

**Region:** 2

**Location:** NY013

**CSS #:** 22051

**Maximo Work Order No.:** 6017

**Asset #:** NA

**Date Issued:** 10/22/19

**Original Description:**

Repair sewer pumps in Pit and pump out also. tight area working venting urgent

**Repairs Needed:**

Removal and disposal of existing pump. Supply and install new grinder pump and control panel per attached specifications. Saw cut blacktop. Excavate trench to access conduit which will require some handwork as there is a gas line running through the excavation area along with sewer. Backfill trench with crusher run 2" minus and compact and re-blacktop disturbed area. The portion of the trench that is not on the blacktop area will be re-top soiled and seeded to original condition. Supply and install conduit, wire for pumps and control panel. Startup of system. Provide monitoring of confined space.

**RS Means Line Buildup and Labor Summary (Data Version 2017, Q4):**

Quantity	Line Item Number	Description	Labor Hours	Labor Rate/Hr	Materials	Equipment	Total
--	NA	Materials (See attached detail)	--	--	\$14,044.00	--	\$14,044.00
--	NA	Excavation Equipment	--	--	\$5,532.00	--	\$5,532.00
--	NA	Hydestone Labor	--	--	--	--	\$9,263.00
--	NA	Tidewater Labor	40	\$80.00	--	--	\$3,200.00

**Estimate Summary:**

Labor Hours	Labor Cost	Material Cost	Equipment	Total Cost	CE Factor	Total Estimate
--	\$12,463.00	\$14,044.00	\$5,532.00	\$32,039.00	90%	<b>\$28,835.10</b>

# PROPOSAL



Date: 10-29-19

Project: grinder pump

Owner: US army Reserve

Attn: Patrick Brown

In regard to the above-mentioned location we are pleased to offer a price based on the following scope of work. If you would like to accept this proposal, please sign below and return to me. Additional repairs above and beyond the quoted scope of work will be quoted separately.

- Removal and disposal of existing pump
- Supply and install new grinder pump and control panel per attached specifications
- Saw cut blacktop
- Excavate trench to access conduit which will require some handwork as there is a gas line running through the excavation area along with sewer.
- Backfill trench with crusher run 2" minus and compact and re-blacktop disturbed area.
- The portion of the trench that is not on the blacktop area will be re-top soiled and seeded to original condition.
- Supply and install conduit, wire for pumps and control panel
- Startup of system
- Provide monitoring of confined space

Labor-----\$3392.00

Material-----\$3536.00

**Electrical subcontractor**

Labor-----\$1492.00

Material-----\$1508.00

**Site subcontractor**

Labor -----\$4379.00

Equipment -----\$5532.00

Material-----\$9000.00

Total cost -----\$28,839.00

**Note**

No additional material or labor has been added for digging frozen ground or delay in paving due to contract award.

This price is good for 30 days

If there are any questions or if I can be of any further assistance, please feel free to contact me.

**Exclusions:**

No premium time

No permits

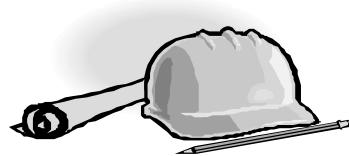
No bonds or special insurance

No sanitary waste piping outside of manhole

Thank you for your time and consideration.

Respectfully,

Patrick J O'Neil  
Project Manager



*Quality by Design*

Hyde-Stone Mechanical

## **TERMS AND CONDITIONS**

1. US ARMY RESERVE CANTON shall permit Hyde-Stone free and timely access to areas and equipment and allow Hyde-Stone to start and stop the equipment as necessary to perform required services. All planned work under this Agreement will be performed during Hyde-Stone's normal working hours.
2. Hyde-Stone warrants that the workmanship hereunder shall be free from defects for three hundred and sixty-five (365) days from date of installation. If any replacement part or item of equipment proves defective, Hyde-Stone will extend to US ARMY RESERVE CANTON the benefits of any warranty Hyde-Stone has received from the manufacturer. Removal and reinstallation of any equipment or materials repaired or replaced under a manufacturer's warranty will be at US ARMY RESERVE CANTON expense and at the rates then in effect.
3. US ARMY RESERVE CANTON will promptly pay invoices within thirty (30) days of receipt. Should a payment become thirty (30) days or more delinquent, Hyde-Stone may stop all work under this Agreement without notice and/or cancel this Agreement, and the entire Agreement amount shall become due and payable immediately upon demand.
4. US ARMY RESERVE CANTON shall be responsible for all taxes applicable to the services and/or materials hereunder.

5. Any alteration to, or deviation from, this Agreement involving extra work, cost of material or labor will become an extra charge (fixed-price amount to be negotiated or on a time-and-material basis at Hyde-Stone Service's rates then in effect) over the sum stated in this Agreement.
6. In the event Hyde-Stone must commence legal action in order to recover any amount payable under this Agreement, US ARMY RESERVE CANTON shall pay Hyde-Stone all court costs and attorneys' fees incurred by Hyde-Stone.
7. Any legal action against the Hyde-Stone relating to this Agreement, or the breach thereof, shall be commenced within one (1) year from the date of the work.
8. Hyde-Stone shall not be liable for any delay, loss, damage or detention caused by unavailability of machinery, equipment or materials, delay of carriers, strikes, including those by Hyde-Stone's Service's employees, lockouts, civil or military authority, priority regulations, insurrection or riot, action of the elements, forces of nature, or by any cause beyond its control.
9. To the fullest extent permitted by law, US ARMY RESERVE CANTON shall indemnify and hold harmless Hyde-Stone, its agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from the performance of work hereunder, provided that such claim, damage, loss or expense is caused in whole or in part by any active or passive act or omission of US ARMY RESERVE CANTON, anyone directly or indirectly employed by US ARMY RESERVE CANTON or anyone for whose acts US ARMY RESERVE CANTON may be liable, regardless of whether it is caused in part by the negligence of Hyde-Stone.
10. US ARMY RESERVE CANTON shall make available to Hyde-Stone's personnel all pertinent Material Safety Data Sheets (MSDS) pursuant to OSHA's Hazard Communication Standard Regulations.
11. Hyde-Stone's obligation under this proposal and any subsequent contract does not include the identification, abatement or removal of asbestos or any other toxic or hazardous substances, hazardous wastes or hazardous materials. In the event such substances, wastes or materials are encountered, Hyde-Stone's sole obligation will be to notify the Owner of their existence. Hyde-Stone shall have the right thereafter to suspend its work until such substances; wastes or materials and the resultant hazards are removed. The time for completion of the work shall be extended to the extent caused by the suspension and the contract price equitably adjusted.

**12.** Hyde-Stone's design is based on published ASHRAE 62-1999 or applicable local code ventilation regulations and does not purport to address health effects attributed to smoking.

**13.** UNDER NO CIRCUMSTANCES, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), EQUITY OR OTHERWISE, WILL HYDE-STONE BE RESPONSIBLE FOR LOSS OF USE, LOSS OF PROFIT, INCREASED OPERATING OR MAINTENANCE EXPENSES, CLAIMS OF US ARMY RESERVE CANTON TENANTS OR CLIENTS, OR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

### **AUTHORIZATION TO PROCEED**

**IN WITNESS WHEREOF**, and intending to be legally bound, the parties hereto subscribe their names to this Agreement as of the date first set forth above.

**HYDE-STONE**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

**«Company»**

By: \_\_\_\_\_

—

Its: \_\_\_\_\_

—

Date: \_\_\_\_\_



*Quality by Design*

Hyde-Stone Mechanical



## LSG200-Series



3  
Year Warranty

Patent: See  
[www.libertypumps.com/patents](http://www.libertypumps.com/patents)

  
**Omnivore**  
Grinders

**2 hp**

**1-1/4" Discharge**

**Features:**

- New Patented V-Slice® cutter technology
- One-piece uni-body casting
- Stainless steel impeller
- Quick-connect power cord
- Internal or external capacitor models available
- 300 Series SS Rotor Shaft

innovate. evolve.





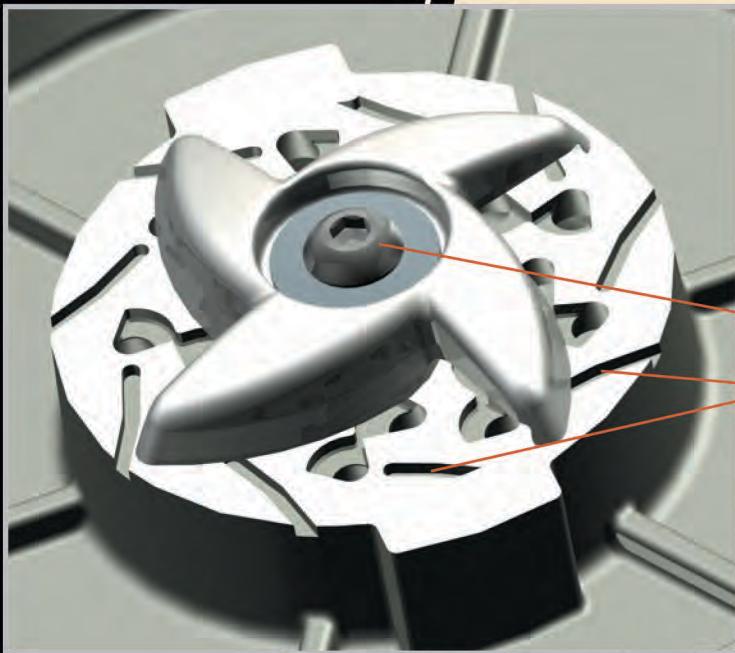
Liberty's LSG200-Series Grinder Pumps meet the demanding needs of commercial and residential sewage applications where difficult solids-handling ability is crucial. The LSG200-Series features a superior cutting system made of hardened 440 stainless steel – Rockwell C 58, for shearing solids into small particles prior to being passed to the discharge by the impeller under high pressure. Applications include individual or groups of homes, motels, schools, shopping centers, lakefront developments and systems requiring high pressure sewage pumping.

## LSG200-Series Grinder Pumps

### Features:

- 2 hp, heavy-duty motor – oil filled, thermally protected
- Upper and lower ball bearings
- One-piece uni-body cast iron housing
- 300 Series SS Rotor Shaft
- 316 Stainless steel impeller
- Dual seals – Upper seal is unitized durable silicon carbide. Lower seal is Viton® double-lip. (Lower seal ensures that all debris is kept away from main seal)
- Motor windings insulated to Class B (130°C)
- Advanced V-Slice® cutting system made of hardened 440 stainless steel – Rockwell C 58
- Horizontal 1-1/4" FNPT Discharge
- Back vanes on impeller and spiraled bottom plate for superior solids clearing
- All stainless steel fasteners
- Clog-free volute design
- Designed for maximum heat dissipation and cool motor operating temperatures
- Solid state starting circuit - no mechanical relay coil
- 25' power cord with Quick-connect
- Piggy back plug with wide angle float (on automatic model) eliminates need for expensive panel

Viton® is a registered trademark of DuPont Dow Elastomers LLC.



### V-Slice® Technology

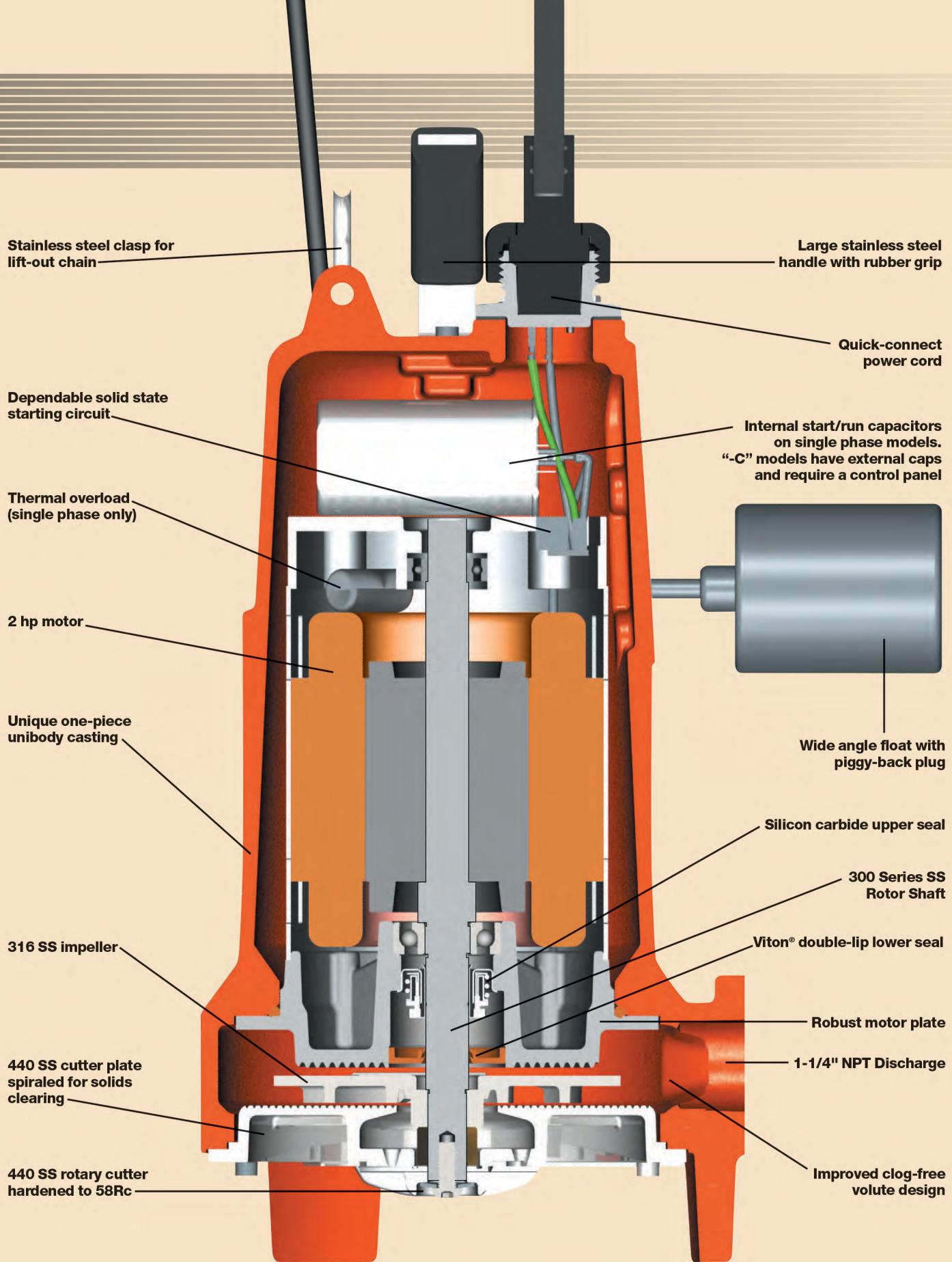
Superior cutting system provides improved shredding performance over radial cutters. V-pattern provides up to 108 alternated cuts per revolution. Entire cutting system made of 440 stainless steel hardened to 58Rc.

**Recessed cutter bolt eliminates wadding**

**Exclusion cleanout slots and back relief clears debris from under cutter**

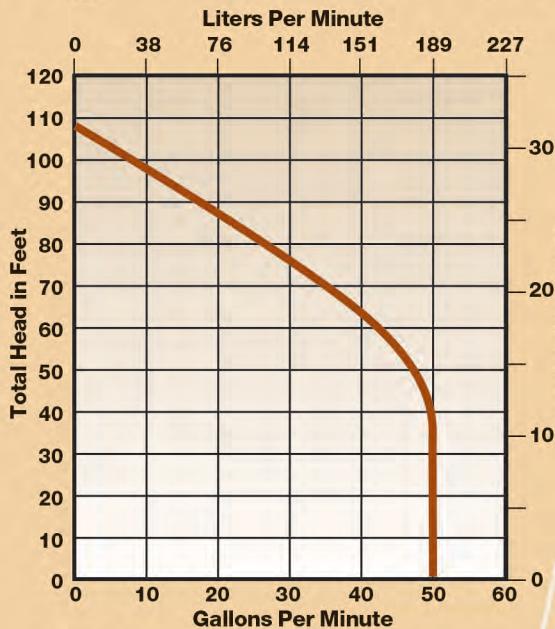
Patent: See  
[www.libertypumps.com/patents](http://www.libertypumps.com/patents)

inno



Water. evolve.

# LSG200-Series Specifications



Model	HP	Volts	Phase	Hz	Amps	Locked Rotor Amps	Speed (RPM)	Discharge	Switch	Weight
LSG202A	2	208-230	1	60	15	53	3450	1-1/4"	Yes	86
LSG202M	2	208-230	1	60	15	53	3450	1-1/4"	No	84
LSG202M-C	2	208-230	1	60	15	53	3450	1-1/4"	No	84
LSG203M	2	208/230	3	60	10.6	62	3450	1-1/4"	No	84
LSG204M	2	440-480	3	60	5.3	31	3450	1-1/4"	No	84
LSG205M	2	575	3	60	4.9	31	3450	1-1/4"	No	84

Single phase models are thermally protected. 3-phase models require a properly sized control panel. Maximum fluid temperature 140° F

LSG202M and LSG202A feature internal capacitors and do not require a separate control panel for operation. LSG202M-C features external capacitors, requiring a panel with appropriately sized start and run capacitors.

## Options for LSG202M-C: External Cap Grp

Model	Description
K001316	Start/Run Capacitor Box (for retrofit in existing panels)
SXHC24=3	Simplex NEMA 4X Panel with start/run capacitors
AE24HC=3	Double NEMA 4X Panel with start/run capacitors

For complete panel specifications, see SX or AE-series literature. Cord standard on all models. LSG202M-C features 35' cord standard.

## GR20 Guide Rail Base (GR20 option sold separately)



- Cast Iron construction
- Standard 1-1/4" guide rail pipe design
- Auto alignment feature
- GR20 works only with LSG-Series pumps
- Upper rail support bracket

# SX-SERIES

## Simplex Pump Controls

**Liberty Pumps®**  
A Family and Employee Owned Company

For reliable control of a single pump in residential or commercial installations. Common applications include sump basins, effluent or sewage pump chambers and lift stations.

### Features

- Across-the-line magnetic contactor
- Test/Auto switch
- Terminal block for easy wiring
- Circuit breaker
- Green pump run indicator light (internal)
- Red alarm indicator light/audible alarm
- Auxiliary contacts
- Alarm silence and test switches
- Tri 120/208/240V operation on 1-phase
- Tri 208/240/480V operation on 3-phase



### Other Available Options

• Alarm bell	• Lockable latch	• Beacon guard
• Redundant off	• Overload protection	• Thermal cutout
• Cycle counter	• Alternate beacon color	• Elapsed time meter
• Dead front	• High and low level indicators	• Delay timer
• Main disconnect	• Seal fail indicator	• Lightning arrestor
• Flasher	• Anti-condensation heater	• GFCI convenience receptacle
• Manual alarm reset	• Pilot breaker	• Start/run capacitors
• Power ON light	• Thru-door overload reset	



innovate. evolve.

# SX-Series Simplex Pump Controls

## Standard Features

**Enclosure:** 8" x 8" x 4"; NEMA 4X – ultraviolet stabilized thermoplastic for outdoor use; NEMA 1 – metal for indoor use. Certain options may increase enclosure size. 3-phase panels measure 12" x 10" x 6".

**Magnetic Motor Contactor:** Controls pump by switching hot electrical lines.

**HOA Switch:** Offers manual operation of pump (on circuit board).

**Green Pump Run Indicator:** On circuit board

**Float Switch Terminal Block:** On circuit board

**Control/Alarm Fuses:** On circuit board

**Control/Alarm Power Indicator:** On circuit board

**Circuit Breaker:** 1-phase panels include appropriately - sized circuit breakers to provide pump disconnect and branch circuit protection. 3-phase breakers sized to application and provide additional overload protection for the pump.

**Pump Input Power and Pump Connection Terminal Block**

**Auxiliary Contacts**

**Ground Lug**

**Alarm Package:** NEMA 4X = red beacon and horn (83 to 85 dB), exterior test/normal/silence switch. NEMA 1 = door mounted red indicator and internally mounted buzzer (83 to 85 dB), exterior test/normal/silence switch.

MODEL	VOLTS	PHASE	FULL LOAD AMPS [Must match pumps]	ENCLOSURE
<b>1-Phase</b>				
SXL21=3	120/208/240	1	0-14.9A	NEMA 1
SXL24=3	120/208/240	1	0-14.9A	NEMA 4X
→ SXH21=3	120/208/240	1	15-20A	NEMA 1
SXH24=3	120/208/240	1	15-20A	NEMA 4X
**SXC24=3-3	120/208/240	1	15-20A	NEMA 4X
<b>3-Phase*</b>				
SX34=3-131	208/240/480	3	1.6-2.5A	NEMA 4X
SX34=3-141	208/240/480	3	2.5-4.0A	NEMA 4X
SX34=3-171	208/240/480	3	4.0-6.3A	NEMA 4X
SX34=3-191	208/240/480	3	6-10A	NEMA 4X
SX34=3-511	208/240/480	3	9-14A	NEMA 4X
SX54=3-121	575	3	1.6-2.5A	NEMA 4X
SX54=3-151	575	3	2.5-4.0A	NEMA 4X
SX54=3-161	575	3	4.0-6.3A	NEMA 4X

35' and 50' cord length options available. Add "-3" or "-5" suffix to model number. Example: SXL21=3-5 for 50' cords.

\*3-phase panels come equipped with thermal overload protection that must be properly sized to the pump's full load run amps.

Multi-tap transformer (208/240/480 VAC primary) provides 120V control voltage. Motor protective switch provides adjustable overload, branch circuit protection and pump disconnect. Please consult factory for proper panel selection.

\*\* SXHC24=3-3 includes start/run capacitors and start relay for use with LSG202M-C and LSGX202M-C models.

## Switch Specifications

All standard simplex panels include (3) pilot-duty float switches for OFF, ON and Alarm. 20' cord standard. Optional lengths available. External weights or pipe clamp mounts required.

**Cable:** Flexible 18 gauge, 2 conductor

**Electrical:** 5A, 120/230 VAC, 50/60 Hz

**Float Switch:** High-impact PVC

**Maximum fluid temperature:** 140°F

**Weight:** NEMA 1 Panels: 24 lbs (approx.)

NEMA 4X Panels: 19 lbs (approx.)

Liberty Pumps can customize a panel to your specific pump needs. Please contact us for available options and ordering information.

