



## 2K Series Stainless Steel Submersible Pumps

### Models

# 2K100-2K405

### FEATURES

- 304SSL construction offers corrosion resistance and increases operating life over typical cast iron models.
- Unique bulge formed components eliminates harsh radius and welds and provides greater efficiency and durability.
- Lubricated double mechanical seal offers dependable performance with a variety of liquids.
- Air filled, continuous-duty motors for reliable, long term operation.
- Single phase motor features permanent split capacitor and thermal protection with automatic reset for added protection and extend motor life.
- Versatile, reliable operation whether fully or partially submerged.
- Multiple sizes from 1/2 to 2 hp offers application flexibility.
- Sealed float switch for automatic operation.

### Quality Materials

- Casing is 304SSL for durability over traditional cast iron.
- Semi-open impeller is 304SSL on all models for long life, durability and economy.
- Shaft is 304SSL for dependable, long life.
- Motor frame is 304SSL for dependability.
- Fasteners are all 304SS for durability.
- Shaft Seals are special blend NBR and FPM for compatibility and long life.
- Sealed Bearings for longer life.

### SPECIFICATIONS

	U.S. Measure
Flow Range .....	up to 180 gpm
Pressure Range .....	up to 19.5 psi
.....	up to 46 Ft. Head
RPM .....	3450 rpm
Discharge Fitting .....	2" NPT
Motor Phase	Single ..... Class F, 115V, 230V
	Three ..... Class F, 230V, 460V
Cycle .....	60 Hz
Cable Length	1 PH .... [Gauge AWG 14/16, UL/CSA 3-Prong] 25 Ft.
	3 PH ..... [Gauge AWG 16, UL/CSA] 25 Ft.
Float Operation .....	Manual or Automatic
Maximum Starts/Hour .....	20
Maximum Temperature.....(Continuous)	104°F
	(Intermittent)..... 140°F
Maximum Solids Diameter.....	2"
Weight (see charts) .....	32-52 lbs.
Dimensions (see charts)	
	Length ..... 19.13-24.0"
	Diameter ..... 9.0"

CAPACITY IN GALLONS PER MINUTE (GPM)																		
MODEL	FEET OF HEAD																	
	8	9	10	12	14	16	18	21	24	27	30	32	35	40	46			
2K100-105	88	83	78	68	57	45	31	8										
2K200-205			100	88	76	64	45	25	8									
2K302-305				120	113	105	97	84	69	52	30	8						
2K403-405					180	177	171	165	158	152	141	130	118	105	96	81	52	8

## GENERAL SAFETY AND OPERATION

1. Use with the proper electrical receptacle. On single phase models cord is supplied with a grounding type, 3-prong plug.  
NOTE: DO NOT USE GROUNDING ADAPTER.
2. Do not use if outer covering of cord becomes excessively cut or worn.
3. Each pump comes with a built-in handle for lifting. For added convenience, the 899045 25 ft. marine rope can be attached to the handle.

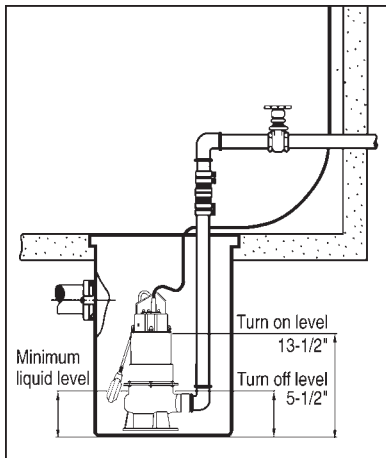
### WARNING

**Do not lift with power cord. This can cause damage to the connection and result in shock or serious injury.**

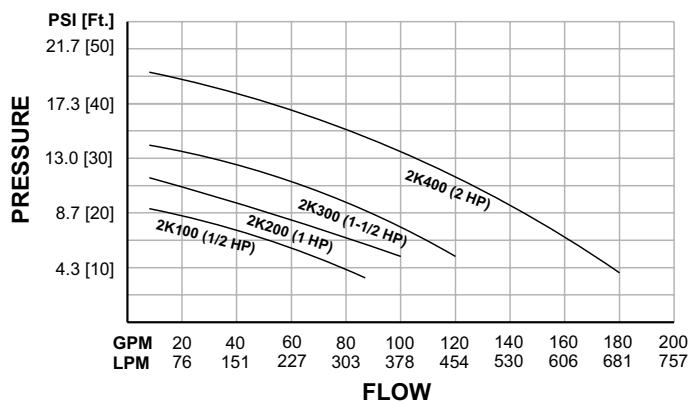
4. Continued cycling on and off is an indication the motor is in overload. Make certain the pump is level and adequately submersed in liquid.

NOTE: CONTINUED OPERATION WITH EXCESSIVE CYCLING WILL OVERHEAT AND BURN OUT MOTOR.

5. All automatic models come with a float switch to shut-off unit when liquid level drops below safe operation. For field retro-fit, the 899080 [115V] or 899081 [230V] float switch can be added to automate the manual units.



## 2K SERIES PERFORMANCE RANGES



### AUTOMATIC MODELS

Model	HP	Phase	Volts	Amps	Pump-Motor Dimensions (in.)			Wt. (lbs.)
					A	B	C	
2K100	1/2	1	115	8.30	21.63	9.0	3.88	36
2K102	1/2	1	230	4.40	19.13	9.0	3.88	36
2K200	1	1	115	*11.80	22.81	9.0	3.88	41
2K202	1	1	230	6.40	22.81	9.0	3.88	44
2K302	1-1/2	1	230	7.00	20.25	9.0	3.88	45

### MANUAL MODELS

Model	HP	Phase	Volts	Amps	Pump-Motor Dimensions (in.)			Wt. (lbs.)
					A	B	C	
2K101	1/2	1	115	8.30	21.63	9.0	3.88	36
2K103	1/2	1	230	4.40	21.63	9.0	3.88	36
2K104	1/2	3	230	3.00	19.13	9.0	3.88	32
2K105	1/2	3	460	1.28	19.13	9.0	3.88	32
2K201	1	1	115	*11.80	22.81	9.0	3.88	41
2K203	1	1	230	6.40	20.25	9.0	3.88	41
2K204	1	3	230	4.20	19.13	9.0	3.88	36
2K205	1	3	460	1.99	19.13	9.0	3.88	36
2K303	1-1/2	1	230	7.00	20.25	9.0	3.88	47
2K304	1-1/2	3	230	4.80	20.25	9.0	3.88	42
2K305	1-1/2	3	460	2.34	20.25	9.0	3.88	42
2K403	2	1	230	*9.10	24.00	9.0	3.88	52
2K404	2	3	230	7.40	20.25	9.0	3.88	47
2K405	2	3	460	3.50	20.25	9.0	3.88	47

Only single phase has motor over-load and auto-reset. \*14 Gauge wire.

### TROUBLESHOOTING

#### PUMP WON'T START

- Blown fuse or tripped circuit
- Low voltage line
- Defective motor
- Impeller clogged
- Not primed
- Check power supply.
- Check power supply.
- Overheated and burned out unit must be replaced.
- Check for proper particle size. Maximum 2" and 2% concentrate and raise from bottom of pit.
- Reposition pump in liquid with minimum 5-1/2" liquid.

#### PUMP CYCLES ON AND OFF

- Insufficient liquid
- Pump run dry
- Liquid temperature to high
- Reposition pump in pit or remove if liquid is too low.
- Keep liquid within pump limits. Remove if liquid is low.
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#### PUMP OPERATES BUT DELIVERS LITTLE FLOW

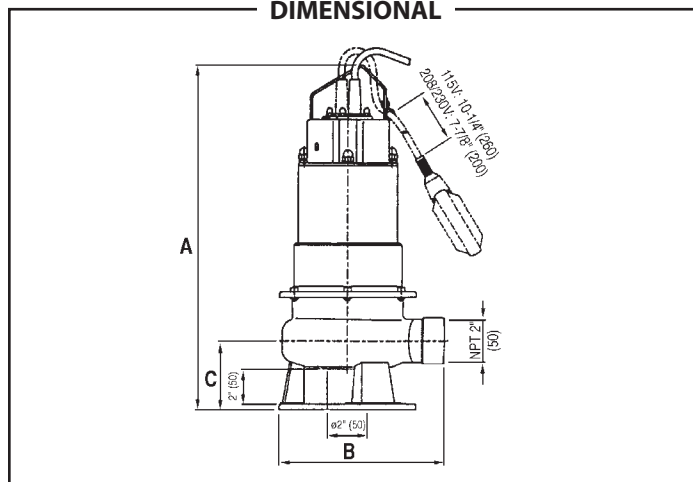
- Impeller clogged
- Low voltage
- Worn seals
- Check liquid and particle size. Flush impeller area.
- Check power supply.
- Replace pump unit.

### WARRANTY

**This pump is warranted for one year from date of purchase.**

Improper installation and use will void the warranty. Tampering with the power cord, impeller or seals will void the warranty.

### DIMENSIONAL



### CAT PUMPS

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