

# US SERIES

Vortex type

# USO SERIES

Vortex type with automatic level control switch

# US-A SERIES

Vortex type with mechanical agitator

*Pumping liquid by vortex action generated by a multi radial vane impeller*



**SAKURAGAWA**

# Specially designed structure to reduce risk of clogging and choking at impeller vanes.

## Simple and easy maintenance.

### Power cable

Heavy-duty cable is used. It is designed to withstand harsh condition in various types of working environment.

### Auto-cut

An auto-cut, automatic-reset type thermal protector, is embedded at the neutral/star point of the motor winding to protect the motor against overheating due to overcurrent/overloading during pump running.

### Shaft seal

Very reliable double-face Silicon Carbide (SiC) mechanical seals are used to ensure steady and long wear and tear service period.

### Casing & Suction cover

Casing and suction cover are made from light-weight rubber-lined steel plates for better resistance against corrosion and abrasion.

### Strainer

As a result of non-clog vortex action, the pump is able to pump out larger solid and fibrous-form substance without choking. Hence the cast-iron strainer has bigger throughlet holes.



US-222A

### Pump handle

The handle is made from a strong but light-weight alloy metal to allow easy handling/lifting of pump and long-term usage.

### Hose coupling

It is specially-designed to allow user to choose either to pump liquid vertically upwards or horizontally across by a mere switch of connection angle. (Exclude US-253A)

### Motor

The motor, driving force of the pump, is designed to give high level of efficiency and torque. Most models in this series have Class F (155°C) Motor Insulation.

### Impeller

Powerful vortex action is brought about by an efficiency designed radial-vane type impeller. With this design, it greatly reduces the risk of clogging at the impeller vanes. The clearance between impeller and suction cover is not as significant as in the case of conventional centrifuge type impeller where enlargement of clearance means a considerable drop in the performance of pump. An allowable wider clearance means larger solid and fibrous substance can be pumped without clogging. Hence, this type of impeller design offers longer wear and tear service lifetime.

## APPLICATIONS

- Civil engineering & Construction: Removal of water/slurry out of trenches, underground pits, manholes, building basements, puddles, etc.
- Industrial: Water transportation, filtration, silt removal, sump application, etc.
- Agriculture & Aquaculture: Water transportation, irrigation, filtration, silt removal, etc.

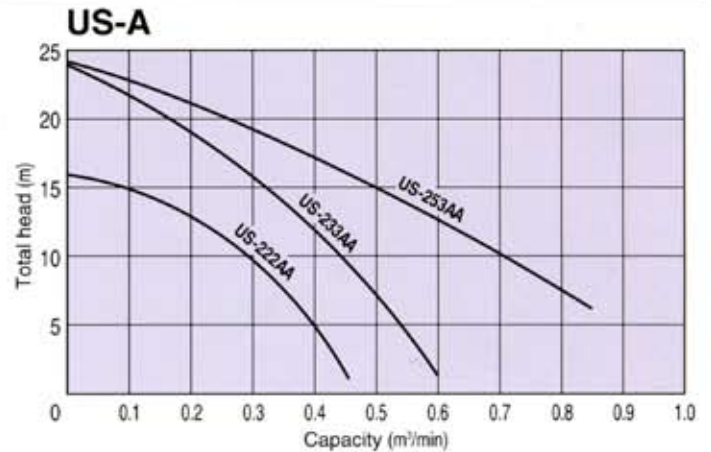
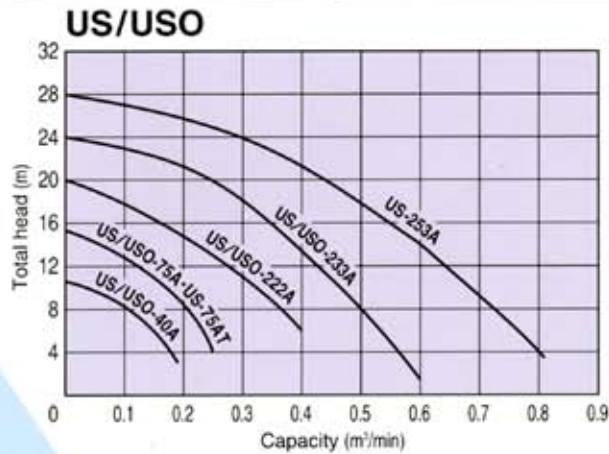


US-40A\*

US-75A

US-253A

## PERFORMANCE CURVES



## SPECIFICATIONS

### US

| MODELS  | DISCHARGE DIA |        | TOTAL HEAD |    | CAPACITY |         | PHASE | MOTOR OUTPUT |     | STRAINER THROUGH WAY<br>φ mm | WEIGHT (w/o CABLE) |     |
|---------|---------------|--------|------------|----|----------|---------|-------|--------------|-----|------------------------------|--------------------|-----|
|         | mm            | inch   | m          | ft | m³/min   | imp.GPM |       | kW           | HP  |                              | kgs                | lbs |
| US-40A* | 50            | 2      | 8          | 26 | 0.1      | 22      | 1     | 0.4          | 1/2 | 8                            | 17                 | 37  |
| US-75A  | 50<br>80      | 2<br>3 | 10         | 33 | 0.17     | 37      | 1     | 0.75         | 1   | 8                            | 21                 | 46  |
| US-75AT | 50<br>80      | 2<br>3 | 10         | 33 | 0.17     | 37      | 3     | 0.75         | 1   | 8                            | 19.5               | 43  |
| US-222A | 50<br>80      | 2<br>3 | 15         | 49 | 0.2      | 44      | 3     | 1.5          | 2   | 10                           | 19.5               | 43  |
| US-233A | 80            | 3      | 12         | 39 | 0.4      | 88      | 3     | 2.2          | 3   | 10                           | 24                 | 53  |
| US-253A | 80<br>100     | 3<br>4 | 18         | 59 | 0.5      | 110     | 3     | 3.7          | 5   | 10                           | 38.5               | 85  |

### USO (US+Single-float level switch)

| MODELS   | DISCHARGE DIA |        | TOTAL HEAD |    | CAPACITY |         | PHASE | MOTOR OUTPUT |     | STRAINER THROUGH WAY<br>φ mm | WEIGHT (w/o CABLE) |     |
|----------|---------------|--------|------------|----|----------|---------|-------|--------------|-----|------------------------------|--------------------|-----|
|          | mm            | inch   | m          | ft | m³/min   | imp.GPM |       | kW           | HP  |                              | kgs                | lbs |
| USO-40A* | 50            | 2      | 8          | 26 | 0.1      | 22      | 1     | 0.4          | 1/2 | 8                            | 17.5               | 39  |
| USO-75A  | 50<br>80      | 2<br>3 | 10         | 33 | 0.17     | 37      | 1     | 0.75         | 1   | 8                            | 21.5               | 47  |
| USO-222A | 50<br>80      | 2<br>3 | 15         | 49 | 0.2      | 44      | 3     | 1.5          | 2   | 10                           | 20                 | 44  |
| USO-233A | 80            | 3      | 12         | 39 | 0.4      | 88      | 3     | 2.2          | 3   | 10                           | 24.5               | 54  |

Note : As for USO-75A, USO-222A & USO-233A, available voltage is 200/220V only.

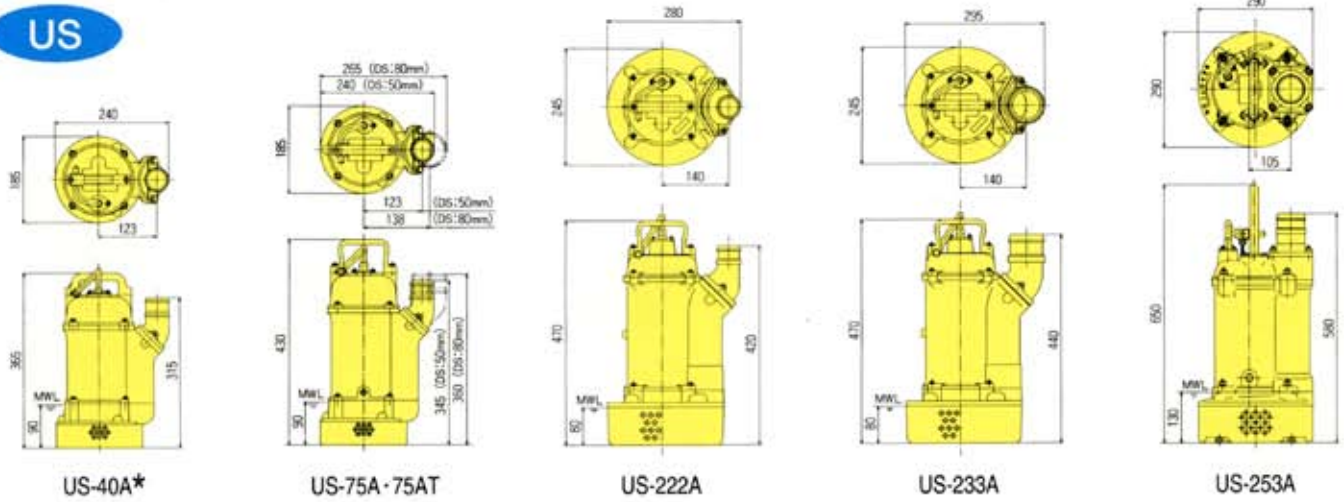
### US-A (US+Mechanical agitator)

| MODELS   | DISCHARGE DIA |        | TOTAL HEAD |    | CAPACITY |         | PHASE | MOTOR OUTPUT |    | STRAINER THROUGH WAY<br>φ mm | WEIGHT (w/o CABLE) |     |
|----------|---------------|--------|------------|----|----------|---------|-------|--------------|----|------------------------------|--------------------|-----|
|          | mm            | inch   | m          | ft | m³/min   | imp.GPM |       | kW           | HP |                              | kgs                | lbs |
| US-222AA | 50<br>80      | 2<br>3 | 13         | 43 | 0.2      | 44      | 3     | 1.5          | 2  | 13                           | 25                 | 55  |
| US-233AA | 80            | 3      | 10         | 33 | 0.4      | 88      | 3     | 2.2          | 3  | 13                           | 29                 | 64  |
| US-253AA | 80<br>100     | 3<br>4 | 15         | 49 | 0.5      | 110     | 3     | 3.7          | 5  | 13                           | 45                 | 99  |

Note that mark with \* is unavailable for the time being. We are sorry for the inconvenience. Instead, we may offer an equivalent model. Please contact us if you are interested.

# DIMENSIONS

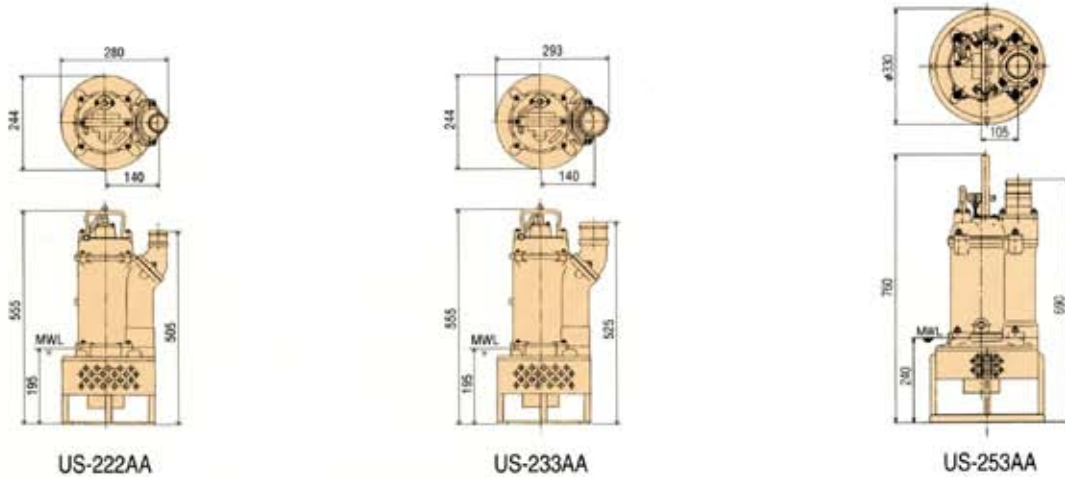
## US



## USO



## US-A



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•Specifications are subject to change without notice.

**SAKURAGAWA PUMP**  
**MFG.CO.,LTD.**