

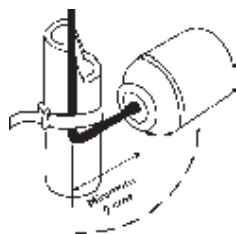
## Features

- Oil bath seal chamber
- Triple seals
- Stainless steel shaft
- Choice of impellers
- Adjustable float switch
- 6m power lead



## Float switches

Some 1 phase and all 3 phase installations require a separate adjustable float switch in either sump fill sump empty function. See accessories page.



## Must be installed vertically

### Applications

Designed for domestic, farm, waste water, sewage and storm water. Orange Sump Pumps are supplied standard with a float switch for full auto operation. Manual models are available, please contact Orange customer service for more details.

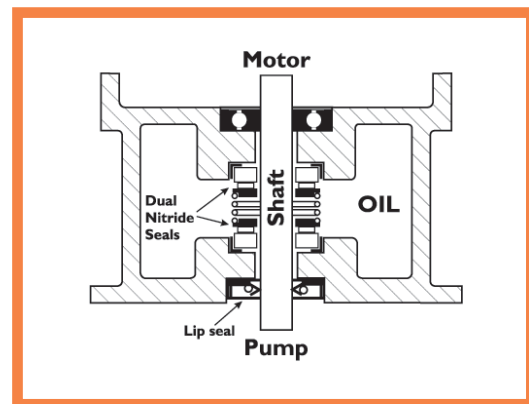
### Installation for all SP models

- Water to be pumped cannot exceed 45°C and 60°C intermittent.
- Standing water level must not exceed 3m above pump
- The ratio of suspended solids cannot exceed 5% of total volume

### Dual seal and oil bath

All SP Orange pumps have ultimate motor protection with an additional lip seal, an oil bath, and dual seals. SP213 pumps and larger have nitride mechanical seals. This reliably keeps water out of the motor.

The silicon nitride seals are very hard and are used for sewage and other applications where the fluid being pumped can contain some abrasive matter.



### Motor protection

The dual silicon nitride seals, lip seal and oil bath construction gives best motor protection.

### Pump construction

Robust heavy design, all cast iron, stainless steel shaft, and durable, giving the pump a long dependable life when pumping most fluids.

### Level control

Each pump is supplied with a level control float switch and 6 metres of cable for easy electrical connection. Both float and lead cable are made of Rubber to withstand chlorine and oils.

# Sump pumps *open impeller*



Model SP213



Model SP213MZ

## Features

Good at handling solids as the open design allows a semi cutting action to clear the pump. Used where there is a possibility that solids will need to be pumped and may clog the pump.



**Model SP213 400 watt**

**Model SP213M 400 watt**

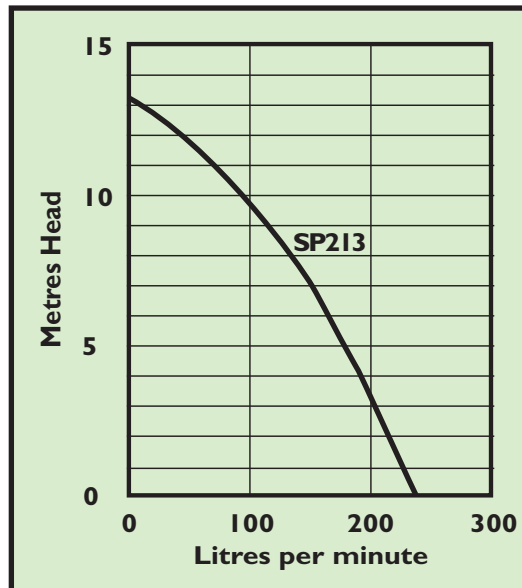
**Model SP213MZ 400 watt**

This pump has an open cast iron impeller and is suitable for pumping from cellars, septic tanks and household drainage where some solids and hair need to be pumped. The pump is protected with a stainless steel suction strainer.

Heavy cast iron construction, dual silicon nitride seals and an additional lip seal which protects the motor.

All pumps have the same performance. The SP213MZ is manual operation and certified for use in class 1 zone 2 pumping applications. The SP213 is automatic operation. The SP213M is manual operation.

## Performance





**Model SP100**



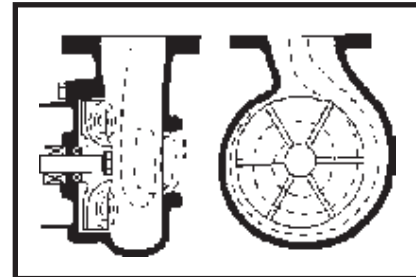
**Model SP140**



**Model SP600**

## Features

The Vortex impeller designs creates a whirlpool pump action. This allows soft solids, stringy material, grey water and light sewage to be pumped.



## Model SP100 180 watt

This pump has a Nylon open impeller with vortex flow action, the motor is housed in stainless steel. It is used for pumping from cellars, septic tanks and household drainage where some solids and hair need to be pumped. The pump uses dual seals and an additional lip seal which protects the motor. Manual or automatic operation

## Model SP140 450 watt

Similar to the SP100 but it will pump more water to a higher head and handle larger solids.

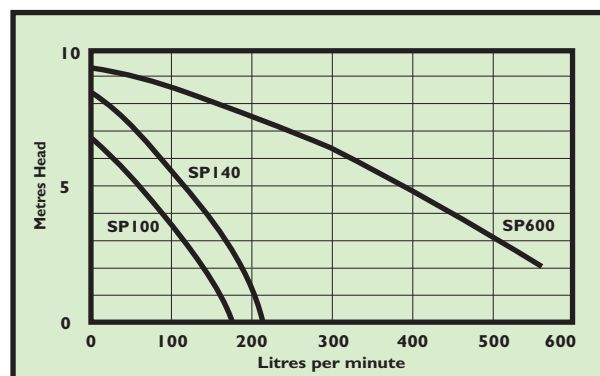
## Model SP600 1100 watt

Vortex in design, capable of pumping 25 mm and stringy solids — dirty water, sewage, sullage, storm water or pumping effluent from dairy sheds, etc.

Heavy cast iron construction, dual silicon nitride seals and an additional lip seal to protect the motor.

The pump can be used on applications where normal pumps become clogged, suction strainers are inadequate or the water contains problem material.

## Performance



# Sump pumps *shrouded impeller*



Model SP500

## Model SP500 750 watt

The pump has a wide shrouded impeller which can pump up to **25 mm** soft solids.

Heavy cast iron construction, dual silicon nitride seals and an additional lip seal to protect the motor.

Capable of pumping large quantities of storm and sullage water, sand, from cellars, septic tanks, car parks, etc.



Model SP617

## Model SP617 1500 watt

The pump is similar to the SP500 but larger. It has a wide shrouded impeller which can pump up to **25 mm** soft solids.

Heavy cast iron construction, dual silicon nitride seals and an additional lip seal to protect the motor.

Capable of pumping large quantities of storm and sullage water, sand, from cellars, septic tanks, car parks etc.



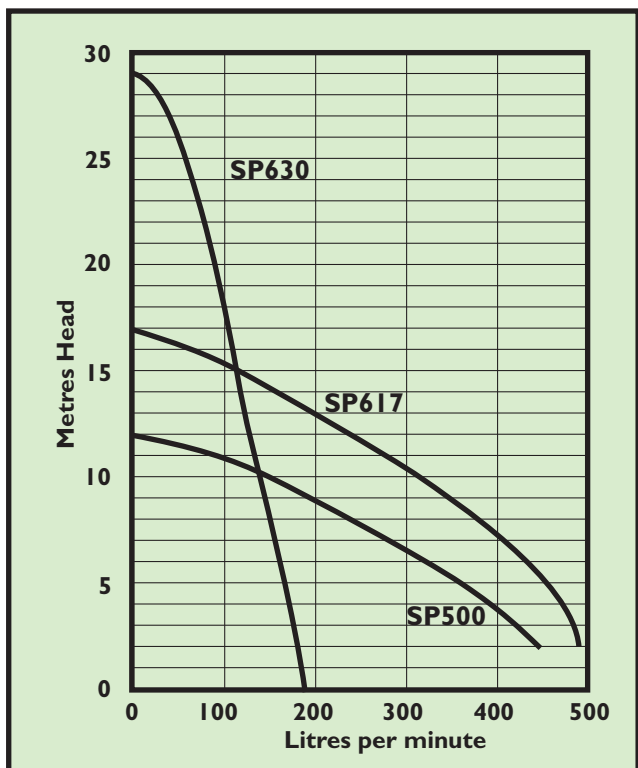
Model SP630

## Model SP630 1100 watt

The pump has a high pressure single stage shrouded impeller and is suitable for clean water or grey water with at best some small soft solids. Supplied with stainless steel suction strainer. Suitable for sullage and septic tank effluent.

Heavy cast iron construction, dual silicon nitride seals and an additional lip seal to protect the motor.

## Performance



# Sump pumps grinder and cutter



Model SP700G

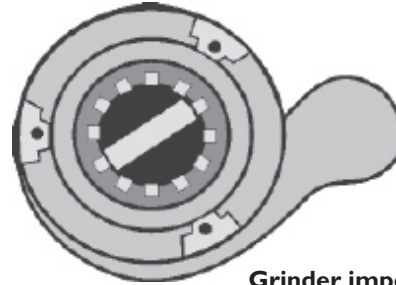


Model SPC700

## Grinder

### Model SP700G 1100 watts

Uses a hardened grinder blade so that oversize rubbish in the incoming water is reduced in size and does not clog the pump — capable of pumping a difficult mix of water and stringy solids. Dirty water, screened sewage, sullage, storm water or pumping effluent from abattoirs, piggeries, etc. Can be used on applications that would clog most pumps. Pump is designed for pumping long stringy items mixed with water.

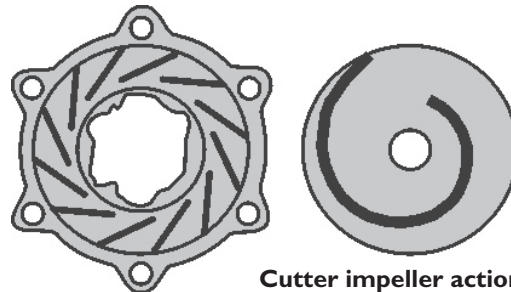


Grinder impeller action

## Cutter

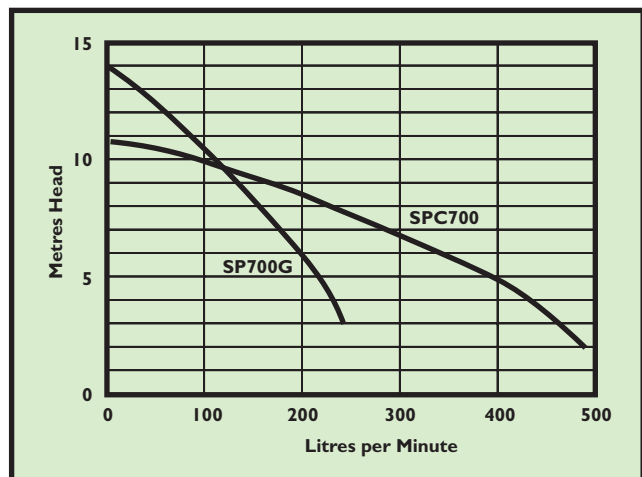
### Model SPC700 1100 watts

Uses a hardened cutter plate so that large items in the incoming water are reduced in size and do not clog the pump — capable of pumping a difficult mix of water and solids. Dirty water, sewage with small sanitary items, sullage, storm water or pumping effluent from abattoirs, etc. Can be used on applications that would clog most pumps. Pump is designed for pumping large items mixed with water.



Cutter impeller action

## Performance



# Sump pumps prices and selection

## Submersible Sump Pumps selection table 230 Volt with automatic float switch

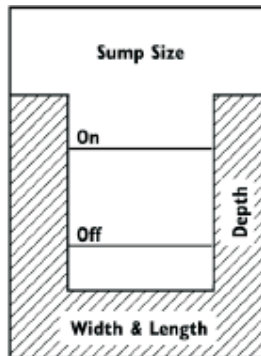
System model	Motor watts	Top head mtrs	Head in Metres [ for kPa x 10 ]										Impeller	Discharge mm	Max size guide	Application
			Capacity in litres per minute													
			2	4	6	8	10	12	15	20	25	30				
SP100	180	7	140	90	30								Vortex	32	18	■ ■ ■ ■
SP140	450	9	180	140	80	20							Vortex	50	25	■ ■ ■ ■
SP213	400	13	220	190	170	120	100	50					Open	40	4	■ ■ ■
SF100	400	10	460	400	320	230			1440 RPM				Shrouded	40	9	■ ■ ■ ■
SP334#	750	34					140	130	120	110	100	60	Shrouded	25	3	■
SP500	750	12	450	390	330	260	155						Shrouded	50	25	■ ■ ■ ■
SP617	1500	17	490	470	435	380	320	250	130				Shrouded	40	25	■ ■ ■ ■
SP630	1100	29	180	170	160	150	140	130	120	90	40		Shrouded	32	3	■
SP600	1100	9	550	450	320	160							Vortex	50	25	■ ■ ■ ■ ■
SP700G	1100	14	250	230	200	160	110	89					Grinder	50	25	■ ■ ■ ■ ■
SPC700	1100	11	480	430	340	230	100						Cutter	50	25	■ ■ ■ ■ ■

Sewage pumps listed will not handle all types of raw sewage large solids or large personal hygiene items. Pumps will pass sand and hard materials to the size listed but pump wear or failure may result.  
# SP334 pump capacity over 60 l/m is for intermittent operation only.

- Storm water dewatering, Fountains, Grey water, Septic, Small soft solids
- Sullage and hair
- Water with 5% soft solids
- Water with 10% soft solids
- Screened sewage, abattoirs, stringy solids
- Sewage with small hygiene items, larger solids

### Sump size selection

An oversize sump will greatly assist in the reliable operation of the pump and level control switch. It will compensate when the incoming flow of water may exceed the pump's capacity. It reduces turbulence and the possibility of the float lead becoming tangled and the on/off cycling of the pump.



**When the pump switches off** the sump must have sufficient volume to allow the water in the discharge pipe to flow back without reactivating the pump. It is recommended a non-return valve be fitted to the pump discharge.

### Guide for minimum size sumps

Size	Height cm	Dia cm	Weight kg	Minimum size sump cm		
				W	L	D
Small	36	21	14	35	50	40
Medium	47	25	30	40	50	60
Large	65	27	38	45	60	75

Small sumps

SP100, SP334, SP213

Medium sumps

SF100, SP400, SP500, SP630, SP600, SPC700, SP700G

Large sumps

SP617