

Two Pump Sentry™ Models from which to Choose

Electrical Specifications	Model 812 PS	Model 1612 PS
Normal Mode Operation:		
Input Voltage:	100-128 VAC	100-128 VAC
Input/Output Current (max.)	11 A Continuous	16 A Continuous
On Motor Start Up	15 A Peak	22 A Peak
Max. Battery Charging Current	12 A	12 A
Max. Recharge Time	13 Hrs.	13 Hrs.
(For recharging a 180 minute reserve battery that has been depleted to 10.5 Vdc)		
Back Up Mode Operation:		
Maximum Back Up Power	1200 Watts Cont.	1600 Watts Cont.
Maximum Input Current	120 A Cont.	180 A Cont.
Size: (inches)	3H x 8W x 17L	3H x 8W x 21L

Model 812 PS will operate most pumps whose continuous current draw does not exceed 11 A.

Model 1612 PS will operate most pump combinations whose continuous current draw does not exceed 16 A.

Pump Sentry™ Selector Guide**

Manufacturer	Pump Model	Pump Sentry Model	
		812 PS	1612 PS
Submersible Types			
Hydromatic	SD 25A	X	X
Jacuzzi	3SPP	X	X
Stevens	SS45F	X	X
Zoeller	M 53	X	X
Tecumseh	T157	X	X

Column Types

Any Brand	X	X
-----------	---	---

***Models other than those listed above may operate properly with Pump Sentry*

AC Pump Sentry System

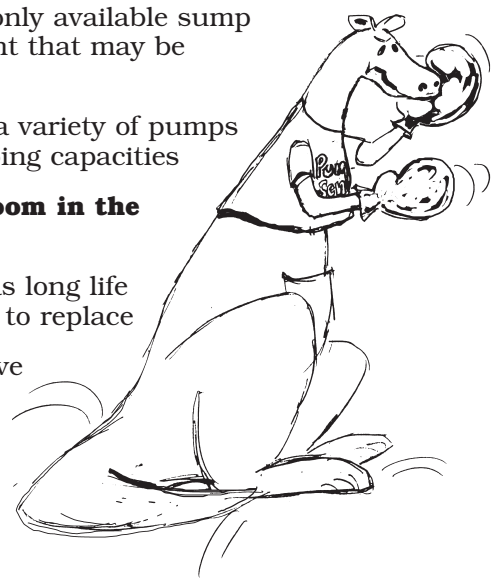
Works with commonly available sump pumping equipment that may be already installed

Can be used with a variety of pumps with varying pumping capacities

Takes no extra room in the sump pit

Motor in pump. has long life and is inexpensive to replace

Pump is inexpensive to replace



VS

12 Volt DC Pump System

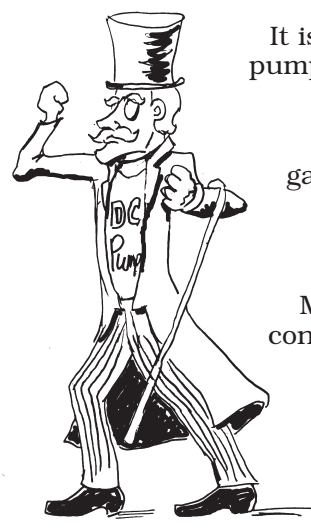
It is usually an add on to the pumping equipment already in the sump pit

Available only in 1100 gal/hour at 10 feet capacity

Occupies space in the sump pit

Motor has shorter life than conventional AC motors used in common sump pumps

Pump is expensive to replace



How to Calculate Operating Time During Power Outage

Operating time will depend on the following:

a) The size of the battery bank i.e. its total Ampere-Hour (A-hr) capacity
Ampere-Hour capacity is calculated by adding the A-hr ratings of all the batteries in the battery bank where the batteries are connected in parallel.
(For Parallel Connection See Fig. #1)

b) The current draw for the pump in Amps (C).
This can be read off the nameplate on the sump pump

c) The average operating duty cycle of the system
The duty cycle of a system is the ratio of its "on" time to its "on" time plus "off" time
e.g. if a pump will work for 10 seconds and is then off for two minutes (120 seconds)
its duty cycle is calculated as follows:

$$\text{Duty cycle} = 10/(10+120) = 0.077$$

Once (a) (b) and (c) are known the operating time of a pump sentry in hours can be calculated by the formula:

$$T = \text{A-hr}/(C \times 10 \times D)$$

e.g. for a system with 1 battery rated 90 A-hr.

- 1) 1 battery rated 90 A-hr., A-hr = 1 x 90
- 2) A sump pump that draws 9 Amps, C=9
- 3) Duty cycle which operates 10 seconds "on" followed by 3 minutes (180 seconds) "off", D = 10/(10+180) = 0.053

$$T (\text{Hours}) = (1 \times 90)/(9 \times 10 \times 0.053) = 19$$

In 10 seconds the average 1/3 hp. sump pump will evacuate approximately 10 gallons of water.

Features and Benefits of Pump Sentry™

- Operates with existing equipment translates into * optimum performance
* does not impose the introduction of an additional pump
- Not restrictive to a single brand or pump style
- Easy Hook Up
(No special tools or wiring necessary, plugs into standard wall outlet)
- Automatic Power Transfer
(You do not have to be present to make it work)
- Automatic Recharge
*(You do not need to remember to recharge the battery)
(You do not need an additional battery charger)*
- Silent and Clean Operation
(can be kept in home basement or utility room)
- Enables the combination of column and submersible pumps without special additions
(no check valves or switches)
- Maintenance Free Operation
(Needs no fuel, has no moving parts)
- Comprehensive Instruction Manual and Factory Support
*(Unconditional 1 Year Warranty on Pump Sentry only)
(no warranty is implied for misapplication - see instruction manual for correct usage)*