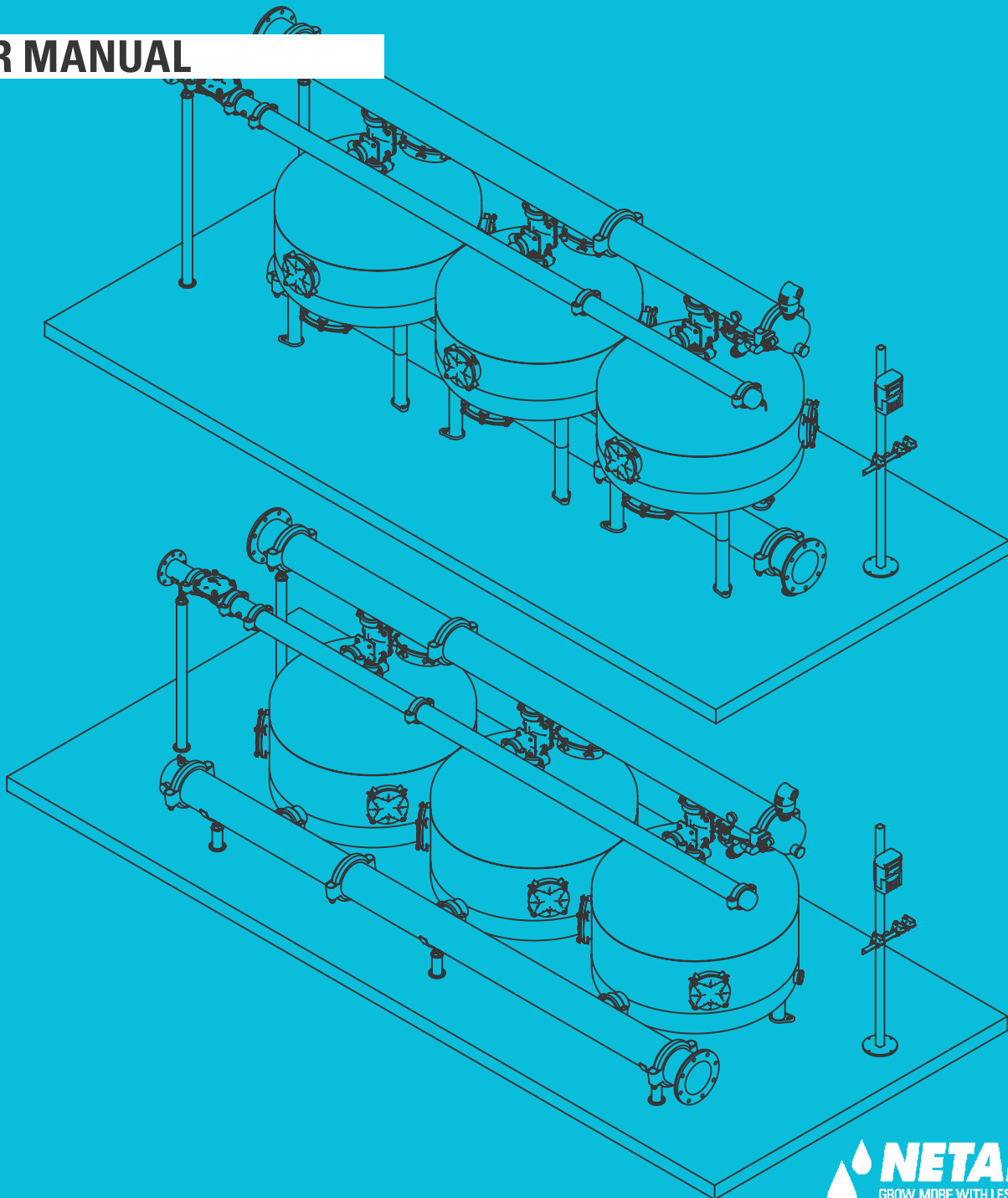


SANDSTORM™

METAL SINGLE/DOUBLE CHAMBER MEDIA FILTER

USER MANUAL



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CONTENTS

Introduction

Aim of this manual	4
Safety instructions	4
Tools required for maintenance and troubleshooting	5
Flange connection	5
Filtration system components and structure - single-chamber	6
Filtration system components and structure - double-chamber	7

Initial operation and adjustment 8

Maintenance

Once a week	10
Once every three months	10
At the end of the irrigation season	11
At the beginning of the next irrigation season	12
Algae and bacterial growth control	13
Replacing the media	14
Replacing the batteries in the BackFlush controller	15
Paint retouching of the tanks and manifolds	16
Cleaning the secondary filter	16

Troubleshooting

If the pressure difference across the filtration system is over 0.7 bar (10.15 PSI) and the flushing cycle does not reduce it	18
If the flushing cycle does not start but the controller is initiating the flushing signal and the solenoids are reacting ("clicking")	18
If the media is running out through the backwash manifold during backwash	18
If media is running out through the outlet manifold during filtration	19

Replacement parts

Tanks - single-chamber	20
Tanks - double-chamber	22
Manifold sections	24
Manifolds accessories	25
Grooved couplings	25
Support legs	26
Control kit	27
Backwash 3-way hydraulic valve 2"	28
Backwash 3-way hydraulic valve 3"	30
Backwash 3-way hydraulic valve 4"	32
Backwash flow-control valve	34
BackFlush controller	35
DC actuator valve	35
Air Valve	35
Inlet adaptor pipe	36
Secondary filter	36

Warranty 37

INTRODUCTION

Aim of this manual

The aim of this manual is to provide the user with general instructions for operation, maintenance and troubleshooting of any configuration of the SandStorm™ metal single- or double-chamber media filtration system.

All system components are shipped to the site packed in pallets and boxes with installation drawings, user manual, and a packing list.



NOTE

This manual describes the operation, maintenance and troubleshooting processes of a generic SandStorm™ filtration system and must be used in unison with the drawings supplied with the system.

Safety instructions

Before handling any part of the system, carefully read the instructions and act accordingly.



NOTE

The maximum working pressure of the filtration system is 8 bar (116 PSI). Make sure the pressure at the inlet of the filtration system is not higher. (For filtration systems made to order, see the maximum working pressure in the Product Order).

Check and make sure the pumps and valves do not exceed the tolerances of the system and match the requirements of the system pressure and flow-rate specifications (see the documentation supplied with the system).



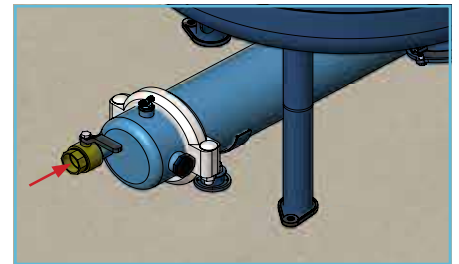
WARNING

Do not perform maintenance operations or open filter ports before the pressure in the system is fully released. For draining purposes, open any valve downstream from the filtration system until the pressure is fully released. Check the pressure gauge to be sure it is at 0 before proceeding.



TIP

If a valve downstream from the filtration system is not available for pressure release, you can install a manual valve on the lower 2" socket of the outlet manifold end-cap.



Electrical connections and wiring must be done by an authorized electrician only.

Be sure that prior to any maintenance procedures, all electrical connections to the system are unplugged (AC controller, pumps, etc.).

Do not apply excessive force or pressure on the filtration system components.

Work only with proper and standard tools.

Use only original parts supplied/approved by Netafim™.

INTRODUCTION

Handling sodium hypochlorite (NaClO) or hydrogen peroxide (H₂O₂)



WARNING

Sodium hypochlorite (NaClO) and hydrogen peroxide (H₂O₂) are dangerous toxic and corrosive chemicals. All application regulations and safety rules must be observed. Store and handle them according to safety regulations.

Before handling **sodium hypochlorite (NaClO)** or **hydrogen peroxide (H₂O₂)**, carefully read all the specific safety, health protection and first aid information and instructions. **Be sure you have all required first aid at the site, as instructed.**

Concentrated liquid sodium hypochlorite (NaClO) or hydrogen peroxide (H₂O₂) can damage exposed metal (especially threads that are exposed to water). Be careful when applying them and avoid the spillage of any of the liquid onto exposed metal parts. Should any of the liquid come into contact with metal parts, immediately wash thoroughly with fresh water.

Tools required for maintenance and troubleshooting

- No special tools are needed. A standard toolkit is adequate.
- To connect grooved couplings: The following wrenches are required:

Grooved coupling size		Bolt and nut size (mm)	Wrench size (mm)
inch	mm		
2	50	M10	17
3	80	M12	19
4	100	M12	19
6	150	M16	24
8	200	M20	30
10	250	M22	34

- To connect flanges: The following wrenches are required:

Flange size	Bolt and nut size	Wrench size
up to 8"	5/8"	15/16"
10" to 14"	7/8"	1.1/8"

Flange connection

In most cases, the filtration system manifolds are connected to the main line with flanges.



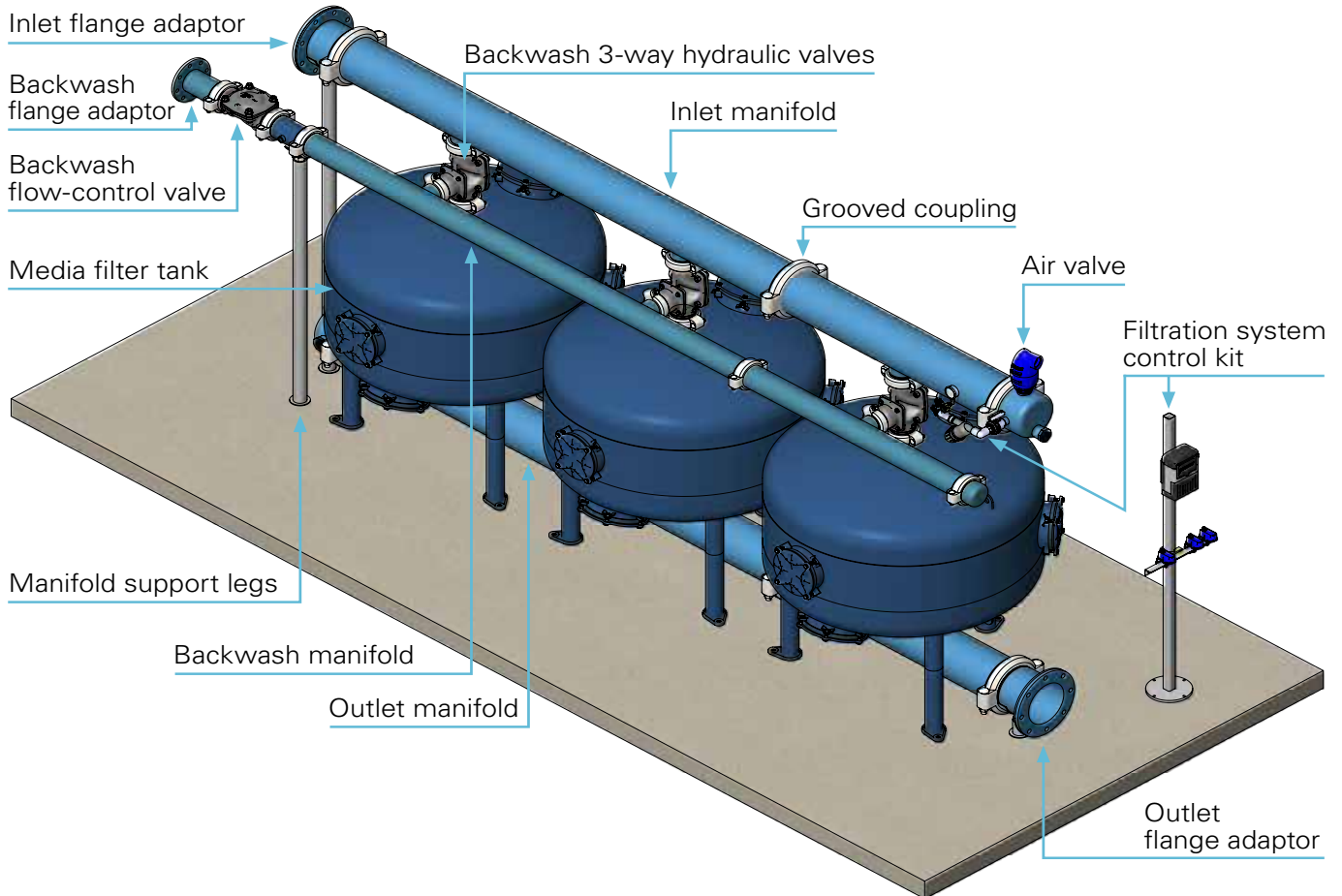
ATTENTION

When connecting flange pipe connectors, do not forget to place the rubber gasket in place.

INTRODUCTION

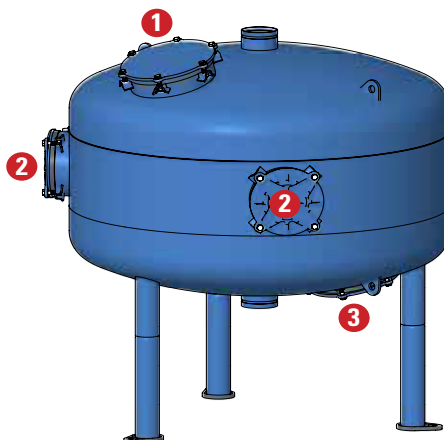
Filtration system components and structure

Single-chamber media filtration system



Location of the tank ports

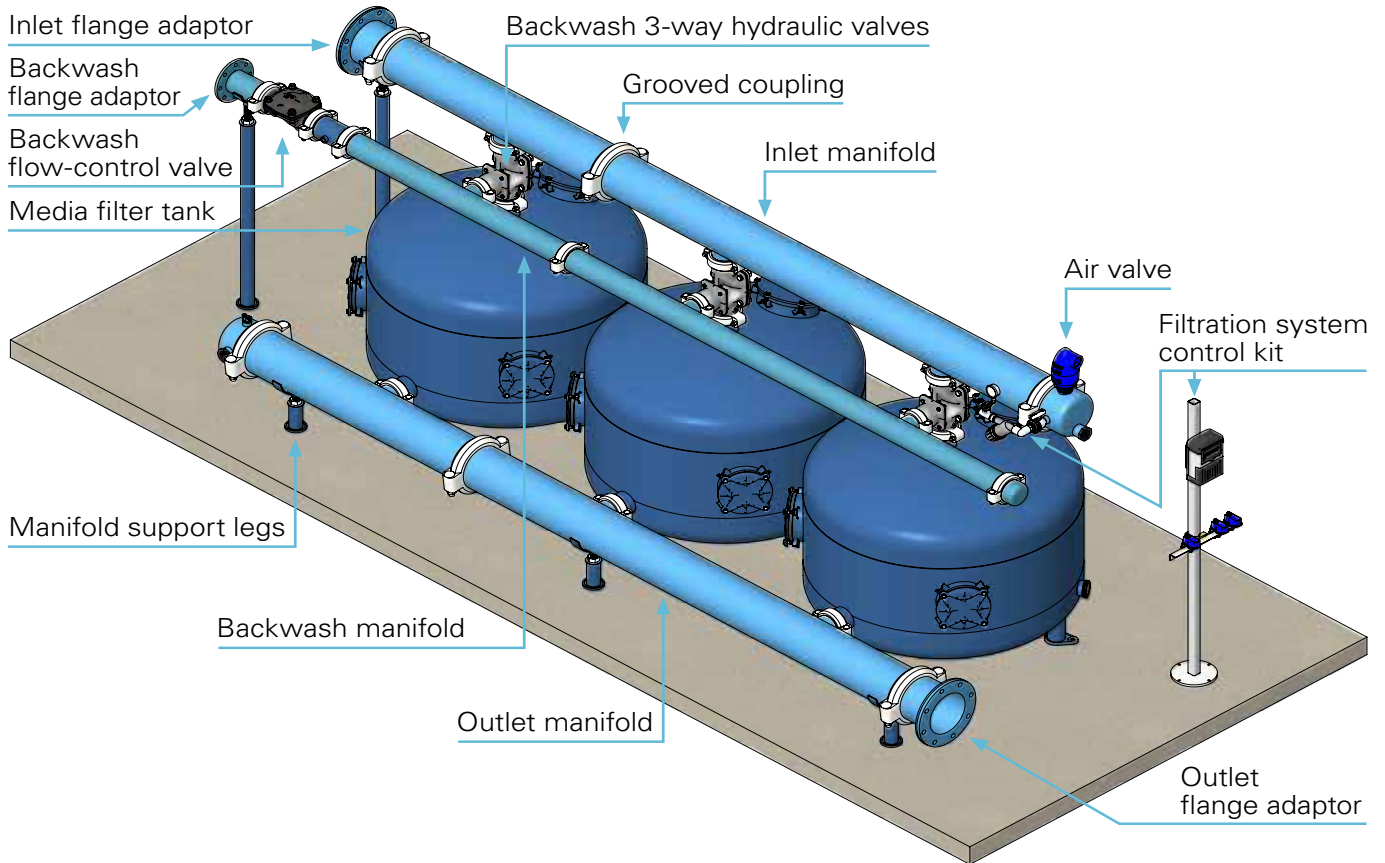
- 1 Filling port
- 2 Side service port
- 3 Bottom service port



INTRODUCTION

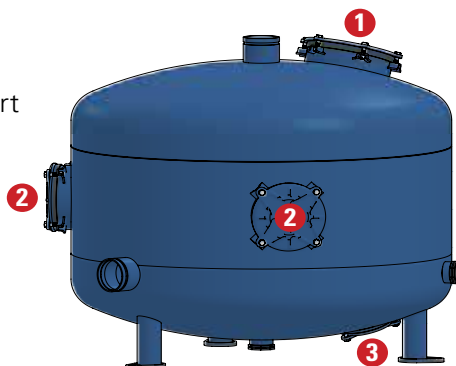
Filtration system components and structure

Double-chamber media filtration system



Location of the tank ports

- 1 Filling port
- 2 Side service port
- 3 Bottom service port

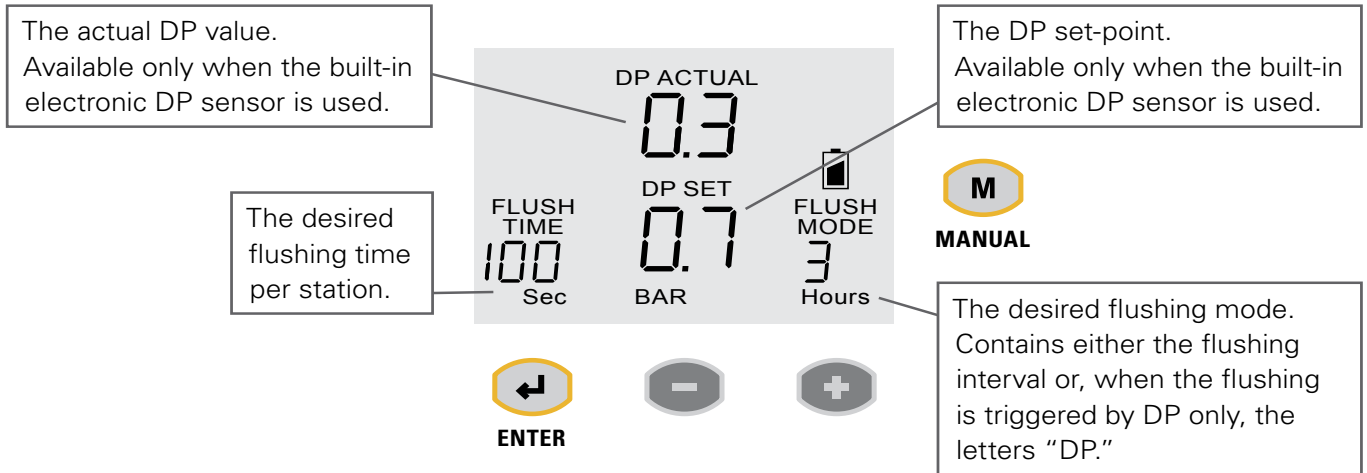


INITIAL OPERATION AND ADJUSTMENT

1. Set the BackFlush controller:

The controller is equipped with an LCD display and 4 keys, as displayed below. When the unit is left untouched for a minute, the display switches off and a beep is heard every 20 seconds to indicate it is working.

Holding down any of the keys for a few seconds will bring the screen back to life.



The screen consists of several fields. Some of them are editable and some of them are not.

To enter the EDIT MODE, press the key. The EDIT MODE is indicated by blinking of the currently editable field.

Each time you press the key, the next editable field becomes active and starts blinking.

Use the and keys to change the value in the active field.

Press the key again to set the selected value for the current field and move to the next editable field.

To return to a previous field during the process of passing through the editable fields, press the key repeatedly until you get back to the FLUSH TIME field, and there are blinking fields. You can then begin the process again.





Configuration

Parameter	Definition	Action
Main valve (sustaining valve)	The pre-dwell delay between the main valve opening and the opening of station 1	Select: YES if exists Enter: 20 sec
Dwell time	The backwashing delay between stations	Enter: 10 sec
DP delay	The delay during which the DP sensor reading is expected to remain stable before reaction	Enter: 10 sec
Looping limit	The number of consecutive flushing cycles triggered by the DP sensor before deciding that there is an endless looping problem	Enter: 3
Alarm	Allocates one output for alarm activation	Select: YES
Delay valve	Allocates one output for delay-valve activation	Select: YES if exists

(continued on the next page)

INITIAL OPERATION AND ADJUSTMENT

Configuration (continued)



Parameter	Definition	Action
View outputs	This is a special mode that enables the user to review the list of outputs and their allocations. The output number is displayed in the bottom left corner and its allocated function appears in large letters in the center of the screen	Use the  key to toggle between NO and YES and confirm by pressing the  key. Keep using the  key to review the list
Pressure units	Select the units to be used for pressure measurement	Select: BAR or PSI
Calibration	Zero calibration of the built-in electronic DP sensor.	Disconnect the sensor ports from the command tube and open them to atmospheric pressure; then select calibration: YES
Version display	Displays the controller's software version-number.	No action required. Press the  key twice to proceed.
Flush time	The desired flushing time per station.	Enter: 100 sec
DP set-point	The pressure difference between the filter's inlet and outlet that initiates a flushing cycle.	Enter: 0.7 bar or 10 PSI
Flush mode	The flushing interval or, when the flushing is triggered by DP only, the letters "DP."	Enter: 3 hours

(For full instructions, see the BackFlush controller manual).



NOTE

If the filtration system was not ordered with a BackFlush controller and is used with an existing irrigation system controller, see your irrigation controller user manual for instructions.

2. Turn on the water and start irrigation.
3. As soon as the system is pressurized and stable, start a manual backwashing cycle by pressing the  key. The icon  will appear on the display (to manually terminate a backwashing cycle in progress, press the same key).
4. After completion of a full backwashing cycle, check that the filtration system DP is within the operational range (0.15-0.4 bar/2.2-5.8 PSI, depending on the flow rate). Toggle the control kit 3-way ball valve and note the filtration system inlet and outlet pressure. Subtract the outlet pressure from the inlet pressure. The result is the filtration system DP.
5. Check all the filtration system connections for water leaks – re-fit, re-connect and re-secure if necessary.
6. Check all the command tube connections for leaks – re-fit, re-connect, and re-secure if necessary.
7. Check that the backwashing cycle is performed in the correct order and that all the filters in the system are backwashed in sequence.
8. Check the secondary filter (if installed) for the presence of gravel.



NOTE

If a secondary filter is not installed, disconnect the main line pipe downstream from the filtration system, let the water flow to the ground and visually check for the presence of gravel.

If gravel is present, see [Troubleshooting](#), page 17.



ATTENTION

Steps **2** to **8** above should be performed whenever the operation of the filtration system is resumed after being idle (i.e., after seasonal shutdown, maintenance or troubleshooting operations).

MAINTENANCE




NOTE

It is highly recommended to keep track of the filtration system pressure regime. Make a dated list of all maintenance activities with system pressure data.

Once a week

While the system is working:

1. Start a manual backwashing cycle by pressing the **M** key (the icon  will appear on the display) and check that the backwashing happens in sequence according to your backwash controller setup (to manually terminate a backwashing cycle in progress, press the same key).
2. Check that during the last 10 seconds of the backwash of every filter, the water from the backwash manifold runs out freely and clean.
3. After completion of a full backwashing cycle, check that the filtration system DP is within the operational range (0.15-0.4 bar/2.2-5.8 PSI, depending on the flow rate). Toggle the control assembly 3-way ball valve and note the filtration system inlet and outlet pressure. Subtract the outlet pressure from the inlet pressure. The result is the filtration system DP.
4. Check the control assembly filter and clean it (blockage of this filter will cause a malfunction of the backwashing process).
5. Check for leaks from connections and fittings - re-fit, re-connect and re-secure if necessary.
6. Open the secondary screen filter (if installed) and check its condition - if necessary, take out the filtration element and clean it with high pressure water. Put the filtration element back in place and close the filter.
7. Check the filtration system visually for any damage to the paint. If the protective coating of the tanks and/or manifolds is damaged, see [Paint retouching of the tanks and manifolds](#), page 16.

For further assistance, contact your local Netafim™ representative.

Once every three months

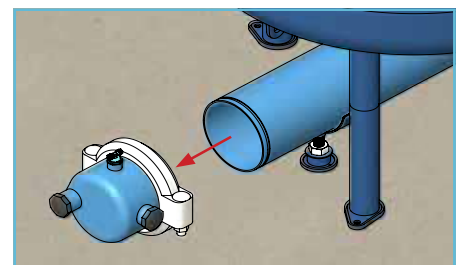
While the system is working:

1. Perform steps 1 - 5 as described in the weekly maintenance section above.
2. Release the pressure from the filtration system. Open any valve downstream from the filtration system or the manual valve (if installed) on the outlet manifold end-cap until the pressure is fully released. Check the pressure gauge to be sure it is at 0 before proceeding.
3. Empty all the water from the filtration system. Open any valve downstream from the filtration system or the manual valve (if installed) on the outlet manifold end-cap.



TIP

To speed up emptying the water from the filtration system, you can temporarily dismantle the outlet manifold end-cap.



4. Open the filling port (top port) of all the tanks.

MAINTENANCE

5. Visually check the filtration system (externally and inside the tanks, with the aid of a flashlight) for any damage to the paint. If the protective coating of the tanks and/or manifolds is damaged, see [Paint retouching of the tanks and manifolds](#), page 16.
6. Check the level of media inside the filters.
 - If the level is lower than the media level marker on the filter tank - add media.
 - If the level is higher than the media level marker on the filter tank - remove media.
7. Manually stir the media inside the tank and check for media solidification.
 - If the media has solidified, crumble it with high pressure water.



WARNING

Do not use tools (such as a shovel) to crumble the media, as this could damage the elements inside the tank.

8. Open the secondary screen filter (if installed) and check its condition - if necessary, remove the filtration element and clean it with high pressure water. Put the filtration element back in place and close the filter.

For further assistance, contact your local Netafim™ representative.

At the end of the irrigation season



ATTENTION

Never leave the filtration system unclean for the winter season.

1. During the last irrigation cycle of the season: Check the filtration system inlet and outlet pressure and make sure that they and the DP (Delta pressure) fit the system benchmark data.
2. Perform all actions as described in the weekly maintenance section, [page 10](#).
3. Check that the backwashing parameters in the controller are correct. If not, enter the correct data.
4. Close the water inlet to the filtration system.
5. Perform steps 2 - 4 as described in the quarterly maintenance section, [page 10](#).
6. Check the level of media inside the filters.
 - If the level is lower than the media level marker on the filter tank - add media.
 - If the level is higher than the media level marker on the filter tank - remove media.
7. Open the secondary screen filter (if installed) and check for gravel. If there is gravel, empty the tank that is losing media and replace the damaged under-drain diffuser/s ("flute/s" or "mushroom/s") (see [Replacing a damaged under-drain diffuser part](#), page 18).
8. Perform chemical cleaning of the media (see [Algae and bacterial growth control](#), page 13).
9. Turn off the water.
10. Open the secondary screen filter (if installed), remove the screen, clean it and store it in a dry and safe place with all the filter covers and handles.
 - For manual filters: Make sure that the cover gaskets are dry before storage.
 - For automatic or semi-automatic filters: Open the filter and check all the inner elements.
11. Lubricate all the screws and bolts of the system. In particular, carefully oil the screws of the shutter units in the gravel filter and the secondary screen filter (if it is a manual filter).

MAINTENANCE

- 12.** Open all gravel-filter covers, drain all the water out of the filtration system (preferably by removing the outlet manifold end-cap). When the filters are completely drained, close the filling ports.
- 13.** Disconnect the electricity source of the backwash controller (for battery-operated controllers – remove the batteries).

For further assistance, contact your local Netafim™ representative.

At the beginning of the next irrigation season

- 1.** Check all covers, gaskets and screen/s that were stored at the end of the previous season. Clean them and wash with fresh water.
- 2.** Check the level of media inside the filters.
 - If the level is lower than the media level marker on the filter tank - add media.
 - If the level is higher than the media level marker on the filter tank - remove media.
- 3.** Install the screen and cover of the secondary screen filter.
- 4.** Connect the electricity source to the controller (for battery-operated controllers – replace the old batteries with new ones) and perform a manual backwash – be sure that the controller sends signals in sequence to the solenoids valves and that the solenoids are reacting.
- 5.** Clean the screen filter in the control assembly with fresh water.
- 6.** Lubricate all the screws and bolts of the system. In particular, carefully oil the screws of the port covers in the gravel filter and the secondary screen filter cover.
- 7.** Perform chemical cleaning of the media (see [Algae and bacterial growth control](#), page 13).
- 8.** Run according to the irrigation program.

For further assistance, contact your local Netafim™ representative.

MAINTENANCE

Algae and bacterial growth control



WARNING

Sodium hypochlorite (NaClO) and hydrogen peroxide (H₂O₂) are dangerous toxic and corrosive chemicals. All application regulations and safety rules must be observed. Store and handle them according to safety regulations.

Before handling **sodium hypochlorite (NaClO)** or **hydrogen peroxide (H₂O₂)**, carefully read all the specific safety, health protection and first aid information and instructions. **Be sure you have all required first aid at the site, as instructed.**

Concentrated liquid sodium hypochlorite (NaClO) or hydrogen peroxide (H₂O₂) can damage exposed metal (especially threads that are exposed to water). Be careful when applying them and avoid the spillage of any of the liquid onto exposed metal parts. Should any of the liquid come into contact with metal parts, immediately wash thoroughly with fresh water.

1. Perform 1 or 2 manual backwashes of the system (as needed), using the manual option in the controller.
2. Release the pressure from the filtration system. Open any valve downstream from the filtration system or the manual valve (if installed) on the outlet manifold end-cap, until the pressure is fully released. Check the pressure gauge to be sure it is at 0 before proceeding. Do not drain the system.
3. Open the top service ports of all the tanks.
4. Make sure that the tanks remain two-thirds full with water. This is essential for the success of the chemical treatment.
5. Pour the required quantity of sodium hypochlorite (NaClO) or hydrogen peroxide (H₂O₂) into each tank according to the table below.

Tank diameter (inch)	Quantity of sodium hypochlorite (NaClO) (liter)		Quantity of hydrogen peroxide (H ₂ O ₂) (liter)
	Domestic liquid 3% concentration	Technical liquid 10% concentration	Technical liquid 30% concentration
12	0.7	0.25	0.15
16	0.8	0.3	0.15
20	1.1	0.4	0.2
24	1.5	0.5	0.2
30	3.0	1.0	0.3
36	5.0	1.5	0.5
48	10.0	3.0	1.5

6. Gently stir the media inside each tank with a wooden stick.



WARNING

Take care not to damage the tank under-drain diffuser/s ("flutes" or "mushrooms").

7. Wait at least 3 hours for the chemical contact time.
8. Close the top service ports of all the tanks.
9. Pressurize the system.
10. Perform 1 or 2 manual backwashes of the system (as needed), using the manual option in the controller.

For further assistance, contact your local Netafim™ representative.

MAINTENANCE

Replacing the media



WARNING

Do not perform maintenance operations or open filter ports before the pressure in the system is fully released. For draining purposes, open any valve downstream from the filtration system until the pressure is fully released. Check the pressure gauge to be sure it is at 0 before proceeding.

The sand media usually requires replacement every 3 to 5 years, depending on water quality and how much the system operates.

1. Close all the valves, open the top and bottom service ports of all the tanks and remove their covers.
2. Drain and flush all the media from the tank.



CAUTION

Do not use tools to help remove the media - under-drain diffusers ("flutes" or "mushrooms") could be damaged.



TIP

If the sand media is solidified inside the tank and does not pour out of the bottom service port by itself, you can crumble it with pressurized water through the bottom service port.

3. Rinse and clean the inside of the tank.
4. Visually check (with the aid of a flashlight) the inside of all the tanks, through the filling port, for damaged, missing or unsecured under-drain diffusers ("flutes" or "mushrooms"). Replace, re-fit, re-connect and re-secure if necessary (See tank replacement parts: single-chamber - [page 20](#), double-chamber - [page 22](#)).
5. Make sure that the bottom service port and its gasket are clear of any remaining gravel particles and close the bottom service port.



ATTENTION

Single-chamber only

Before filling the tanks with media, Fill each tank with water up to a third of its height with a hose through the filling port before media filling to prevent damage to the under-drain diffusers when pouring the media.

6. Fill the tanks with media through the filling port. Fill each tank up to the media level marker on the filter tank.

Single-chamber

Tank diameter (inches)	*Sand quantity (lbs)
30	700
36	1000
48	1900


Silica 16*

Double-chamber

Tank diameter (inches)	*Sand quantity (lbs)
12	130
16	200
20	260
24	400

7. Flatten the surface of the media.

MAINTENANCE

8. Make sure that the filling port and its gasket are clear of any remaining gravel particles and close the filling port.
 9. Turn on the water and start irrigation.
 10. As soon as the system is pressurized and stable, start a manual backwashing cycle by pressing the key (the icon  will appear on the display) and check that the backwashing happens in sequence according to your backwash controller setup (to manually terminate a backwashing cycle in progress, press the same key). M
 11. Readjust the backwash flow-control valve:
 - If a manual backwash flow-control valve is installed, throttle the valve to reduce the flow until the media stops running out.
 - If a hydraulic backwash flow-control valve is installed, the valve is factory pre-set to the required flow rate.
- In the rare case that the backwash flow-control valve requires fine-tuning:**
- a. Release the pilot lock-nut.
 - b. Gently rotate the pilot calibration bolt counterclockwise with a wrench to reduce the flow until the media stops running out.
 - c. Retighten the pilot lock-nut.

For further assistance, contact your local Netafim™ representative.

Replacing the batteries in the BackFlush controller

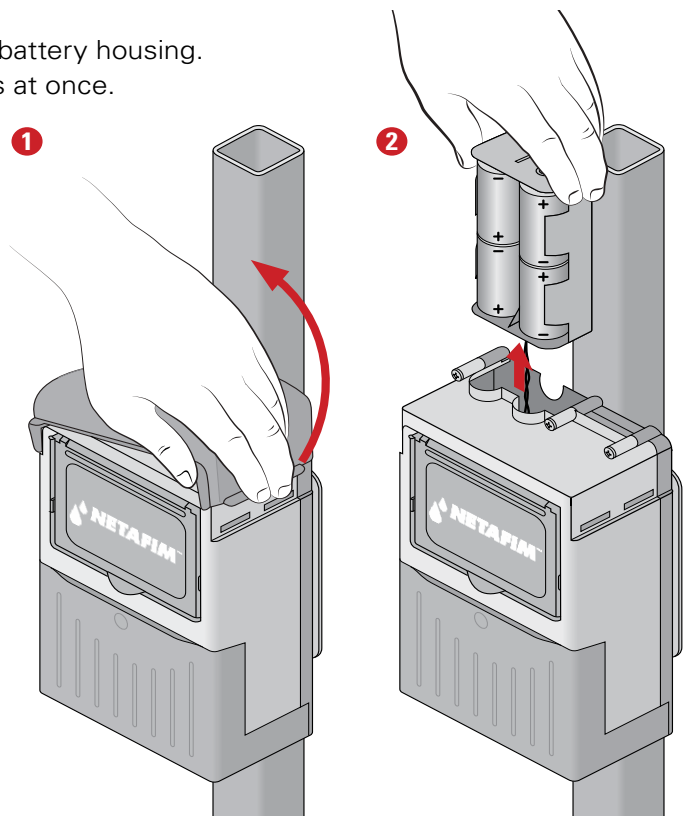
For controllers powered by 4 x 1.5v D-size batteries (6v DC)



ATTENTION

- Match the poles to the markings inside the battery housing.
- Always replace the whole set of 4 batteries at once.

1. Remove the upper cover.
2. Pull out the battery housing.
3. Remove the used batteries from the battery housing.
4. Insert new batteries.
5. Push the battery housing back in.
6. Put the upper cover back in place.



MAINTENANCE

Paint retouching of the tanks and manifolds



WARNING

If the protective coating (inside and outside) of the tanks and manifolds is damaged and the bare metal is exposed, it will rust in contact with irrigation water and chemicals. If neglected, this will lead to a leak.

A tin of polyester protective repair paint (color: RAL 5010) is supplied with the system.

Any damage to the protective coating of the tanks and manifolds must be repaired as soon as possible.

- 1.** Sand the damaged area or spot with sandpaper and clean it with a wire brush.
- 2.** Apply the protective paint.
- 3.** Let the paint completely dry for at least 24 hours before exposing the mended spot to water.

For further assistance, contact your local Netafim™ representative.

Cleaning the secondary filter

At the end of the irrigation season and during the irrigation season, at the frequency required by the irrigation water quality.

Remove the filtration element from the filter casing and clean it according to the instructions in the filter user manual.

TROUBLESHOOTING



WARNING

Do not perform maintenance operations or open filter ports before the pressure in the system is fully released. For draining purposes, open any valve downstream from the filtration system until the pressure is fully released. Check the pressure gauge to be sure it is at 0 before proceeding. Alternatively, you can open the valve installed on the outlet manifold end-cap - if installed.

If the pressure difference across the filtration system is over 0.7 bar (10.15 PSI) and the flushing cycle does not reduce it:

1. Check the system flow rate to see if the flow rate corresponds with the benchmark data, to make sure that the system flow rate is not too high.
2. If the pressure differential is not caused by a high flow rate, perform the following steps.
3. Adjust the flow-control valve if necessary.
4. Make sure that the water from the backwash manifold is running free.
5. Check the duration of backwash and make sure the water that drains in the last 10 seconds of flushing is clean.
If the water is dirty at the end of the flushing – increase the duration of flushing – if required, increase the backwash duration and perform 3 consecutive flushing cycles.

If the flushing cycle does not start but the controller is initiating the flushing signal and the solenoids are reacting (“clicking”):

1. Check the command filter in the control head. Clean it if necessary and perform manual flushing.
2. Check for clogging inside the solenoid valves - clean if possible or replace with a new solenoid.
3. Check for clogging of the hydraulic control tubes - open the clogs and clean if necessary.
4. Check for a ruptured or defective hydraulic control tube - replace if necessary.

If the media is running out through the backwash manifold during backwash:

1. Adjust the backwash flow-control valve on the backwash manifold.
 - If a manual backwash flow-control valve is installed, throttle the valve to reduce the flow until the media stops running out.
 - If a hydraulic backwash flow-control valve is installed, the valve is factory pre-set to the required flow rate.

In the rare case that the backwash flow-control valve requires fine-tuning:

- a. Release the pilot lock-nut.
 - b. Gently rotate the pilot calibration bolt counterclockwise with a wrench to reduce the flow until the media stops running out.
 - c. Retighten the pilot lock-nut.
2. Check the level of media inside the filters.
 - If the level is lower than the media level marker on the filter tank - add media.
 - If the level is higher than the media level marker on the filter tank - remove media.

TROUBLESHOOTING

If media is running out through the outlet manifold during filtration:

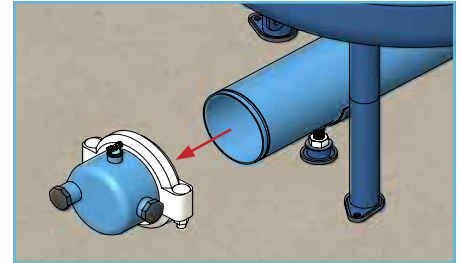
Replacing a damaged under-drain diffuser part ("flute" or "mushroom"):

1. Release the pressure and drain the filtration system. Open any valve downstream from the filtration system or the manual valve (if installed) on the outlet manifold end-cap, until the pressure is fully released. Check the pressure gauge to make sure it is at 0 before proceeding.
2. Empty the water from the filtration system.



TIP

To speed up emptying the water from the filtration system, you can temporarily dismantle the outlet manifold end-cap.



3. Open the top service ports of all the tanks.
4. Gently remove the media from all the tanks.



WARNING

Do not use tools (such as a shovel) to remove the media, as this could damage the tank under-drain diffusers ("flutes" or "mushrooms").

5. Clean any media remaining on the under-drain diffuser with pressurized water (with a hose, through the top service ports).
6. Visually identify the damaged under-drain diffuser part/s ("flute/s" or "mushroom/s") with the aid of a flashlight.



ATTENTION

There may be more than one tank losing gravel.



ATTENTION

Screw, unscrew and fasten the under-drain diffuser parts by hand only. Do not use tools, as this could damage the under-drain diffusers ("flutes" or "mushrooms").

7. Manually unscrew the damaged under-drain diffuser part.
8. Check the integrity of the following parts and replace them if necessary:
 - Single-chamber tank - the plastic washer (yellow).
 - Double-chamber tank - the rubber gasket.



WARNING

A damaged rubber gasket may be difficult to pull out. Do not use a screwdriver (or any metal tool) to remove it, as this could damage the tank protective coating.

9. Replace the damaged under-drain diffuser part ("flute" or "mushroom") with a new one.



ATTENTION

Do not forget to put the following parts back in place:

- Single-chamber tank - the plastic washer (yellow).
- Double-chamber tank - the rubber gasket.

TROUBLESHOOTING



ATTENTION

Single-chamber only

Before filling the tanks with media, fill each tank with water up to a third of its height with a hose through the filling port before media filling.

- Fill the tanks with media through the filling port. Fill each tank up to the media level marker on the filter tank.

Single-chamber

Tank diameter (inches)	*Sand quantity (lbs)
30	700
36	1000
48	1900

Silica 16*

Double-chamber

Tank diameter (inches)	*Sand quantity (lbs)
12	130
16	200
20	260
24	400

- Flatten the surface of the media.
- Make sure that the filling port and its gasket are clear of any remaining gravel particles and close the filling port.
- Turn on the water and start irrigation.

(See tank replacement parts: single-chamber - [page 20](#), double-chamber - [page 22](#)).

For further assistance, contact your local Netafim™ representative.

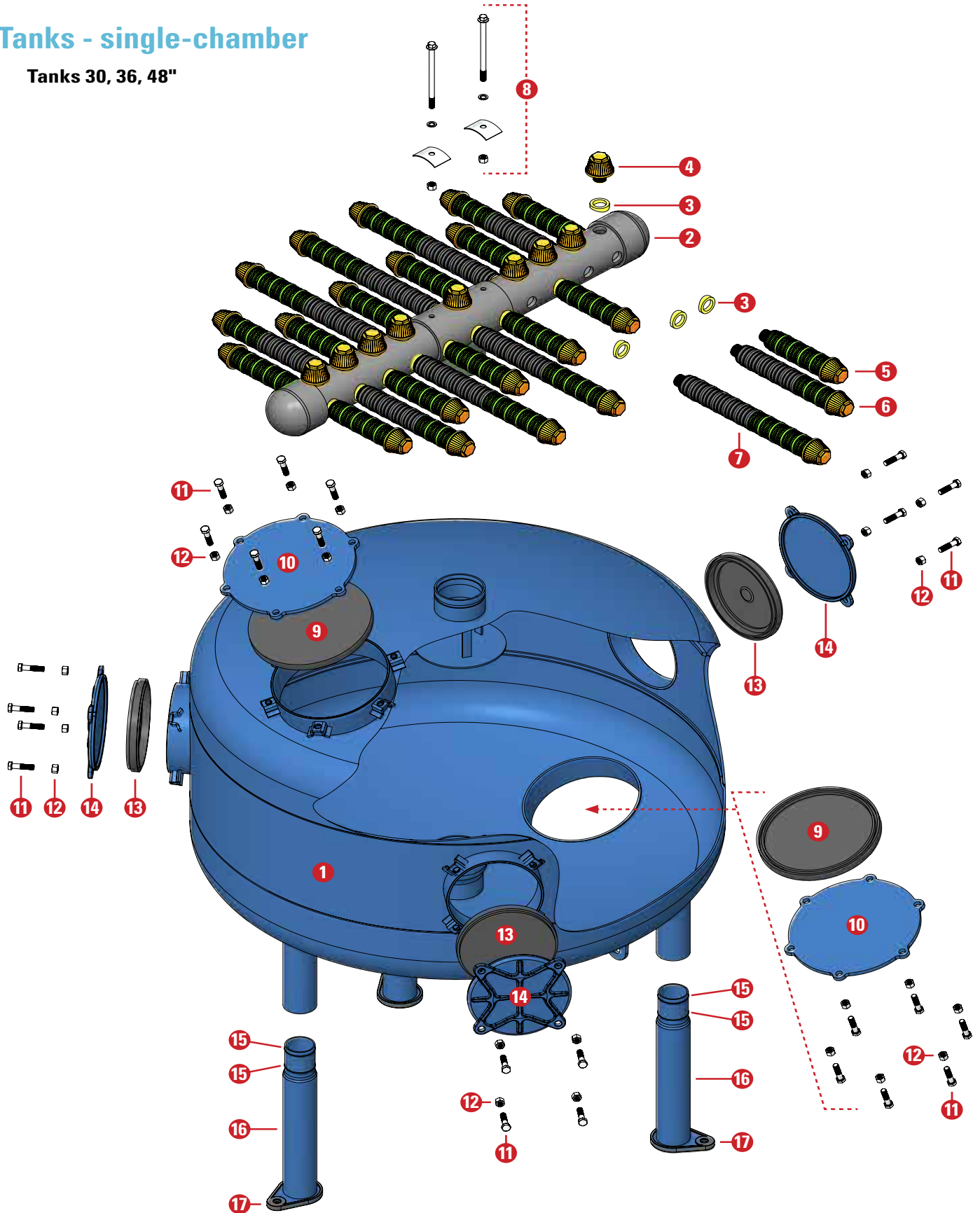
Silica Sand Media Data

Media type	Mesh range	Mean effective size
Crushed Silica 12	130 - 80	1.2mm - 1.1
Standard Sand 6/20	140 - 100	1.0mm - 0.9
Crushed Silica 16	200 - 155	0.7mm - 0.6
U.S. Silica 80	200 - 160	0.7mm - 0.6
Crushed Silica 20	230 - 170	0.5mm - 0.45

REPLACEMENT PARTS

Tanks - single-chamber

Tanks 30, 36, 48"



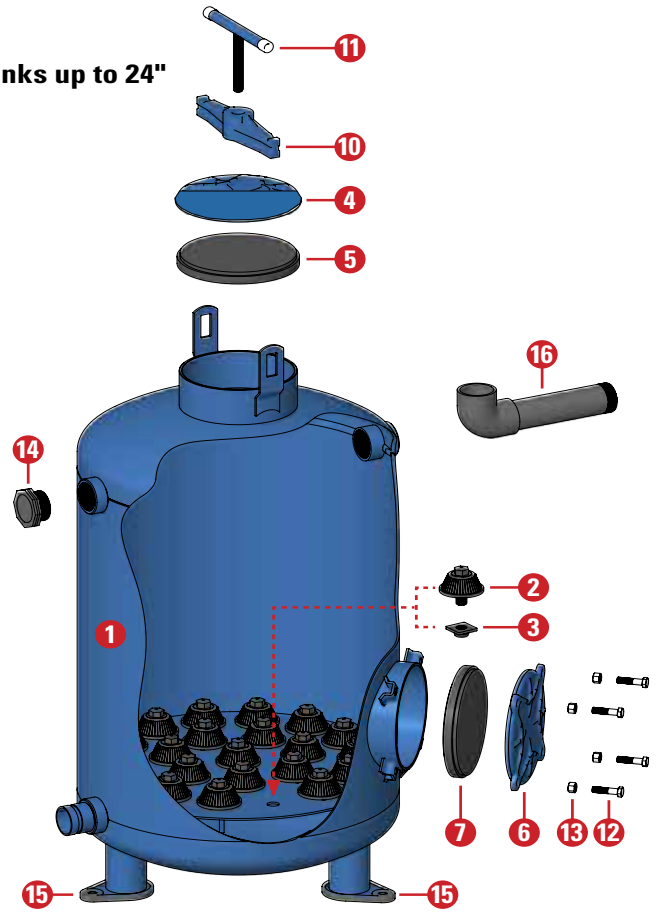
REPLACEMENT PARTS

Part	Description	Tank diameter (in)	Cat. No.
1	Filter body	Not available as spare part	
2	Undedrain collector	30	71915-000124
		36	71915-000125
		48	71915-000126
3	Plastic washer	All	71915-000128
4	Mushroom diffuser	All	71915-000127
5	Underdrain element - S	All	71915-000131
6	Underdrain element - M	36, 48	71915-000132
7	Underdrain element - L	48	71915-000133
8	Underdrain screw set (2X)	All	71915-000210
9	Top and bottom service cover gasket 8"	30	71915-000107
	Top and bottom service cover gasket 10"	36, 48	71915-000121
10	Top and bottom service cover 8"	30	71915-000113
	Top and bottom service cover 10"	36, 48	71915-000122
11	Bolt M12X50	All	71915-000114
12	Nut M12	All	71915-000115
13	Service cover gasket 8"	All	71915-000107
14	Service cover 8"	All	71915-000113
15	O-ring	All	71915-000134
16	Extension leg	All	71915-000135
17	Rubber leg	All	71915-000136

REPLACEMENT PARTS

Tanks - double-chamber

Tanks up to 24"



Tanks 30" and up



REPLACEMENT PARTS

Part	Description	Tank diameter (in)	Cat. No.	
1	Filter body	Not available as spare part		
2	Mushroom diffuser	All	71915-000102	
3	Mushroom rubber gasket	All	71915-000103	
4	Top service cover	6"	12	71915-000108
		8"	16, 20, 24	71915-000109
			30, 36	71915-000113
5	Top service cover gasket	10"	48	71915-000121
		6"	12	71915-000106
		8"	16, 20, 24, 30, 36	71915-000107
6	Side service cover	10"	48	71915-000121
		6"	12, 16, 20	71915-000112
7	Side service cover gasket	8"	24, 30, 36, 48	71915-000113
		6"	12, 16, 20	71915-000110
8	Bottom service cover	8"	24, 30, 36, 48	71915-000107
9	Bottom service cover gasket	6"	48	71915-000112
10	Tightening bridge	6"	48	71915-000110
11	Tightening handle	12, 16, 20, 24	71915-000104	
12	Bolt M12X50	12, 16, 20, 24	71915-000105	
13	Nut M12	All	71915-000114	
14	2" male plug (plastic)	All	71915-000115	
15	Rubber leg cup	All	75050-008800	
16	PVC nipple and elbow	All	71915-000136	
		12	71915-000116	
		16	71915-000117	
		20	71915-000118	
		24	71915-000119	

REPLACEMENT PARTS

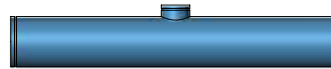
Manifold sections

Single-sided manifold sections

Tank diameter (in)	Type of manifold	Manifold diameter (in)	Number of outlets	Outlet diameter (in)	Cat. No.
20	Inlet/outlet	4	2	2	71910-001706
			3	2	71910-001715
	Backflush	3	2	2	71910-001705
			3	2	71910-001714
24	Inlet/outlet	4	2	2	71910-001708
			3	2	71910-001717
	Backflush	3	2	2	71910-001707
			3	2	71910-001716
30-36	Inlet/outlet	6	1	3	71910-001701
			2	3	71910-001710
	Backflush	3	1	2	71910-001700
			2	2	71910-001709
48	Inlet/outlet	8	1	4	71910-001704
			2	4	71910-001713
	Backflush	4	1	3	71910-001703
			2	3	71910-001712

Inlet/outlet manifold sections -

1 outlet



2 outlets



Backwash manifold sections -

1 outlet



2 outlets

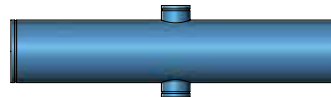


Double-sided manifold sections

Outlet manifold sections for parallel centered installations only

Tank diameter (in)	Type of manifold	Manifold's diameter (in)	Number of outlets	Outlet's diameter (in)	Cat. No.
30, 36	Inlet/outlet	8	2	3	71910-007000
			4	3	71910-000924
48	Inlet/outlet	10	2	4	71910-000050
			4	4	71910-000051

2 outlets



4 outlets



Manifolds of other diameters are available upon request.

REPLACEMENT PARTS

Manifolds accessories

Inlet and outlet manifold end-caps

End-cap diameter (in)	Female threaded outlets	Cat. No.	
		BSP	NPT
4	3 x 1"	71910-001801	71910-001800
6	2 x 2" + 1 x 1"	71910-001803	71910-001802
8	2 x 2" + 1 x 1"	71910-001805	71910-001804
10	2 x 2" + 1 x 1"	71910-001820	71910-001821



Backflush manifold end-caps

End-cap diameter (in)	Cat. No.
3	71910-001791
4	71910-001792



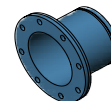
T-fittings (adaptors)

T-fitting diameter (in)	T-fitting outlets	Cat. No.
8	2 x 6"	71910-001801
10	2 x 6"	71910-001803
10	2 x 8"	71910-001805
14	2 x 10"	71910-001820



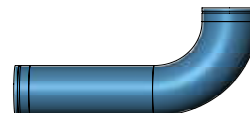
Flange-grooved coupling adaptors

Standard ›	ISO10	ISO16	ANSI	BSTD
Diameter (in)	Cat. No.			
3	71910-002005		71910-002003	71910-002004
4	71910-002008		71910-002006	71910-002007
6	71910-002011		71910-002009	71910-002010
8	71910-002014	71910-002040	71910-002012	71910-002013
10	71910-002017	71910-002018	71910-002015	71910-002016



Elbows

To order this spare part, call your local Netafim™ representative with the SKU (Stock Keeping Unit) number of your SandStorm™ filtration system at hand. **Only with this number can we supply the correct part for your specific system.** Find the SKU number on your system order form.



Grooved couplings

Diameter (in)	Cat. No.
2	71910-002500
3	71910-002501
4	71910-002502
6	71910-002503
8	71910-002504
10	71910-002505

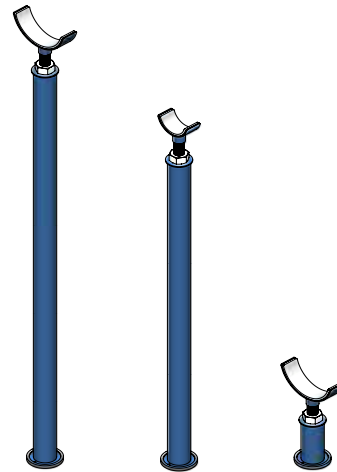


REPLACEMENT PARTS

Support legs

For single-chamber tanks

Tank diameter (in)	For manifold	Cat. No.
30	Inlet	71910-001965
	Outlet for straight systems	71910-001908
	Backflush	71910-001893
36	Inlet	71910-001965
	Outlet for straight systems	71910-001909
	Backflush	71910-001893
48	Inlet	71910-001971
	Outlet for straight systems	71910-001970
	Backflush	71910-001952



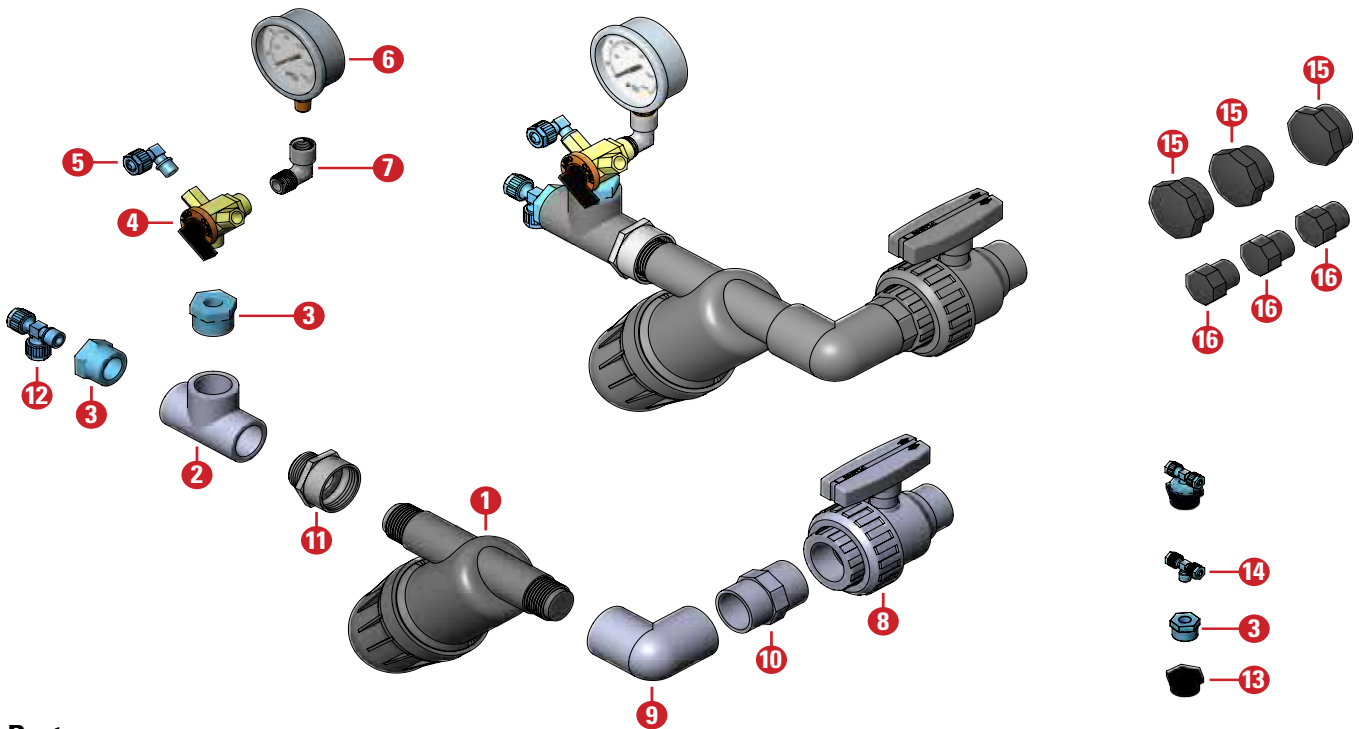
For double-chamber tanks

Tank diameter (in)	For manifold	Cat. No.
20	Inlet	71910-001906
	Outlet for straight systems	71910-001899
	Backflush	71910-001890
24	Inlet	71910-001906
	Outlet for straight systems	71910-001899
	Outlet for parallel systems	71910-001967
	Backflush	71910-001890
30	Inlet	71910-001960
	Outlet for straight systems	71910-001909
	Backflush	71910-001891
36	Inlet	71910-001960
	Outlet for straight systems	71910-001909
	Outlet for parallel systems	71910-001916
	Backflush	71910-001891
48	Inlet	71910-001924
	Outlet for straight systems	71910-001917
	Outlet for parallel systems	71910-001928
	Backflush	71910-001951

REPLACEMENT PARTS

Control kit

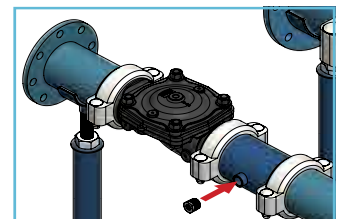
Description	Cat. No.
1" Control kit (BSP connection)	37090-009600
1" Control kit (NPT connection)	37090-009610



Parts

Part	Description	Cat. No.	
		BSP	NPT
1	NMV PVC ball valve 1 union 1" FMT	77450-000121	77450-000150
2	PVC double nipple 1"	77400-017800	
3	PVC 90 deg threaded elbow 1"	77400-016200	
4	Filter 1" 80 mesh blue inox	76240-004050	76240-004080
5	PVC threaded reducer 3/4M*1F	77400-011350	
6	PVC 90 deg threaded Tee 3/4"	77400-013700	
7	Bushing 3/4m * 1/4f	76400-009600	
8	Male run tee 8*8*1/4"	76400-004560	
9	S.Y-3 1/4F (1/8F*1/8F*1/4M)	76040-001400	
10	Male elbow 8*1/8"	76400-003400	
11	Pressure gauge 250 GLZ 10 bar 1/4"	77540-003400	
12	Brass elbow M.F. 1/4"	78300-002700	
13	Plastic bushing 1M * 3/4F	78220-004600	
14	Male branch Tee 8*1/4"	76400-004500	
15	Plastic male threaded plug 2"	78220-006300	
16	Plastic male threaded plug 1"	78220-006100	
17	Galvanized bushing 3/4*1/4"*	78200-010490	

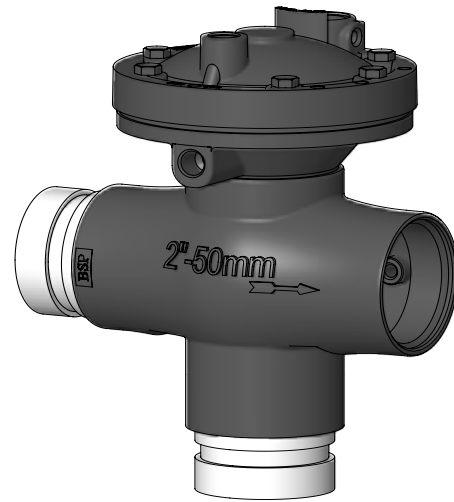
* **17** Only for systems equipped with a hydraulic flow-control valve.



REPLACEMENT PARTS

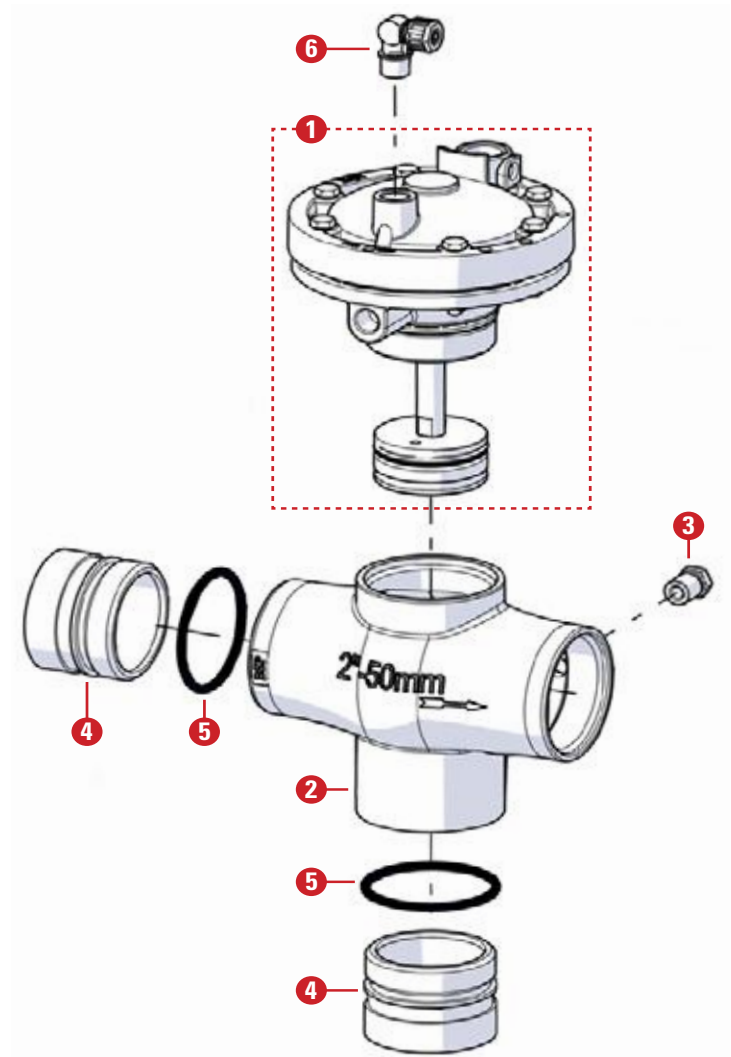
Backwash 3-way hydraulic valve - 2"

Description	Cat. No.
3-way hydraulic valve, 2"	71600-006515



Main parts

Part	Description	Cat. No.
1	Operator assembly	71680-006595
2	Body BSP	71680-001715
3	Plug	71610-000800
4	Grooved adaptor BSP	71680-015710
5	O-ring	71680-014350
6	Elbow 8 x 1/4 in	76400-003500



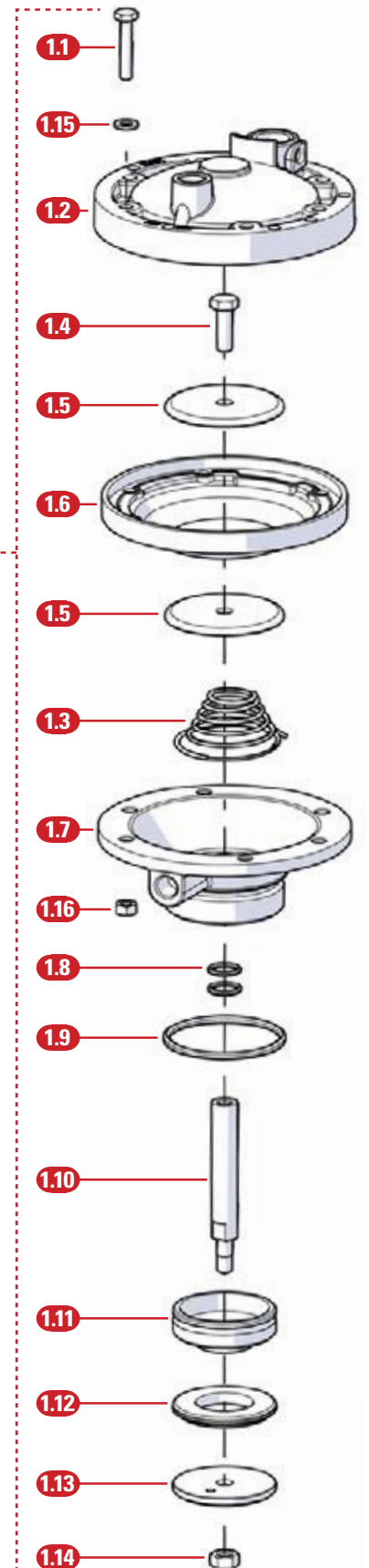
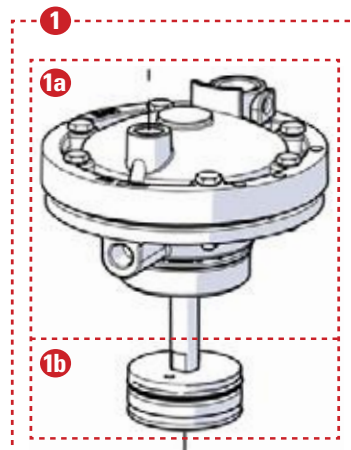
REPLACEMENT PARTS

Assemblies

Part	Description	Cat. No.
1	Operator assembly	71680-006595
1a	Diaphragm assembly	71680-007480
1b	Plug kit	71680-001720

Assemblies - sub-parts

part	Description	1	1a	1b
1.1	Bolt	+		
1.2	Bonnet	+		
1.3	Spring No. 51	+		
1.4	Bolt	+	+	
1.5	Diaphragm disc	+	+	
1.6	Diaphragm No. 337	+	+	
1.7	Actuator body	+		
1.8	O-ring	+	+	
1.9	O-ring	+	+	
1.10	Shaft	+	+	
1.11	Valve disc	+		+
1.12	Seal	+		+
1.13	Seal disc	+		+
1.14	Nut	+		+
1.15	Washer	+		
1.16	Nut M6	+		



REPLACEMENT PARTS

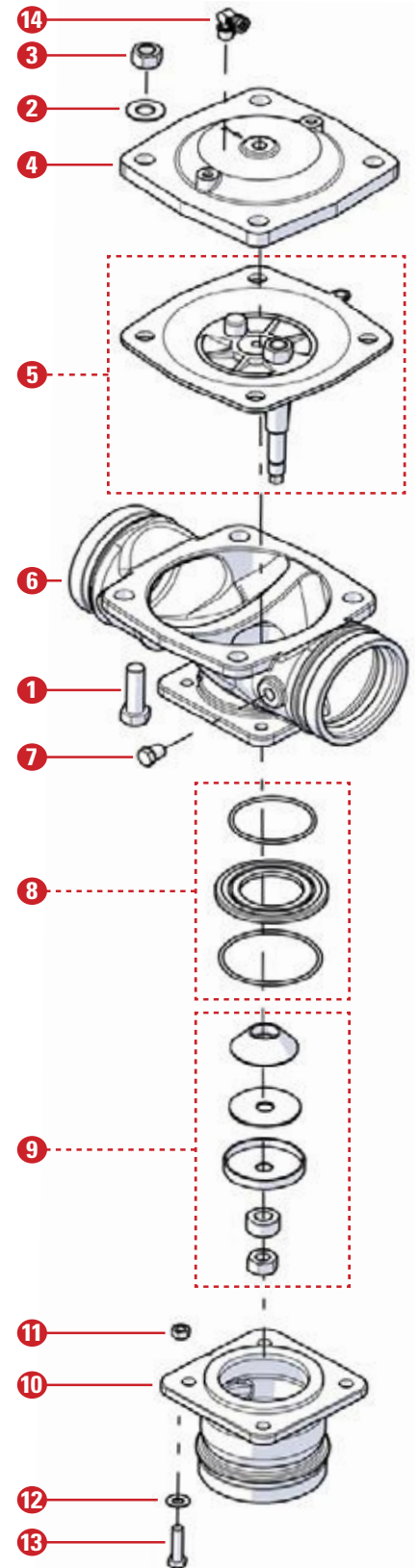
Backwash 3-way hydraulic valve - 3"

Description	Cat. No.
3-way hydraulic valve, 3"	71600-006670



Main parts

Part	Description	Cat. No.
1	Bolt 5/8*50 steel	71680-001710
2	Washer 5/8	76540-001100
3	Nut 5/8	76540-001000
4	Bonnet	71680-001721
5	Diaphragm assembly	71680-007750
6	Body	71680-012925
7	Plug	71610-000800
8	Seat kit	71680-001713
9	Plug kit	71680-001723
10	BSP adaptor	71680-001722
11	Nut	71680-011700
12	Washer	71680-011600
13	Bolt	71680-011540
14	Elbow 8x1/4 in	76400-003500



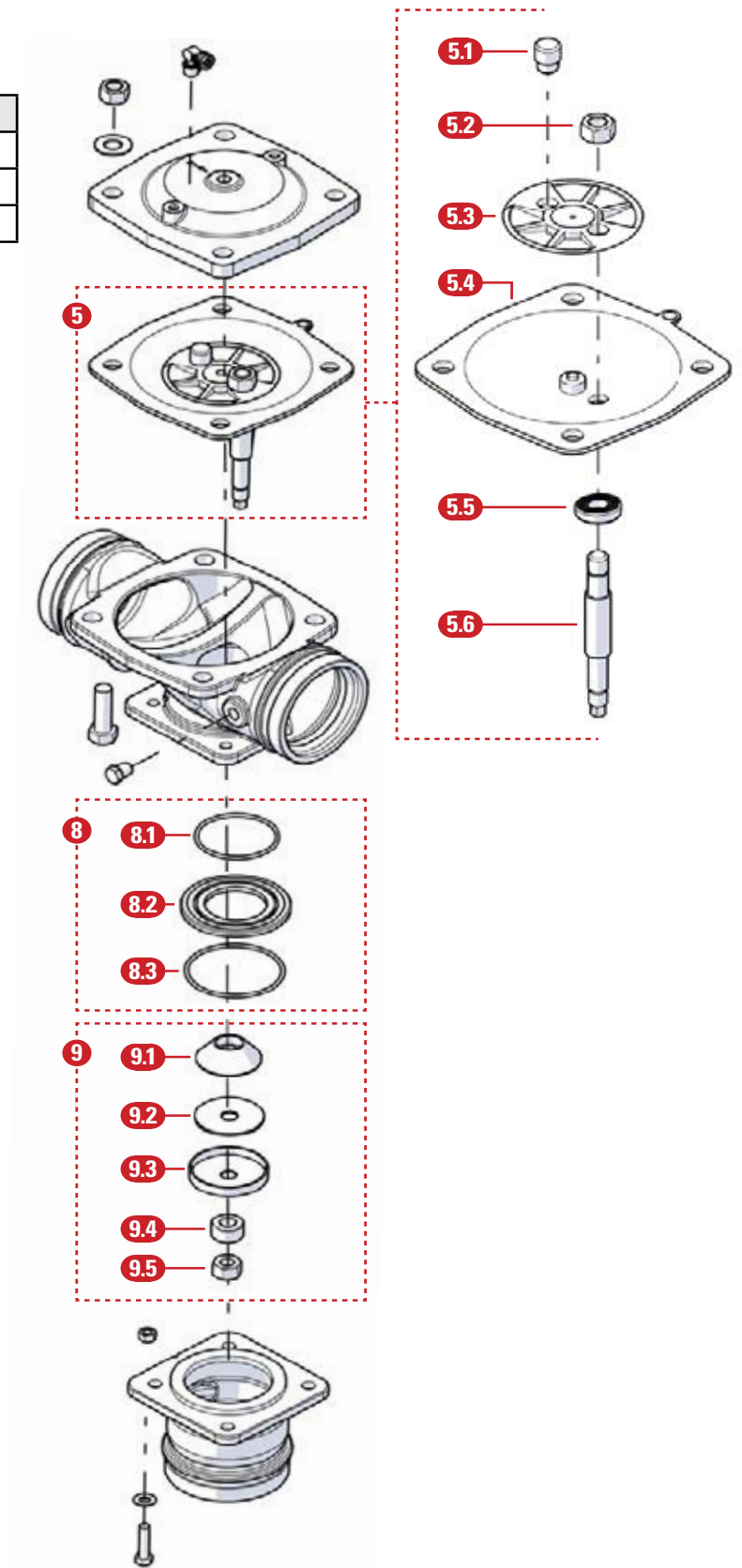
REPLACEMENT PARTS

Assemblies

Part	Description	Cat. No.
5	Diaphragm assembly	71680-007750
8	Seat kit	71680-001713
9	Plug kit	71680-001723

Assemblies - sub-parts

part	Description	5	8	9
5.1	Support pin	+		
5.2	Nut	+		
5.3	Top disc	+		
5.4	Diaphragm	+		
5.5	Shaft disc	+		
5.6	Shaft	+		
8.1	O-ring		+	
8.2	Seat		+	
8.3	O-ring		+	
9.1	Guide cone			+
9.2	Seal			+
9.3	Seal bowl			+
9.4	Spacer			+
9.5	Nut			+



REPLACEMENT PARTS

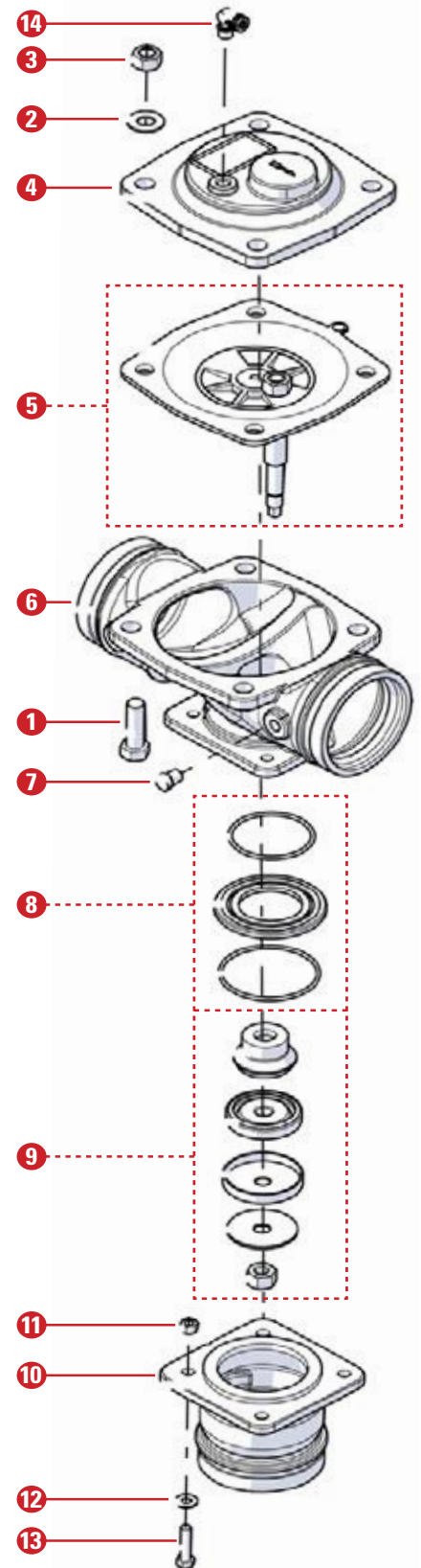
Backwash 3-way hydraulic valve - 4"

Description	Cat. No.
3-way hydraulic valve, 4"	71600-006660



Main parts

Part	Description	Cat. No.
1	Bolt 5/8*50 steel	71680-001710
2	Washer 5/8	76540-001100
3	Nut 5/8	76540-001000
4	Bonnet	71680-001711
5	Diaphragm assembly	71680-007800
6	Body	??????????????
7	Plug	71610-000800
8	Seat kit	71680-001713
9	Plug kit	71680-001714
10	Adaptor	71680-016091
11	Nut	71680-011700
12	Washer	71680-011600
13	Bolt	71680-011540
14	Elbow 8x1/4 in	76400-003500



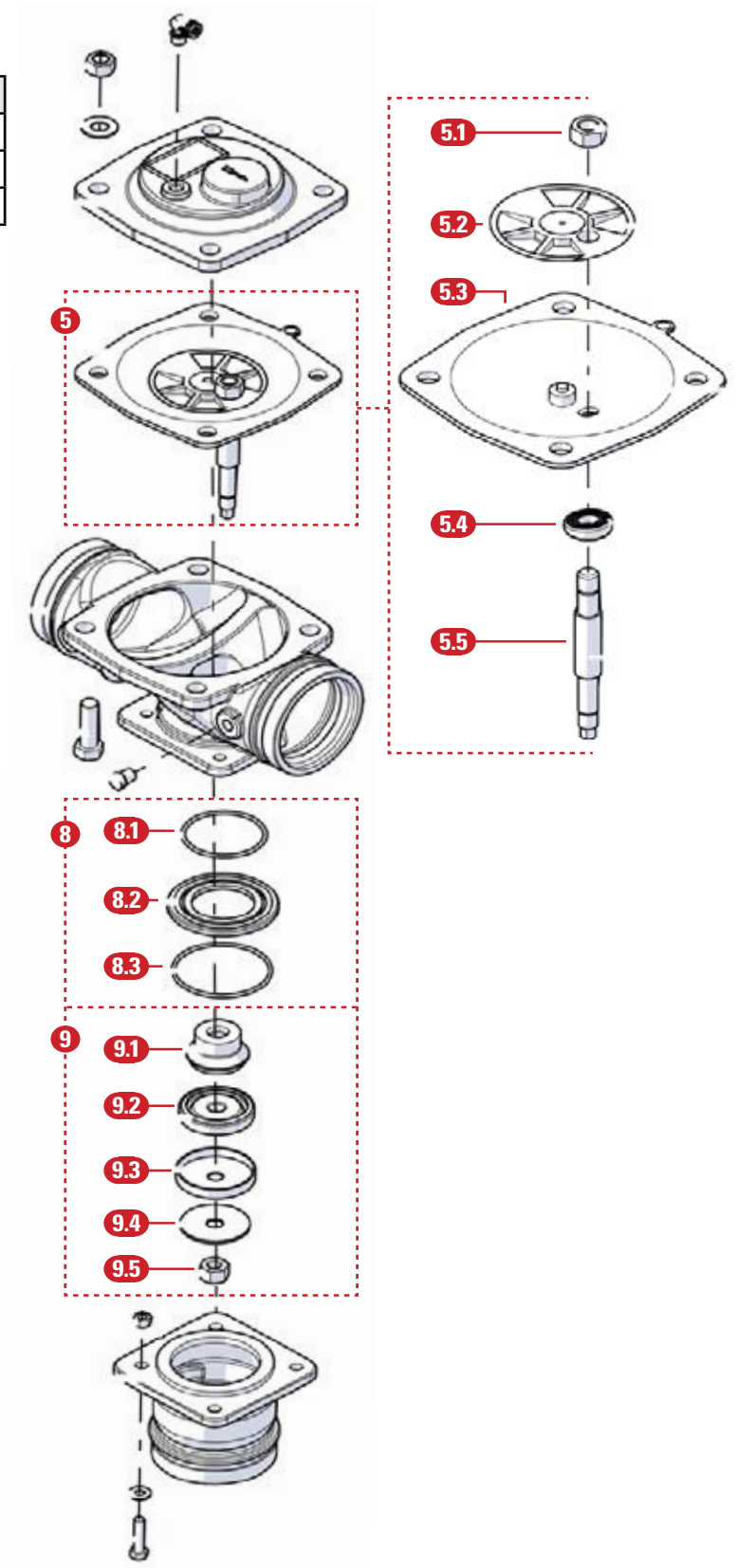
REPLACEMENT PARTS

Assemblies

Part	Description	Cat. No.
5	Diaphragm assembly	71680-007800
8	Seat kit	71680-001713
9	Plug kit	71680-001714

Assemblies - sub-parts

part	Description	5	8	9
5.1	Nut	+		
5.2	Top disc	+		
5.3	Diaphragm	+		
5.4	Shaft disc	+		
5.5	Shaft	+		
8.1	O-ring		+	
8.2	Seat		+	
8.3	O-ring		+	
9.1	Guide cone			+
9.2	Seal			+
9.3	Seal bowl			+
9.4	Washer			+
9.5	Nut			+



REPLACEMENT PARTS

Backwash flow-control valve

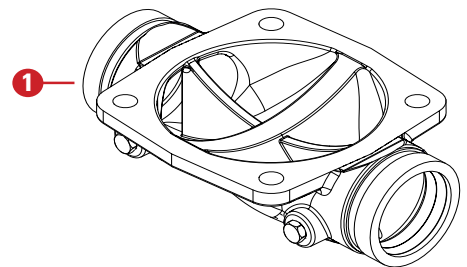
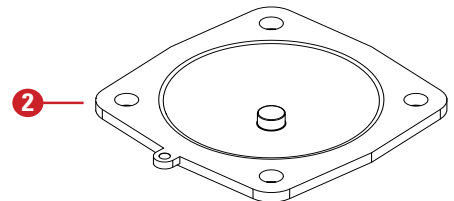
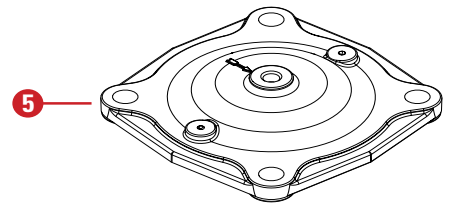
Hydraulic flow-control valve

For filtration system tank diameter	Description	Cat. No.
20"	3" metal hydraulic valve	71600-052301
24"		71600-052302
30"		71600-052303
36"		71600-052300
48"	4" metal hydraulic valve	71600-004272



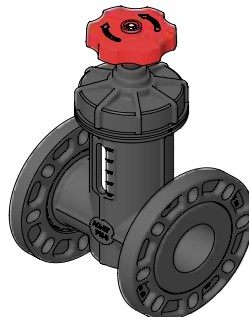
Main parts

Part	Description	Cat. No.	
		3"	4"
1	Body	71680-018281	71680-018282
2	Diaphragm	71680-006300	
3	Spring disc	71680-008900	
4	Spring	71680-008100	
5	Bonnet	71680-009153	
6	Flow control pilot 29-310	71680-001175	



Manual flow-control valve

Description	Cat. No.
3" plastic throttle valve	71920-000100
4" plastic throttle valve	71920-000110



REPLACEMENT PARTS

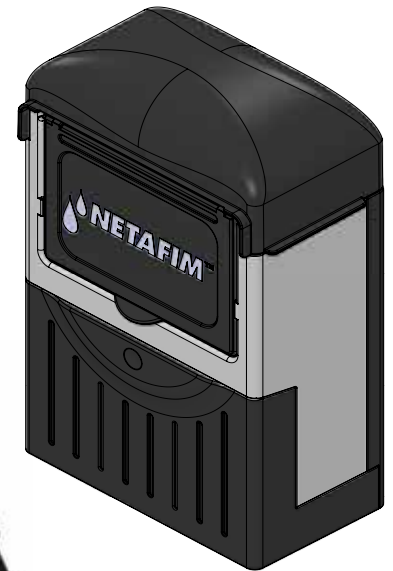
BackFlush controller

BackFlush controller

Description	Cat. No.
DC 2 outputs with DP sensor	73240-003175
DC 4 outputs with DP sensor	73240-003178
DC 6 outputs with DP sensor	73240-003179
DC 8 outputs with DP sensor	73240-003181
DC 10 outputs with DP sensor	73240-003182

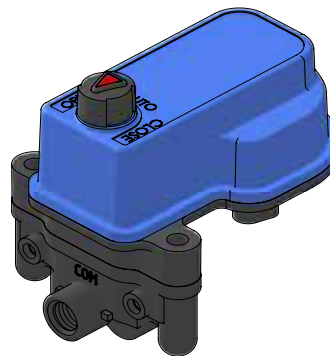
BackFlush controller accessories

Description	Cat. No.
DC 2 output expansion card	73240-003177
Power supply 100-240VAC/12VDC 1A	73240-007240



DC actuator valve

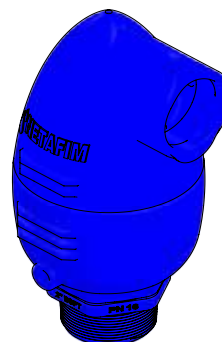
Description	Cat. No.
Aquativ DC actuator valve	35500-001925



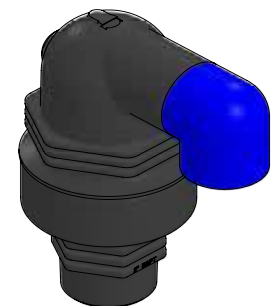
Air Valve

Inlet diameter (in)	Cat. No.	
	BSP	NPT
1	32600-004000	70561-001200
2	32600-002000	70561-001500

Netafim™ Air Valve



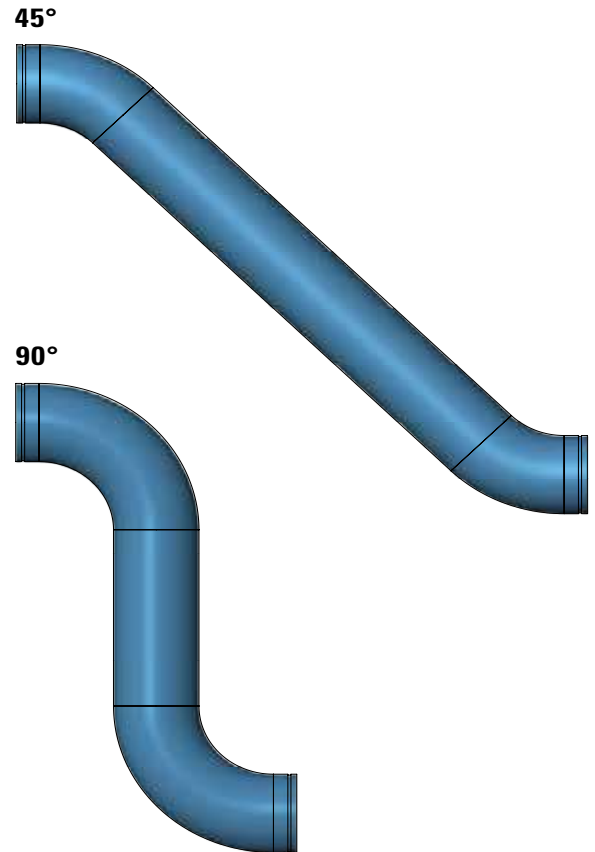
ARI Air Valve



REPLACEMENT PARTS

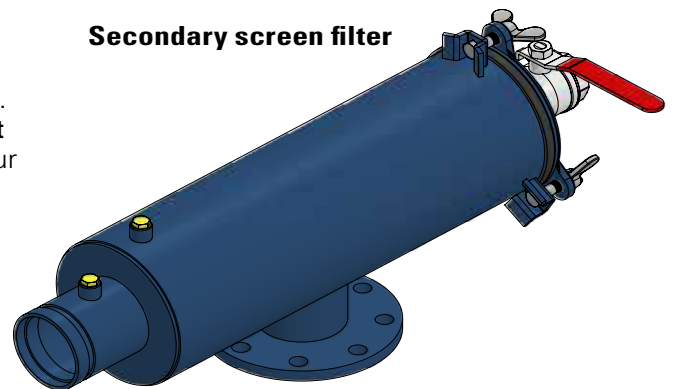
Inlet adaptor pipe

To order this spare part, call your local Netafim™ representative with the SKU (Stock Keeping Unit) number of your SandStorm™ filtration system at hand. **Only with this number can we supply the correct part for your specific system.** Find the SKU number on your system order form.



Secondary filter

To order this part, call your local Netafim™ representative with the SKU (Stock Keeping Unit) number of your SandStorm™ filtration system at hand. **Only with this number can we supply the correct part for your specific system.** Find the SKU number on your system order form.



WARRANTY

Netafim™ warrants all the components of the SandStorm™ media filter system to be free of defects in material and workmanship for 5 (five) years from the date of installation.

If a defect is discovered during the applicable warranty period, Netafim™ will repair or replace, at its discretion, the product or the defective part.

This warranty does not extend to repairs, adjustments or replacements of a Netafim™ media filter system or part that results from misuse, negligence, alteration, force majeure, lightning, power surge, improper installation or improper maintenance.

If a defect arises in your Netafim™ product during the warranty period, contact your local Netafim™ representative.

Limited warranty

This warranty is subject to the conditions in Netafim's official warranty statement.

(For the full text of Netafim's official warranty statement, please contact your local Netafim™ representative).



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