

User Manual for High-efficiency Automatic Backwash Disk Prefilter

0WRX.466.692

1. Main Application

Used for the filtration of municipal water treatment. It is a coarse filtration, which can intercept the particles larger than 0.05mm, such as sediment, rust, debris, etc., to protect the water device behind. Suitable for indoor installation.

2. Product Characteristics

1. Disk filter, inverted installation
2. High-efficiency automatic backwash
3. Leakage protection function (cut off the water automatically when you forget to turn off the faucet while short of water supply, tube leak or burst)
4. Inlet and outlet can be rotated 360°
5. There is a check valve in the outlet to avoid backflow.
6. Humanization design, LED lamp
7. Connector to leakage sensor (The leakage sensor should be installed in low-lying place, thus it will close valve immediately when leaking)

3. Technical Parameters

Model	Nominal Size	Rated Water Flow m ³ /h	Rated Treated Water Capacity m ³	Requirements of Backwash Flow Rate m ³ /h	Filtration Precision μm	Remark
RL-Q01	DN20	1.5	15	≥1.5	50	Appearance A
RL-Q02	DN25	2.5	25	≥2.5	50	Appearance A

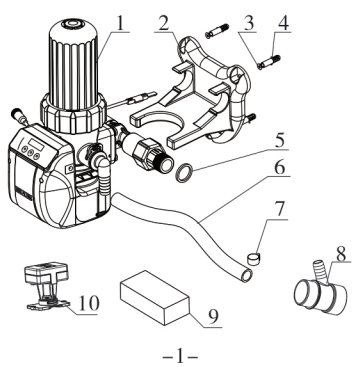
Operating Conditions:

Working pressure: 0.1~0.6MPa Working water temperature: 5~50°C
 Environment temperature: 5~50°C; Relative humidity: ≤95% (25°C)
 Power Adapter: Input AC100~240V/50~60Hz, Output DC12V

Note: Rated treated water capacity is related to the raw water quality. The more particulate matter contains, the less water capacity will be.

4. Check Spare Parts

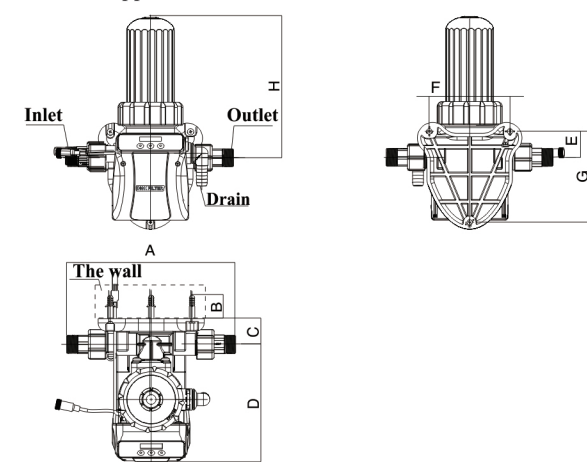
After unpacking, please check spare parts as below.



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Number	Description and Specification	Quantity	Remark
1	Prefilter	1	
2	Fixed Seat	1	
3	Screw Cross ST3.9×25	3	
4	Expansion Screw	3	OD φ6
5	Seal Ring	2	
6	Hosepipe 1.5M	1	
7	Clamp	2	
8	Connector	1	
9	Transformer	1	DC 12V, water-proof wire
10	Leakage Sensor	1	

5. Product Appearance and Installation Dimensions

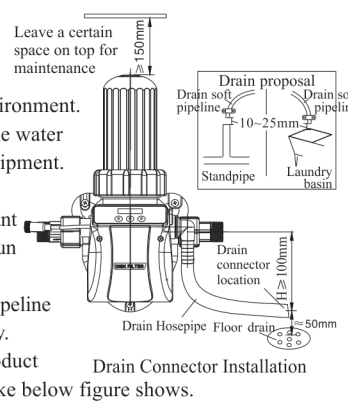


Model	Inlet/Outlet	Drain	A	B	C	D	E	F	G	H
RL-Q01	G3/4M	φ16.5	244	34	37	169	38	118	133	206
RL-Q02	G1M	φ20	302	34	45	221	49	130	180.5	239

Remark: M: male thread, all dimensions above are in mm.

6. Installation Notes

1. The installation conditions should conform to the requirements of the product work environment.
2. It should be installed behind the water meter, but in front of other equipment. Avoid installation outside.
3. It should stay away from stagnant water and prevent it from the sun and rain.
4. Regulator valve is required if pipeline pressure often change suddenly.
5. The installation position of product and drain pipeline should be like below figure shows.



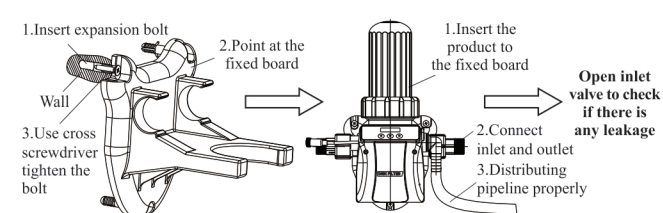
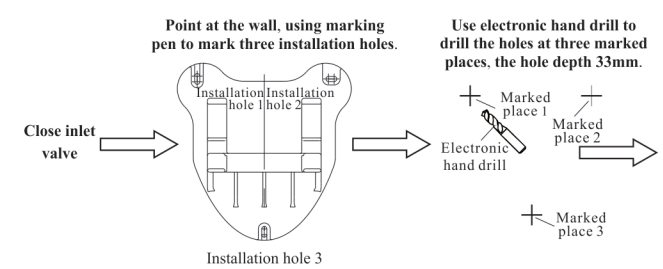
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6. The distance between installation location and power socket should shorter than power line.
7. Please avoid drilling the subsurface pipes or cables during the installation of expand screw.
8. If you have any questions, please feel free to contact our after-sales service or professionals.
9. When connected to pipes, the size of pipe should match with filter inlet and outlet, which should be not smaller than the caliber of pipe. Otherwise, it may result in bad backwash performance caused by low water pressure or low backwash flow rate.

7. Installation Step

Before installation, be sure all these tools and materials listed below are ready: Electric or percussion hand drill 1 piece (matching with φ6 masonry drill and tile drill, each 1 piece), cross screwdriver 1 piece, hammer 1 piece, pipeline clamp several pieces, thread seal tape several pieces.

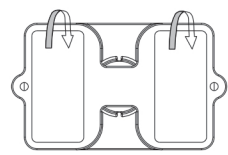
1. Installation of Automatic Backwash Disk Prefilter:



2. Installation of Leakage Sensor
- There are two installation types for leakage sensor: installed with double-faced adhesive tape and installed with expansion screw.

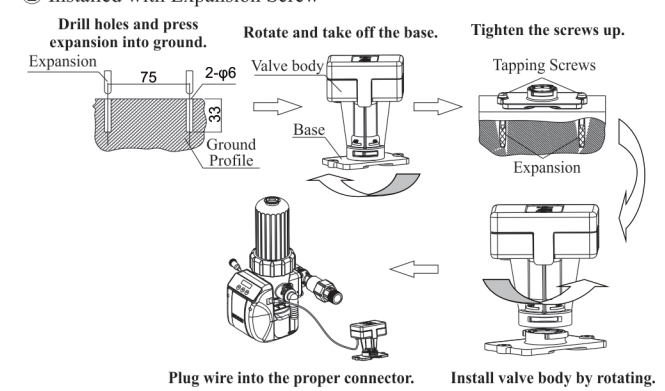
It should be installed near automatic backwash disk prefilter and at the place where can easily meet water.

- Single Monitor Installation (Standard)
 - Installed with Double-faced Adhesive Tape
- Tear protective layer of double-faced adhesive tape as the below picture, stick onto a dry and clean ground, and fix it.

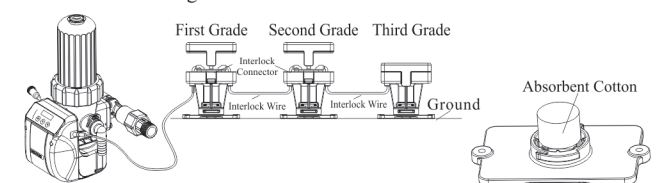


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2. Multi-point Monitor Installation (Optional)



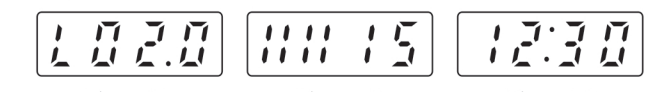
Installation method of multi-point monitor should refer to "Single Monitor Installation". Wiring is shown below.



Attention: If the automatic backwash disk prefilter receives the leakage signal from leakage sensor and is closed, only you press "ON" button till it return to service status and change absorbent cotton of leakage sensor, can it recover to normal monitor.

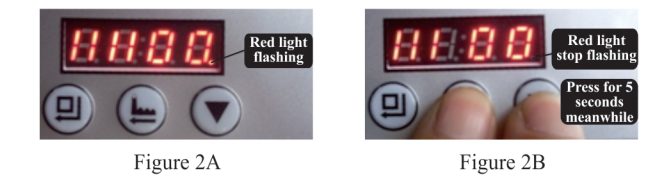
8. Operation and Setting

1. Display



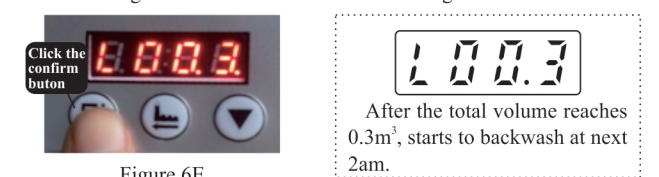
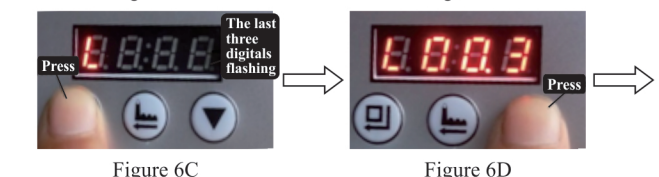
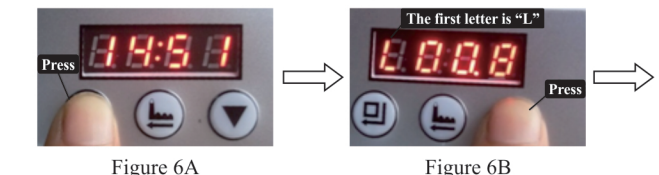
- Under service position, figure 1A, 1B, 1C display circularly 10 seconds.
- Under service position, figure 1A displays residual water (For example: L02.0: residual water 02.0m³. L00.0: start to backwash at next 2am)
- Under service position, figure 1B displays the current flow rate (For example: 15: the current flow rate is 15L/min)
- Figure 1C displays the current time.

2. Lock and unlock

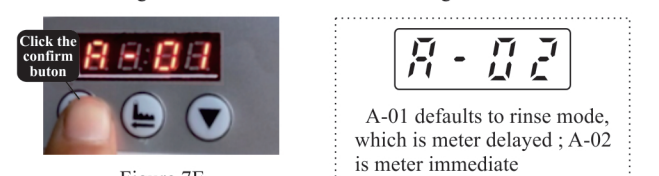
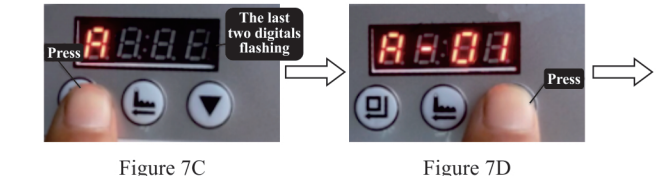
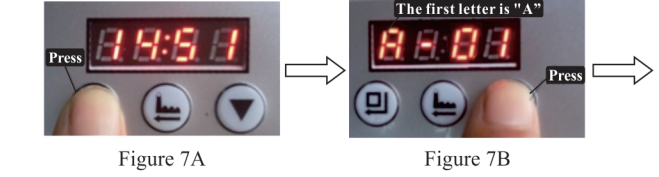


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- Set the water capacity (Figure 6A, 6B, 6C, 6D, 6E). Set the water capacity from 0.8m³ to 0.3m³. When the water capacity reaches the set value, it starts to backwash at next 2am. Set range: 0~20.0m³.

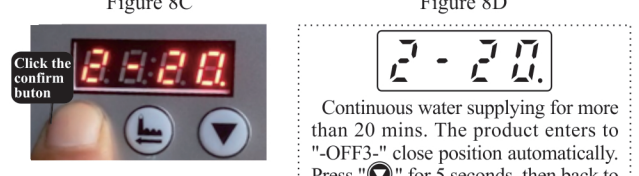
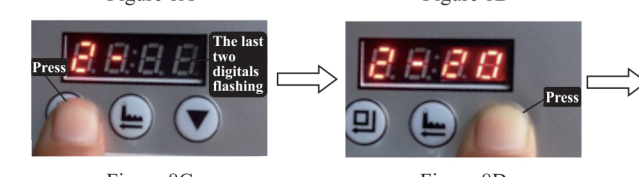
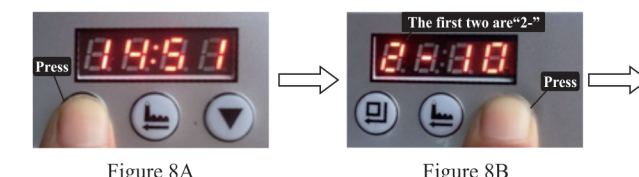


- Set rinse type (Figure 7A, 7B, 7C, 7D, 7E)

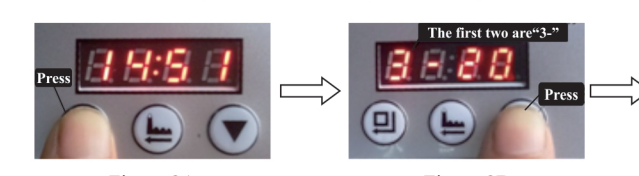


- Set the closing time of continuous water supplying (Figure 8A, 8B, 8C, 8D, 8E). Set continuous water supplying time from 10 min. to 20 min. When the continuous water supplying time reaches the set value, if there is any possibility of leakage or forgetting to turn off the faucet, the valve will cut off the water. Set range is 0~90 min, 0 min means this function invalid.

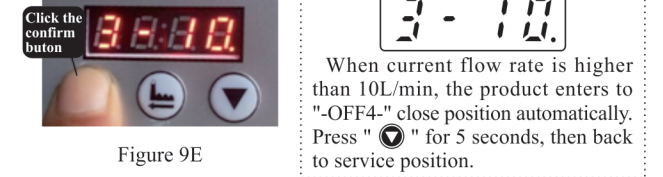
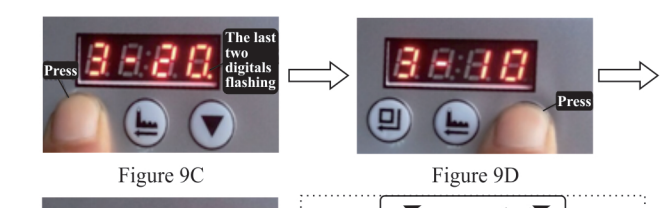
the default value is 75 min. The user should set the maximum continuous water supplying time according to the family water usage and the working condition of other water appliances. For example, it is suggested to use default set when the prefilter is used together with the whole house water softening (filter) device; when the prefilter is used alone, if the vessel volume that family equip is no more than 1 ton, it is suggested to set 90 min; if more than 1 ton, then set 0 min. If there is no equipment need long-time water supply, it is recommended to lower the setting value as far as possible to raise the level of leakage prevention.



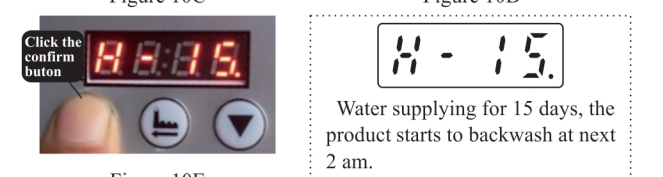
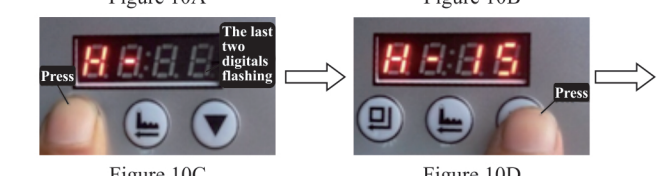
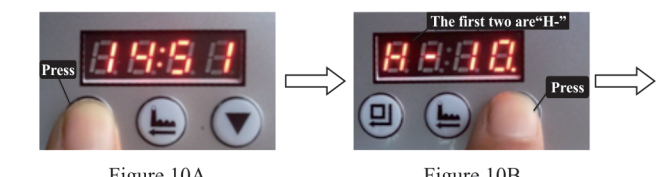
- Set peak flow rate. (Figure 9A, 9B, 9C, 9D, 9E). Set peak flow rate from 20L/min to 10L/min. When the current flow rate is higher than setting value which may be caused by pipeline burst, it will cut off the water inlet. Set range is 0~99L/min. The default for RL-Q01 is 60L/min, RL-Q02 is 90L/min. It is suggested to use default set when the prefilter is used together with the whole house water softening (filter) device; when the prefilter is used alone, the setting should be according to the quantities of faucets that may use simultaneously in house. For example, if there is only one faucet in the house, then you can set 15L/min, if there is two faucets, then set 20L/min, if there is 3, set 25L/min.



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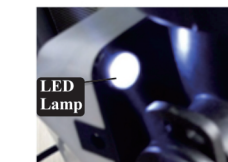


- Set maximal interval regeneration days. (Figure 10A, 10B, 10C, 10D, 10E). Set the maximal interval regeneration days from 10 days to 15 days. When the water supply days reach to the setting value, it will go backwash at next 2am even if the volume has not dropped to 0. So, it can avoid impurities blocked caused by non-washing for a long time. Set range is 0~30 days.



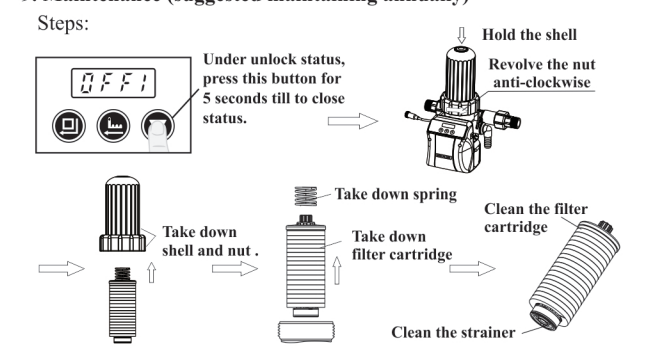
- LED lamp (Refer to Figure 11)

Touch any button, the LED lamp will light for 5 minutes. without any operation in 5 minutes, the light will be off.



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9. Maintenance (suggested maintaining annually)



After clean, repeat above steps backward to assemble all the parts and check its seal for later use.

10. Trouble-Shooting

Problem	Cause	Correction
-E1-	1. Motor damaged. 2. Wire of motor with controller is loose. 3. Locating board damaged. 4. Wire of locating board with controller is loose. 5. Small gear damaged.	1. Replace motor. 2. Reconnect wire of motor. 3. Replace locating board. 4. Reconnect wire of locating board. 5. Replace small gear.
-E2-	1. Locating board damaged. 2. Display board damaged.	1. Replace locating board. 2. Replace display board.
-E3-	1. Display board damaged.	1. Replace display board.
-E4-	1. Display board damaged.	1. Replace display board.
Current flow rate "0"	1. Wire of flow meter disconnect or breakdown. 2. Wire of flow meter damaged. 3. Turbine gets stuck. 4. Other causes	1. Reconnect wire of flow meter. 2. Replace wire of flow meter. 3. Clean turbine. 4. Replace turbine.
Outlet flow rate decrease	1. Impurities stuck in filter cartridge. 2. Filter net in the filter cartridge gets stuck.	1. Backwash manual. 2. Clean filter net.
Ineffective backwash	1. Inlet water pressure is low. 2. Fixed seat of filter cartridge gets stuck.	1. Install booster pump or increase flow. 2. Disassemble and clean the filter cartridge.
-OFF1-	1. Wrongly press down button for 5 seconds in service status.	1. Exit the OFF status.
-OFF2-	1. Detecting the leakage.	1. Check and maintain the leakage spot, replace the sensor cotton.
-OFF3-	1. The continuous supplying water time is too long.	1. Reset the continuous supply water time according to the consuming habit.
-OFF4-	1. Many water taps open simultaneously or pipeline cracks.	1. Reset the current flow rate according to the consuming habit or repair the water pipe.

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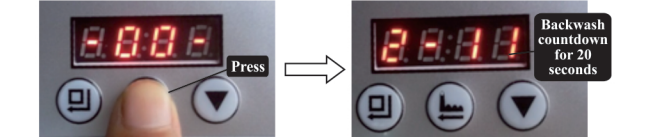
Without any key operation in one minute, interface will be locked. (Refer to Figure 2A)

Press "ON" and "OFF" at the same time for 5 seconds, the interface will be unlocked. As Figure 2B shows.

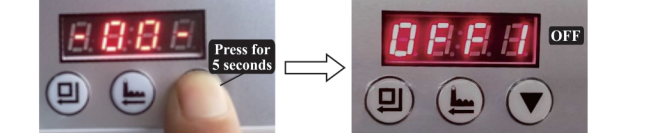
3. Manual function

- Manual backwash (backwash by manual operation when needed)

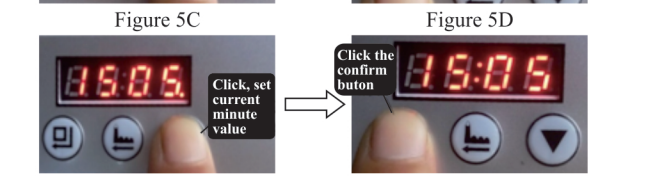
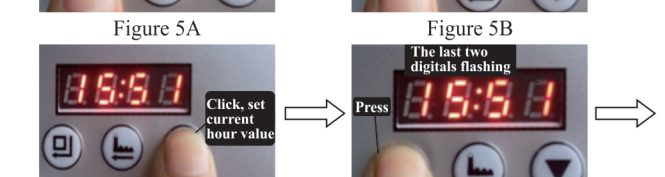
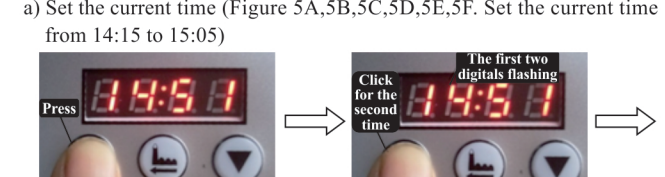
In the status of unlock, press "ON" (Figure 3A), enter into backwash (Figure 3B), backwash time is 20 seconds, after that, it will enter into service position automatically. In the process of backwash, press "ON", it will go back to service.



- Manual turn off (when maintaining filter or other water appliance products, you can cut off the water by manual operation). In the status of unlock, press and hold the "ON" button for 5 seconds, the valve will be closed and the subsequent water supply will be cut off (Figure 4A), and the closed position (Figure 4B) Press and hold the "OFF" button for 5 seconds again back to service.

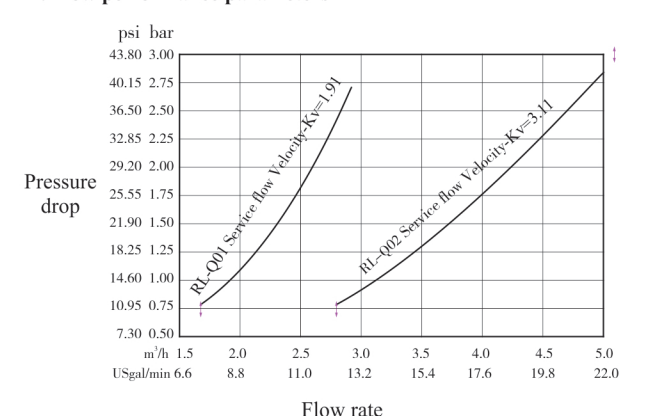


- Parameter Setting (All the settings should be in the status of unlock)
 - Set the current time (Figure 5A, 5B, 5C, 5D, 5E, 5F. Set the current time from 14:15 to 15:05)



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11. Flow performance parameters



12. Warranty Card

Dear client:
This warranty card is the guarantee proof of High-efficiency Automatic Backwash Disk Prefilter. It is kept by client itself, you could get the aftersales services from the supplier which is appointed by manufacturer. Please keep it properly. It couldn't be retrieved if lost. It couldn't be repaired free of charge under the below conditions:

1. Guarantee period expired. (One year).
2. Damage resulting from using, maintenance, and keeping that are not in accordance with the instruction.
3. Damage resulting from repairing not by the appointed maintenance personnel.
4. Content in guarantee proof is unconfirmed with the label on the real good or be altered.
5. Damage resulting from force majeure.

Product Name		High-efficiency Automatic Backwash Disk Prefilter	
Model		Code of Valve Body	
Purchase Company Name		Tel/Cel	
Problem			
Solution			
Date of Repairing		Date of Accomplishment	Maintenance Man Signature

When product need warranty service, please fill the form and send this card together with the product to the appointed suppliers.

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