



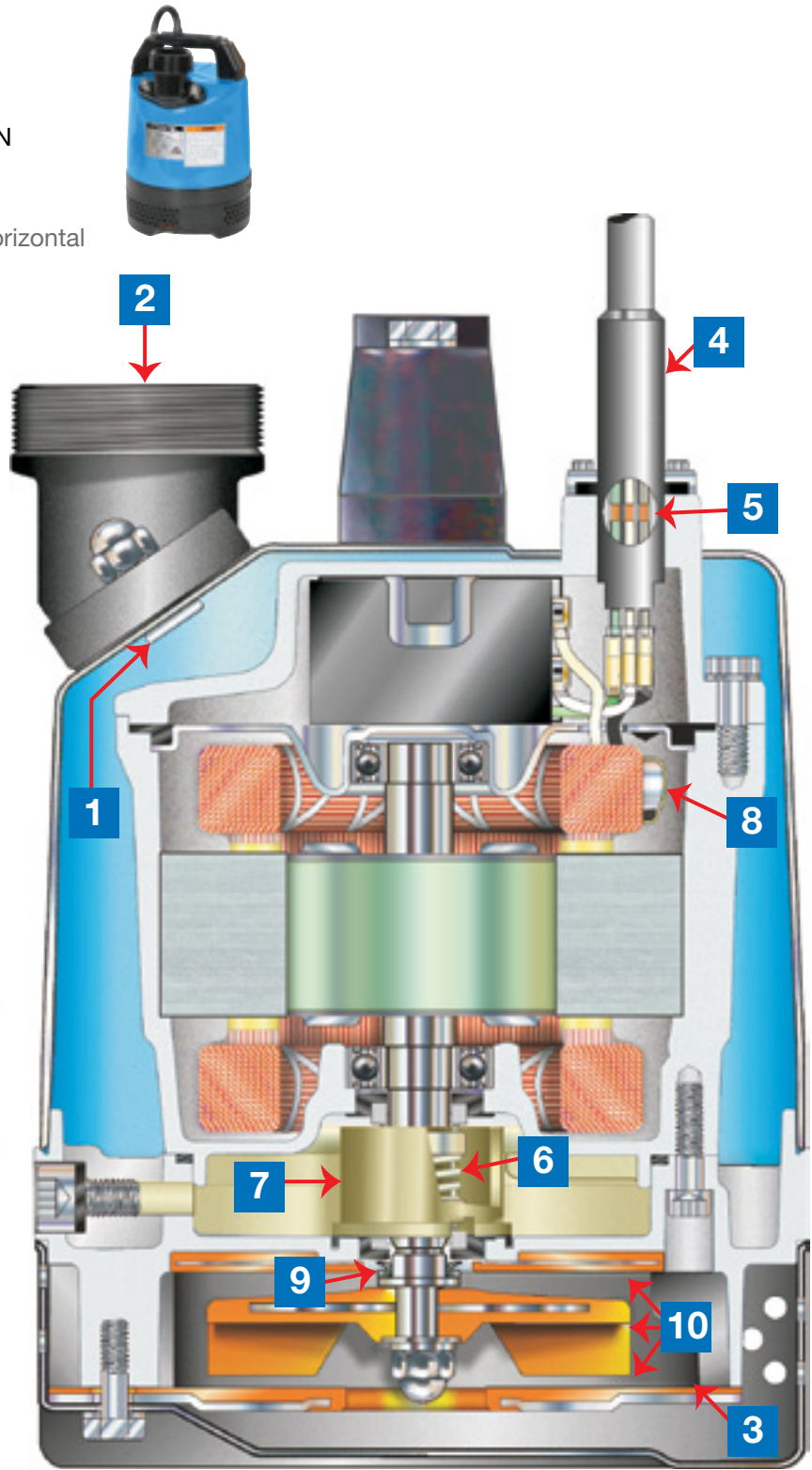
 **TSURUMI PUMP**™  
**BUILT FOR WORK**®  
CONTRACTOR PUMPS | ENGINE PUMPS | GENERATORS



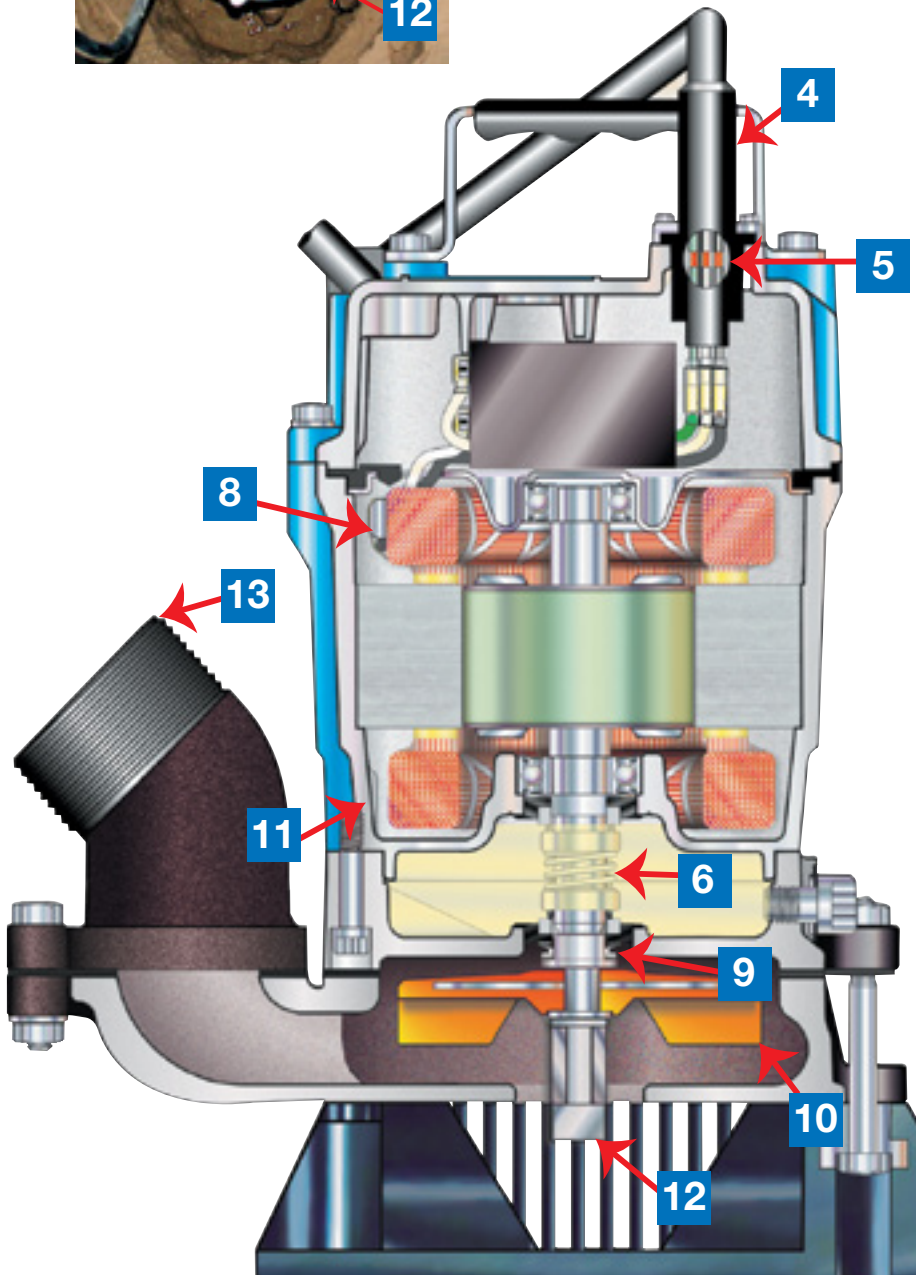
## ELECTRIC SUBMERSIBLE PUMPS - Long Life by Design

### LB Features

- 1** TOP DISCHARGE, FLOW THRU DESIGN
- 2** MULTI-DIRECTIONAL DISCHARGE CONNECTOR: Can be configured for horizontal or vertical discharge. Providing for a more stable installation.
- 3** RUBBER CASING WITH LARGE ROUNDED CUT-WATERS: Resists wear and degradation of performance due to abrasive particles.
- 4** CABLE BOOT: Prevents kinking at cable entrance by extending bending radius.
- 5** ANTI-WICKING BLOCK: Prevents water incursion due to capillary wicking, should the power cable be damaged or the end submerged.
- 6** DUAL INSIDE MECHANICAL SEAL WITH SILICON CARBIDE FACES: Provides longer operational life of any seal available.
- 7** OIL LIFTER: Provides lubrication of the seal faces down to 1/3 of normal oil level and extends seal life by ten times—uses no additional power.



Featured Model LB-480



Featured Model HS2.4S

(Not all features available on every Tsurumi submersible pump)

**8** MINIATURE THERMAL MOTOR PROTECTOR: Protects against overheating & run-dry.

**9** V-RING SEAL PROTECTOR: Protects mechanical seal from abrasive particles.

**10** URETHANE, SEMI-VORTEX IMPELLER & WEAR PLATES: Resists wear by abrasive particles and does not depend on close tolerances to maintain pump performance.



Tsurumi Impeller polished, not worn by abrasive material.



Competitor Impeller is effectively worn out.

**11** COPPER WINDINGS WITH CLASS E INSULATION

### HS Features

**12** AGITATOR: Suspends sand and mud, allowing for sediment removal from sumps or basins.

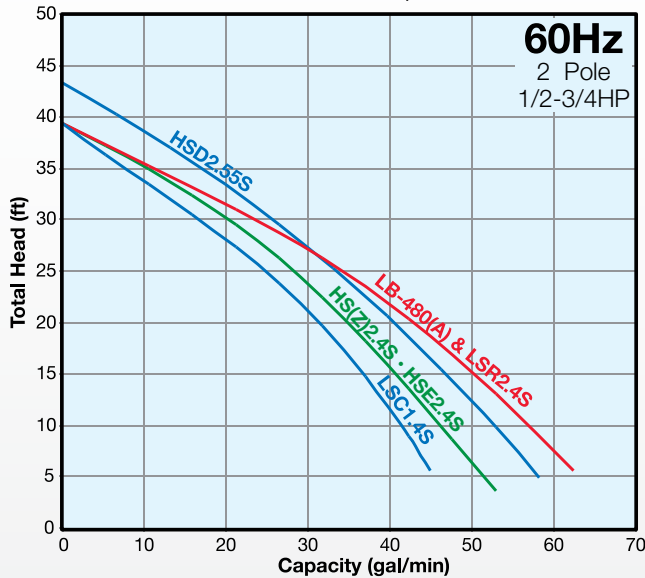
**13** 45° ANGLED DISCHARGE CONNECTOR: Provides for a more stable installation for either vertical or horizontal discharge hose.

## GROUP PERFORMANCE RANGE

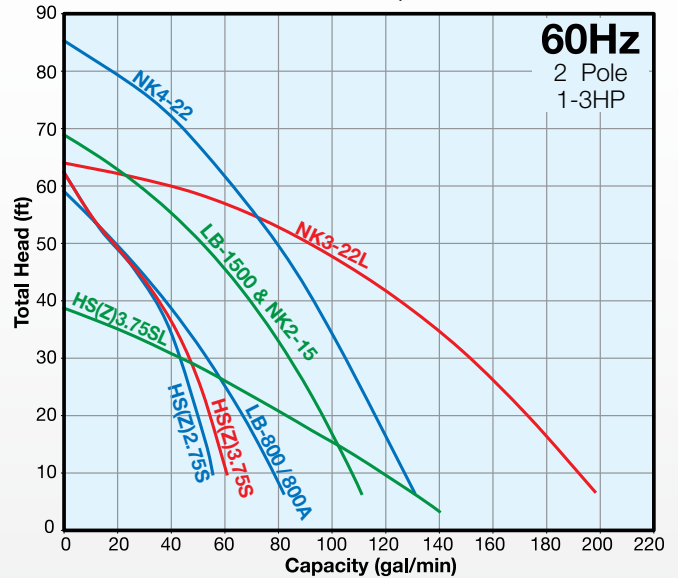
**Reliable and cost-effective pumps** enable Tsurumi to remain an industry leader in the rental and construction markets. Our customers know that while many pumps may look the same, only Tsurumi incorporates the most durable components into the final manufactured product.

### GROUP PERFORMANCE RANGE ELECTRIC SUBMERSIBLE PUMPS

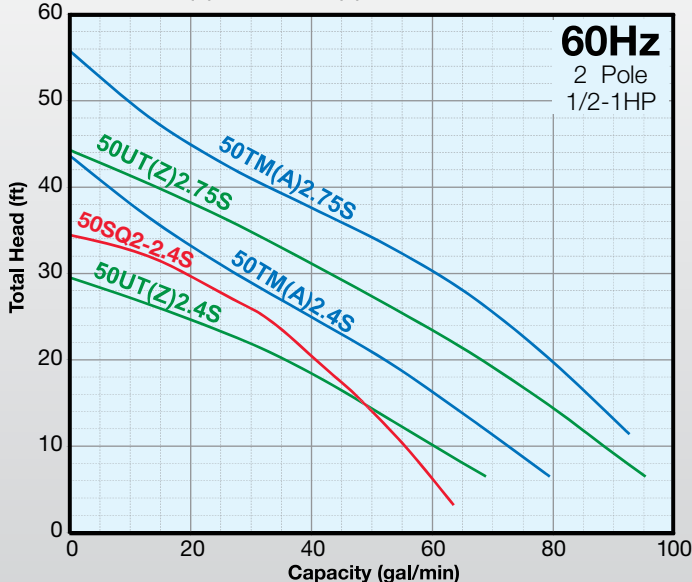
Electric Submersible Pumps: Under 1HP



Electric Submersible Pumps: 1HP or more



TM(A) Series • UT(Z) Series • 50SQ2-2.4S



## LB-480 • LB-480A - DEWATERING PUMPS

**LB-480** Slimline design pump fits into 8" pipes. Powerful pumps built with durable materials in an easy handling design. Top discharge provides maximum motor cooling efficiency allowing continuous duty operation at low water levels and extended dry-run capability.

**LB-480A** features Relay Unit (Level Sensor) which incorporates low voltage, stainless steel probes, epoxy and rubber encapsulated timing relay, that turns the unit off when water is not present. It saves energy and extends the life of the motor and bearings!



LB-480



LB-480A

### LB-480 Features

- Urethane, Semi Vortex Impeller and Wear Plates for maximum durability and maintaining pump performance
- Dual Inside Mechanical Seal With SiC faces provides longer operational life
- Oil Lifter provides lubrication of the seal faces
- V-Ring Seal design protects mechanical seal from abrasive particles

Optional Accessories - See page 24-27

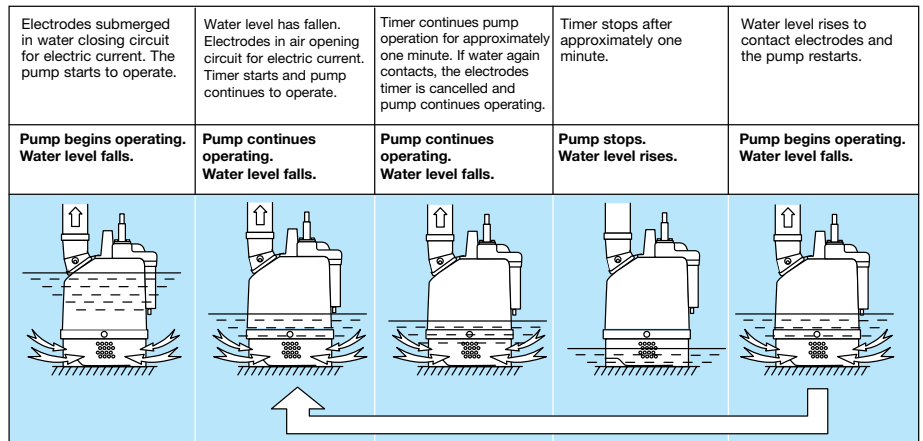
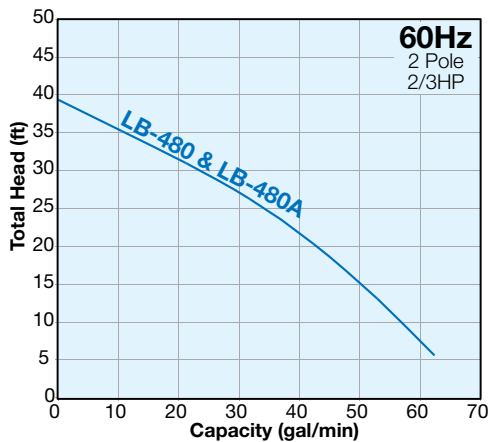
- TS-301 Float Switch for automatic operation
- Discharge hoses
- Quick connect fittings

### LB-480A Features

- No control panel or float switches required
- Performs like the non-automatic pump with no special float installation required
- Requires very small space to operate - only 8 3/4" diameter

### Technical Features of Automatic (A) Water Level Sensor

- Sensitive electrodes detect water to start pump operation even when foreign materials are present
- Internal 60-second timer eliminates frequent on/off operation in rough water to extend motor life
- Relay sensor completely molded in resin and covered by rubber case for protection against rough handling
- Jobsite tested for more than 30,000 on-off cycles without failure or damage



Certified by Intertek Testing Service to UL and CSA standards for submersible construction pumps.

Model	Motor Output (HP)	Phase	Discharge Bore (inch)	Cable Length (ft)	Dimension (inch)		Continuous Running Water Level (inch)	Shipping Weight (lbs.)
					Diameter	Heights		
LB-480	2/3	Single	2	32	7 11/16	11 1/4	2	28
LB-480A	2/3	Single	2	32	8 3/4	11 1/4	4 1/2*	29

\*Pump Starting Water Level

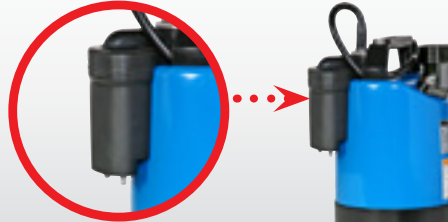
## LB-800 • LB-800A - DEWATERING PUMPS

**LB-800** Slimline design pumps fits into 8" pipes. Powerful pump built with durable materials in an easy handling design. Top discharge provides maximum motor cooling efficiency allowing continuous duty operation at low levels and extended dry-run capability.

**LB-800A** features Relay Unit (Automatic Water Level Sensor) which incorporates low voltage, stainless steel probes, epoxy and rubber encapsulated timing relay, that turns the unit off when water is not present. It saves energy and extends the life of the motor and bearings!



LB-800



LB-800A

### LB-800 Features

- Designed to fit an 8" pipe
- Up to 59' shut off head
- Available in 230V single-phase
- Dual Inside Mechanical Seal With SiC faces provides longer operational life
- Oil Lifter provides lubrication of the seal faces

### Optional Accessories - See page 24-27

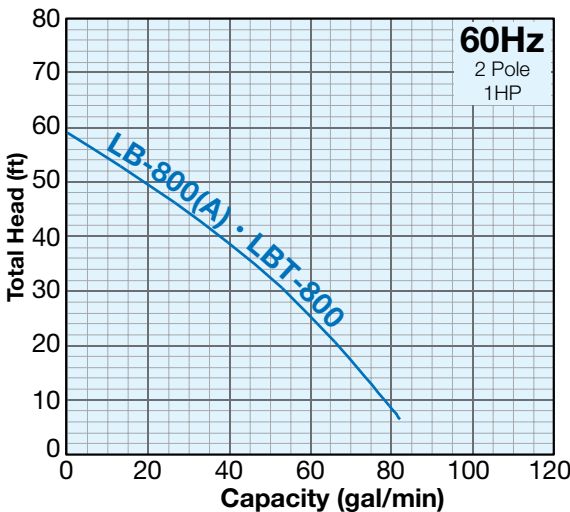
- Float Switch for automatic operation (TS-302 for 115V, TS-303 for 230V)
- Discharge hoses
- Quick connect fittings

### LB-800A Features

- Up to 59' shut off head
- Dual Inside Mechanical Seal With SiC faces provides longer operational life
- Oil Lifter provides lubrication of the seal faces

### Technical Features of Automatic (A) Water Level Sensor

- Sensitive electrodes detect water to start pump cycling even when foreign materials are present
- Internal 60-second timer eliminates frequent on/off cycling in rough water to extend motor life
- Automatic water level sensor completely molded in resin and covered by rubber case for protection against rough handling.
- Jobsite tested for more than 30,000 on-off cycles without failure or damage



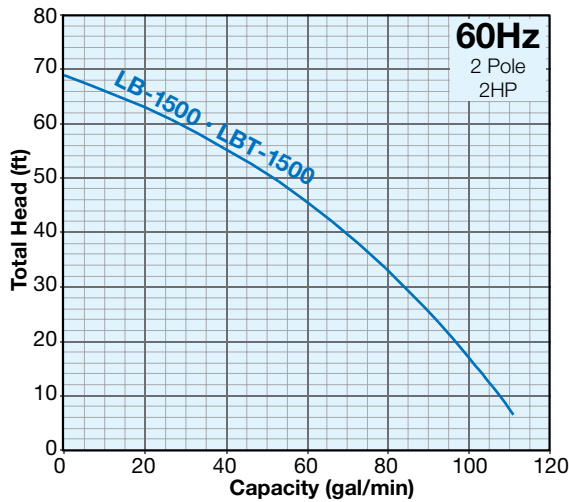
Certified by Intertek Testing Service to UL and CSA standards for submersible construction pumps.

Model	Motor Output (HP)	Phase	Discharge Bore (inch)	Cable Length (ft)	Dimension (inch)		Continuous Running Water Level (inch)	Shipping Weight (lbs.)
					Diameter	Height		
LB-800	1	Single	2	50	7 9/16	13 7/16	2	37
LB-800A	1	Single	2	50	8 3/4	13 7/16	6 3/4*	38

\*Pump Starting Water Level

## LB-1500 - DEWATERING PUMPS

LB-1500 Slimline design pumps fit into 8" pipes. Powerful pump built with durable materials in an easy handling design. Top discharge provides maximum motor cooling efficiency allowing continuous duty operation at low levels and extended dry-run capability.



### LB-1500 Features

- Circle Thermal Motor Protector: Protects against overheating, over amperage & run-dry
- Anti-Wicking Block: Prevents water incursion due to capillary wicking should the power cable be damaged or the end submerged
- Oil Lifter: Lubricates the seal faces and extends seal life by ten times using no additional power, even when oil is down to 1/3 normal level.
- Dual inside mechanical seals with silicon carbide faces, (both top and bottom) running in an oil filled chamber provides for the most durable seal design available
- High Chrome Iron Semi-Open Impeller resists wear from abrasive particles
- Synthetic Rubber Pump Casting: For wear resistance and easy maintenance
- V-Ring System: Protects the shaft seals

### Optional Accessories - See page 24-27

- Float switch TS-304
- Discharge hoses
- Quick connect fittings
- Control panel
- 2" discharge

Certified by Intertek Testing Service to UL and CSA standards for submersible construction pumps.

Model	Motor Output (HP)	Phase	Discharge Bore (inch)	Cable Length (ft)	Dimension (inch)		Continuous Running Water Level (inch)	Shipping Weight (lbs.)
					Diameter	Height		
LB-1500	2	Single	3 (2)*	50	7 3/8	23 5/16	3 1/8	85

\*2" is optional

# SPECIFICATIONS - SINGLE PHASE PUMPS: LB • HS(Z) • HSE • HSD

	LB-480	LB-480A	LB-800	LB-800A	LB-1500	HS2.4S	HS2.4S	HS2.75S	HS2.75S	HS3.75S	HS3.75S	HS3.75SL	HS3.75SL	HSE2.4S	HSD2.55S			
	2" Dewatering Pump	2" Auto Dewatering Pump	2" Slimline Pump	2" Auto Slimline Pump	3" Slimline Pump	2" Sand/Solid Trash Pump	2" Auto Trash Pump	2" Sand/Solid Trash Pump	2" Auto Trash Pump	3" Sand/Solids Trash Pump	3" Auto Trash Pump	3" Sand/Solids Trash Pump	3" Auto Trash Pump	2" Trash Pump with Auto Water Level Sensor	2" Extreme Durable Sand Pump			
<b>FLUID</b>	Max. Capacity (GPM)	62.4		82		111		53		55		61		132				
	Max. Head (ft.)	39.5		59		69		39		62		62		36				
	Solid Diameter (in.)	0.236					0.276					0.393						
<b>PUMP</b>	Impeller	Semi-Vortex			Semi-Open		Semi-Vortex											
	Impeller Material	Urethane Rubber			High Chrome		Urethane Rubber							High Chrome				
	Casing Material	Ethylene Propylene Rubber		Butadiene Rubber & Natural Rubber		Butadiene Rubber & Natural Rubber & Steel		Gray Iron Casing							Ductile Iron Casing			
	Wear Plate Material	Urethane Rubber			Natural Rubber		Integral Part of Casing											
	Shaft Seal - Type / Material	Double Inside Mechanical Seal with Silicon Carbide faces on lower seals and Carbon Ceramic Faces on upper seals																
	Seal Lubricant - Type	SAE 10W/20W or Turbine Oil (ISO VG32)																
	Seal Lubricant Amount (oz.)	5.2					12.5					5.4						
	Seal Protection	V-Ring and Oil Lifter																
<b>MOTOR</b>	Discharge Connection	2" MNPT Coupling			3" MNPT Coupling (2" is optional)		2" MNPT Coupling		2" MNPT Coupling		3" MNPT Coupling (2" optional)		3" MNPT Coupling		2" MNPT Coupling			
	Motor Output (HP)	2/3		1		2		1/2		1		1		1		1/2 3/4		
<b>DIMENSION</b>	Phase	Single Phase																
	Voltage (V)	115 or 220		115		115 or 230		115 or 220		115		115 or 230		115		115		
	Amperage - Rated Current	5.9 (115V) 3.0 (220V)		5.9 (115V)		10.5 (110V) 5.2 (230V)		26.2 (115V) 13.2 (230V)		5.2 (110V) 2.7 (220V)		10.0 (115V)		9.7 (115V) 4.9 (230V)		5.2 (115V) 7.3 (115V)		
	Amperage - Starting Current	12.4 (115V) 5.9 (220V)		12.4 (115V)		20.6 (110V) 12.6 (230V)		112 (115V) 56 (230V)		12.4 (110V) 5.9 (220V)		29.7 (115V)		29.7 (115V) 18.5 (230V)		12.4 (115V) 19.0 (115V)		
	Type	Continuous Duty, Air Filled, 3600 RPM, 60Hz																
	Bearings	Double shielded, permanently lubricated, high-temp C3 with B-10 life of 60,000 hours																
	Insulation Class	E				B		E										
	Motor Protection (Built-In)	Miniature Protector		Circle Thermal Protector			Miniature Protector		Circle Thermal Protector					Miniature Protector		Circle Thermal Protector		
	Plug Configuration (Nema)	5-15P (115V) No Plug (220V)		5-15P (115V) No Plug (230V)		No Plug		5-15P (115V) No Plug (220V)		5-15P (115V) No Plug (230V)								
	Cable - # of Conductors x AWG	3C x 16AWG		3C x 14AWG		3C x 12AWG (110V) 3C x 12AQG (230V)		3C x 16AWG		3C x 14AWG					3C x 16AWG			
	Standard Cable Length (ft.)	32		50			20		32					32 32				
	Max. Cable Length (ft.)	110 (115V) 420 (220V)		110 (115V)		100 (115V) 400 (230V)		70 (115V) 160 (230V)		125 (115V) 460 (220V)		100 (115V) 430 (230V)					120 (115V) 90 (115V)	
	Recommended Generator Capacity (watts)	2700		4600		8400		2400		3700					2400 2900			
	Optional Float Switch	TS-301		N/A		TS-302 (110V) TS-303 (230V)		N/A		TS-303 (230V) operation only		TS-301 (110V)		N/A		TS-302		
	<b>DIMENSION</b>	Diameter (in.)	7 3/8		8 3/4		7 9/16		8 3/4		7 3/8		10 1/16		13 1/2		11 7/16 13 1/2 12 7/16 14 9/16 12 7/16 15 3/4 10 1/16 10 3/8	
Height (in.)		11 1/4		11 1/4		13 7/16		13 7/16		23 5/16		12 15/16		15 1/8		15 3/8 17 1/2 15 5/16 18 11/16 16 3/4 19 7/8 14 1/8 15 3/8		
Continuous Running Water Level (C.W.L) (in.)		2		4 1/2 (Pump Starting Water Level)		2		6 3/4 (Pump Starting Water Level)		3 1/8		3 1/2		15 1/8 (Pump Starting Water Level)		3 1/2 17 1/2 (Pump Starting Water Level) 3 1/2 18 11/16 (Pump Starting Water Level) 4 3/4 19 7/8 (Pump Starting Water Level) 6 1/2 (Pump Starting Water Level) 4 1/8		
Shipping Weight (lbs.)	28		29		37		38		85		30		50		50 50 50 50 50 30 39			



**PUMP ACCESSORIES** for Electric Submersible Pumps, Engine Pumps & Portable Generators

**Automatic Float Switch** Model: TS-301 • TS-302 • TS-303 • TS-304 / SLS-LSC20 • SLS-LSR32

See Page 26-27 for more details



**TS-301 • TS-302 • TS-303 • TS-304**

Piggy-back float switches allow fast & easy installation of Tsurumi submersible pumps for automated operation.

TS-301 • TS-302 .... NEMA 5-15P plug; 30'  
TS-303 ..... NEMA 6-15P plug; 30'



**SLS-LSC20 • SLS-LSR32**

The surface level switch is used to automate a utility/floor sucking pump. Set the Surface Level Switch on the floor and plug the power cord from the pump into the piggyback plug on the switch. Plug the piggy-back plug into a standard 120 VAC wall outlet (the unit will also work on GFI outlets).



**Hoses**

See Page 26-27 for more details

**Hose Kit**



Hose Kit with NPT



Hose Kit with Quick Connect

**Discharge Hose**



NPT



Quick Connect

**Other Hoses**



Mill Hose



Suction Hose

**Suction Hose**



NPT



Quick Connect

**Hose Accessories**



Hose Nozzle



Quick Connect 'A'



Quick Connect 'F'

**PUMP ACCESSORIES** for Electric Submersible Pumps, Engine Pumps & Portable Generators

**Sand Kit**

**Model: K15-SK / K22-SK**

The Sand Kit can be added to the NK Series to suspend sand and prevent sand lock.



K15-SK  
for NK2-15



K22-SK  
for NK4-22

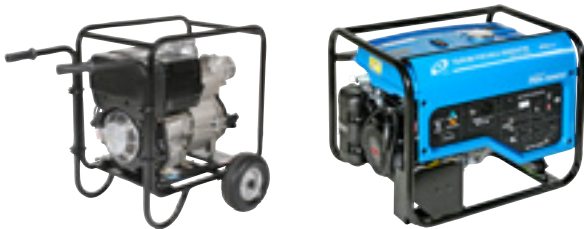
**Residue Kit**

**Model: HS-RK**

Available for the HS2.4S, the Residue Kit allows pumping of residual water down to 0.4 inches.



**Wheel Kit / Lifting Bail**



Wheel Kit PGWK-200X  
for TPG4 Series Generator & Gas Engine Pumps



Lifting Bail  
PGLB-1X

Heavy-duty and easy to install our wheel kits, and lifting bails fit Tsurumi engine pumps & generators.

**PGWK-200X Wheel Kit**  
for TPG4 generators & TE/EPT/THP engine pumps







**PGLB-1X Lifting Bail**  
for all TPG4 generators & TE/EPT/THP engine pumps\*  
\*excluding TPG4-3000HDX

## PUMP ACCESSORIES GUIDE for Electric Submersible Pumps

### Electric Submersible Pumps

	Float Switch	Sand Kit	Residue Kit	2" Straight Discharge	3" Straight Discharge
<b>MODEL</b>					
LB-480	TS-301				
LB-480A					
LB-800	TS-302				
LB-800A					
LB-1500	TS-303 (220V Only)			032-351-11	
HS2.4S	TS-301		HS-RK	032-214-11	
HSZ2.4S			HS-RK	032-214-11	
HSE2.4S			HS-RK	032-214-11	
HS2.75S	TS-302				032-160-11
HSZ2.75S					032-160-11
HS3.75S	TS-302			032-158-16	032-160-11
HSZ3.75S				032-158-16	032-160-11
HS3.75SL	TS-302			032-158-16	032-160-11
HSZ3.75SL				032-158-16	032-160-11
HSD2.55S	TS-301			032-214-11	
NK2-15	TS-304 (115V)/TS-303 (220V)	K15-SK			
NK4-22	TS-303	K22-SK			
NK3-22L	TS-303				
LSR2.4S	SLS-LSR32				
LSC1.4S	SLS-LSC20			032-426-18	









### Electric Submersible Pumps (continued)

	2" Discharge Hose NPT	2" Discharge Hose Quick Connect	2" Quick Disconnect 'A'	3" Discharge Hose NPT	3" Discharge Hose Quick Connect	3" Quick Disconnect 'A'
<b>MODEL</b>						
	XXHS2D	XHD2QC50	G200-A-AL	XXHS3D	XHD3QD50	G300-A-AL
LB-480	X	X	X			
LB-480A	X	X	X			
LB-800	X	X	X			
LB-800A	X	X	X			
LB-1500*	X	X	X	X	X	X
HS2.4S	X	X	X			
HSZ2.4S	X	X	X			
HSE2.4S	X	X	X			
HS2.75S	X	X	X			
HSZ2.75S	X	X	X			
HS3.75S				X	X	X
HSZ3.75S				X	X	X
HS3.75SL				X	X	X
HSZ3.75SL				X	X	X
HSD2.55S	X	X	X			
NK2-15				X	X	X
NK4-22				X	X	X
NK3-22L				X	X	X
LSR2.4S	X	X	X			
LSC1.4S						













\* Standard discharge size is 2". 3" is optional.

## PUMP ACCESSORIES GUIDE for Engine Pumps & Portable Generators













### Engine Driven Pumps: Discharge Size 1" and 1 1/2"

	Wheel Kit	Lifting Bail	1" Mill Hose	1" Suction Hose NPT	1.5" Mill Hose	1.5" Suction Hose NPT	1" Lexan Nozzle	1.5" Lexan Nozzle
<b>MODEL</b>	PGWK-200X Wheel kit ONLY 	PGLB-1X Lifting Bail ONLY 	XHM1N50 	XHS1N20 	XHM15N50 	XHS15N20 	XHLN1N20 	XHLN15N20 
TE2-25H			X	X				
THP-4070HA	X	X	X		X	X	X	X



### Engine Driven Pumps: Discharge Size 2", 3", and 4"

	Strainer	Wheel Kit	Lifting Bail	2" Hose Kit NPT	2" Hose Kit Quick	2" Dis. Hose NPT 50'	2" Dis. Hose Quick 50'	2" Suc. Hose NPT 20'	2" Suc. Hose Quick 20'	2" Quick Disconnect 'A'	3" Hose Kit NPT	3" Hose kit Quick
<b>MODEL</b>		PGWK-200X Wheel kit ONLY 	PGLB-1X Lifting Bail ONLY 	XHK2RNPT 	XHK2RQC 	XXHS2D 	XHD2QC50 	XXHS2S 	XHS2QC20 	G200-A-AL 	XHK3RNPT 	XHK3RQC 
TE3-50HA	Z047	X	X	X	X	X	X	X	X	X		
TE3-80HA	Z048	X	X								X	X
TE2-100HA	Z055	X	X									
EPT3-50HA	Z049	X	X	X	X	X	X	X	X	X		
EPT3-80HA	Z050	X	X								X	X
EPT3-100HA	Z051	X	X									
TD(E)6-200	Included			X	X	X	X	X	X	X		
TD(E)6-300	Included										X	X

### Engine Driven Pumps: Discharge Size 2", 3", and 4" (Continued)

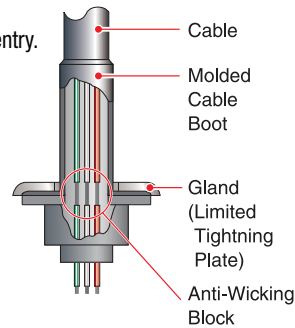
	3" Dis. Hose NPT 50'	3" Dis. Hose Quick 50'	3" Suc. Hose NPT 20'	3" Suc. Hose Quick 20'	3" Quick Disconnect 'A'	4" Hose Kit NPT	4" Hose kit Quick	4" Dis. Hose NPT 50'	4" Dis. Hose Quick 50'	4" Suc. Hose NPT 20'	4" Suc. Hose Quick 20'	4" Quick Disconnect 'A'
<b>MODEL</b>	XXHS3D 	XHD3QC50 	XXHS3S 	XHS3QC20 	G300-A-AL 	XHK4RNPT 	XHK4RQC 	XXHS4D 	XHD4QC50 	XXHS4S 	XHS4QC20 	G400-A-AL 
TE3-50HA												
TE3-80HA	X	X	X	X	X							
TE2-100HA						X	X	X	X	X	X	X
EPT3-50HA												
EPT3-80HA	X	X	X	X	X							
EPT3-100HA						X	X	X	X	X	X	X
TD(E)6-200												
TD(E)6-300	X	X	X	X	X							

### Portable Generators

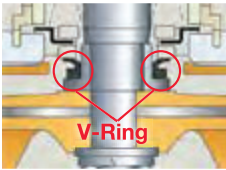
	Wheel Kit	Lifting Bail
<b>MODEL</b>	PGWK-200X Wheel kit ONLY 	PGLB-1X Lifting Bail ONLY 
TPG4-3000HDX	X	
TPG4-4500HDX	X	X
TPG4-6000HDX	X	X
TPG4-7000HDX	X	X
TPG4-7000HDXE	X	X

**Anti-Wicking Cable Entrance:** Maximum protection against water incursion through the cable entry.

- Molded Cable Boot or Cable Protection Tube - extends cable bending radius, prevents abrading, and reduces fatigue.
- Cable Gland - provides 360 degree compression of cable boot, protection tube or cable bush for a water tight fit.
- Anti-Wicking Block - window cuts on conductor insulation expose strands to molded rubber or epoxy to prove water wicking through the strands and entering the motor providing protection even if the cable insulation is cut.



**Circle Thermal Protector (CTP):** For pumps with 1-10HP: 3-Pole protector connects to each winding of the motor and reacts to excessive heat and amperage. Automatic reset at safe temperature to restart the motor. No motor protection circuit required in starter or control panel.



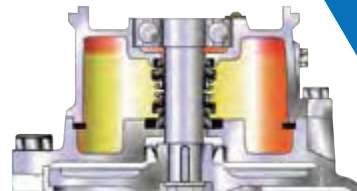
**V-Ring:** V-Ring is mounted at the top of the impeller and is brought in close contact to the bottom of the mechanical seal by the internal pressure of the pump casing. This V-Ring acts as a dust seal to prevent fine abrasive particles in the pumping fluid from reaching the mechanical seal.



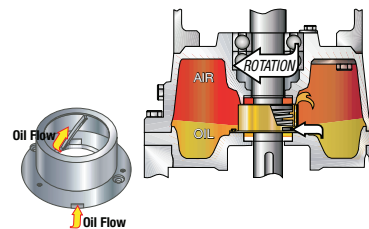
**High-Performance Motor:** Dry type, squirrel-cage, induction motor, housed in a watertight casing, conforms to either insulation class B or E, or F. In both of these classes, all standard pumps can be used in ambient temperature up to 104°F (40°C).

**Dual Inside, Silicon Carbide Mechanical Seals:**

Isolation of mechanical seals in an oil chamber provides a clean, non-corrosive and abrasion free lubricating environment to prevent spring failure due to corrosion or abrasion and bottom seal failure due to loss of cooling during dry-run conditions.



**Oil Lifter:** Tsurumi's Oil Lifter encloses the mechanical seal and uses the centrifugal force generated by the rotating shaft and seal to pump oil to the upper seal faces. Upper and lower seal faces are positively lubricated even when extremely low oil levels exist, as experienced after long periods of extended operation.



## **TSURUMI PUMP**<sup>®</sup> BUILT FOR WORK<sup>®</sup>

**TSURUMI (AMERICA), INC.**  
Headquarters: 1625 Fullerton Ct, Glendale Heights, IL 60139  
Utah Office: 3822 West 1987 South, Salt Lake City, UT 84104  
Tel: 1-888-878-7864 (Toll-Free) • 1-630-793-0127  
Fax: 1-630-793-0146 • [www.tsurumipump.com](http://www.tsurumipump.com)



**Your Dealer**

**TSURUMI**<sup>Canada</sup>

149 J.A. Bombardier, Suite 10  
Boucherville QC J4B 8P1

+14504496484  
[info@tsurumicanada.com](mailto:info@tsurumicanada.com)  
[tsurumicanada.com](http://tsurumicanada.com)



Find us @tsurumiamerica