

STARK™ 5S SERIES FILTERS

HORIZONTAL SAND FILTRATION SYSTEMS



5S4-50-12
60" Dia. System

Featured Highlights

- All vessel models are NSF listed
- Manway cover has integral viewport for internal filter observation
- Solid composite construction - does not employ a bladder
- Schedule 80 Face Piping is fully assembled
- Vessels feature proprietary PARACOTE® All-Weather Exterior Coasting with UV Inhibitors
- Vessels greater than 40 SF utilize an innovative 8" air-actuated backwash valve
- Several backwash control options available
- Butterfly-valve options including linked tandem valves are also available.

The 5S Series Filter Systems are designed as an extension to the industry-leading SS Series Filtration Systems, with many of the same features including fully-assembled Schedule 80 Face Piping, with the addition of new innovations. The 5S Series Filter Systems include the only 8" backwash valve in the industry, and air valve actuation for the smoothest, quickest valve movement.

Ordering Information

CAPACITY INFORMATION												
# Tanks	*System	Internal Tank	Filtration Area	Flow (GPM)	Flow (GPM)	Backwash Valve				Total Media	Operating Weight	Shipping Weight
	Number	Size	(Sq. Ft.)	12 gpm/sf	15 gpm/sf	Size/Type	'W'	'L'	'Hs'	(cu ft)	(lbs.)	(lbs.)
1	5S1-30-06	60" X 78"	30.0	360	450	6" Clear	62"	83"	106"	63.5	15,000	2,000
	5S1-35-06	60" X 90"	35.0	420	525	6" Clear	62"	95"	106"	74.3	17,000	2,300
	5S1-40-06	60" X 102"	40.0	480	600	6" Clear	62"	107"	106"	85.4	20,000	2,600
	5S1-45-08	60" X 114"	45.0	540	675	8" Gray	62"	119"	123"	96.4	23,000	2,900
	5S1-50-08	60" X 126"	50.0	600	750	8" Gray	62"	131"	123"	107.4	25,000	3,200
2	5S2-30-08	60" X 78"	60.0	720	900	6" Clear	128"	83"	111"	127.0	30,000	4,100
	5S2-35-08	60" X 90"	70.0	840	1,050	6" Clear	128"	95"	111"	148.6	35,000	4,600
	5S2-40-08	60" X 102"	80.0	960	1,200	6" Clear	128"	107"	111"	170.8	40,000	5,200
	5S2-45-08	60" X 114"	90.0	1,080	1,350	8" Gray	128"	119"	127"	192.8	45,000	5,700
	5S2-50-10	60" X 126"	100.0	1,200	1,500	8" Gray	128"	131"	133"	214.8	49,000	6,300
3	5S3-30-08	60" X 78"	90.0	1,080	1,350	6" Clear	194"	83"	111"	190.5	45,000	6,100
	5S3-35-10	60" X 90"	105.0	1,260	1,575	6" Clear	194"	95"	117"	222.9	53,000	6,900
	5S3-40-10	60" X 102"	120.0	1,200	1,800	6" Clear	194"	107"	117"	256.2	60,000	7,800
	5S3-45-10	60" X 114"	135.0	1,620	2,025	8" Gray	194"	119"	133"	289.2	68,000	8,600
	5S3-50-12	60" X 126"	150.0	1,800	2,250	8" Gray	194"	131"	135"	322.2	75,000	9,500
4	5S4-30-10	60" X 78"	120.0	1,440	1,800	6" Clear	260"	83"	117"	254.0	61,000	8,100
	5S4-35-10	60" X 90"	140.0	1,680	2,100	6" Clear	260"	95"	117"	297.2	70,000	9,200
	5S4-40-12	60" X 102"	160.0	1,920	2,400	6" Clear	260"	107"	119"	341.6	80,000	10,400
	5S4-45-12	60" X 114"	180.0	2,160	2,700	8" Gray	260"	119"	135"	385.6	92,000	11,500
	5S4-50-12	60" X 126"	200.0	2,400	3,000	8" Gray	260"	131"	135"	429.6	100,000	12,600

STARK™ 5S SERIES FILTERS (CONT'D)

HORIZONTAL SAND FILTRATION SYSTEMS



Dimensions and Performance



5S Series Systems Include:

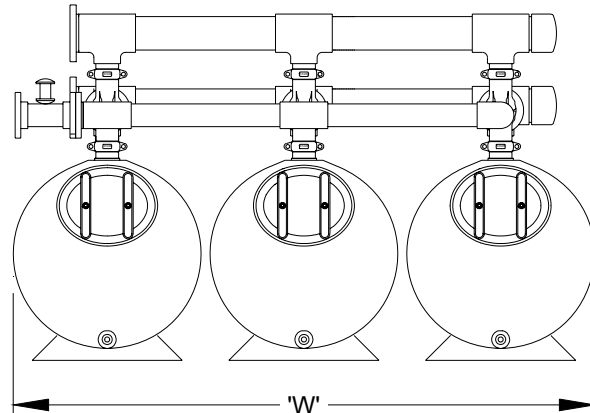
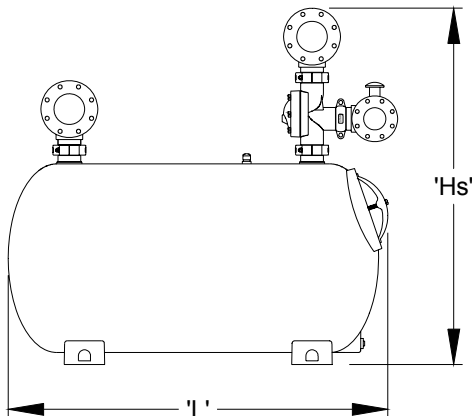
- Manway viewport standard on all Stark tanks
- Stark backwash valves (1 per tank)
- Pre-glued piping utilizing grooved couplings
- Stark diaphragm-style priority valve (on dual-tank systems)

With Fully Automatic (CA100) Control Option

- Effluent Flow Sensor/Saddle
- Temperature Probe

Additional Adders

- Pressure Booster System (PBS01)
- Manual or Motorized Butterfly backwash
- Throttling valve for 3+ tank systems
- Advanced backwash controls



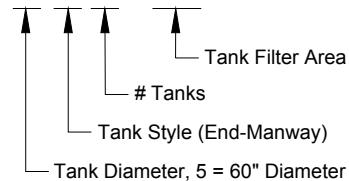
5S Series System Numbering

60" Dia. Vessels

Influent / Effluent Connection Size

Backwash Control: A = Auto (CA100),
M = Manual (CM200), S = Semi (CS400)

5S3-50A-10



Notes:

1. Standard header sizing shown is based on 10 fps max. at 15 gpm per sq. ft.
2. For more dimensional detail, consult the appropriate Cut Sheet in our Design Manual.
3. For special requirements including non-standard header sizes / locations and systems consisting of more vessels than shown, please contact our Applications Engineering at PoolApplicationRFQ@pentair.com.

STARK™ FILTERS

BACKWASH OPTIONS AND ADDITIONAL FEATURES



Multiport Gauge Panel

CM200 Manual Backwash Controller (Backwash Option "M")

This is the simplest option. No electronics or programming required; simply turn the knob to backwash each tank in the system.



CS 400 Semi-Auto Backwash Controller (Backwash Option "S")

This controller is programmable and controls every aspect of the backwash cycle once initiated. Backwash can be initiated three ways: by an operator with the touch of a button, by a signal from a master controller (such as the AK600), or by a signal from an optional differential pressure switch (CS400-DP). Stored backwash data and history, alarms, and calculated backwash cycle times are also features of the CS400 controller, as are relays for communication with the heater, pump and Acu Drive.

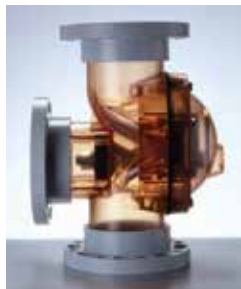


CA 100 Automatic Backwash Controller (Backwash Option "A")

This is the most comprehensive backwash controller and can be readily reprogrammed to initiate backwash automatically based on differential pressure (integral pressure transducers are standard), time (internal seven-day clock with battery back-up is standard), flow (with optional flow sensor), or any combination of the above. The controller has real-time display of operation mode, filter flow rate, and water temperature (with optional temperature probe). Also, includes Energy Saver Mode for simple On/Off pump scheduling and various interlocks and relays to communicate with other equipment (pump, heater, Acu Drive).

Stark Diaphragm Backwash Valves

Cost-effective backwash control both manual and automatic. 6" version (on most models) includes a transparent valve housing and cover to display position and convenient maintenance inspections.



Manway Viewport

Standard on all Stark Filters.



2" Threaded Laterals

Superior Commercial Lateral:

2" NPT injection molded ABS with "V" groove slots and reinforcing ribs for best performance and service life. Also used on THS Series Filters.

Optional Pressure Booster System (PBS01)

Provides consistent valve-actuation where city water pressure is unreliable.



Butterfly Valve Systems

Single Lever Linkage (Backwash Option "SL": Single-Tank Systems Only - tank is backwashed by the throw of a single lever); and Tandem Butterfly Valve Configurations (Backwash Option TM; Multiple Tank Systems - each Stark backwash valve is replaced by a linked pair of butterfly valves.

