

# Centrifugal-Action Sand Separators for Residential Water Well Systems

# SMP

Stainless Steel Construction

Get the sand out. Protect your system from unwanted sand, grit, silt and scale particles. Whatever settles in 3-4 minutes or less is easily removed with a LAKOS Sand Separator.

- Protects faucet screens, washing machine strainers and ice-makers from clogging
- Extends the operating cycles and life of water softeners, charcoal filters, RO systems and super-fine cartridge filters
- Eliminates troublesome build-up in hot water heaters, toilet tanks & tankless water heaters
- Keeps sprinklers operating at best efficiency without clogging or restricted spray patterns
- Improves shower sprays and sand-free baths

### No screens or filter elements to clean or replace

Centrifugal action removes settleable sand without filter mess or restricted flow.

### Low system pressure loss

LAKOS Sand Separator installs between your pump and pressure tank (see reverse). In line with the system's flow rate, LAKOS Separators maintain a pressure drop of no more than 5-12 psi (0.3 - 0.8 bar).

### Performance tested/proven

Independent testing confirms the 98% removal of 200 mesh (74 micron) and larger particle matter. No match to knock-off brands.

### LAKOS SandMaster

LAKOS SMP Separator (304L stainless steel) is recommended for sulfides, chlorides, or any signs of rust or corrosion. Grounding the separator to an electrical ground or well casting is recommended for best practice, especially if the inlet/ outlet piping is plastic (see installation instructions for details).



**Flow Range:** 5-70 US gpm  
(19-265 liters/min)

**Minimum Inlet Pressure Required:**  
20 psi (1.4 bar)

**Maximum Pressure:** 100 psi (6.9 bar)  
**Maximum Temperature:** 120°F (49°C)

Models also available for protecting submersible pumps from sand wear. Ask LAKOS about SUB-K Series.

## ACCESSORIES



SMP-05 Sandmaster  
SMP-10 Sandmaster  
SMP-20 Sandmaster  
SMP-30 Sandmaster  
SMP-45 Sandmaster

"Certified <0.25 weighted average percent lead" and  
"Complies with California Health and Safety Code  
Section 116875 (commonly known as AB19530)."



AutoPurge with motorized ball valve

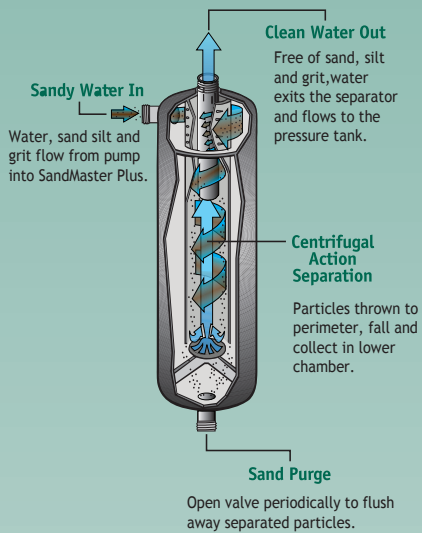


Manual & Visual Purge Options



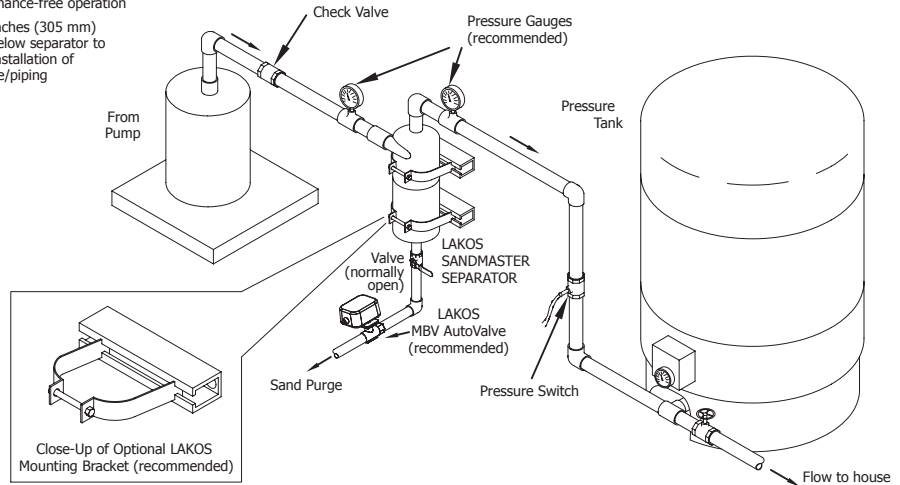
Mounting Brackets for easy, professional installation

## How It Works



LAKOS AutoPurge Valve for maintenance-free operation

Allow 12-inches (305 mm) of space below separator to allow for installation of purge valve/piping



IMPORTANT: Install SandMaster between the check valve and pressure tank.

## How to determine actual flow

Model selection depends on actual flow rate of the pump. **DO NOT USE PIPE SIZE FOR MODEL SELECTION.** To determine your flow rate:

1. Drain water from your system until pump starts. With no other water in use, wait for pump to completely re-fill the system and shut-off.
2. Open a valve downstream of the pressure tank and use a 5-gallon bucket to measure the volume of water drained until pump turns on again.
3. Count the time it takes for pump to again completely re-fill the system.
4. Divide your actual gallons of water by the time it takes to re-fill the system:  $\text{gpm} = \frac{\text{gallons}}{\text{minutes}}$
5. Example: 13 gallons drained from system; takes 1-3/4 minutes to re-fill system:  $14 \div 1.75 = 8 \text{ gpm}$

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## Specifications

Model	Flow Range		Inlet/Outlet Size* Male, N.P.T.	Dry Weight		Weight With Water	
	U.S. gpm	liters/min		lbs.	kg	lbs.	kg
SMP-05	5-10	19-38	1/2"	7	4.0	16	7.3
SMP-10	10-20	38-76	3/4"	8	4.0	16	7.3
SMP-20	20-32	76-120	1"	13	6.0	33	15.0
SMP-30	30-48	114-182	1-1/4"	13	6.0	33	15.0
SMP-45	45-70	170-265	1-1/2"	13	6.0	33	15.0

\*Caution: Do not size unit by pipe size.

Note: Purge pipe size for all models is 3/4".

Material Spec: SMP Series - 304L stainless steel outer body, plastic internal parts

Maximum System Pressure: 100 psi (6.9 bar)

Maximum Temperature: 120° F (49° C)

Material Construction: Carbon steel outer body; plastic internal

Models SMP-05 & SMP-10

- Height: 19-3/8 inches (492 mm)

- Diameter: 4-1/2 inches (114 mm)

Models: SMP-20, SMP-30 & SMP-45

- Height: 24-3/4 inches (629 mm)

- Diameter: 6 inches (152 mm)

Note: Recommended 12 inches (305 mm) of space below separator's purge outlet for installation and use of manual and/or automatic purge valve below unit. See illustration above.