

STARK™ S SERIES FILTERS

HORIZONTAL SAND FILTRATION SYSTEMS



SB2-144M-08ST



SA2-144M-08

Featured Highlights

- All vessel models are NSF listed
- Solid composite construction - does not employ a bladder
- Vessels can be stacked to minimize footprint. Designed for Seismic Zone 4 loading with additional supports or braces
- Vessels feature proprietary PARACOTE® All-Weather Exterior Coasting with UV Inhibitors
- Several backwash control options available
- Multiple influent and effluent pipe locations available - A, B and C style

S Series Systems include: Manway with Viewport standard on all Stark Tanks; Stark backwash valves (1 per tanks); Stark diaphragm-style priority valve (on dual-tank systems).

Additional Adders: Pressure Booster System (PBS01); Manual or Motorized Butterfly Backwash; Throttling Valve for 3+ tank systems; Advanced backwash controls.

For use in commercial pool, water park, and many aquarium applications. Standard systems accommodate flows from 135 to 2,500 GPM - custom systems accommodate unlimited flows.

All Stark S Series vessels are corrosion-proof, composite vessels. Systems are available with 100 psi rated filament-wound vessels. All vessels are 42" diameter to offer the best combination of cost and effectiveness for recreational water. Stark Diaphragm Valves and Controls are Standard; butterfly-valve options (including linked valves) are also available.

Ordering Information

CAPACITY INFORMATION (INDEPENDENT OF STYLE / CONFIGURATION)										DIMENSIONS - SIDE-BY-SIDE			
# Tanks	General System Number	Tank Size	Filtration Area (Sq. Ft.)	Flow (GPM) 12 gpm/sf	Flow (GPM) 15 gpm/sf	Backwash Valve Size/Type	Total Media (cu ft)	Operating Weight (lbs.)	Shipping Weight (lbs.)	Descriptive System Number	Single-Tank and Side-by-Side Systems		
											'W'	'L'	'Hs'
1	S1-48	42" x 48"	12.8	154	192	4" Gray	16.5	5,280	870	*SC1-48-04	44"	82"	47"
	S1-72	42" x 72"	20.0	240	300	6" Clear	26.0	7,920	1,110	*SA1-72-06	44"	107"	67"
	S1-96	42" x 96"	27.0	324	405	6" Clear	36.0	10,560	1,350	*SA1-96-06	44"	122"	67"
	S1-120	42" x 120"	35.0	420	525	6" Clear	45.5	13,200	1,590	SA1-120-06	44"	146"	67"
	S1-144	42" x 144"	41.0	492	615	6" Clear	55.5	15,840	1,830	SA1-144-06	44"	170"	67"
2	S2-48	42" x 48"	25.6	307	384	4" Gray	33.0	10,560	1,740	*SC2-48-06	96"	80"	56"
	S2-72	42" x 72"	40.0	480	600	6" Clear	52.0	15,840	2,220	*SA2-72-06	99"	92"	86"
	S2-96	42" x 96"	54.0	648	810	6" Clear	72.0	21,120	2,700	*SA2-96-06	99"	116"	86"
	S2-120	42" x 120"	70.0	840	1050	6" Clear	91.0	26,400	3,180	SA2-120-08	110"	144"	91"
	S2-144	42" x 144"	82.0	984	1230	6" Clear	111.0	31,680	3,660	SA2-144-08	110"	168"	91"
3	S3-48	42" x 48"	38.4	461	576	4" Gray	49.5	15,840	2,610	*SC3-48-06	152"	80"	56"
	S3-72	42" x 72"	60.0	720	900	6" Clear	78.0	23,760	3,330	*SA3-72-08	152"	94"	91"
	S3-96	42" x 96"	81.0	984	1215	6" Clear	108.0	31,680	4,050	*SA3-96-08	152"	117"	91"
	S3-120	42" x 120"	105.0	1260	1575	6" Clear	136.5	39,600	4,770	SA3-120-10	152"	138"	96"
	S3-144	42" x 144"	123.0	1476	1845	6" Clear	166.5	47,520	5,490	SA3-144-10	152"	162"	96"
4	S4-48	42" x 48"	51.2	614	768	4" Gray	66.0	21,120	3,480	*SC4-48-06	200"	80"	56"
	S4-72	42" x 72"	80.0	960	1200	6" Clear	104.0	31,680	4,440	*SA4-72-08	200"	94"	91"
	S4-96	42" x 96"	108.0	1296	1620	6" Clear	144.0	42,240	5,400	*SA4-96-10	200"	118"	96"
	S4-120	42" x 120"	140.0	1680	2100	6" Clear	182.0	52,800	6,360	SA4-120-10	200"	142"	96"
	S4-144	42" x 144"	164.0	1968	2460	6" Clear	222.0	63,360	7,320	SA4-144-12	200"	168"	100"

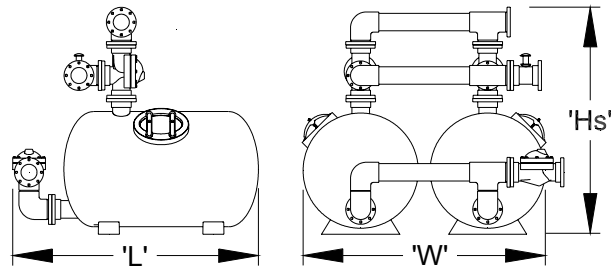
STARK™ S SERIES FILTERS (CONT'D)

HORIZONTAL SAND FILTRATION SYSTEMS

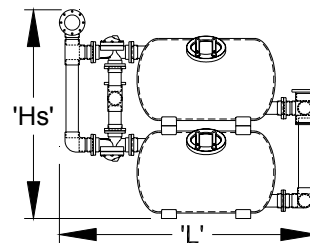
Dimensions and Performance



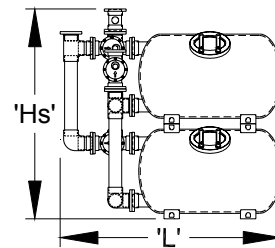
DIMENSIONS - STACKED SYSTEMS							
Style	# Tanks	Descriptive System Number	Filtration Area (Sq. Ft.)	'W'	'L'	'Hs'	
Stacked Systems - B-Style	2	SB2-48-06ST	25.6	44"	98"	107"	
		SB2-72-06ST	40.0	44"	135"	109"	
		SB2-96-06ST	54.0	44"	159"	109"	
		SB2-120-08ST	70.0	44"	191"	109"	
		SB2-144-08ST	82.0	44"	215"	109"	
Stacked Systems - B-Style	4	SB4-48-06ST	51.2	92"	99"	108"	
		SB4-72-08ST	80.0	92"	140"	111"	
		SB4-96-10ST	108.0	100"	166"	119"	
		SB4-120-10ST	140.0	100"	190"	119"	
		SB4-144-12ST	164.0	104"	217"	122"	
Stacked Systems - C-Style	2	SC2-48-06ST	25.6	50"	80"	107"	
		SC2-72-06ST	40.0	50"	114"	109"	
		SC2-96-06ST	54.0	50"	138"	109"	
		SC2-120-08ST	70.0	53"	165"	109"	
		SC2-144-08ST	82.0	53"	189"	109"	
	Stacked Systems - C-Style	4	SC4-48-06ST	51.2	92"	88"	108"
			SC4-72-08ST	80.0	92"	122"	111"
			SC4-96-10ST	108.0	100"	146"	119"
			SC4-120-10ST	140.0	100"	169"	119"
			SC4-144-12ST	164.0	104"	193"	122"



A-Style Side-by-Side

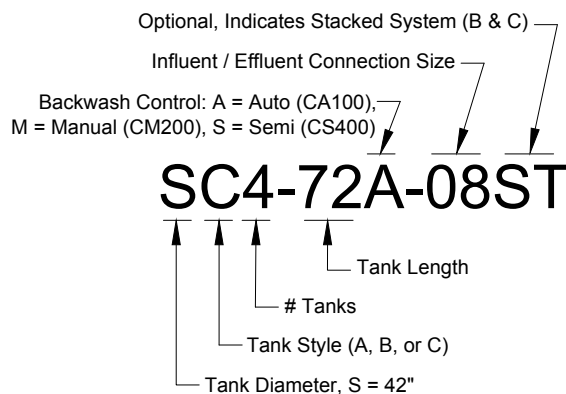


B-Style Stacked



C-Style Stacked

S Series System Numbering



Notes:

- Standard header sizing shown is based on 10 fps max. at 15 gpm per sq. ft.
- For more dimensional detail, consult the appropriate Cut Sheet in our Design Manual.
- S-48 Vessels are not available in A Style. Dimensions above represent C Style.
- 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.

