INTELLIGENT FLOW FOR GOOD

LEO PUMP, INC

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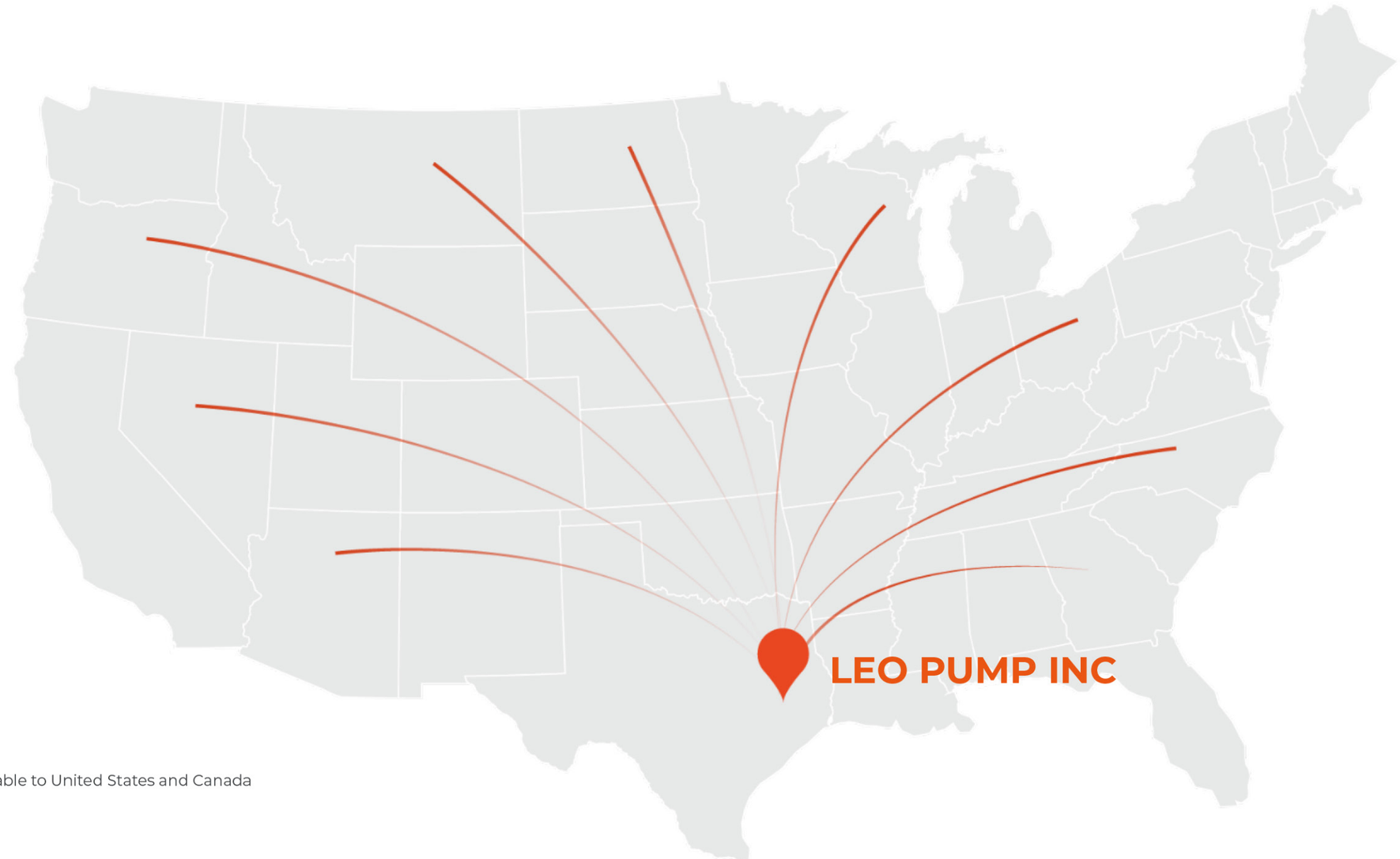
LEO

GENERAL CATALOG

https://leowaterpump.com

U.S. Nationwide Business Reach

Global Supply Chain High Efficiency



14387 ft²
Warehouse covered area

50
Shipping available to United States and Canada

LEO PUMP INC.

LEO PUMP INC., established in 2016, is a locally incorporated and independently operated U.S. company committed to delivering high-quality pump solutions tailored to the needs of North American businesses. As a 100% U.S. entity, LEO PUMP INC. boasts a dedicated local team with full decision-making authority, ensuring agile operations and customer-first responsiveness. Backed by the global strength of LEO Group, with over 30 years of manufacturing expertise and a sales network spanning 160+ countries, LEO PUMP INC. combines world-class technology with deep local market insights. The company specializes in domestic and commercial pumps, offering reliable and efficient products designed to meet the specific demands of American distributors, retailers, and industrial users. With a market-focused approach and a commitment to service excellence, LEO PUMP INC. continues to grow as a trusted partner in the North American pump industry.

CONTENT

CLEAN WATER

PRESSURE BOOSTING SYSTEM

LAWN & IRRIGATION

SUMP PUMP

EFFLUENT PUMP

CONTENT

SEWAGE PUMP

MULTI-PURPOSE

CIRCULATION PUMP

SWIMMING POOL PUMP

RESOURCES

CAST IRON SHALLOW WELL JET PUMP

APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms, and cabins that have suction lifts down to 25ft

UJM50-1

UJM75/100-1

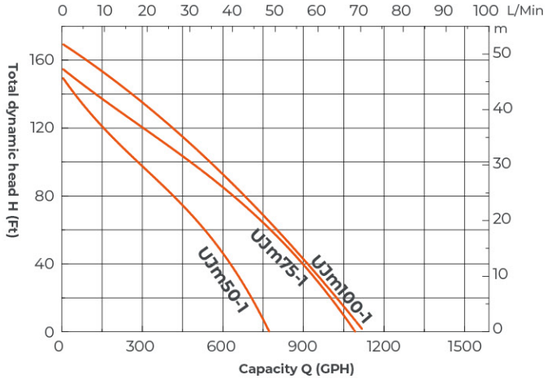
FEATURES & BENEFITS

- Durable cast iron volute
- Built-in automatic thermal overload protector
- Pressure switch is pre-set at 30-50 PSI for automatic operation
- For use on shallow well applications where wells are 25ft (7.6m) deep or less

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head					Max.Head Ft
						5ft	35ft	70ft	100ft	130ft	
UJM50-1	1/2	115/230V	6.6/3.3A	1-1/4	1	790	660	580	300	75	147
UJM75-1	3/4	115/230V	9.0/4.5A	1-1/4	1	1100	920	710	500	200	154
UJM100-1	1	115/230V	9.6/4.8A	1-1/4	1	1100	950	750	540	310	164

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
UJM50-1	22.4	15.94	10.43	9.45
UJM75-1	31.0	18.31	11.61	9.84
UJM100-1	33.2	18.31	11.61	9.84



CONVERTIBLE JET PUMP

APPLICATIONS

Ideal for the supply of fresh water to rural homes and farms, For use on shallow well applications where water level is 25ft or deep well applications where water level is 60ft.

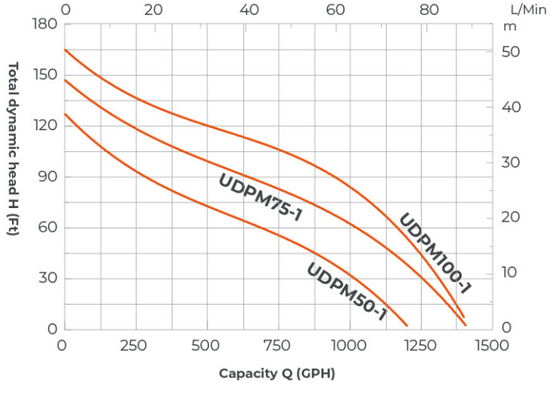
FEATURES & BENEFITS

- Durable cast iron volute
- Built-in automatic thermal overload protector
- Pressure switch is pre-set at 30-50 PSI for automatic operation
- Injector is included for using in deep well
- For use on shallow well applications where water level is 25ft or deep well applications where water level is 60ft.

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head					Max. Head Ft
						5FT	35FT	70FT	100FT	130FT	
UDPM50-1	1/2	115/230V	8.8/4.4	1-1/4	1	1100	950	650	200	-	128
UDPM75-1	3/4	115/230V	12.6/6.3	1-1/4	1	1400	1220	900	430	125	147
UDPM100-1	1	115/230V	15.4/7.7	1-1/4	1	1400	1320	1050	790	310	164

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
UDPM50-1	26.5	14.57	10.24	8.58
UDPM75-1	34.6	15.55	11.42	9.13
UDPM100-1	36.4	15.55	11.42	9.13



PUMP & TANK SYSTEM

APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms and cabins where compact system size and ease of installation are most important.

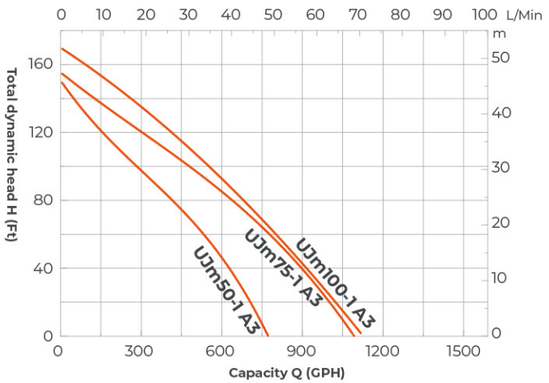
FEATURES & BENEFITS

- Durable cast iron volute
- Built-in automatic thermal overload protector
- Pressure switch is pre-set at 30-50 PSI for automatic operation
- For use on shallow well applications where wells are 25ft deep or less
- System includes jet pump, pressure switch, pressure gauge, precharged pressure tank.

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head					Max. Head Ft
						5ft	35ft	70ft	100ft	130ft	
UJM50-1A3	1/2	115/230V	6.6/3.3A	1-1/4	1	790	660	580	300	75	147
UJM75-1A3	3/4	115/230V	9.0/4.5A	1-1/4	1	1100	920	710	500	200	154
UJM100-1A3	1	115/230V	9.6/4.8A	1-1/4	1	1100	950	750	540	310	164

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
UJM50-1A3	40	20.3	12.4	21.5
UJM75-1A3	44	20.3	12.4	22.24
UJM100-1A3	46.6	20.3	12.4	22.24

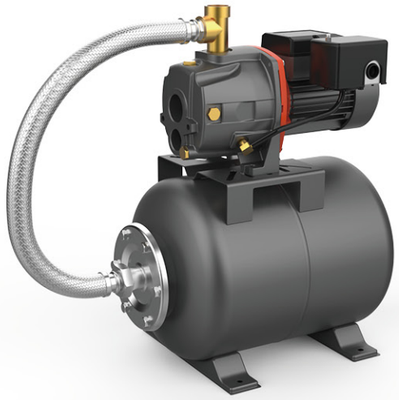


CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP

PUMP & TANK SYSTEM

APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms and cabins where compact system size and ease of installation are most important.



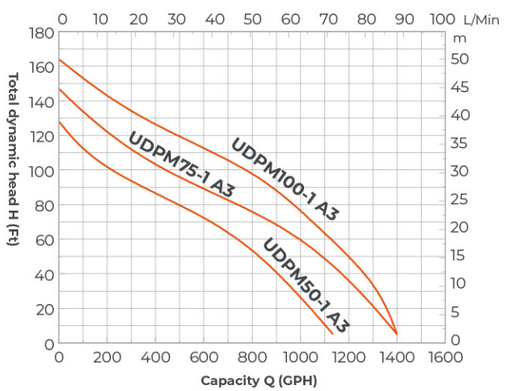
FEATURES & BENEFITS

- Durable cast iron pump body
- Automatic thermal overload protector
- Pressure switch pre-set at 30-50 PSI
- System includes jet pump, pressure switch, pressure gauge, precharged pressure tank
- Self-priming after initially filled
- Injector is included for using in deep well
- Shallow well applications with depth to 25 feet
- Deep well applications with depth up to 60 ft

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head					Max.Head Ft
						5FT	35FT	70FT	100FT	130FT	
UDPM50-1A3	1/2	115/230V	6.6/3.3A	1-1/4	1	1100	950	650	200	-	128
UDPM75-1A3	3/4	115/230V	9.0/4.5A	1-1/4	1	1400	1220	900	430	125	147
UDPM100-1A3	1	115/230V	9.6/4.8A	1-1/4	1	1400	1320	1050	790	310	164

CARTON SPECIFICATIONS

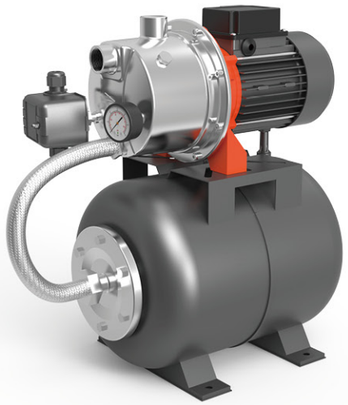
Model	GW(lbs)	L(in)	W(in)	H(in)
UDPM50-1A3	36.12	19.09	12.4	22.44
UDPM75-1A3	44.05	19.49	12.4	23.03
UDPM100-1A3	45.81	19.49	12.4	23.03



PUMP & TANK SYSTEM

APPLICATIONS

Ideal for the supply of fresh water to rural homes, farms and cabins where compact system size and ease of installation are most important.



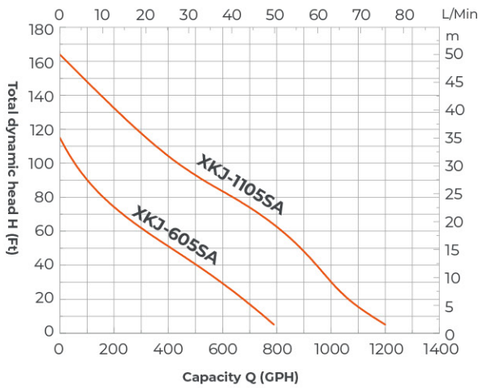
FEATURES & BENEFITS

- Works as a portable or perment application.
- System comes compelete with pump pressure switch, pressure gauge, and 6 gallon pressure tank
- Durable stainless steel volute
- Reinforced thermoplastic impeller and diffuser for corrosion-resistance
- Built-in automatic thermal overload protector
- Carbon / ceramic mechanical seal
- Permanent split capacitor motor
- Fully automatic water supply for house and garden
- 1'' NPT discharge

Model	Certification	HP	Voltage	AMP	Discharge NPT(In)	GPH of water@Total Ft.of Head						Max. Head Ft
						5ft	20ft	40ft	60ft	80ft	100ft	
XKJ-605SA	ETL	3/4	115	4.77	1	790	680	510	310	150	50	115
XKJ-1105SA	UL	1 1/2	115	11.9	1	1200	1050	950	830	650	400	164

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
XKJ-605SA	26.65	18.31	12.4	20.87
XKJ-1105SA	41.18	22.64	15.16	22.83



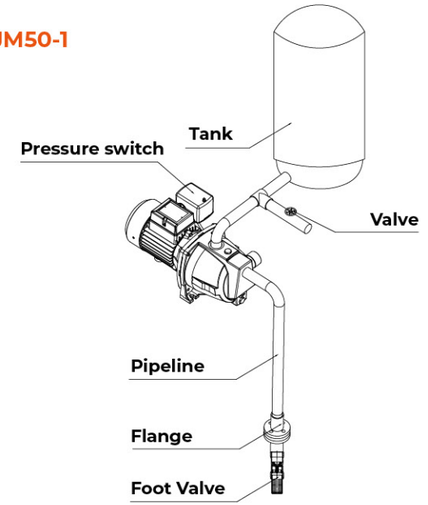
CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP

TYPICAL INSTALLATIONS

SHALLOW WELL JET PUMP (DOWN TO 25')

Well pumps are used to bring water from groundwater well into your house . Shallow well jet lifts up to 25ft.

UJM50-1



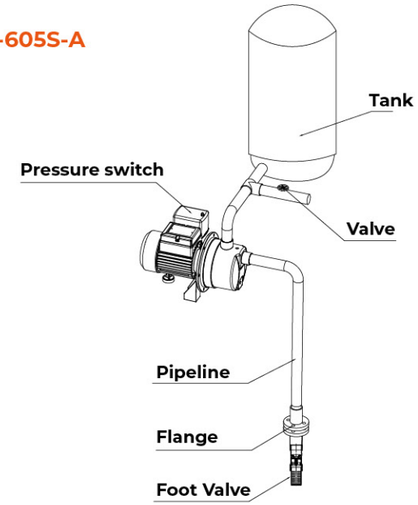
To complete installation, the following is required:

Jet pump
Pressure tank
Pump-to-tank fittings
Pipeline
Flange
Foot Valve and Valve

SHALLOW WELL JET PUMP (DOWN TO 25')

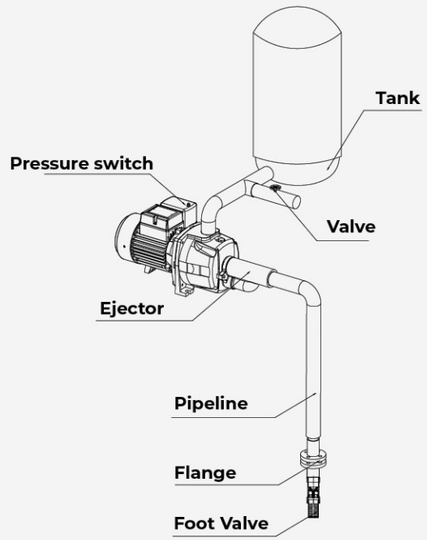
Well pumps are used to bring water from groundwater well into your house . Shallow well jet lifts up to 25ft.

XKJ-605S-A



To complete installation, the following is required:

Jet pump
Pressure tank
Pump-to-tank fittings
Pipeline
Flange
Foot Valve and Valve



UDPM75-1

CONVERTIBLE JET PUMP (DEEP WELL CONFIGURATION DOWN TO 60')

Well pumps are used to bring water from groundwater well into your house . DEEP well jet lifts up to 60ft.

To complete installation, the following is required:

Jet pump
Pressure tank
Pump-to-tank fittings
Pipeline
Flange
Foot Valve and Valve
Ejector

PRESSURE BOOSTING SYSTEM

APPLICATIONS

Ideal for homes with a municipal water source and incoming water. This pressure boosting system assists in maintaining steady pressure when more than one water fixture is in use.

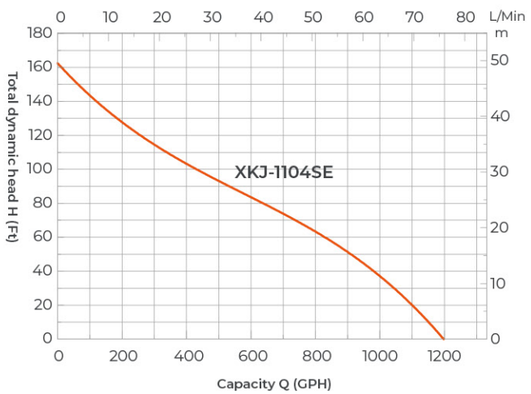
FEATURES & BENEFITS

- Automatic Pressure Booster
- Maintains preset water pressure for consistent water supply
- Stainless steel corrosion resistant construction
- Designed to supply consistent water pressure without the use of a tank

Model	HP	Voltage	AMP	Discharge NPT(In)	GPH of water@Total Ft.of Head						Max.Head Ft
					0ft	20ft	40ft	60ft	80ft	100ft	
XKJ-1104SE	1 1/2	110-120	10	1	1210	1100	980	850	640	450	164

CARTON SPECIFICATIONS

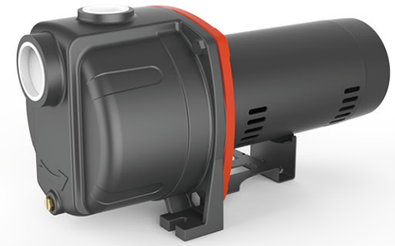
Model	GW(lbs)	L(in)	W(in)	H(in)
XKJ-1104SE	28.63	24.8	11.02	10.63



CAST IRON SPRINKLER UTILITY PUMP

APPLICATIONS

Ideal for pressure boosting, sprinkler systems, and general purpose applications where portability is important.



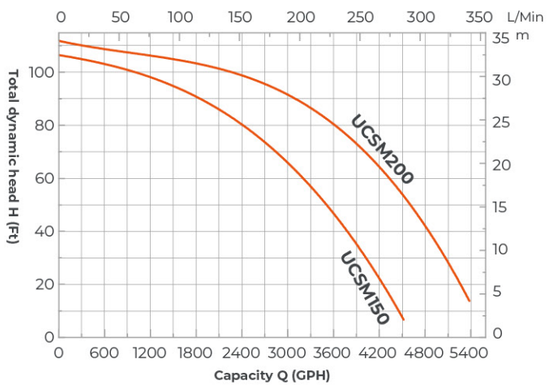
FEATURES & BENEFITS

- Durable cast iron volute
- Reinforced impeller and diffuser for long-life
- Built-in automatic thermal overload protector
- Dual voltage (115/230V) high efficiency square, flanged motor, factory set for 230V

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head					Max.Head Ft
						20ft	40ft	60ft	80ft	100ft	
UCSM150	1-1/2	115V/230V	18.0/9.0A	2	1-1/2	4250	3750	3150	2400	950	108
UCSM200	2	230V	9.0A	2	1-1/2	5200	4900	4350	3600	2320	112

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
UCSM150	56.9	22.8	12.4	11.8
UCSM200	65.7	22.8	12.4	11.8



CAST IRON SPRINKLER UTILITY PUMP

APPLICATIONS

Ideal for pressure boosting, sprinkler systems, and general purpose applications where portability is important.

FEATURES & BENEFITS

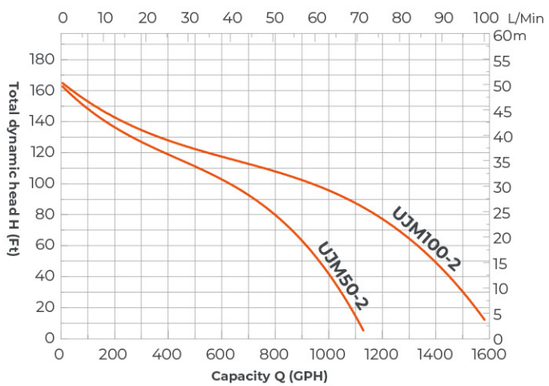
- Professional grade jet well pumps
- Durable cast iron volute
- Built-in automatic thermal overload protector
- Pressure switch is pre-set at 30-50 PSI for automatic operation
- For use on shallow well applications where wells are 25ft deep or less
- Nema Motor

UJM100-2

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head					Max.Head Ft
						5ft	35ft	70ft	100ft	130ft	
UJM50-2	1/2	115/230V	13.0/6.5A	1-1/4	1	1160	1050	860	630	280	162
UJM100-2	1	115/230V	16.0/8.0A	1-1/4	1	1550	1500	1270	950	500	180

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
UJM50-2	44.4	22.24	13.58	11.61
UJM100-2	52.8	22.24	13.58	11.61



CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP
LEO

STAINLESS STEEL SPRINKLER UTILITY PUMP

APPLICATIONS

Ideal for pressure boosting, sprinkler systems, and general purpose applications where portability and corrosion-resistance is important.

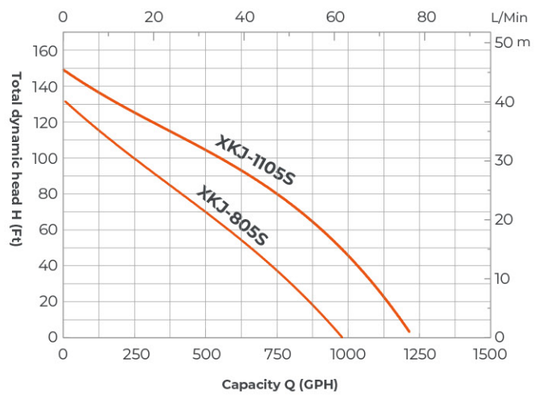
FEATURES & BENEFITS

- Designed to move high volumes of water or boost water pressure
- Reinforced thermoplastic impeller and diffuser for corrosion-resistance
- Built-in automatic thermal overload protector
- Carbon / ceramic mechanical seal
- Permanent split capacitor motor

Model	HP	Voltage	AMP	Inlet NPT (In)	Outlet NPT (In)	GPH of water@Total Ft.of Head							Max. Head Ft
						0ft	20ft	40ft	50ft	60ft	80ft	100ft	
XKJ-805S	1	115	5.9	1	3/4	978	840	740	-	620	460	270	121
XKJ-1105S	1 1/2	110-120	10	1	3/4	1200	-	-	980	-	-	580	164

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
XKJ-805S	18.3	14.6	10.24	11.02
XKJ-1105S	28.63	15.94	9.84	10.83



THERMOPLASTIC SUMP PUMP

APPLICATIONS

Ideal for light- to high-volume water removal in residential spaces such as basements and crawl spaces.

FEATURES & BENEFITS

- Top Suction Design helps eliminate air locks and filters debris
- Tethered or vertical float switch for automatic operation.
- Easy access handle designed for easy portability
- Corrosion-resistant, reinforced thermoplastic construction
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- For use in 14"diameter or larger sump basins

LSD-252PL/372P

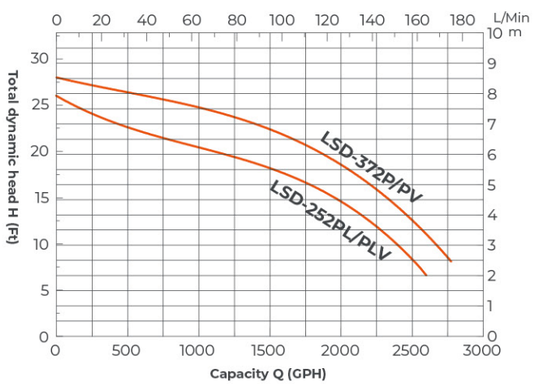
LSD-252PLV/372PV

Model	HP	Voltage	AMP	Oil filling capacity (ounces)	Inlet NPT(In)	Outlet NPT(In)	GPH of water@Total Ft.of Head					Max. Head Ft
							5ft	10ft	15ft	20ft	25ft	
LSD-252PL	1/3	115V	4.6A	14.20	1-1/2	1-1/4	2560	2300	1900	1000	100	26
LSD-372P	1/2	115V	5.0A	13.53	1-1/2	1-1/4	2900	2650	2300	1850	990	28
LSD-252PLV	1/3	115V	4.6A	14.20	1-1/2	1-1/4	2560	2300	1900	1000	100	26
LSD-372PV	1/2	115V	5.0A	13.53	1-1/2	1-1/4	2900	2650	2300	1850	990	28

Note: Model with "L" means aluminum wire

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LSD-252PL	9.45	9.1	8.5	11.8
LSD-372P	10.4	9.1	8.5	11.8
LSD-252PLV	9.8	10.47	9.09	12.4
LSD-372PV	10.5	10.47	9.09	12.4



STAINLESS STEEL SUMP PUMP

APPLICATIONS

Ideal for average to high-volume water removal in residential spaces such as basements and crawl spaces.

FEATURES & BENEFITS

- Top Suction Design helps eliminate air locks and filters debris
- Silent sump pump design reduces sound while pumping
- Reliable performance without the noise
- 10' Piggy back tethered or vertical float switch for automatic operation.
- Easily replaces all tethered or vertical float switch pumps.
- Cast iron base for long life durability and prevents pump from moving around in the pit
- Stainless steel motor shell with durable cast iron volute
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- For use in 14'' diameter or larger sump basins
- 1-1/2'' discharge

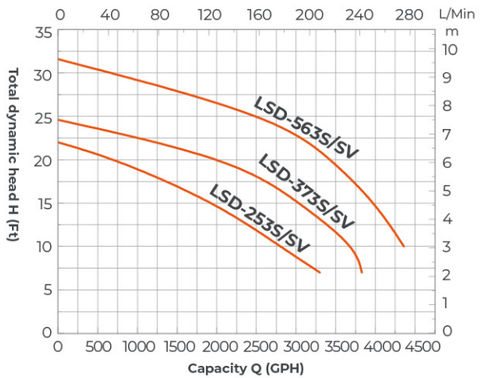
LSD-253S/373S/563S

LSD-253SV/373SV/563SV

Model	HP	Voltage	AMP	Oil filling capacity (ounces)	Discharge NPT(In)	GPH of water@Total Ft.of Head					Max.Head Ft
						7ft	10ft	15ft	20ft	25ft	
LSD-253S	1/3	115V	4.5A	27.05	1-1/2 in	3300	2800	2000	750	-	22
LSD-373S	1/2	115V	5.0A	27.05	1-1/2 in	3830	3750	3050	2250	-	24.6
LSD-563S	3/4	115V	7.0A	33.81	1-1/2 in	-	4360	4000	3450	2750	31.6
LSD-253SV	1/3	115V	4.5A	27.05	1-1/2 in	3300	2800	2000	750	-	22
LSD-373SV	1/2	115V	5.0A	27.05	1-1/2 in	3830	3750	3050	2250	-	24.6
LSD-563SV	3/4	115V	7.0A	33.81	1-1/2 in	-	4360	4000	3450	2750	31.6

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LSD-253S	23.6	9.84	8.27	13.19
LSD-373S	24.7	9.84	8.27	13.19
LSD-563S	26.4	9.84	8.27	13.19
LSD-253SV	23.6	11.02	8.27	15.16
LSD-373SV	24.7	11.02	8.27	15.16
LSD-563SV	26.4	11.02	8.27	15.16



STAINLESS STEEL SUMP PUMP

APPLICATIONS

Ideal for average to high-volume water removal in residential spaces such as basements and crawl spaces.

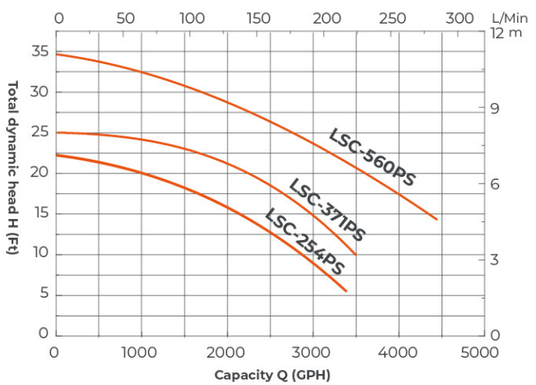
FEATURES & BENEFITS

- Top Suction Design helps eliminate air locks and filters debris
- Silent sump pump design reduces sound while pumping
- Reliable performance without the noise
- Integral snap-action float switch for automatic operation
- Built in automatic thermal overload motor protection
- Easily replaces all snap action float switch pumps
- For use in 14'' diameter or larger sump basins
- Plastic Pump body prevents clogs and keeps pump away from moving around the pit
- 1-1/2'' discharge
- 10ft power cord

Model	HP	Voltage	AMP	Discharge NPT(In)	Oil filling capacity (ounces)	GPH of water@Total Ft.of Head					Max.Head Ft
						5ft	10ft	15ft	20ft	25ft	
LSC-254PS	1/3	110-120V	4.5A	1-1/2 in	27.05	3450	2850	2100	1000	-	22.4
LSC-371PS	1/2	110-120V	5.0A	1-1/2 in	27.05	3450	3200	2850	2250	-	24.6
LSC-560PS	3/4	110-120V	7.0A	1-1/2 in	33.81	-	-	4390	3650	2750	34.8

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LSC-254PS	16.8	11.2	9.8	15.0
LSC-371PS	17.6	11.2	9.8	15.0
LSC-560PS	19.8	11.2	9.8	15.0



CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP
LEO

CAST IRON SUMP PUMP

APPLICATIONS

Ideal for average- to high-volume water and effluent removal in residential spaces such as basements, laundry facilities, and crawl spaces.

FEATURES & BENEFITS

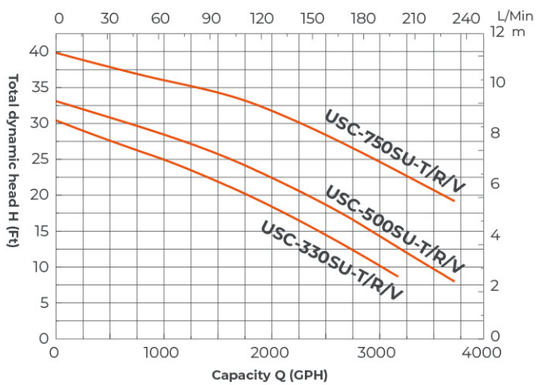
- Bottom suction design with non clog vortex impeller
- Easily replaces all professional grade tethered or snap action float switch pumps
- Stainless steel hardware and handle designed for easy installation
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- 10 ft. Cord with plug on 115 volt single phase
- 1-1/2" NPT discharge
- Application with up to 1/2" diameter solids

Model	HP	VOLT/PH	HZ	RPM	AMPS	Performance (GPH@Height in Feet)					Max Head(ft)
						10ft	15ft	20ft	25ft	30ft	
USC-330SU-T	1/3	115/1	60	3450	6.2	3020	2440	1780	1000	0	30
USC-330SU-R	1/3	115/1	60	3450	6.2	3020	2440	1780	1000	0	30
USC-330SU-V	1/3	115/1	60	3450	6.2	3020	2440	1780	1000	0	30
USC-500SU-T	1/2	115/1	60	3450	8.2	3470	2930	2330	1620	680	33
USC-500SU-R	1/2	115/1	60	3450	8.2	3470	2930	2330	1620	680	33
USC-500SU-V	1/2	115/1	60	3450	8.2	3470	2930	2330	1620	680	33
USC-750SU-T	3/4	115/1	60	3450	9.5	-	-	3590	2950	2270	40
USC-750SU-R	3/4	115/1	60	3450	9.5	-	-	3590	2950	2270	40
USC-750SU-V	3/4	115/1	60	3450	9.5	-	-	3590	2950	2270	40

"T" means tethered float switch, "V" means vertical float switch, "R" means rocker float switch

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
USC-330SU-T/V	30.4	12.01	9.06	14.76
USC-500SU-T/V	30.84	12.01	9.06	14.76
USC-750SU-T/V	31.5	12.01	9.06	14.76
USC-330SU-R	30.4	12.01	9.06	14.76
USC-500SU-R	30.84	12.01	9.06	14.76
USC-750SU-R	31.5	12.01	9.06	14.76



PEDESTAL PUMP

APPLICATIONS

Ideal for average-volume water removal in residential sump pits located in basements and crawl spaces.

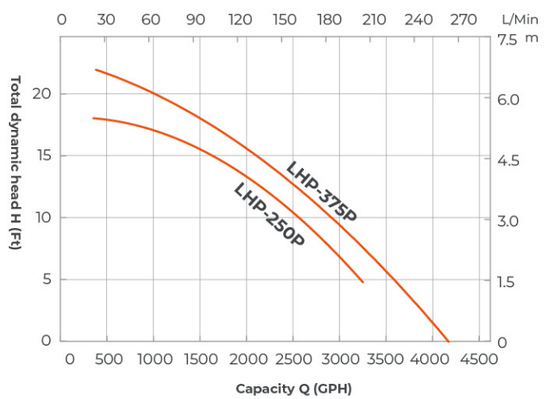
FEATURES & BENEFITS

- Corrosion-resistant vinyl column
- Built-in automatic thermal overload protector
- Fully adjustable automatic vertical float switch
- Plastic base
- Top suction screen design to prevent clogs
- 1-1/4" NPT discharge

Model	HP	Voltage	AMP	Discharge NPT(In)	GPH of water@Total Ft.of Head				Max.Head Ft
					5ft	10ft	15ft	20ft	
LHP250P	1/3	115V	4.3A	1- 1/4 in	3270	2650	1740	-	18ft
LHP375P	1/2	115V	4.9A	1- 1/4 in	3650	2850	2100	1000	23ft

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LHP250P	15.1	10.2	9.5	33.7
LHP375P	17.6	10.2	9.5	33.7



CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP
LEO

PEDESTAL PUMP

APPLICATIONS

Ideal for average-volume water removal in residential sump pits located in basements and crawl spaces.

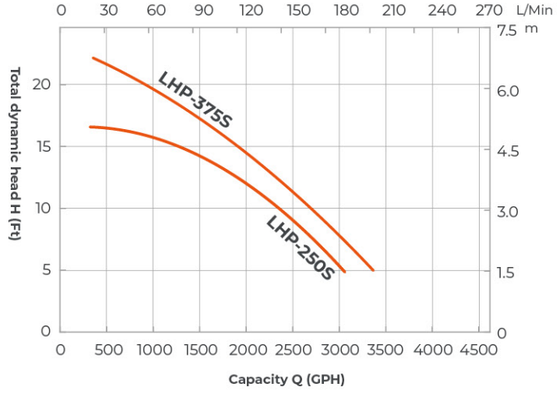
FEATURES & BENEFITS

- Stainless steel column
- Built-in automatic thermal overload protector
- Fully adjustable automatic vertical float switch
- Cast iron corrosion-resistant base
- Top suction screen design to prevent clogs
- 1-1/2" NPT discharge

Model	HP	Voltage	AMP	Discharge NPT(In)	GPH of water@Total Ft.of Head				Max.Head Ft
					5ft	10ft	15ft	20ft	
LHP250S	1/3	115V	3.9A	1-1/2 in	3100	2430	1250	-	16.4
LHP375S	1/2	115V	4.8A	1-1/2 in	3370	2750	1890	800	23

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LHP250S	21.6	10.2	9.5	33.7
LHP375S	24.2	10.2	9.5	33.7



THERMOPLASTIC EFFLUENT PUMP

APPLICATIONS

Ideal for average- to high-volume water and effluent removal in residential spaces such as basements, laundry facilities, and crawl spaces.

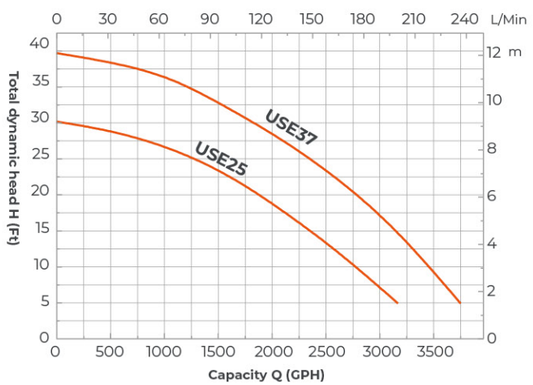
FEATURES & BENEFITS

- Bottom suction design
- Easily replaces all professional grade tethered or integral snap-action float switch pumps
- Snap-Action float switch for automatic operation
- Permanent split capacity motor
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- Works with snap-action float switch tethered float switch for automatic operation
- Application with up to 3/8" diameter solids
- 1-1/2" NPT discharge

Model	HP	VOLT/PH	HZ	RPM	AMPS	GPH of water@Total Ft.of Head					Max head (FT)
						5ft	10ft	15ft	20ft	25ft	
USE25	1/3	115/1	60	3450	5.5	3170	2780	2330	1640	1220	30
USE37	1/2	115/1	60	3450	8	3750	3490	3145	2800	2330	39

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
USE25	34.39	11.02	9.45	13.39
USE37	34.39	11.02	9.45	13.39



CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP

CAST IRON EFFLUENT PUMP

APPLICATIONS

Ideal for average- to high-volume water and effluent removal in residential spaces such as basements, laundry facilities, and crawl spaces.

USC-330/500/750EF-T

USC-330/500/750EF-R

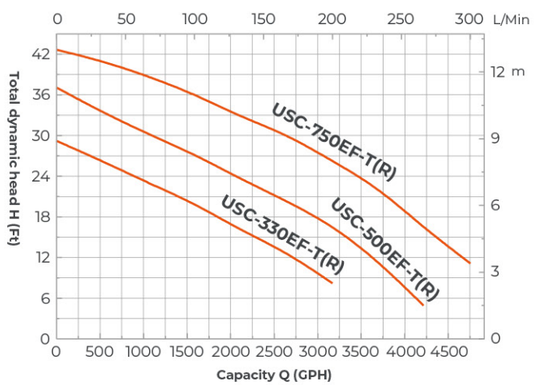
FEATURES & BENEFITS

- Bottom suction design with non clog vortex cast iron impeller
- Easily replaces all professional grade tethered or integral snap-action float switch pumps
- Passes 3/4 diameter solids
- Stainless steel hardware and handle designed for easy installation
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- 10 ft. Cord with plug on 115 volt single phase
- 1-1/2" NPT discharge

Model	HP	VOLT/PH	HZ	RPM	AMPS	GPH of water@Total Ft.of Head					Max head (FT)
						5ft	10ft	15ft	20ft	25ft	
USC-330EF-T	1/3	115/1	60	3450	5.5	-	2960	2290	1560	720	29
USC-500EF-T	1/2	115/1	60	3450	9	4210	3800	3330	2680	1900	37
USC-750EF-T	3/4	115/1	60	3450	11	-	4870	4360	3890	3330	42.5
USC-330EF-R	1/3	115/1	60	3450	5.5	-	2960	2290	1560	720	29
USC-500EF-R	1/2	115/1	60	3450	9	4210	3800	3330	2680	1900	37
USC-750EF-R	3/4	115/1	60	3450	11	-	4870	4360	3890	3330	42.5

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
USC-330EF-T	35.93	12.01	9.06	15.35
USC-500EF-T	36.38	12.01	9.06	15.35
USC-750EF-T	38.14	12.01	9.06	16.34
USC-330EF-R	36.38	12.01	9.06	15.35
USC-500EF-R	36.82	12.01	9.06	15.35
USC-750EF-R	38.36	12.01	9.06	16.34



EFFLUENT PUMP

APPLICATIONS

Ideal for pumping liquid from septic tanks, as well as pumping out flooded basements, irrigation, and general dewatering.

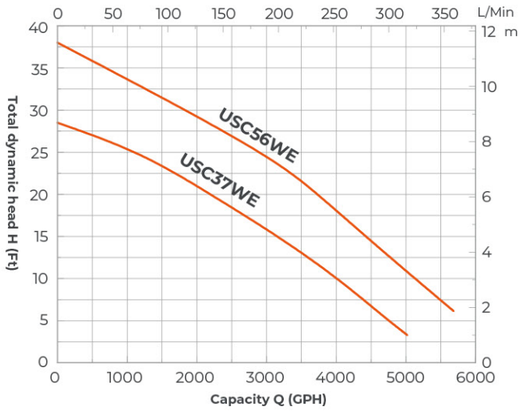
FEATURES & BENEFITS

- High flow effluent pump
- Easily replaces all professional grade tethered pumps
- Durable cast iron construction
- Oil-filled permanent split capacitor motor and bulit-in automatic thermal overload protector
- Integral 10ft piggy back float switch for automatic operation
- Application with up to 3/4" diameter solids
- 2"NPT discharge

Model	HP	VOLT/PH	HZ	RPM	AMPS	GPH of water@Total Ft.of Head					Max head (FT)
						5ft	10ft	15ft	20ft	25ft	
USC37WE	1/2	120/1	60	3450	7.8	4750	4030	3170	2200	1200	28.5
USC56WE	3/4	120/1	60	3450	10	-	5130	4420	3740	3000	38

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
USC37WE	30.62	11.22	7.48	17.13
USC56WE	32.38	11.22	7.48	17.13



CAST IRON SEWAGE PUMP

APPLICATIONS

Ideal for high volume raw sewage removal applications.

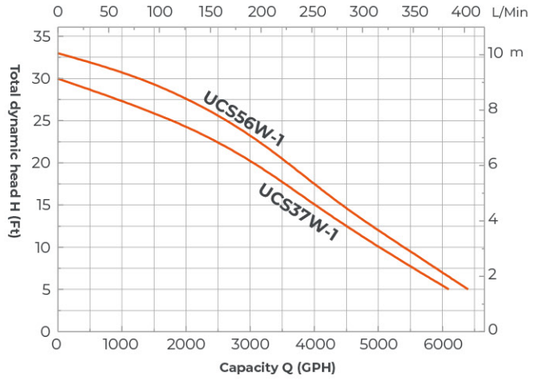
FEATURES & BENEFITS

- Durable cast iron construction
- Plastic non-clog votex impeller
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- Works with 10' piggy back tethered float switch for automatic operation
- Application with up to 2" diameter solids
- Ideal for basements or below grade installations
- 2'' NPT discharge capable for handing up to 2" diameter solids

Model	HP	VOLT/PH	HZ	RPM	AMPS	GPH of water@Total Ft.of Head					Max head (FT)
						5ft	10ft	15ft	20ft	25ft	
USC37W-1	1/2	120/1	60	3450	9.5	6000	4950	4050	3000	1950	30
USC56W-1	3/4	120/1	60	3450	10	6400	5400	4400	3600	2700	33

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
USC37W-1	34.39	11.22	7.48	17.68
USC56W-1	34.83	11.22	7.48	17.68



PREMIUM CAST IRON SEWAGE PUMP

APPLICATIONS

Ideal for high volume raw sewage removal applications.

FEATURES & BENEFITS

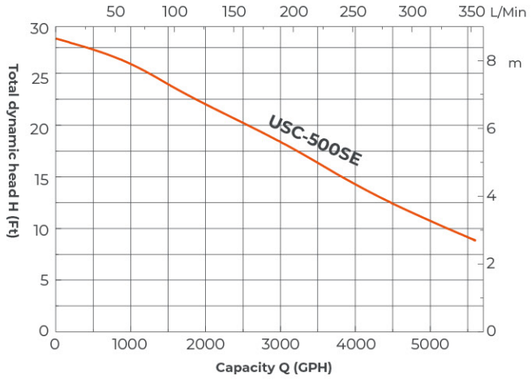
- Durable cast iron construction
- Heavy duty cast iron volute and impeller
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- Work with 10ft piggy back tethered float switch for automatic operation
- 2" NPT discharge capable for handing up to 2" diameter solids

USC-500SE-R USC-500SE-T

Model	HP	VOLT/PH	HZ	RPM	AMPS	GPH of water@Total Ft.of Head				Max head (FT)
						10ft	15ft	20ft	25ft	
USC-500SE-R	1/2	115/1	60	3450	12	5230	3810	2560	1250	28
USC-500SE-T	1/2	115/1	60	3450	12	5230	3810	2560	1250	28

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
USC-500SE-R	42.95	12.01	9.06	19.29
USC-500SE-T	42.95	12.01	9.06	19.29



MULTI-PURPOSE THERMOPLASTIC UTILITY PUMP

APPLICATIONS

Ideal for general water transfer applications and household water removal in places like basements, aquariums, and window wells.

FEATURES & BENEFITS

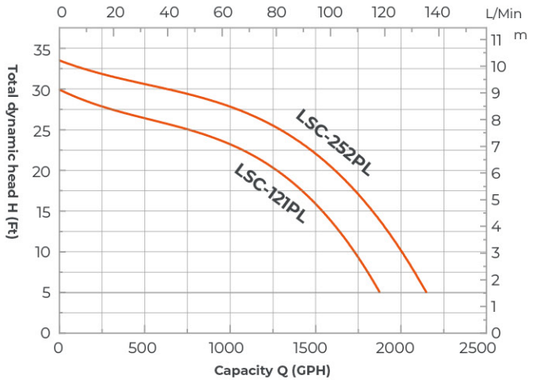
- Continuous duty and unique ergonomic handle design for easy portability
- Corrosion-resistant, reinforced thermoplastic construction
- Bottom suction design filters debris and removes water down to 1/4" of surface
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- 1-1/4" NPT discharge with 3/4" garden hose adapter included

Model	HP	Voltage	AMP	Oil filling capacity (ounces)	Discharge NPT(In)	GPH of water@Total Ft.of Head					Max.Head Ft
						5ft	10ft	15ft	20ft	25ft	
LSC-121PL	1/6	115V	3.5A	18.60	1-1/4 in	1850	1700	1500	1250	750	29.5
LSC-252PL	1/3	115V	4.0A	18.94	1-1/4 in	2110	2000	1850	1650	1300	33.5

Note: Model with "L" means aluminum wire

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LSC-121PL	8.37	7.9	7.1	11
LSC-252PL	9.03	7.9	7.1	11



MULTI-PURPOSE AUTOMATIC UTILITY PUMP

APPLICATIONS

Ideal for general water transfer applications and household water removal in places like basements, aquariums, and window wells.

FEATURES & BENEFITS

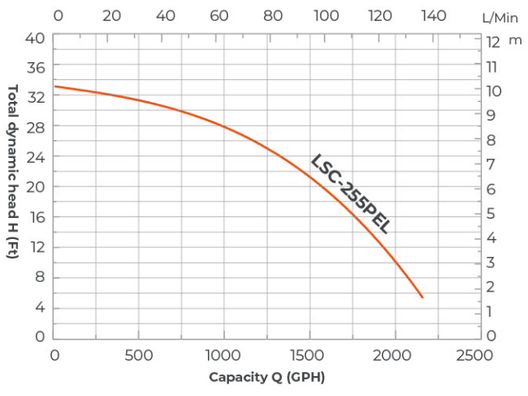
- Smart electronic sensor automatically turns on when 1-1/2" water is detected; turns off when water level falls below 1/4"
- Corrosion-resistant, reinforced thermoplastic construction
- Bottom suction design filters debris and removes water down to a depth 1/4"
- Oil-filled permanent split capacitor motor and built-in automatic thermal overload protector
- 1" NPT discharge with 3/4" garden hose check valve adapter included

Model	HP	Voltage	AMP	Oil filling capacity (ounces)	Discharge NPT(In)	GPH of water@Total Ft.of Head					Max.Head Ft
						5ft	10ft	15ft	20ft	25ft	
LSC-255PEL	1/3	115V	4.0A	18.60	1 in	2110	1950	1750	1550	1240	33.5

Note: Model with "L" means aluminum wire

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LSC-255PEL	10.6	9.06	8.46	12.2



CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP
LEO

MULTI-PURPOSE TRANSFER PUMP

APPLICATIONS

Ideal for draining hot water tanks, appliances, aquariums, and boat bilges, filling or emptying live wells, or water transfer applications where easy portability is required.

FEATURES & BENEFITS

- Unique ergonomic handle designed for easy portability
- Durable metal volute
- No oil design,safe for aquatic life
- Built-in automatic thermal overload protection
- Water suction attachment included
- Available in 115 volt or 12 volt
- 12 Volt model comes with an on and off switch
- 3/4" brass adapters connect to standard garden hose

PM001-1

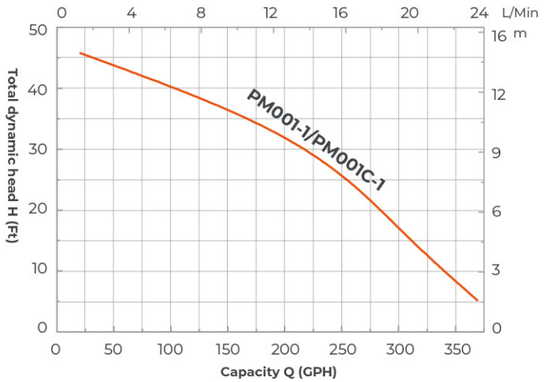
PM001C-1

Model	HP	Voltage	AMP	Discharge NPT(In)	GPH of water@Total Ft.of Head					Max.Head Ft
					5ft	15ft	25ft	35ft	45ft	
PM001-1	1/10	12V	15.0A	3/4 in	365	310	259	160	27	46ft
PM001C-1	1/10	115V	1.8A	3/4 in	365	310	259	160	27	46ft

Note: PM001 (copper pump body), PM001-1 (zinc alloy pump body), PM001C-1 (copper pump body)

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
PM001-1	6.4	9.5	9.5	6.0
PM001C-1	7.2	9.5	9.5	6.0



CIRCULATION PUMP

APPLICATIONS

It is widely used for heating ventilation and air conditioning (HVAC) circulation,pressure boosting of hot water in Family, homes powered by solar energy.

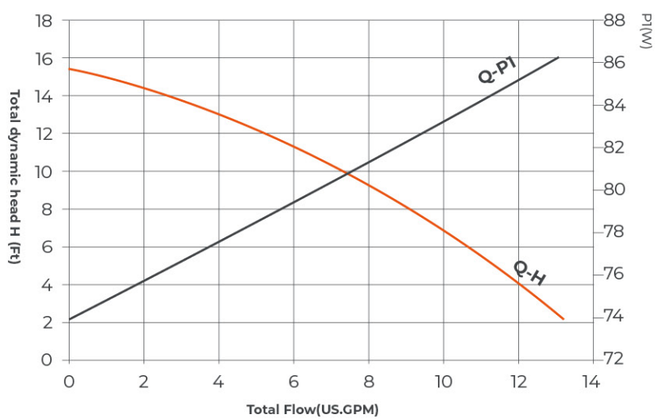
FEATURES & BENEFITS

- Bronze or anti-rust cast iron pump body
- Noryl impeller with heat resistance up to 302 ˚F
- 95% alumina ceramic shaft
- Liquid temperature: 35.6 ˚F ~230 ˚F
- Insulation class: F
- 99% alumina ceramic bearing

Model	Voltage /Frequency	Power (W)	Max. Flow (GPM)	Max.Head (FT)
LRP21-40F/162	115V/60Hz	100	10.9	15.4

CARTON SPECIFICATIONS

Model	N.W. (lbs)	GW. (lbs)	L(in)	W(in)	H(in)
LRP21-40F/162	7.06	7.72	6.77	6.5	5.39



POOL COVER PUMP

APPLICATIONS

- Suitable for some small swimming pools, bathing pools, small water supply and supporting systems, aquaculture and other scenes.

FEATURES & BENEFITS

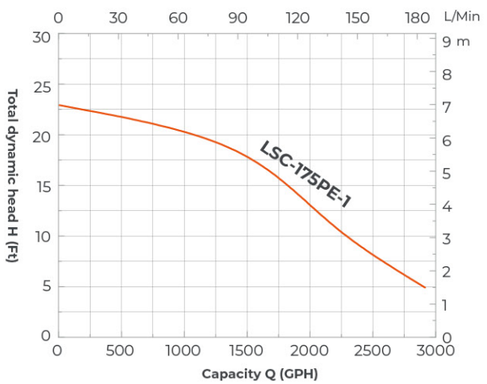
- Easy access handle designed for easy portability
- Corrosion-resistant, reinforced thermoplastic construction
- Bottom suction design filters debris and removes water down to 3/4"
- No oil design,safe for aquatic life and build-in automatic thermal overload protector
- Smart electronic sensor for automatic operation turns on when water has been detected at 2.5”
- 25ft power cord with GFCI protected plug (included in Canadian market)
- 1-1/4" NPT discharge with 3/4" check valve adapter included
- GFCI is optional

Model	HP	Voltage	AMP	Discharge NPT	GPH of water@Total Ft.of Head				Max.Head Ft
					5ft	10ft	15ft	20ft	
LSC-175PE-1	1/4	115V	3.0	1-1/4 in	2910	2250	1850	1300	23

"-1" means capacitive sensing

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
LSC-175PE-1	12.8	12.6	9.6	13.2



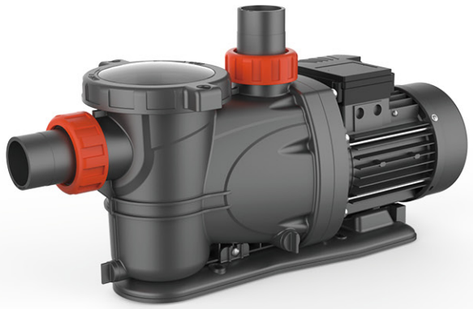
SWIMMING POOL PUMP

APPLICATIONS

It is used for water circulation in all kinds of small domestic swimming pools. Slightly dirty water with solids in suspension can be perfectly filtered.

FEATURES & BENEFITS

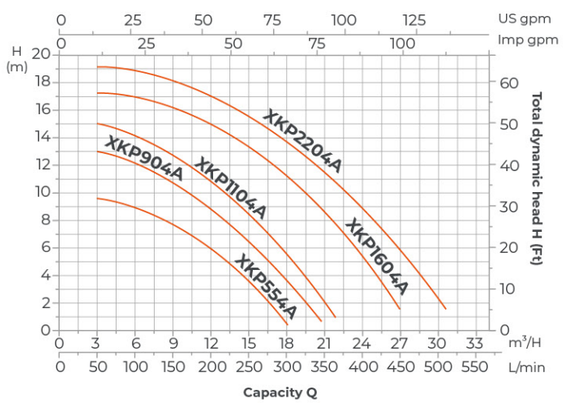
- The motor is completely rain resistant, safe and reliable
- Thermal overload protector
- Insulation class:F
- Protection class:IPX5
- The motor allows S1 to work continuously
- The design of the casing cover can be disassembled easily
- Large capacity basket volume
- Design to handle swimming pool chemicals
- The pump's wet parts are reinforced with engineered plastics
- Water pump drain plugs for installation



Model	HP	Voltage	AMP	Discharge (in)	GPM of water@Total Ft.of Head					Max.head ft
					10ft	20ft	30ft	40ft	50ft	
XKP554A	3/4	110-120	5.5	G2	68.33	53.33	26.33	-	-	33.8
XKP904A	1.2	110-120	9	G2	80.5	67.5	52.83	29.67	-	45.9
XKP1104A	1.5	110-120	10.5	G2	93.33	80	65	41.67	-	49
XKP1604A	2.2	110-120	15.5	G2	122.5	108.33	92.33	72.67	42.5	55.1
XKP2204A	3	110-120	18	G2	134.33	120.67	108.33	90	64.83	60.6

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
XKP554A	22.11	23.82	8.07	11.42
XKP904A	25.76	23.82	8.07	11.42
XKP1104A	26.77	23.82	8.07	11.42
XKP1604A	35.13	25.39	9.06	11.42
XKP2204A	39.58	25.39	9.06	11.42



CLEANWATER PRESSURE BOOSTING SYSTEM LAWN & IRRIGATION SUMP PUMP EFFLUENT PUMP
SEWAGE PUMP MULTI-PURPOSE CIRCULATION PUMP SWIMMING POOL PUMP
LEO

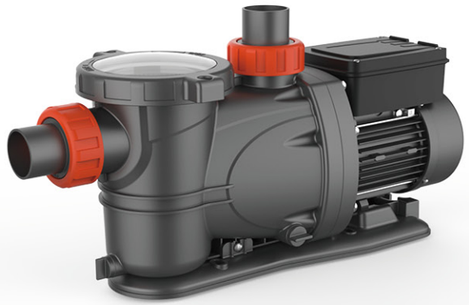
SWIMMING POOL PUMP

APPLICATIONS

It is used for water circulation in all kinds of small domestic swimming pools. Slightly dirty water with solids in suspension can be perfectly filtered.

FEATURES & BENEFITS

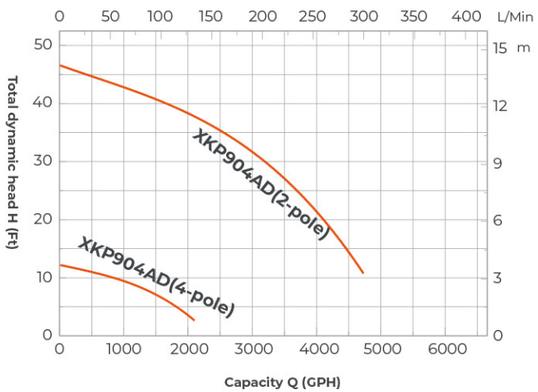
- The motor is completely rain resistant, safe and reliable
- Thermal overload protector
- Insulation class:F
- Protection class:IPX5
- The motor allows S1 to work continuously
- The design of the casing cover can be disassembled easily
- Large capacity basket volume
- Design to handle swimming pool chemicals
- The pump's wet parts are reinforced with engineered plastics
- Water pump drain plugs for installation



Model	Motor pole	HP	Voltage	AMP	Discharge	GPH of water@Total Ft.of Head						Max.head
					in	5FT	10FT	20FT	30FT	40FT	50FT	FT
XKP904AD	2-pole	1.2	110-120	10.5	G2	5200	4900	3280	3280	1750	-	45.9
	4-pole	1/3	110-120	3.5	G2	2100	790	-	-	-	-	11.5

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
XKP904AD	32.05	25.39	8.07	12.01



SWIMMING POOL PUMP

APPLICATIONS

It is used for water circulation in all kinds of small domestic swimming pools. Slightly dirty water with solids in suspension can be perfectly filtered.

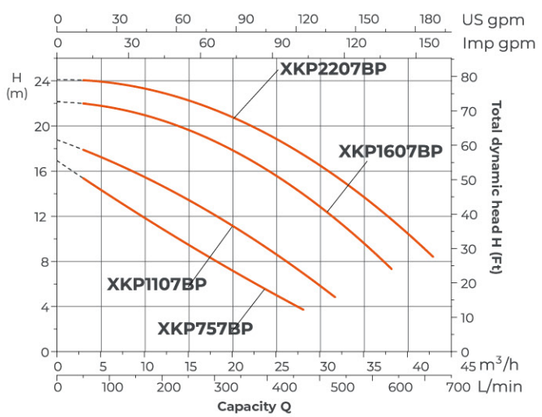
FEATURES & BENEFITS

- Runs quietly at all times, allowing you to enjoy freedom.
- Strong suction, fast pumping, easily meet water needs
- 24-hour cycle timed start and stop, no need for supervision giving you more peace of mind
- Language genius, six languages can be switched at will
- Multiple security protections,more comfortable to use
- LED high-resolution display screen, easy operation,information visualization
- Adopting permanent magnet motor, energy saving and low consumption, more energy saving and more economical
- Energy saving 1: high-efficiency permanent magnet motor (speed up to 4000 rpm) & ECO algorithm upgrade, lower energy.
- Consumption under similar flow and head performance
- Energy saving 2: 30-100% speed self-setting function, not only to meet the routine needs of daily water circulaticn, but also to adjust the speed with sand cylinder backwashing
- Constaint temperature system, disinfection system and other flow scenario needs, to solve the traditional pump high energy consumpption problems.

Model	Voltage	Frequency	Speed	Input Power	Max.Flow	Max. Head
			rpm	HP	GPM	ft
XKP757BP	220-240	50/60Hz	4000	1	123	55.8
XKP1107BP				1.5	141	60.7
XKP1607BP				2.2	168	72.2
XKP2207BP				3	189	78.7

CARTON SPECIFICATIONS

Model	GW(lbs)	L(in)	W(in)	H(in)
XKP757BP	31.75	27.56	9.84	13.19
XKP1107BP	32.19	27.56	9.84	13.19
XKP1607BP	35.71	27.56	9.84	13.19
XKP2207BP	35.71	27.56	9.84	13.19



GLOSSARY OF TERMS

Air volume control
Designed to maintain the air charge in a standard water storage tank. Pre-charged tanks do not require an air volume control.

Atmospheric pressure
A force exerted upon the earth's surface by the weight of air extending to a height of 25 miles above the earth; 14.7 pounds per square inch at sea level.

Barb fitting
A part of a fitting that a hose slides over which contains ridges, which help lock the hose to the fitting. The hose is then secured with a clamp.

Basin
A container connected to a sink, toilet, washer, or dishwasher that is used to collect refuse that comes from these appliances. Once collected, the waste is pumped from the basin to a septic tank, holding tank, leaching field, or septic field. See Minimum Basin Diameter for additional information.

Black water
Also known as sewage or wastewater. Water containing semi-solids up to 2 inches in diameter.

Centrifugal force
The force created by a spinning or rotating impeller resulting in the movement of water outward from the center point. A pump uses an impeller to create centrifugal force.

Check valve
Allows water to move in only one direction which prevents water from returning to its source.

Control box
Installs above ground. Contains electrical starting components for 3-wire submersible deep well pumps. 2-wire submersible deep well pumps do not use a control box.

Convertible jet pump
For both deep wells (where pumping water levels are as far as 90' below the pump) and shallow wells (where pumping water levels are no more than 25' below the pump). Pump/tank packages are also available.

Cut-in pressure setting
The point at which the pressure switch turns the pump on.

Deep well
Well with a depth to water greater than 25'.

Deep well pump (submersible)
For use on wells where pump water levels are up to 400' below point of use. Pump is submerged underwater in the well.

Depth to water
The vertical measurement from pump level down to water level of water source. Pump height above water.

Discharge
The opening by which water is removed by the pump.

Discharge pressure
The amount of force or pressure of the water being discharged from the pump.

Dual voltage motor
Pump motor can then be operated on 115 Volts or 230 Volts.

Effluent
Water containing semi-solids up to 1/2" diameter generated from activities such as dishwashing, bathing, laundry, etc., also known as gray water.

FNPT
Female National Pipe Thread: a U.S. standard for tapered threads used on threaded pipes and fittings (female end is larger than male end).

Foot valve
Installs on the end of the suction pipe to prevent water from draining back to source. Includes strainer to minimize suction of debris into the pump.

GLOSSARY OF TERMS

Friction loss
A loss in pressure caused by friction when liquid moves through a pipe.

GHT
Garden Hose Thread (3/4").

GPH
Gallons per hour.

GPM
Gallons per minute.

Gray water
Also known as effluent. Water containing semi-solids up to 1/2" in diameter generated from activities such as dishwashing, bathing, laundry, etc.

Head
The vertical distance from the top of the well to the pressure tank, the top of the well to the static water level, the drawdown (static water level to the pumping water level), or the vertical distance from the well to the house

HP
Horsepower (power of motor)

Intake
The opening by which water is sucked into the pump.

Jet pump
A centrifugal pump that requires a jet to help build additional water pressure.

Minimum basin diameter
Minimum basin diameter refers to the inside diameter of the opening at the top of a basin not including the lip. It is a guideline based on average basin sizes in the industry. Minimum clearance dimensions are not provided because most basins are tapered at the bottom and it can be difficult to measure this accurately. Place the pump so the switch can move freely without touching the basin (the pump edge should be up against the side of the basin). Always test the pump to make sure the switch clears the side wall of the basin. If you have a narrow pit or basin less than 18" in diameter, a pump with a vertical or snap-action float switch is recommended.

MNPT
Male National Pipe Thread: a U.S. standard for tapered threads used on threaded pipes and fittings (male end is smaller than female end).

Multi-stage jet pump
For use on deep wells only with pumping water levels as far as 210' below the pump.

NPT
National Pipe Thread: a U.S. standard for tapered threads used on threaded pipes and fittings.

PSI
Pounds per square inch. A volumetric pressure measurement.

Pre-charged tank
A water storage tank pre-charged with air at the factory featuring a vinyl bag to separate water from the air which prevents waterlogging. This tank design provides greater drawdown than standard tanks. Pre-charged tanks do not require an air volume control.

Pressure
A force usually expressed in pounds per square inch.

Pressure switch
The switch that automatically turns the pump on and off at specified pressures of 30/50 psi and 40/60 psi.
IMPORTANT: Always replace an old switch with a new switch with the same pressure settings.

Pressure operation - 30/50
Pressure switch turns pump on at 30 psi and off at 50 psi.

GLOSSARY OF TERMS

Pressure operation - 40/60
Pressure switch turns pump on at 40 psi and off at 60 psi.

Priming the pump
The initial filling of a jet or centrifugal pump with water so that air can be removed.

Pump capacity
The amount of water a pump is capable of moving at a given pressure.

Pumping water level
The distance below ground where the water is found when the well is being pumped at its rated capacity.
Static Water Level + Drawdown = Pumping Water Level.

Safety relief valve
Required for all submersible pump and pressure boosting installations to prevent over-pressurization of water storage tank and system piping that could develop from pressure switch malfunction.

Sewage
Water containing semi-solids up to 2" in diameter. Also known as black water.

Shallow well
Well with a depth of water of 25' or less.

Shallow well pump
For use in wells where pump water levels are no more than 25' below the pump. Features a built-in jet.

Sizing
Properly matching product to application for best performance.

Standard tank
A pressurized water storage tank where air comes in contact with water. Requires air volume control for proper operation.

Static water level
The distance below ground where water is found when no pumping occurs.

Submersible deep well pump
For use on wells where pump water levels are up to 400' below point of use. Pump is submerged underwater in the well.

Suction lift
The vertical height from the pumping water level to the suction part of the pump.

Tank
Stores air and water under pressure to provide for automatic pump operation and a source of water when pump is not running.

TEFC design
Totally enclosed, fan cooled design.

Waterlogging
The absorption of air into water stored in a water storage tank, greatly reducing the amount of usable water drawdown available from the tank.

Water storage tank
Stores air and water under pressure to provide for automatic pump operation and a source of water when pump is not running.

Well capacity
Also known as the well's replenishment rate or well recovery rate. It is the rate at which the well refills with water, measured in gpm. This information is found on the Well Driller's Report.

Well recovery rate or well replenishment rate
Also known as the well's replenishment rate or well capacity. It is the rate at which the well refills with water, measured in gpm. This information is found on the Well Driller's Report.

TROUBLESHOOTING GUIDE

SHALLOW WELL JET PUMPS

1. Motor will not start:
- No power to pressure switch due to blown fuses, open switches or loose connections.
- Pump pressure switch not closed.

2. Pump fails to deliver water:
- Pump not completely primed.
- Suction lift is too great.
- Foot valve is either not submerged, buried in mud or plugged.
- Filtration cartridge (if used) needs changing or is not installed properly.

3. Pump loses prime:
- Air leaks in suction line.
- Well drawn down too far.
- Faulty foot valve.

4. Pump delivers water but not at rated capacity:
- Leaks in suction or discharge line.
- Foot valve, suction line, impeller or nozzle are partially plugged.
- Suction lift is greater than recommended.
- Improper impeller rotation or low speed.
- Venturi or diffuser is plugged.
- Motor is wired for improper voltage.
- Low line voltage at motor.
- Motor does not come off starting windings (improper motor switch adjustment).
- Filtration cartridge (if used) needs changing or is not installed properly.

5. Pump starts and stops too often:
- Faulty air volume control.
- Air leaks in tank above the water level.
- Incorrect setting on pressure switch.
- Tank is waterlogged or too small for application.

CONVERTIBLE JET PUMPS

1. Motor will not start:
- No power to pressure switch due to blown fuses, open switches or loose connections.
- Pump pressure switch not closed.

2. Pump fails to deliver water:
- Pump not completely primed.
- Suction lift is too great.
- Foot valve is either not submerged, buried in mud or plugged.
- Restrictor valve is fully closed.
- Filtration cartridge (if used) needs changing or is not installed properly.

3. Pump loses prime:
- Air leaks in suction line.
- Well drawn down too far and requires a tail-pipe.
- Faulty foot valve.

4. Pump delivers water but not at rated capacity:
- Leaks in suction or discharge line.
- Foot valve, suction line, impeller or nozzle are partially plugged.
- Suction lift is greater than recommended.
- Improper setting of control valve on deep well units.
- Improper impeller rotation or low speed.
- Venturi or diffuser is plugged.
- Motor is wired for improper voltage.
- Low line voltage at motor.
- Filtration cartridge (if used) needs changing or is not installed properly.

5. Pump starts and stops too often:
- Air leaks in tank above the water level.
- Incorrect setting on pressure switch.
- Tank is waterlogged or incorrectly charged.
- Foot valve leaks or is stuck open.

SAND POINT APPLICATIONS

Trouble	Possible Solution
Pump noisy; output requirement exceeds available capacity.	Install/adjust valve on discharge to reduce output
Pump runs hot/won't shut off. Cannot build pressure due to lack of water at source.	Install low pressure cut-off switch to shut down pump prior to critical failure.
Changes in requirement not being met by current system (added bathroom, irrigations, etc.)	Increase pressure cut-off switch to offset peak period demand from insufficient source.

TROUBLESHOOTING GUIDE

SUBMERSIBLE UTILITY & SUMP PUMPS

Trouble	Possible Cause	Corrective Action
Motor does not run.	Blown fuse.	Replace fuse.
	Tripped circuit.	Reset.
	Disconnected plug.	Reinstall pump.
	Corroded plug.	Clean prongs.
	Tripped overload.	Allow pump to cool, investigate cause (i.e. jammed impeller).
	Defective switch.	Replace switch.
	Defective motor.	Replace pump.
	Float obstructed.	Check for freedom of movement. Ensure switch isn't touching wall of basin or pit.
Motor hums but flow reduced or none at all.	Impeller jammed	Remove bottom plate and clean.
	Plugged check valve.	Remove valve, clean or replace.
	Partially blocked inlet.	Clean inlet.
	Line leak.	Repair line.
	Worn impeller.	Replace pump/repair.
	Defective motor.	Replace pump.
Pump runs continuously.	Plugged inlet.	Clean inlet.
	Defective switch.	Replace switch.
	Float obstruction.	Adjust position of pump.
	Plugged check valve.	Remove valve, clean or replace.

CAUTION

A plugged pump inlet can be mistaken for a faulty switch. If the pump runs continuously or for extended periods of time between turning off, first check for a partially plugged inlet.

CAST IRON SURFACE EFFLUENT PUMP & HEAVY-DUTY MULTI-PURPOSE TRANSFER PUMP

1. Pump fails to prime or primes slowly:
- Leaks in suction line.
- Loose gasket connection due to shrinkage of the gasket.
- Collapsed or clogged suction line.
- Not enough water in the casing for priming.
- Suction lift is too great.

2. Reduced pressure or capacity:
- Partially collapsed or clogged suction line.
- Clogged impeller.
- Leaks in the suction line.
- Strainer or end suction hose is not properly submerged.
- Suction line is improperly installed, resulting in air pockets in the suction line.
- Suction lift is too great (the greater the suction lift, the lower the capacity and pressure).
- Worn parts, such as the impeller or the pump casing.

TROUBLESHOOTING GUIDE

SPRINKLER UTILITY PUMPS

1. Motor will not start:
- No power to pressure switch due to blown fuses, open switches or loose connections.
- Pump pressure switch not closed.

2. Pump fails to deliver water:
- Pump not completely primed.
- Suction lift is too great.
- Foot valve is either not submerged, buried in mud or plugged.
- Convertible jet only; restrictor valve is fully closed.

3. Pump loses prime:
- Air leaks in suction line.
- Well drawn down too far
- Faulty foot valve.

4. Pump delivers water but not at rated capacity:
- Leaks in suction or discharge line.
- Foot valve, suction line, impeller or nozzle are partially plugged.
- Suction lift is greater than recommended.
- Improper impeller rotation or low speed.
- Venturi or diffuser is plugged.
- Motor is wired for improper voltage.
- Motor does not come off starting windings (improper motor switch adjustment).

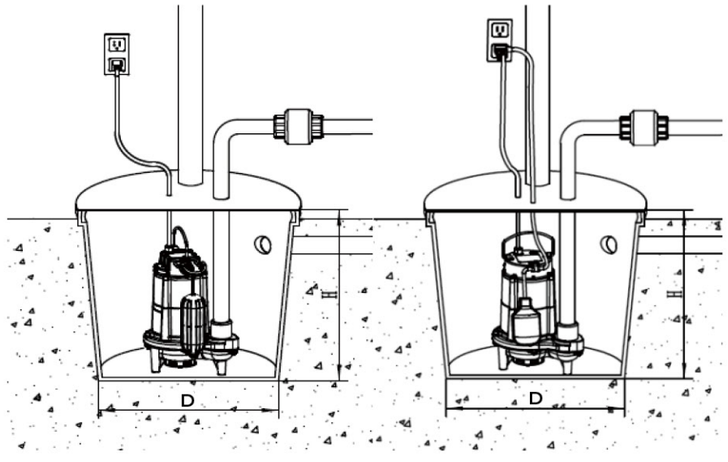
TECHNICAL DATA

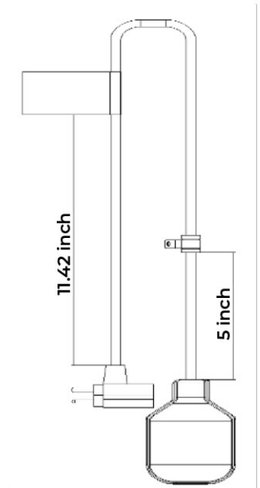
FRICTION LOSS CHART

Nom. Pipe Size	3/4"			1"			1-1/4"			1-1/2"			2"		
Material	Steel	Copper	Plastic	Steel	Copper	Plastic	Steel	Copper	Plastic	Steel	Copper	Plastic	Steel	Copper	Plastic
I.D./US GPM	0.824	0.822	0.824	1.049	1.062	1.049	1.38	1.368	1.38	1.61	1.6	1.61	2.067	2.067	2.067
1															
2	1.93	1.21	1.04	0.6	0.35	0.32									
2.5	2.91	1.82	1.57	10.92	0.55	0.48									
3	4.08	2.56	2.21	1.26	0.73	0.68									
3.5	5.42	3.4	2.93	1.7	1	0.9									
4	6.94	4.36	3.74	2.14	1.24	1.15	0.56	0.36	0.3	0.27	0.17	0.14			
4.5	8.63	5.4	4.66	2.68	1.58	1.45	0.69	0.42	0.39	0.34	0.21	0.18			
5	10.5	6.57	5.66	3.42	1.88	1.75	0.85	0.55	0.46	0.41	0.25	0.22			
5.5	12.4	7.79	6.75	3.9	2.3	2.1	1	0.62	0.53	0.49	0.3	0.26			
6	14.7	9.22	7.95	4.54	2.63	2.45	1.2	0.77	0.65	0.57	0.36	0.31			
6.5	17	10.7	9.25	5.3	3.12	2.84	1.38	0.88	0.72	0.66	0.42	0.36			
7	19.6	12.2	10.6	6.08	3.58	3.25	1.59	1.02	0.86	0.76	0.48	0.41			
7.5	22.3	13.9	12	6.92	4.03	3.68	1.82	1.16	0.98	0.86	0.54	0.46			
8	25	15.7	13.5	7.73	4.5	4.16	2.04	1.31	1.1	0.96	0.61	0.52			
8.5	27.9	17.6	15.1	8.76	5.08	4.62	2.3	1.47	1.21	1.07	0.68	0.58			
9	31.1	19.5	16.8	9.72	5.6	5.17	5.55	1.62	1.35	1.19	0.75	0.65			
9.5	34.5	21.6	18.6	10.7	6.18	5.72	2.82	1.79	1.5	1.32	0.83	0.72			
10	37.8	23.7	20.4	11.7	6.77	6.31	3.08	1.98	1.67	1.45	0.92	0.79	0.43	0.27	0.23
11	45.1	28.2	24.4	14.1	8.08	7.58	3.7	2.32	1.98	1.74	1.1	0.95	0.51	0.32	0.27
12	53	33.2	28.6	16.4	9.47	8.85	4.31	2.75	2.33	2.04	1.29	1.1	0.6	0.37	0.32
13	61.5	38.5	33.2	18.9	11	10.3	5.01	3.18	2.71	2.37	1.49	1.28	0.7	0.43	0.37
14	70.5	44.2	38	21.8	12.6	11.8	5.73	3.64	3.1	2.71	1.71	1.46	0.8	0.49	0.43
16	90.2	56.6	48.6	27.9	16.2	15.1	7.34	4.68	3.96	3.47	2.2	1.87	1.03	0.63	0.55
18	112	70.4	60.5	34.7	20.1	18.7	9.13	5.81	4.93	4.31	2.75	2.33	1.28	0.78	0.69
20	136	83.5	73.5	42.1	24.4	22.8	11.1	7.1	6	5.24	3.34	2.83	1.55	0.96	0.84
25				63.9	36.9	34.6	16.8	10.7	9.06	7.9	5	4.26	2.35	1.45	1.27
30				89.2	51.6	48.1	23.5	15	12.7	11.1	7	6	3.29	2.03	1.78
35				119	68.7	64.3	31.2	20	16.9	14.7	9.35	7.94	4.37	2.71	2.36
40				152	88	82	40	25.6	21.6	18.9	12	10.2	5.6	3.47	3.03
45				189	109	102	49.4	31.9	27	23.4	14.9	12.6	6.96	4.31	3.76
50							60.4	38.7	32.6	28.5	18.1	15.4	8.46	5.24	4.57
55							71.9	46.5	39.1	34	21.5	18.4	10.1	6.22	5.46
60							84.7	54.1	45.6	40	25.3	21.6	11.9	7.34	6.44
65							99.1	63	53.4	46.4	29	25.1	13.8	8.5	7.42
70							114	72.2	61.5	53.2	33.8	28.7	15.8	9.78	8.53
75							129	82.1	69.4	60.4	38	32.6	17.9	11.1	9.68
80							144	92.4	77.9	68.1	43.1	36.8	20.2	12.5	10.9
85							161	104	87	76.2	47.6	41.2	22.5	14	12.2
90							179	115	96.6	84.7	53.6	45.7	25.1	15.6	13.6
95										93.6	58.8	50.5	27.8	17.2	15

NOTE: Loss of head in feet due to friction per 100 feet of pipe (based on C = 100 for steel, C = 130 for copper, and C = 140 for plastic)

Suggestions for selecting submersible pump sewage tanks





No.	Model	Minimum barrel diameter (inch)	Lowest barrel height (inch)	Float switching distance (inch)
1	LSC-121PL	7.87	15.75	
2	LSC-252PL	7.87	15.75	
3	LSC-255PEL	7.87	15.75	
4	LSD-253S	17.72	22.05	4.33
5	LSD-254PS	17.72	22.05	4.33
6	USC-330SU-R	11.02	22.05	
7	USC-330EF-R	11.02	22.05	
8	USC-750EF-R	11.02	22.05	
9	USC-330EF-T	17.72	25.59	5
10	USC-750EF-T	17.72	25.59	5
11	USC37WE	17.72	27.56	5
12	USC37W-1	17.72	27.56	5
13	USC-500SE-R	11.02	22.05	
14	USC-500SE-T	17.72	27.56	5