

SX Series

HIGH-CAPACITY STAINLESS STEEL SLIDING VANE PUMP
PRODUCT BROCHURE



Blackmer

Where Innovation Flows



Blackmer® Stainless Steel SX Series Sliding Vane Pumps are specifically engineered for corrosive, low- and medium-viscosity process applications at high capacities up to 250 gpm (946 L/min).

FIELD-PROVEN RELIABILITY AND PERFORMANCE

Blackmer® SX Series High Capacity Stainless Steel Sliding Vane Pump

These pumps are ideal for handling shear-sensitive liquids at high speeds with no product degradation. SX Series Sliding Vane Pumps are constructed of 316 stainless steel, and provide reliable, continuous duty operation with no preventative maintenance.

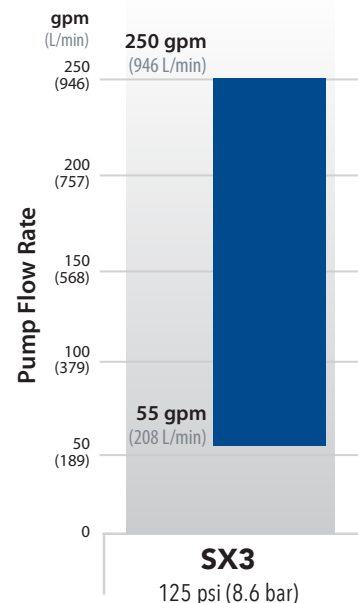
Offering unbeatable durability, reliability and the lowest overall cost of ownership, the Blackmer SX3 Series stainless-steel process vane pump is the ideal pump for high-capacity process applications between 55 and 250 gpm (208 and 946 L/min). Designed for a wide range of chemical applications and compatibility, SX3 Series Pumps feature non-metallic Duravanes, adjustable bypass relief valve and external ball bearings protected by chemical mechanical seals with PTFE elastomers. The pump's performance offers low shear, non-pulsing flow and pressure capabilities to 125 psi (8.6 bar) with superior vacuum capabilities for self-priming, loading/unloading and line-stripping applications.

- Adjustable bypass relief valve designed to protect the pump from excessive pressure
- Non-metallic Duravanes reduce friction and eliminate galling of stainless steel components while providing exceptional sealing and performance
- External ball bearings reduce pump wear due to balanced shaft load, and decrease required maintenance due to greased bearing housing being external from working fluid
- Constructed from 316 stainless steel to protect against corrosive and caustic fluids

Applications

- Transfer of corrosive & non-corrosive liquids:
 - Chemicals
 - Solvents
 - Sulfates
 - Vegetable Oils
 - Urea
 - Acids

Nominal Flow Rate Range

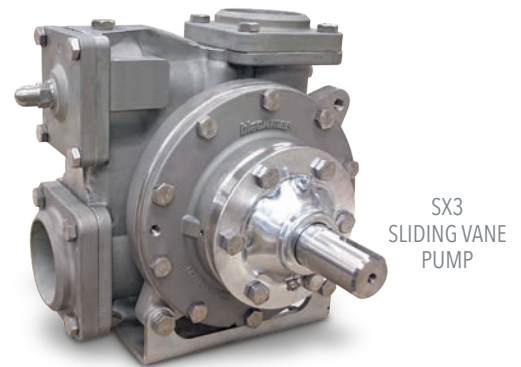
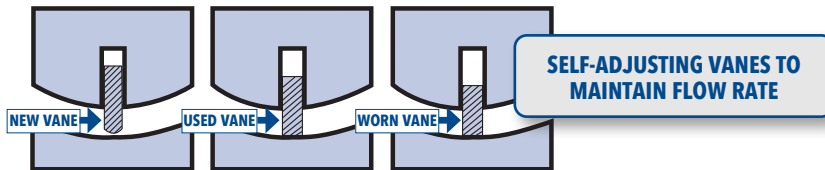
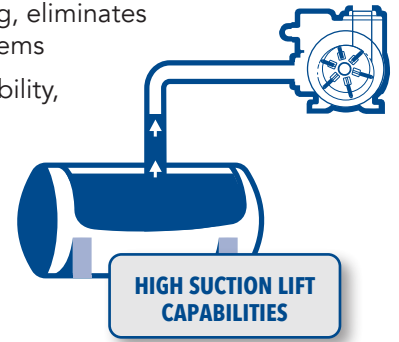


**Maximum Differential Pressure
SX 125 psi (8.6 bar)**
(Internal relief valve setting)

Self-Priming, Dry Run & Other Benefits of Blackmer Vane Pumps

Blackmer positive displacement pumps have revolutionized the pumping industry with their unique sliding vane technology. This revolutionary rotary vane design allows the pumps to self-adjust for wear to help maintain flow rates. This sliding vane pump design creates excellent self-priming, dry run and high suction lift capabilities, while also providing sustained performance and trouble-free operation.

- Maintain consistent flow rates throughout the life of the pump due to unique sliding vane pump design that self-adjusts for wear
- Sliding vane design provides sustained performance and trouble-free operation
- Easy maintenance: vanes can be easily replaced without removing the pump from the piping system
- Low maintenance and low life-cycle costs, pumps are renewable and repairable
- Highly efficient, sliding vane pumps require less horsepower than other pumps, meaning spending less on motors initially and less on electricity to power the pump
- Excellent at self-priming, eliminates expensive priming systems
- Extended dry-run capability, eliminates nuisance current monitoring systems
- High suction lift abilities that exceed 25 feet (7.6 meters)



Integrated Unit Assembly

Blackmer® fully [Integrated Unit Assemblies](#) are the pre-engineered and pre-designed drop-in pumping solution. These unit assemblies, include motor, gearbox, baseplate, coupling safety covers, and a SX 3-inch Stainless Steel Sliding Vane Pump. No alignment required with these pre-configured fully Integrated Unit Assemblies as they are ready for immediate drop-in installation.

SX Series Specs | Maximum Operating Limits

MAXIMUM OPERATING LIMITS

Pump Model	Nominal Flow Rate Range	Viscosity	Minimum Operating Temperature	Maximum Operating Temperature	Min./Max. Speed	Maximum Differential Pressure	Maximum Working Pressure
	gpm (L/min)	cP	°F (°C)	°F (°C)	RPM	psi (bar)	psi (bar)
SX3	55 - 250 (208 - 946)	0.2 - 4,250	-25 (-32)	240 (115)	250 - 800	125 (8.6)	175 (12.1)

Note: Optional materials of construction may be required to meet specific application requirements – refer to Blackmer Material Specification Sheets. For operating conditions that exceed those listed, consult factory.



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