	Screen	5m³/h	95cm²	8bar
1732D120B/N	1"	Disc	4m³/h	150cm²	8bar

1-1/2"

Item No.	Size	Type	Max. Flow	Filtration Surface	Max. Pres.
Y50S120B/N	1.5"	Screen	20m³/h	488cm²	8bar
Y50D120B/N	1.5"	Disc	20m³/h	568cm²	8bar

2"

Item No.	Size	Type	Max. Flow	Filtration Surface	Max. Pres.
Y63S120B/N	2"	Screen	25m³/h	488cm²	8bar
Y63D120B/N	2"	Disc	25m³/h	568cm²	8bar

2" Super

Item No.	Size	Type	Max. Flow	Filtration Surface	Max. Pres.
YB63S120B/N	2"S	Screen	32m³/h	802cm²	8bar
YB63D120B/N	2"S	Disc	32m³/h	884cm²	8bar

Filter Elements

Screen Elements

Disc Elements

Solenoid Valve (Motor Type)

24V AC(DC)

IP68 WATERPROOF

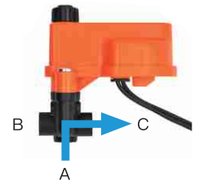
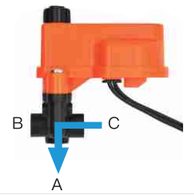
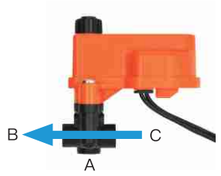
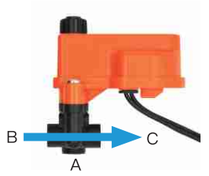
12V DC Latching

IP68 WATERPROOF

Technical Data

- AC (DC) version: Voltage 24V (18-30V), Current Inrush 250 mA, Holding 15 mA
- DC Latching version has red (positive) wire and black (negative) wire
- DC Latching version: Voltage 9-40V, Pulse width: 80-500ms
- Max. ambient temperature: 60℃ (140 ℉)
- Filtration: Min. 80 mesh
- With 100cm Wires
- Pressure range: 0-10bar (0-140 psi)
- Max. fluid temperature: 60℃ (140 ℉)
- Hydraulic ports connecting: 1/8" BSP
- Waterproof Rating: Ip68

How to Connect with Main Hydraulic Valve:

	Flowing Direction	
	NC (Normally Closed)	NO (Normally Open)
De-energized	 A: Pressure B: Vent C: Command	 A: Vent B: Pressure C: Command
Energized	 A: Pressure B: Vent C: Command	 A: Vent B: Pressure C: Command

Note: NC & NO is refering to the Hydraulic valve. NC is hydraulic valve closing when de-energized, NO is hydraulic valve opening when de-energized.