



# PRODUCT CATALOG

2025 Edition

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## **CSI Water Treatment Systems**

We are driven to constantly innovate with a focus on hard to treat problem water. With the ever-improving line of Signature control valves, industry leading Nitro & Sidekick iron filters and many new products on the horizon, CSI remains dedicated to providing clean, safe water for your residential and commercial needs.

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REGARDLESS OF YOUR WATER PROBLEM,

**CSI Water Treatment Systems offers solutions!**

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## LEGACY VIEW

SETUP  
CONTROL  
VIEW HISTORY  
MODIFY SETTINGS  
MONITOR WATER USAGE  
THROUGH  **Bluetooth™ 4.0** DEVICES



### Legacy View now comes standard on all Signature Valves

Legacy View makes setting up and monitoring your Chandler Systems water treatment system easier than ever. When used with a Legacy View Valve the user, through the app, can do the following functions:

- Conveniently view all valve settings and status
- Easily change valve settings
- View current water usage information
- Graphically view water usage information
- Start a regeneration or backwash cycle from your phone or tablet
- Set / view the servicing water treatment dealer information
- Better understand how your system is working and understand what settings are for
- Connect to all of your valves in your system (if they are all Legacy View Valves)
- Manage your connection to your valves
- Monitor Brine Tank Salt Levels



## S4 Technology

- Heavy Duty Motors
- Vertical Screw Drive for Precise Piston Movement
- Bluetooth App Control Simplifies Setup and Operation
- Patented Piston Allows User to Shut Off Water or Bypass Treated Water from the App



## System Features

- Simple set up through Legacy View Bluetooth App
- Water bypass and shut-off with Bluetooth
- Screw drive technology for piston accuracy
- 12 VDC operation
- 4 cycles, all fully adjustable
- Treated Water Refill with pre-brine option
- Programming ease and options increase efficiency, save salt and water
- Strong, durable Noryl® valve body, weather insect resistant one-piece slide cover
- Proprietary two valve bypass with 1" MNPT Connections
- 9V battery back-up
- Will motor to a drain line shut off position if power fails during regeneration
- Switch Output for:
  - Full Cycle Function
  - Backwash Function
- Limited 5 year warranty

Order S4 using part number xxxxxxxx-S4

### Valve Specifications

Valve Material	Noryl®*
Inlet / Outlet	1"
Cycles	5

### Flow Rates (50 psi inlet) - Valve Alone

Continuous (15 psi drop)	12.6 gpm
Peak (25 psi drop)	16.8 gpm
CV (flow at 1 psi drop)	5.4
Max. backwash (25 psi drop)	12.8 gpm

### Regeneration

Downflow / Upflow	Downflow
Adjustable Cycles	Yes
Time Available	99 minutes per cycle

### Meter Information

Meter Accuracy Range	.25 - 15 gpm +/- 5%
Meter Capacity Range (gal.)	1 - 9,999

### Dimensions

Distributor Pilot	1.050" O.D.
Drain Line	1/2" NPT Q.C.
Brine Line	3/8"
Mounting Base	2-1/2" - 8 NPSM
Height From Top of Tank	7.7"

### Typical Applications

Water Softener	6" - 16" Diameter up to 4 ft <sup>3</sup> Capacity
Iron Filter	6" - 16" Diameter
Sediment Filter	6" - 16" Diameter
Carbon Filter	6" - 16" Diameter
Neutralizing Filter	6" - 16" Diameter

### Additional Information

Electrical Rating	12 VDC
Pressure	Hydrostatic: 300 psi Working: 20 - 125 psi
Temperature	34 ° - 110 ° F

\*Noryl is a registered trademark of General Electric Company



## System Features

- Simple set up through Bluetooth App
- 12 VDC operation
- 4 cycles, all fully adjustable
- Treated Water Refill with pre-brine option
- Programming ease and options increase efficiency, save salt and water
- Strong, durable Noryl® valve body, weather insect resistant one-piece slide cover
- Proprietary two valve bypass with 1" MNPT Connections
- 9V battery back-up
- Will motor to a drain line shut off position if power fails during regeneration
- Switch Output for:
  - Full Cycle Function
  - Backwash Function

### Optional Configurations

- Backwash filter
- Meter initiated regeneration
- Nitro & Sidekick Single Tank Aeration Systems

**Order Signature 3 using part number xxxxxxxx-S4**

## Valve Specifications

Valve Material	Noryl®*
Inlet / Outlet	1"
Cycles	5

## Flow Rates (50 psi inlet) - Valve Alone

Continuous (15 psi drop)	21 gpm
Peak (25 psi drop)	27 gpm
CV (flow at 1 psi drop)	5.4
Max. backwash (25 psi drop)	17 GPM

## Regeneration

Downflow / Upflow	Downflow
Adjustable Cycles	Yes
Time Available	99 minutes per cycle

## Meter Information

Meter Accuracy Range	.25 - 15 gpm +/- 5%
Meter Capacity Range (gal.)	1 - 9,999

## Dimensions

Distributor Pilot	1.050" O.D.
Drain Line	1/2" NPT Q.C.
Brine Line	3/8"
Mounting Base	2-1/2" - 8 NPSM
Height From Top of Tank	7.7"

## Typical Applications

Water Softener	6" - 16" Diameter up to 4 ft <sup>3</sup> Capacity
Iron Filter	6" - 16" Diameter
Sediment Filter	6" - 16" Diameter
Carbon Filter	6" - 16" Diameter
Neutralizing Filter	6" - 16" Diameter

## Additional Information

Electrical Rating	12 VDC
Pressure	Hydrostatic: 300 psi Working: 20 - 125 psi
Temperature	34 ° - 110 ° F

\*Noryl is a registered trademark of General Electric Company

General Specifications	CM24-S4	CM32-S4	CM48-S4
Grains Capacity - Regeneration / Lbs Salt Used*	20,000 / 7.5	27,000 / 9	40,000 / 15
Maximum Raw Water Hardness (grains)	50	75	100
Maximum Clear Iron / Manganese	3	5	5
Exchange Resin (cu ft per tank)	.75	1.0	1.5
Mineral Tank Size	9 x 35	9 x 35	12 x 35
Service Flow Rate** (gpm)	8.0	10.0	11.0
Backwash Flow Rate (gpm)	2.0	2.0	2.4
Gallons Used / Regeneration	86	88	90
Space Required (D x W x H)	23 x 14 x 45	23 x 14 x 45	23 x 14 x 45
Approximate Shipping Weight (lbs)	88	100	133



## System Features

- Eliminates Hardness (Calcium & Magnesium)
- Available with Signature 3 (P/N-S3) or **S4**(P/N-S4) Control Valve
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Slide Cover design for easy access to salt compartment
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- High Flow 1" distributor
- Treated Water Refill with pre-brine option
- High flow brine safety float assembly overflow fitting and brine well

\* Factory Salt Setting: 9 lbs / cu. ft.

\*\* The pressure drop does not exceed 15.0 psi at the service flow rate.

General Specifications	MS24-S4 MS24V-S4	MS32-S4 MS32V-S4	MS48-S4 MS48V-S4	MS64-S4 MS64V-S4	MS96V-S4*
Grains Capacity - Regeneration / Lbs Salt Used*	20,000 / 7.5	27,000 / 9	40,000 / 15	54,000 / 18	81,000 / 27
Maximum Raw Water Hardness (grains)	50	75	100	100	100
Maximum Clear Iron / Manganese	3	5	5	5	5
Exchange Resin (cu ft per tank)	.75	1.0	1.5	2.0	3.0
Mineral Tank Size	8 x 44	9 x 48	10 x 54	12 x 52	13 x 65
Brine Tank (polyethylene w grid & safety)	16 x 33	16 x 33	16 x 33	18 x 40	18 x 40
Service Flow Rate** (gpm)	8.0	10.0	11.0	12.0	14.0
Backwash Flow Rate (gpm)	1.5	2.0	2.4	3.5	
Backwash Flow Rate (gpm) Vortech (V) Units	1.2	1.5	2.0	2.4	3.0
Gallons Used / Regeneration Vortech (V) Units	69	78	90	117	126
Gallons Used / Regeneration	79	90	101	140	
Space Required (D x W x H)	16x26x 53	16x27x 56	16x28x62	18x30x60	18x32x74
Approximate Shipping Weight (lbs)	88	100	133	164	285



### System Features

- Eliminates Hardness (Calcium & Magnesium)
- Reduces Iron / Manganese stains and taste
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- High Flow 1" distributor
- Optional Vortech™ tank technology maximizing capacity and efficiency
- Treated Water Refill with pre-brine option
- Standard brine tank size 16" X 33"
- High Flow brine safety float assembly, overflow fitting, grid plate and brine well

\*96 Series only available in Vortech Units

\*\*Factory Salt Settings are 9 lbs / cu ft

\*\*\*The pressure drop does not exceed 15 psi at the service flow rate.



General Specifications	MSI32-S4	MSI48-S4	MSI64-S4	MSI96-S4
Grains Capacity - Regeneration /Lbs Salt Used **	35,000 / 15	52,000 / 24	70,000 / 30	105,000 / 45
Maximum Raw Water Hardness (grains)	75	100	100	100
Maximum Clear Iron / Manganese	5	10	10	10
Exchange Resin (cu ft per tank)	1.0	1.5	2.0	3.0
Mineral Tank Size	9 x 48	10 x 54	12 x 52	13 x 65
Brine Tank (polyethylene w grid & safety)	16 x 33	16 x 33	18 x 33	18 x 40
Gravel (in lbs)	20	20	30	50
Service Flow Rate* (gpm)	10.0	11.0	12.0	14.0
Backwash Flow Rate (gpm)	1.5	2.0	2.4	3.0
Gallons Used / Regeneration	72	83	95	112
Space Required (D x W x H)	16 x 27 x 56	16 x 28 x 62	18 x 30 x 60	18 x 32 x 74
Approximate Shipping Weight (lbs)	130	163	204	290



## System Features

- Eliminates Hardness (Calcium & Magnesium)
- High Quality Fine Mesh for increased Iron / Manganese Reduction
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- High Flow 1" distributor
- Treated Water Refill with pre-brine option
- Standard brine tank size 16" X 33"
- High Flow brine safety float assembly, overflow fitting, grid plate and brine well

\*96 Series only available in Vortech Units

\*\*Factory Salt Settings are 9 lbs / cu ft

\*\*\*The pressure drop does not exceed 15 psi at the service flow rate.

General Specifications	MSC32-S4	MSC48-S4
Softening Capacity / lbs salt used**	27,000 / 9	40,000 / 15
Exchange Resin (cu. ft. per tank)	1.0	1.5
Catalytic Carbon Media	.5 cu. ft.	1 cu. ft.
Maximum Raw Water Hardness (gpg)	75	100
Maximum Raw Water Iron (ppm)	5	5
Service Flow Rate (gpm)*	5	8
Intermittent Flow Rate (gpm)	7	10
Backwash Flow Rate (gpm)	2.4	3.5
Mineral Tank Size (inches)	10 x 54	13 x 54
Gallon Used / Regeneration	81	105
Space Required	16 x 28 x 62	16 x 31 x 73
Approximate Shipping Weight (lbs)	130	240

## System Features



- Eliminates Hardness (Calcium & Magnesium)
- Reduces / Removes Chlorine & Chloramine
- Removes chemical taste and odor
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- High Flow 1" distributor
- Replaceable Carbon Media
- Features Vortech Mid-Plate Technology
- Treated Water Refill with pre-brine option
- Standard brine tank size 16" X 33"
- High Flow brine safety float assembly, overflow fitting, grid plate and brine well

\*The pressure drop does not exceed 15.0 psi at the service flow rate.

\*\*Factory Salt Settings are 9 lbs / cu ft

General Specifications	SD48-TW SD48V-TW	SD64-TW SD64V-TW	SD96-TW SD96V-TW	SD128-TW SD128V-TW
Grains Capacity / Lbs Salt Used per regeneration	20,000/7.5	27,000/9.0	40,000/15.0	54,000 / 18.0
Maximum Raw Water Hardness (grains)	50	75	100	100
Maximum Clear Iron / Manganese (ppm)	3	5	5	5
Exchange Resin (cu. ft. per tank)	.75	1.0	1.5	2.0
Mineral Tanks (polyglass)	(2) 8 x 44	(2) 9 x 48	(2) 10 x 54	(2) 12 x 52
Brine Tank (polyethylene w grid & safety)	16 x 33	16 x 33	16 x 33	18 x 40
Service Flow Rate (gpm per active tank)	8.0	10.0	11.0	12.0
Backwash Flow Rate (gpm)	1.5	2.0	2.4	3.5
Gallons Used / Regeneration	79	90	101	140
Backwash Flow Rate (gpm) Vortech (V) Units	1.2	1.5	2.0	2.4
Gallons Used / Regeneration Vortech (V) Units	69	78	90	117
Space Required	16 x 34 x 52	16 x 34 x 56	16 x 36 x 62	16 x 40 x 60
Approximate Shipping Weight (lbs)	139	169	237	299



## System Features

- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Optional double backwash feature offers optimum regeneration, cleaning ability, and efficiency
- Treated water refill with pre-brine option
- Downflow regeneration
- 12 VDC operation
- Proprietary two valve bypass with 1" MNPT Connections
- 5 cycles, all fully adjustable
- Programming ease and options increase efficiency, save salt and water
- Strong, durable Noryl valve body, weather insect resistant one-piece, slide.
- Immediate initiated regeneration
- 24 hour / day soft water

General Specifications	MST32-S4	MST48-S4	MST64-S4
Grains Capacity / Hardness per Regeneration	24,000	32,000	48,000
Salt Used / Regeneration (lbs)**	12.0	15.0	24.0
Maximum Raw Water Hardness (grains)	10	10	10
Maximum Clear Iron / Manganese (ppm)	.50	.50	.50
Exchange Resin (cu ft)	.75	1.0	1.5
Tannin Resin (cu ft)	.25	.50	.50
Mineral Tank Size	9 x 48	10 x 54	12 x 52
Brine Tank (polyethylene with grid & safety)	16 x 33	16 x 33	18 x 40
Service Flow Rate (gpm)*	10.0	11.0	12.0
Backwash Flow Rate (gpm)	1.2	1.5	2.0
Gallons Used / Regeneration	69	80	93
Space Required (D x W x H)	16 x 27 x 56	16 x 28 x 62	16 x 30 x 60
Approximate Shipping Weight (lbs)	100	133	164



### System Features

- Eliminates Hardness (Calcium & Magnesium)
- Reduces Tannin stains, taste & odor
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- High Flow 1" distributor
- Vortech Distributor Plate
- Treated Water Refill with pre-brine option
- Standard brine tank size 16" X 33"
- High Flow brine safety float assembly, overflow fitting, grid plates and brine well

\* The pressure drop does not exceed 15.0 psi at the service flow rate.

\*\*Factory Salt Setting; 15lbs./cuft.



General Specifications	MN15-S4	MN25-S4
Grains Capacity / Regeneration	15,000	25,000
Salt Used / Regeneration	18.0	30.0
Maximum Raw Water Nitrate / Sulfate (mg/l)	100	100
Maximum Clear Iron / Manganese (ppm)	0	0
Exchange Resin (cu ft)	1.5	2.5
Mineral Tank Size	10 x 54	13 x 54
Brine Tank (polyethylene with grid & safety)	16 x 33	18 x 40
Service Flow Rate (gpm)*	5.0	8.0
Backwash Flow Rate ((gpm)	1.2	2.4
Gallons Used / Regeneration	60	80
Space Required (D x W x H)	16 x 28 x 62	16 x 31 x 62
Approximate Shipping Weight (lbs)	133	251



### System Features

- Reduces Nitrates (EPA MCL – 10.0 mg/l)
- Reduces Sulfates (EPA SMCL– 250 mg/l)
- Reduces Fluoride (EPA MCL– 4.0 mg/l)
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- High Flow 1" distributor
- Vortech Distributor Plate
- Treated Water Refill with pre-brine option
- Standard brine tank size 16" X 33"
- High Flow brine safety float assembly, overflow fitting, grid plates and brine well

\* The pressure drop does not exceed 15.0 psi at the service flow rate

General Specifications	MSF32-10D-S4	MSF48-15D-S4
Softening Capacity / lbs salt used**	27,000 / 9	40,000 / 15
Exchange Resin (cu. ft. per tank)	1.0	1.5
Filter Media Capacity	1 cu. ft.	1.5 cu. ft.
Softening Capacity	32,000	48,000
Service Flow Rate (gpm)*	5.0	8.0
Intermittent Flow Rate (gpm)	7.0	10.0
Backwash Flow Rate (gpm)	5.0	7.0
Gallons Used / Regeneration	145	185
Mineral Tank Size	10 x 65	13 x 65
Space Required (D x W x H)	16 x 28 x 73	16 x 31 x 73
Approximate Shipping Weight (lbs)	126	182



### System Features

- Perfect for Filtering and Softening in ONE System
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- Calendar Day Override
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- High Flow 1" distributor
- Features Vortech™ mid-plate technology
- Treated Water Refill with pre-brine option
- Standard brine tank size 16" X 33"
- High Flow brine safety float assembly, overflow fitting, grid plates and brine well

\* The pressure drop does not exceed 15.0 psi at the service flow rate

\*\*Factory Salt Settings are 9 lbs / cu ft

General Specifications	WF10-S4	WF15-S4	WF20-S4	WF25-S4	WF30-S4
Filter Media Type	Less Filter Media				
Filter Media Capacity (cu ft)	1.0	1.5	2.0	2.5	3.0
Mineral Tank Size	9 x 48	10 x 54	12 x 52	13 x 54	13 x 65
Service Flow Rate - Continuous (gpm)	4	5	6	8	9
Service Flow Rate - Intermittent (gpm)	6	7	8	10	11
Backwash Flow Rate (gpm)	5.0	5.0	6.0	7.0	7.0
Gallons Used / Backwash	100	100	120	140	140
Space Required (D x W x H)	9 x 9 x 56	10 x 10 x 62	12 x 12 x 60	13 x 13 x 62	14 x 14 x 74
Approximate Shipping Weight (lbs)	27	32	35	40	49



## System Features

- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Includes meter to provide water usage history
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Vortech™ distributor plate
- Adjustable Cycle Times
- High Backwash flow capability
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- Optional dome fill hole and closure
- Optional "natural" color
- No chemical regenerants required

\* - Use of a Flow Control in the service line is highly recommended.

\*\* - Caution should always be used in sizing filters. Always choose a unit by first satisfying the backwash and flow requirement.

Consult the factory or your field sales person with questions.

General Specifications	WFA10-S4*	WFA20-S4*	WFA30-S4*
Arsenic/Heavy Metals Adsorption Media (cu ft)	1.0	2.0	3.0
Filter Sand Underbedding (lbs.)	10	20	30
Maximum Iron (ppm)	<0.30	<0.30	<0.30
Maximum Manganese (ppm)	< .04	< .04	< .04
Maximum Service Flow Rate	5.0	8.0	11.0
Backwash Flow Rate (gpm)	2.0	4.0	5.0
Gallons Used / Backwash	30	60	75
Mineral Tank Size	9 x 48	12 x 52	13 x 65
Space Required (D X W X H)	9 x 9 x 56	12 x 12 x 60	13 x 13 x 74
Approximate Shipping Weight (lbs)	80	140	185



### System Features

- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Patented NSF Std. 61 validated Titanium Oxide Adsorbent Media for the efficient reduction of both Arsenic III & V
- Includes meter to provide water usage history and totalization
- Proprietary two valve bypass with 1" MNPT Connections
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Excellent reduction of a wide range of heavy metals including Lead, Cadmium, Copper, Selenium, Uranium, Vanadium & Zinc
- Non-hazardous disposal of media as solid waste - media passes EPA TCLP (Toxicity Characteristic Leach Procedure)
- Higher adsorbent capacity than GFO (Granular Ferric Oxide) & GFH (Granular Ferric Hydroxide)
- Weather / Insect Resistant One-Piece Slide Cover
- Vortech™ distributor plate

\* Please contact the factory for pre-treatment requirements and estimated media capacities per project basis



## Carbon Block Filters for Taste/ Odor Removal & Sediment

General Specifications	CT-03-CB	CT-20-CB	CT-03-CB-AMINE
Micron Rating	3	20	3
Treatment Description	Chlorine / Sediment	Chlorine / Sediment	Chlorine / Sediment / Chloramine
Max Flow Rate / psi drop	25 gpm / 4 psi	25 gpm / 3 psi	25 gpm / 4 psi
Estimated Gallon Capacity	250,000 gallons of water @ 15 gpm with greater than 90% reduction, estimated capacity using 2ppm of free chlorine	150,000 gallons of water with 90% reduction using 2.0 ppm free chlorine at 7 gpm.	50,000 gallons of water with 85% reduction of chloramine @ 7 gpm.

## Filters for Sediment Removal

General Specifications	CT-2005 - SWMB	CT-2010	CT-1005
Micron Rating	Outer layer 20 / Inner core 5	Outer layer 20 / Inner core 10	Outer layer 10 / Inner Core 5
Treatment Description	Sediment	Sediment	Sediment
Max Flow Rate / psi drop	25 gpm / 4 psi	25 gpm / 4 psi	25 gpm / 4 psi
Surface area vs typical 4.5" x 20" cartridge	2 times as much	6.5 times as much	6.5 times as much
Filter Type	String Wound w/ Melt Blown Core	Dual Gradient / Double Pleated Polyester	Dual Gradient / Double Pleated Polyester



Carbon Block Filters



Poly Wound / Melt Blown



Pleated



## System Features

- Full flow 1" service lines for Whole House performance of up to 25 gpm
- Longer life and lower pressure drop than traditional 2-½" and 4-½" cartridge filters
- Bypass and Pressure Release Valve allow for quick filter change without removal from plumbing - no tools necessary
- Union connections simplify installation
- Up to 150 psi working pressure
- Top dust Cover Keeps dust and dirt from accumulating and getting inside housing during filter change
- Free Standing - No need for mounting brackets or wall anchoring
- Part Number MF-40



# PIONEER™ DROP Whole House Cartridge Filter FC-40P and FC-40A

PIONEER® Pb Specifications - Model FC-40P (Lead)					
Cartridge Part Number	Size and Micron Rating	Rated Capacity and Flow Rate	Peak Flow and % Reduction of Lead and PFOA/PFOS	Chlorine/chloramine Taste and Odor Reduction Capacity	Pressure Drop Spec
PIONEER® Pb Filter					
CT-05-CB-AMYCL	8" x 40" / 0.5 Microns	Lead Reduction and PFOA/PFOS 100,000 gallons @ 4.51 GPM (378,541 Liters @ 17.1 lpm)  @ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction	8 GPM (30.2 lpm) @ 99.62% lead reduction @ 97.9% PFOA/PFOS reduction  >88,000 gallons at 8 GPM (333,116 Liters @ 30.2 lpm)	>300,000 gallons @ 15 GPM (1,135,533 Liters @ 56.8 lpm) with greater than 90% reduction, estimated capacity using 2 ppm of free chlorine  >150,000 gallons @ 8 GPM (567,812 Liters @ 30.3 lpm) with greater than 85% reduction, estimated using 3 ppm of chloramine	9 psid @ 4.51 GPM

PIONEER® As Specifications - Model FC-40A (Arsenic)			
Cartridge Part Number	Size	Rated Capacity and Flow Rate	Pressure Drop Spec
PIONEER® As Filter			
CT-5020-F11	8" x 40"	Arsenic Reduction 125,000 Gallons @ 7 GPM 473,177 Liters @ 26 lpm	10 psid @ 7 GPM (26.5 lpm)



## System Features

- Reduces Arsenic and Lead
- Provides Cartridge Replacement Notification
- 9V Battery Backup for Power Loss
- Full flow 1" services lines for whole house performance of up to 25 gpm
- DROP App to Control System from Anywhere
- Water Usage Data and History
- Top Dust Cover keeps dust and dirt from accumulating and getting inside housing during filter change
- Proprietary two valve motorized bypass with 1" MNPT Connections
- 5 Year Warranty on tank and valve
- 1 Year Warranty on electronics

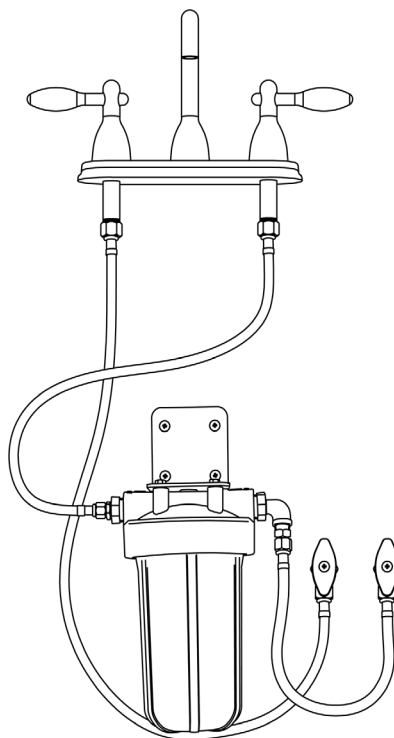
Forever chemicals (PFAS) pose serious health risks and contaminate water.

Dimensions	Flow Rate	Gallons Capacity
4.5" x 10"	1.51 gpm	8,575



### System Features

- Simple installation & low maintenance for hassle-free use
- Complete installation kit included
- Optimum protection for safer water
- Effectively removes organics and TOCs
- Part Number PF10J



General Specifications	FTP6	FTP8	FTP10
De-scale Media	4 Liters	5 Liters	7 Liters
Catalytic Carbon	1 Cu. Ft.	1 Cu. Ft.	1 Cu. Ft.
Service GPM	6	8	10
Max Iron	0.5 ppm	0.5 ppm	0.5 ppm
Space Required (D x W x H)	10 x 10 x 64	10 x 10 x 64	10 x 10 x 64
Approximate Shipping Weight (lbs)	60	62	64



## System Features

- De-scale media prevents scale build-up by crystallizing calcium & magnesium (hardness)
- Internal KDF 55 chamber filter / removal of chlorine
- Catalytic carbon / removal of chloramines
- No backwash or drain line required
- Salt free
- Requires no regeneration
- Easy to install
- Electricity is not required
- No TDS is added
- No change in pH
- Upflow configuration to ensure proper fluidization of media
- Includes bypass and union connections that allow for easy servicing



General Specifications	U10	U15	U20	U25
Filter Media Type <sup>1</sup>	Less Filter Media			
Filter Media Capacity (cu ft)	1.0	1.5	2.0	2.5
Mineral Tank Size	9 x 48	10 x 54	12 x 52	13 x 54
Service Flow Rate - Continuous (gpm)	4	5	6	8
Service Flow Rate - Intermittent (gpm)	6	7	8	10
Space Required (D x W x H)	9 x 9 x 52	10 x 10 x 58	12 x 12 x 56	13 x 13 x 58
Approximate Shipping Weight (lbs)	20	25	30	35



## System Features

- Bypass with 1" MNPT Connections
- Vortech™ distributor plate
- Optional "natural" color
- Optional dome fill hole and closure
- Simply select and add the desired filter media
- No chemical regenerates required
- Economical alternative in certain applications

Note 1: See "Filter Media" section for selection of proper media for your filtration application.  
Note 2: Use of a flow control in the Service Line is highly recommended.

General Specifications	UF8C
Micron Rating	.02
Pre-Filtration Required (microns)	<5
Maximum Clear Iron / Manganese (ppm)	0
Service Flow Rate (gpm)	10
Backwash Flow Rate (gpm)	5.0
Gallons Used / Regeneration	15
Space Required (D x W x H)	8 x 14 x 56
Approximate Shipping Weight (lbs) - Must Ship LTL	46



## System Features

- Filtration down to .02 micron - excellent for organic color, tannins, colloidal clay, virus, bacteria & cyst reduction
- Utilizes the Signature Series™ Shuttle Valve System to provide automatic clean water backwash of the UF membranes and tank flushing (a pressure tank with 15 gallons draw down is required and is not included)
- Membranes are NSF Standard 61 Certified
- Tank is NSF Standard 44 Certified

General Specifications	SMD15	SMD25
Media Capacity (cu. ft.)	1.5 cu. ft.	2.5 cu. ft.
Mineral Tank Size	10 X 54	13 X 54
Service Flow Rate - Continuous (gpm)	5	8
Service Flow Rate - Intermittent (gpm)	7	10
Backwash Flow Rate (gpm)	5.0	7.0
Gallons Used / Backwash	100	140
Space Required (D x W x H)	10 X 21 X 61	13 X 24 X 61
Approximate Shipping Weight	65	105

### System Features

- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up through the app
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Includes meter to provide water usage history
- Adjustable cycle times
- Proprietary two valve bypass with 1" MNPT Connections
- High Flow 1" distributor
- Includes gravel bed
- Top cap fill opening for ease of service / great for adding neutralizer media or replacing carbon media
- Standard natural color tank allows you to monitor media level
- Compatible with any type of well pump system
- Drain valve included to remove water from the tank prior to adding media



DRAIN VALVE

General Specifications	MS32VN-SQ-S4	WF15ND-SQ-S4	NTF15ND-SQ-S4	RF15/VSND-SQ-S4
Softening Capacity	32,000 grains	N/A	N/A	N/A
Media Type	Softener Resin	N/A	Smart Blend	Smart Blend
Media Capacity	1.0	1.5	1.5	1.5
Reactr Tank	N/A	N/A	N/A	16 x 40
Mineral Tank Size	10 x 35	13 x 35	13 x 35	13 x 35
Service Flow Rate	8.0	5.0	5.0	5.0
Backwash Rate	2.0	7.0	7.0	7.0
Space Required	16 x 26 x 43	13 x 13 x 43	13 x 13 x 43	40 x 53 x 56
Approximate Shipping Weight (lbs)	78	140	146	140

Note: Caution should always be used in sizing filters! Always choose a unit by first satisfying the Backwash requirement. Use of a flow control in the Service Line is highly recommended. Consult the factory or your field sales person with questions. Oxyclean can be added to any existing Reactr or Reactr VS system.

### System Features



- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified setup
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Adjustable Cycle Times
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- Filters come standard with dome hole and natural color
- All tanks feature Vortech distributor plate
- Standard brine tank size 16" X 33"

## Filter Media Selection Guide

Media	Ship Wt. (lbs)	Description	Handles...	Used in...
SmartBlend™ SB75 SB10	45 61	Granular / White-Black / Blend of Filter Ag Plus and Katalox Light / Max life expectancy about 8-10 years but is dependent upon water chemistry and usage	Sediment, Adjusts pH, Iron (clear & red) Manganese (clear & red) Sulfur Particles	Nitro Reactr and Sidekick
Neutralizer NE50 NE75 NE10	50 64 85	Granular / White / Sacrificial to water with pH, 7.0 / Max pH correction to 7.2 / Lowest pH application 5.8 / Must be replenished about every 6 months to 1 year	Sediment (downflow) pH correction	WF Filter Upflow and Optimizr
Neu-Cor™ NC75 NC10	62 82	Granular / Semi-round / White & Off-white / 70%-30% Blend of Neutralizer & Corosex® must be replenished on a regular basis since both components are sacrificial to low pH / Use on pH levels as low as 5.0	Sediment (downflow) pH Correction	WF Filter Upflow and Optimizr
Corosex® CX75 CX10	79 103	Semi-round / Off-White / Magnesium Oxide / Extremely reactive to pH dissolving rapidly adding alkalinity / NEVER use 100% Corosex® in a filter as it will "cement"	Sediment (downflow) pH Correction	WF Filter Upflow and Optimizr
Coconut Shell Carbon CN75 CN10	22 30	Black / High carbon-low ash content. Practical for ordinary taste, odor and chlorine loads. Will impart a high "polish" to the filtered water.	Taste/Odor/Chlorine	WF Filter Upflow and Optimizr
Activated Carbon AC75 AC10	21 28	Granular / Black / Wide application for removal of organics and some inorganics / Must be replaced on a regular basis / Life expectancy varies based on use	Sediment Taste/Odor/Color Chlorine/Iodine	WF Filter Upflow and Optimizr
Catalytic Carbon CC75 CC10	26 34	Granular/Black / enhanced activated carbon that has a higher catalytic power which produces an increased electron transfer for better absorption.	Sulfur Removal Chloramines	WF Filter Nitro and Sidekick City Softener
Filter Ag® FA75 FA10	21 28	Granular / Off-White / Wide application for removal of sediment / Life expectancy is unlimited	Sediment	WF Filter
Filter Ag Plus FP75 FP10	37 50	Light tan to white, 5 micron filtration	Sediment	WF Filter
Katalox Light KL75 KL10	49 66	Granular / Dark Gray / Max iron and Manganese level 10 ppm and H2S 1ppm / Estimated life 8 - 10 years Requires backwashing but not regeneration	Sediment (downflow) Iron (Clear & Red) Manganese (Clear & Red) Sulfur Removal pH Correction	WF Filter Nitro Sidekick Reactr Optimizr
Birm® BM75 BM10	37 49	Granular / Gray / Must not be used on waters with a pH < 6.8 / Must have dissolved oxygen present at a level of at least 15% of iron & manganese ppm / Max iron & manganese level 10 ppm / Estimated life about 8-10 years	Sediment Iron (clear & red) Manganese (clear & red)	WF Filter
GT10	42	Arsenic Media	Arsenic III and V	WFA Filter
"B" Gravel BG20 BG50	20 50	Semi-Round / Brown / #20 Flint / Used as underbed for all media in all filters providing for excellent flow distribution in both service and backwash modes / Permanent unless fouled but can be cleaned and re-used.	Underbed	All Non-Vortech Filter Tanks

Filter Media and Gravel are shipped in convenient reusable buckets.



## SIDEKICK™ Single Tank Aeration Filter

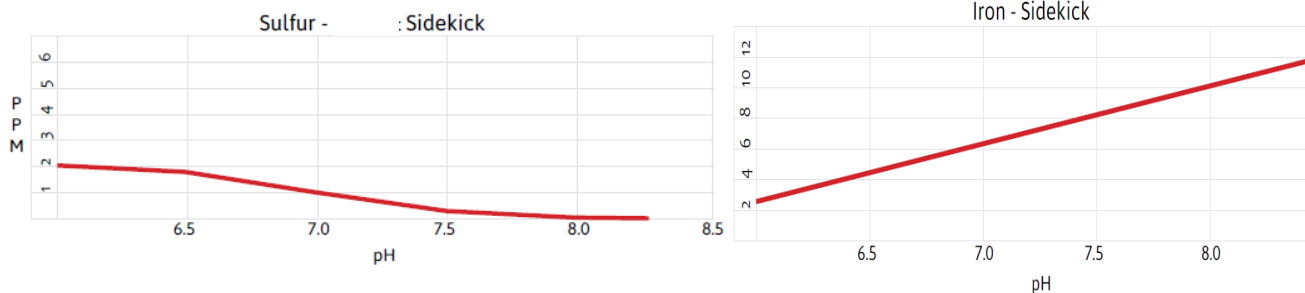
General Specifications	SK15	SK25
Smart Blend Media Capacity (cu ft)	1.5 cu. ft.	2.5 cu. ft.
Mineral Tank Size	10 x 54	13 x 54
Service Flow Rate - Continuous (gpm)	5	8
Service Flow Rate - Intermittent (gpm)	7	10
Backwash Flow Rate (gpm)	5.0	7.0
Gallons Used / Backwash	106	146
Space Required (D x W x H)	10 x 21 x 61	13 x 24 x 61
Approximate Shipping Weight	160	236

### System Features

- Air is injected into the top of the tank converting ferrous iron to ferric iron after untreated water has passed through the control valve preventing the control valve from fouling with iron
- **S4™** control valve shown, Signature 3™ control valve available with independently programmable air draw & backwash cycles saving THOUSANDS of gallons of water per year
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Includes meter to provide water usage history
- Vortech™ distributor plate - provides vigorous backwash with no gravel underbed needed
- Air draw cycle can be initiated without a backwash cycle saving 1000's of gallons of water annually
- The control valve slowly releases compressed air charge prior to backwash cycle eliminating the explosive blast that can dislodge the drain line
- Adjustable cycle times
- Proprietary two valve bypass with 1" MNPT Connections
- High Flow 1" distributor
- Smart Blend filter media
- Top cap fill opening for ease of service
- Compatible with any type of well pump system



Ozone Complete  
Option Available



## SIDEKICK™ 'S' Single Tank Aeration Filter

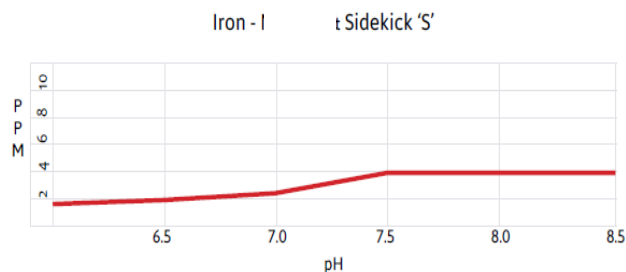
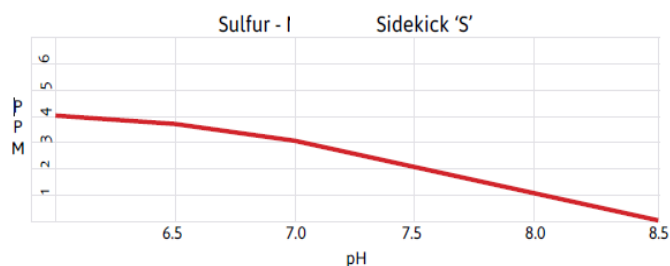
General Specifications	SK15S	SK25S
Catalytic Carbon Media Capacity (cu. ft.)	1.5 cu. ft.	2.5 cu. ft.
KDF Cubes	1.5 lbs	2.5 lbs
Mineral Tank Size	10 X 54	13 X 54
Service Flow Rate - Continuous (gpm)	5	8
Service Flow Rate - Intermittent (gpm)	7	10
Backwash Flow Rate (gpm)	5.0	7.0
Gallons Used / Backwash	106	146
Space Required (D x W x H) per tank	10 x 21 x 61	13 x 24 x 61
Approximate Shipping Weight	160	236

### System Features

**S4 Technology available by adding -S4 after part number**



- Air is injected into the top of the tank converting ferrous iron to ferric iron after untreated water has passed through the control valve preventing the control valve from fouling with iron
- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Includes meter to provide water usage history
- Vortech™ distributor plate - provides vigorous backwash with no gravel underbed needed
- Air draw cycle can be initiated without a backwash cycle saving 1000's of gallons of water annually
- The control valve slowly releases compressed air charge prior to backwash cycle eliminating the explosive blast that can dislodge the drain line
- Adjustable cycle times
- Proprietary two valve bypass with 1" MNPT Connections
- High Flow 1" distributor
- Catalytic Carbon & KDF cubes for Sulfur Reduction
- Top cap fill opening for ease of service
- Compatible with any type of well pump system



General Specifications	ZPR13
Treatment Rate	2.5 - 10 GPM (can be custom configured based on well capacity)
Flow Rates	Up to 20 GPM
Minimum Space Required (D x W x H)	28 x 72 x 80



### System Features

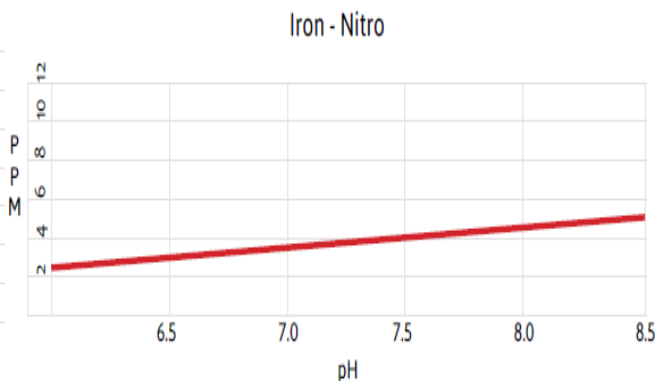
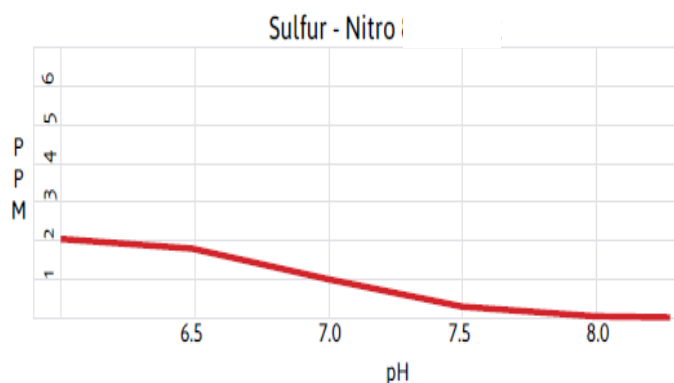
- 99% Radon Removal
- Stream-line modular design
- Proprietary Quadtrain air injector nozzle with flow rates of 2.5 - 10 gallons. (can also be custom configured based on well capacity)
- Turbulance ensures radon in water gets released
- Force of blower esnures radon gas is safely vented outside
- Transducer monitors water flow
- Controller will cycle pump off and on as needed to ensure clean water for your home
- Part Number ZPR13

General Specifications	NTF15-S3	NTF25-S3
Filter Media Type	SMART BLEND™	
Filter Media Capacity (cu. ft.)	1.5	2.5
Mineral Tank (Vortech™)	10 x 54	13 x 54
Service Flow Rate - Continuous (gpm)	5	8
Service Flow Rate - Intermittent (gpm)	7	10
Backwash Flow Rate (gpm)	5.0	7.0
Gallons Used / Backwash	106	146
Space Required (D x W x H)	10 x 10 x 62	13 x 13 x 62
Approximate Shipping Weight (lbs)	145	221



## System Features

- Signature 3™ control valve with independently programmable air draw & backwash cycles saving THOUSANDS of gallons of water per year
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Includes meter to provide water usage history
- Simplicity of a single tank aeration system that can be used with any type of well pump and system (standard submersible, constant pressure, jet pump)
- Precise external air injection directly into the media tank to help prevent control valve fouling & for ease of service
- The control valve slowly releases compressed air charge prior to backwash cycle eliminating the explosive blast that can dislodge the drain line
- Operates on low 12 vdc power
- Smart Blend™ media for efficient reduction of iron, manganese, sulfur & correction of low pH
- Vortech™ distributor plate for exceptional backwashing capability
- Proprietary two valve bypass with 1" MNPT Connections
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure



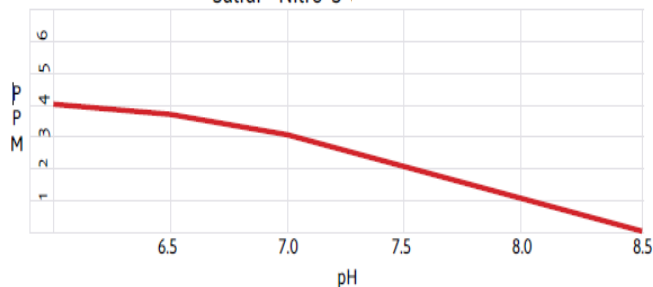
General Specifications	NTF15S-S3	NTF25S-S3
Filter Media Type	CATALYTIC CARBON	
Filter Media Capacity (cu ft)	1.5	2.5
KDF Cubes	1.5 lbs	2.5 lbs
Mineral Tank Size	10 X 54	13 X 54
Service Flow Rate - Continuous (gpm)	5	8
Service Flow Rate - Intermittent (gpm)	7	10
Backwash Flow Rate (gpm)	5.0	7.0
Gallons Used / Backwash	106	146
Space Required (D x W x H)	10 x 10 x 62	13 x 13 x 62
Approximate Shipping Weight (lbs)	145	221



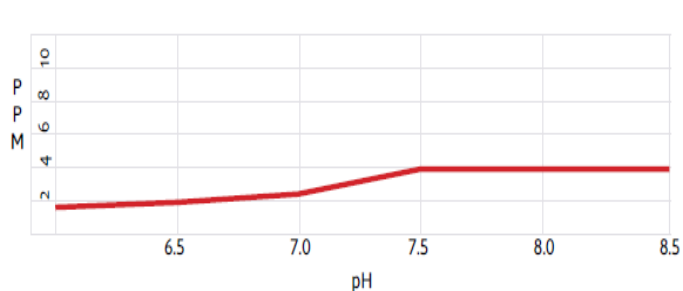
## System Features

- Signature 3™ control valve with independently programmable air draw & backwash cycles saving THOUSANDS of gallons of water per year
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Includes meter to provide water usage history
- Simplicity of a single tank aeration system that can be used with any type of well pump and system (standard submersible, constant pressure, jet pump)
- Precise external air injection directly into the media tank to help prevent control valve fouling & for ease of service
- The control valve slowly releases compressed air charge prior to backwash cycle eliminating the explosive blast that can dislodge the drain line
- Operates on low 12 vdc power
- Catalytic Carbon media and KDF 85 foam cubes for efficient reduction of sulfur and control of sulfur bacteria.
- Vortech™ distributor plate for exceptional backwashing capability
- Proprietary two valve bypass with 1" MNPT Connections
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure

Sulfur - Nitro 'S'



Iron - Nitro 'S'





General Specifications	RF15-S4	RF20-S4	RF25-S4	RF30-S4
Filter Media Type	SmartBlend™			
Filter Media Capacity (cu ft)	1.5	2.0	2.5	3.0
REACTR™ Tank Size	10 x 54	10 x 54	10 x 54	16 x 40
Mineral Tank Size	10 x 54	12 x 52	13 x 54	13 x 65
Service Flow Rate - Continuous (gpm)	5	6	8	9
Service Flow Rate - Intermittent (gpm)	7	8	10	11
Backwash Flow Rate (gpm)	5.0	6.0	7.0	7.0
Gallons Used / Backwash	100	120	140	140
Space Required for REACTR™ Tank	10 x 10 x 72	10 x 10 x 72	10 x 10 x 72	16 x 16 x 58
Space Required for Mineral Tank (WxD x H)	10 x 13 x 66	12 x 15 x 66	13 x 16 x 66	13 x 16 x 77
Approximate Shipping Weight (lbs)	165	236	270	311



### System Features

- **S4™** control valve shown, Signature 3™ control valve available
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- On demand meter providing data and history
- Adjustable Cycle Times
- High backwash flow capability
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- Vortech™ distributor plate

General Specifications	RF15VS-S4	RF20VS-S4	RF25VS-S4	RF30VS-S4
Filter Media Type	SmartBlend™			
Filter Media Capacity (cu ft)	1.5	2.0	2.5	3.0
REACTR™ Tank	10 x 54	10 x 54	10 x 54	16 x 40
Mineral Tank Size	10 x 54	12 x 52	13 x 54	13 x 65
Service Flow Rate - Continuous (gpm)	5	6	8	9
Service Flow Rate - Intermittent (gpm)	7	8	10	11
Backwash Flow Rate (gpm)	5.0	6.0	7.0	7.0
Gallons Used / Backwash	100	120	140	140
Space Required (D x W x H)	10 x 10 x 62	10 x 10 x 62	10 x 10 x 62	16 x 16 x 73
Approximate Shipping Weight (lbs)	175	246	280	321



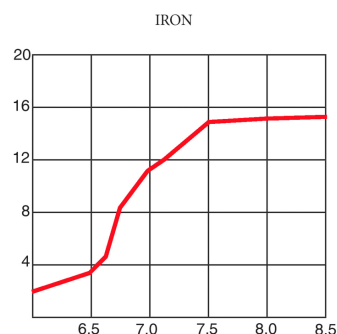
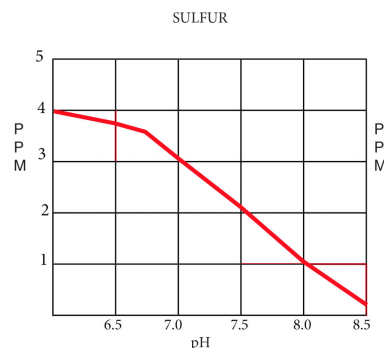
## System Features

- **S4™** control valve shown, Signature 3™ control valve available with meter for precise compressor control
- Legacy View Bluetooth enabled control valve for advanced diagnostics and simplified set up
- Simple 9 volt battery back-up keeps electronic meter active and will motor control valve to shut off position if in regeneration during power failure
- Designed for use with constant pressure (variable speed) and jet type pumping systems
- On demand meter for air compressor activation and data / history
- Quiet, high output, oil less air compressor for maximum aeration
- Adjustable Cycle Times
- High backwash flow capability
- Proprietary two valve bypass with 1" MNPT Connections
- Weather / Insect Resistant One-Piece Slide Cover
- Vortech™ distributor plate

## Manganese Removal

ReactR™ capability to remove Manganese from water is critically dependent on the Iron and pH levels as shown below:

If the Iron to Manganese ration is:	Then the pH must be at least:
10:1	7.0
5:1	7.8
1:1	8.3
0:1	8.5



## System Features

- Automatically cleans the entire REACTR™ system with every backwash
- Ideal for situations where media bed becomes fouled by high levels of ferric iron, iron or sulfur bacteria and tannins\*
- Installs in minutes
- Can be added to any existing REACTR™ system without changes to the plumbing or electrical wiring
- Effectively uses chlorine or hydrogen peroxide
- No pump adjustments required
- No pump check valves to maintain

## OXYCLEAN™ Option



REACTR™ OxyClean Option OXY-08R



REACTR™ VS OxyClean Option OXY-08VS

\* Not to be substituted for accepted disinfection techniques for moderate or high levels of these contaminants.

General Specifications	UV6	UV11	UV11D	UV15D
Lamp	UVLMP-6	UVLMP-11	UVLMP-11	UVLMP-15
Sleeve	UVQTZ-6	UVQTZ-11	UVQTZ-11	UVQTZ-15
Max GPM @ 30mj / cm <sup>2</sup>	6	11	11	15
Inlet / Outlet	3/4" MNPT	3/4" MNPT	3/4" MNPT	1" MNPT
Chamber	20.5" x 2.5"	35.2" x 2.5"	35.2" x 2.5"	40" x 2.5"
Solenoid	No	No	Optional	Optional
Lamp Out Indicator (audible & visual)	Yes	Yes	Yes	Yes
Lamp Life Countdown	Yes	Yes	Yes	Yes
Digital Display	No	No	Yes	Yes
UV Monitor	No	No	Optional	Optional
Shipping Weight	10 lbs	15 lbs	15 lbs	18 lbs

Many wells, ponds and other untreated water sources may contain unwanted or harmful organisms supply tested drinkable one day, may become contaminated from underground seepage, surface water or ground water fouling from a myriad of sources. Ultra Violet systems address these concerns without having to add chemicals like chlorine to water or changing its chemical composition.



### Water Quality Parameters

UV disinfection is extremely effective against microorganisms but only if the UV light can pass through the water it needs to treat. This means that the quality of your water is very important in order to ensure complete disinfection. Treated water should be tested for at least the parameters listed below. If the water exceeds the listed parameters appropriate pretreatment equipment must be installed (equipment required will depend on parameters being treated):

**Hardness**• <7 gpg (120 mg/L) – if hardness level is 7 gpg or slightly below the quartz sleeve must be cleaned periodically in order to ensure efficient UV penetration; if above the water should be softened.

**Iron (Fe)**• <0.3 ppm (0.3 mg/L)

**Manganese (Mn)**• <0.05 ppm (0.05 mg/L)

**Turbidity**• < 1 NTU

**Tannins (organics)**• <0.1 ppm (0.1 mg/L)

**UVT (transmittance)**• >85%

General Specifications	TFC3 NSF CERTIFIED	TFC4 NSF CERTIFIED	TFC300
Membrane Rating <sup>1</sup> Production TDS Reduction	41-53 Gallons / Day 96%	41-53 Gallons / Day 96%	41-53 Gallons / Day 96%
System Rating <sup>2</sup> Production TDS Reduction	12 Gallons / Day 95%	12 Gallons / Day 95%	12 Gallons / Day 95%
Input Water Requirements	TFC3	TFC4	TFC300
Water Pressure	40 - 100 psi	40 - 100 psi	40 - 100 psi
Total Dissolved Solids (TDS)	2000 max.	2000 max.	2000 max,
Temperature	40 - 110° F.	40 - 110° F.	40 - 110° F
pH	4 - 11	4 - 11	4 - 11
Maximum Hardness (gpg)	<10	<10	<10
Maximum Iron (ppm)	<.1	<.1	<.1
Maximum Manganese(ppm)	<.05	<.05	<.05
Bacteria	None	None	None
Maximum Hydrogen Sulfide	None	None	None
Tannins	None	None	None
Replacement Components	TFC3	TFC4	TFC300
Sediment / Carbon Prefilter	PRE-GAC	PRE-GAC	PRE-GAC
Membrane	MM-TFC	MM-TFC	MM-TFC
Carbon Postfilter	PST-GAC	PST-GAC	PST-GAC
Carbon Polishing Filter	N/A	M-POL-JG	N/A



## System Features

All in one simple system that fits under your sink!  
Treatment of water by reverse osmosis represents a modern breakthrough in water filters. Water is processed at the molecular level, providing you and your family a reliable supply of quality drinking water.

That's why major bottled water companies use this process to filter water prior to bottling.

CSI has combined this fantastic reverse osmosis process with quality components to create a compact drinking water appliance that fits neatly under your sink.

**Note 1:** Measured at 65 psi, 77°F, 250 ppm TDS, discharging to atmosphere. Actual system production and contaminant reduction will depend upon water temperature, pressure, pH, and T.D.S. level, membrane variation and usage pattern.

**Note 2:** Measured at 50 psi, 77°F ±2°, 750 ± 40 mg / LT.D.S





Description	TFC Series
Replacement Membrane	MM-TFC
Replacement Prefilter	PRE-GAC
Replacement Postfilter	PST-GAC
Replacement Polishing Filter ("D" Models Only)	M-POL-JG
Optional Booster Pump Recommended for TDS 800+ or low inlet psi	BP-3

Description	Part Number
100" Roll (clear) 1/2" ID Drain Line Tubing for Softeners and Filters	DL-100-C
Potassium Permanganate - Case of 6 / 2# Bottles	KF02N
Media Funnel	U-1006
Res-Care Softener Resin Cleaner-1 Gallon Case of 4	RK128N
Res-Care Kit 64 oz.	RK15
Res-Care 6-pack 64 oz. Kit	RK15K
Res-Care 4-pack 64 oz.	RK64N



Like millions of people in America, you may have water quality treatment equipment installed in your home. You count on those systems to provide all the benefits of softened water and clean drinking water.

But if your water treatment equipment is not properly sanitized, bacteria can grow and multiply wherever the water sits, including on the inside surfaces of tanks and hoses. When water sits, chlorine levels drop, reducing its chemical ability to prevent bacterial growth. Filters can also filter out chlorine, making the water more susceptible to bacterial growth.

That's why Water Quality Professionals rely on Sani-System Liquid Sanitizer Concentrate. Specially designed to maintain the quality and performance of water softeners, Sani-System sets the standard for sanitizing.

Comes Standard with every CSI Softener	
Single Pack	SS1WS
24 Pack	SS24WS

- Sanitizes in just 60 seconds
- EPA and NSF Certified for use in water softeners

Item Number	Description
NJ-9	Shark Skin Jacket for 9 x 48 Tank
NJ-10	Shark Skin Jacket for 10 x 54 Tank
NJ-12	Shark Skin Jacket for 12 x 52 Tank
NJ-13	Shark Skin Jacket for 13 x 54 Tank



### Shark Skin Jacket Features

- Easy to apply with a quick zip
- No need to remove valve or plumbing
- Insulates tank
- No more condensation
- No more puddles on floor
- Can be applied to most media tank sizes
- Order separately from equipment – Black Color Only

Item Number	Description
SS1MTR-KIT	Signature 1 Main Board & Motor Kit
SS3MTR-KIT	Signature 2 Main Board & Motor Kit



## Field Test Kits



**2401 Test Kit**  
Tests for Hardness, pH and Iron



**K9510 Test Kit**  
Tests for H<sub>2</sub>S only



**Spin Touch**  
City - ST-DW60-C  
Well - ST-DW60-W



**Arsenic Test Kits**  
5 Tests - #481297-5  
50 Tests - #481297-I



**Test Strips**

### Strips Available to Test the Following:

- pH - Part Number 1974
- Nitrate / Nitrite - Part Number 2996
- Hydrogen Peroxide - Part Number 10254
- Manganese - Part Number 481020
- Total Hardness - Part Number U1021
- Total & Free Chlorine - Part Number U1025

### Complete Water Well Testing Kit

#### Watercheck with Pesticide Option - WC-9002



- Tests for coliform and e-coli bacteria
- Test for 22 heavy metals and minerals (including arsenic)
- Tests for 7 inorganic chemicals, 5 physical factors, 4 trihalomethanes and 47 volation organic chemicals (VOC)
- Tests for 20 additional herbicides and pesticides
- Full scope of what this test covers available on next page

## Watercheck with Pesticide Option

### Analytes and Minimum Detectable Levels

Parameter	MDL (mg/l)	Parameter	MDL (mg/l)	Parameter	MDL (mg/l)
<b>Bacteria</b>		<b>Organic Chemicals - Trihalomethanes</b>			
Total Coliform and E.Coli	(Presence/Absence)	Bromodichloromethane	0.002	Dichlorodifluoromethane	0.002
<b>Inorganic Chemicals - Metals</b>		Bromoform	0.004	Dichloromethane	0.002
Aluminum	0.1	Chloroform	0.002	Ethylbenzene	0.001
Arsenic	0.005	Dibromochloromethane	0.004	Ethylenedibromide (EDB)	0.001
Barium	0.30	Total THMs	0.002	Methyl Ethyl Ketone	0.010
Cadmium	0.002	<b>Organic Chemicals - Volatiles</b>		Methyl tert-butyl ether	0.004
Calcium	2.0	1,1-Dichloroethene	0.001	Styrene	0.001
Chromium	0.010	1,1-Dichloroethane	0.002	Tetrachloroethene (PCE)	0.002
Copper	0.004	1,1-Dichloropropene	0.002	Tetrahydrofuran	0.010
Iron	0.020	1,2-Dichlorobenzene	0.001	Toluene	0.001
Lead	0.002	1,2-Dichloroethane	0.001	Trans-1,2-Dichloroethene	0.002
Lithium	0.001	1,2-Dichloropropane	0.002	Trans-1,3-Dichloropropene	0.002
Magnesium	0.10	1,3-Dichlorobenzene	0.001	Trichloroethene (TCE)	0.001
Manganese	0.004	1,3-Dichloropropane	0.002	Trichlorofluoromethane	0.002
Mercury	0.001	1,4-Dichlorobenzene	0.001	Vinyl Chloride	0.001
Nickel	0.02	1,1,1-Trichloroethane	0.001	Xylene	0.001
Potassium	1.0	1,1,2-Trichloroethane	0.002	<b>Pesticides, Herbicides and PCBs (Add-on Option)</b>	
Selenium	0.020	1,2,3-Trichlorobenzene	0.002	2,4-D	0.010
Silica	0.1	1,2,3-Trichloropropane	0.002	Alachlor	0.001
Silver	0.002	1,2,4-Trichlorobenzene	0.002	Aldrin	0.002
Sodium	0.1	1,1,1,2-Tetrachloroethane	0.002	Atrazine	0.002
Strontium	0.001	1,1,2,2-Tetrachloroethane	0.002	Chlordane	0.001
Uranium	0.001	2-Chlorotoluene	0.001	Dichloran	0.002
Zinc	0.004	2,2-Dichloropropane	0.002	Dieldrin	0.001
<b>Inorganic Chemicals and Physical Factors</b>		4-Chlorotoluene	0.001	Endrin	0.0001
Alkalinity (Total as CaCO <sub>3</sub> )	20	Acetone	0.010	Heptachlor	0.0004
Bromide	0.5	Benzene	0.001	Heptachlor Epoxide	0.0001
Chloride	5.0	Bromobenzene	0.002	Hexachlorobenzene	0.0005
Fluoride	0.5	Bromomethane	0.002	Hexachlorocyclopentadiene	0.001
Hardness	10	Carbon Tetrachloride	0.001	Lindane	0.0002
Nitrate as N	0.5	Chlorobenzene	0.001	Methoxychlor	0.002
Nitrite as N	0.5	Chloroethane	0.002	PCBs	0.0005
Orthophosphate	2.0	Chloromethane	0.002	Pentachloronitrobenzene	0.002
pH (Standard Units)	-	Cis-1,2-Dichloroethene	0.002	Silvex (2,4,5-TP)	0.005
Sulfate	5.0	Cis-1,3-Dichloropropene	0.002	Simazine	0.002
Total Dissolved Solids	20	Dibromochloropropane (DBCP)	0.001	Toxaphene	0.001
Turbidity (Turbidity Units)	0.1	Dibromomethane	0.002	Trifluralin	0.002

Note: The Watercheck and Watercheck with Pesticides test packages are intended to be used as informational screening packages and may not be used for regulatory compliance.



## WATER TREATMENT EQUIPMENT

This warranty cannot be transferred - it is extended only to the original purchaser or first user of the product. By accepting and keeping this product, you agree to all of the warranty terms and limitations of liability described below.

**Important Warning:** Read carefully the CSI Water Treatment Systems Equipment Installation, Operating and Maintenance Instructions Manual to avoid serious personal injury and property HAZARDS and to ensure safe and proper care of this product.

Model Numbers Covered:  
Water Softeners, Media Filters and Upflow Filters

\*FOR AS LONG AS YOU OWN AND LIVE IN YOUR SINGLE FAMILY HOME, this warranty covers your water treatment equipment, if you are the first user of this CSI Water Treatment Systems equipment and purchased it for single family home use - subject to all of the conditions, limitations and exclusions listed below. Purchasers who buy the CSI Water Treatment Systems equipment for other purposes, and other component parts are subject to more limited warranties and you should read all of the terms included in this form to make sure you understand your warranty.

What is covered by this warranty?

CSI Water Treatment Systems warrants that at the time of manufacture, the water treatment equipment shall be free from defects in material and workmanship as follows:

Product	Warranty
Residential Mineral Tank	10 Years
Proprietary Control Valves	7 Years
Other Softener / Filter Control Valves	5 Years
Twin Softeners	5 Years
Brine Tank	5 Years
Residential Reverse Osmosis System	5 Years
Other Accessories and Parts	1 Year
Brine Tank Components	1 Year

\* This warranty does not include media and/or cartridge filter elements.

### Additional Terms & Conditions

What CSI Water Treatment Systems will do if you have a covered warranty claim CSI will at its option either make repairs to correct any defect in material or workmanship or supply and ship either new or used replacement parts or products. CSI will not accept any claims for labor or other costs.

### Additional Exclusions and Limitations

This warranty is non-transferable and does not cover any failure or problem unless it was caused solely by a defect in material or workmanship. In addition, this warranty shall not apply:

- If the water treatment equipment is not correctly installed, operated, repaired and maintained as described in the Installation, Operating & Maintenance Instructions Manual provided with the product.
- Defects caused as a direct result of the incoming water quality

- If the tank is not the size indicated for the supply line size of the installation, as described in the manual.
- To any failure or malfunction resulting from abuse (including freezing), improper or negligent; handling, shipping (by anyone other than CSI)
- If the unit has not always been operated within the factory calibrated temperature limits, and at a water pressure not exceeding 125 psi other than CSI), storage, use, operation, accident; or alteration, lightning, flooding or other environmental conditions.
- To any failure or malfunction resulting from failure to keep the unit full of potable water, free to circulate at all times; and with the tank free of damaging water sediment or scale deposits.
- This warranty does not cover labor costs, shipping charges, service charges, delivery expenses, property damage, administrative fees or any costs incurred by the purchaser in removing or reinstalling the water treatment equipment.
- The warranty does not cover any claims submitted to CSI more than 30 days after expiration of the applicable warranty, and does not apply unless prompt notice of any claim is given to an authorized CSI Dealer or to CSI or a designated contractor is provided access to the installation and to the water treatment equipment.

THESE WARRANTIES ARE GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. NO CSI REPRESENTATIVE OR ANY OTHER PARTY IS AUTHORIZED TO MAKE ANY WARRANTY OTHER THAN THOSE EXPRESSLY CONTAINED IN THIS WARRANTY AGREEMENT.

### Additional Warranty Limitations

ANY IMPLIED WARRANTIES THE PURCHASER MAY HAVE, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE APPLICABLE TIME PERIODS SPECIFIED ABOVE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

### Limitations of Remedies

The remedies contained in this warranty are the purchaser's exclusive remedies. In no circumstances will CSI or the seller of the product be liable for more than, and purchaser-user's remedies shall not exceed, the price paid for the product. In no case shall CSI or seller be liable for any special, incidental, contingent or consequential damages. Special, incidental, contingent and consequential damages for which CSI is not liable include, but are not limited to, inconvenience, loss or damage to property, consequential mold damage, loss of profits, loss of savings or revenue, loss of use of the products or any associated equipment, facilities, buildings or services, downtime, and the claims of third parties including customers. Some states do not allow the exclusion or the limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.

### What to do if you have a problem covered by this warranty

Any warranty coverage must be authorized by CSI. Contact the person from whom you purchased the product, who must receive authorization from a CSI Dealer.

If your product is new and not used and you wish to return it, contact your CSI Dealer.

#### **IMPORTANT NOTICE**

Chandler Systems, Inc. reserves the right to make changes, corrections, enhancements, modifications, and improvements to products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on Chandler Systems, Inc. products before placing orders. Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

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