

**SUBMERSIBLE
AGITATOR**

SA

SERIES



SAKURAGAWA

*High Efficiency in Stirring
and Mixing Liquid*



Excellent in stirring, mixing, solution, diffusion, suspension, anti-freezing, keeping even condensing and even temperature and generating powerful current.

Proper selection of propellers is available depending on conditions of service.

Able to cope with handling liquids of high specific gravity and high viscosity.

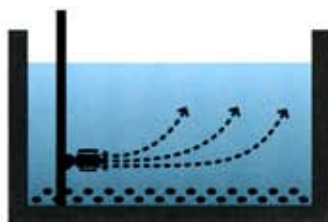
The unit is mounted on a guide bar, flexible to be raised and lowered, operated at different depths, angled upwards or downwards, and swivelled to the sides.

Simple in installation and maintenance.



SAKURAGAWA submersible agitators have great potential for use in various kinds of industry.

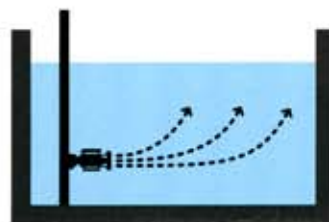
Factory drainage water treatment systems;
Water supply and sewage water treatment plants;
Farming and agriculture;
Marine products industry;
Rivers, civil engineering and public works.



Prevention of sedimentation

Preventing suspended solids from settling to the bottom of liquid by agitating or stirring the liquid. Start stirring from the top of the pit and gradually sliding down along the guide bar, it is possible to use the full range inside the pit.

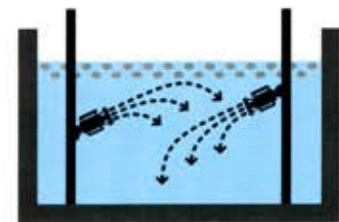
- Preventing sludge settlement at the bottom of the pits or septic tanks in sewage treatment system in factories or municipal facilities.
- Keeping food stuff in suspension at fish farming ponds for longer time or removing surplus food stuff or fish droppings.



Stirring slurry

In addition to stirring effect of flow current, SAKURAGAWA submersible agitators generate flow current in the whole of the tank to stir slurry with minimum power consumption.

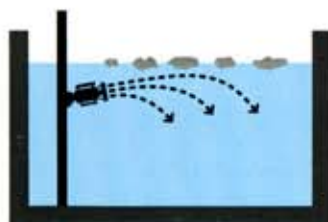
- Promotes efficiency of dehydration by means of even mixing of sludge in sewage treatment plants and sewage drainage systems at municipal facilities and factories.
- Stirring slurry in the process of paper mills.



Breaking up and stirring sludge crusts in suspension at the surface of liquid

SAKURAGAWA submersible agitator can be angled upwards to break up sludge crusts in suspension at the surfaces of liquid into particles by means of powerful current flow of liquid or downwards, pushing and breaking up sludge crusts towards the bottom of the tank.

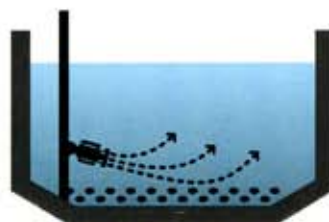
- In sewage pumps station, distributing tanks, sludge saving tanks, and stirring and breaking up sludge at drainage saving tanks in factories, saving time and cost.



For solution or diffusion of soluble substances in suspension

If soluble substances or powder lumps are suspended at the surfaces of liquid, direct the agitator toward them to efficiently make solution or to diffuse.

- Solution or diffusion in sewage treatment tanks.



Stirring sedimentation substances in condensed liquid tanks

Stirring and suspending sediment at the bottom of tanks, thus evening the density of fast sedimenting slurry or sludges.

- At sewage treatment plants and stirring at condensed tanks in drainage water treatment system in various kinds of industry.



Generating of current

Generating current in aquaculture farms artificially.

- To keep freshness of water, giving proper exercise to fish and to control water temperature (protects water from freezing in cold weather).

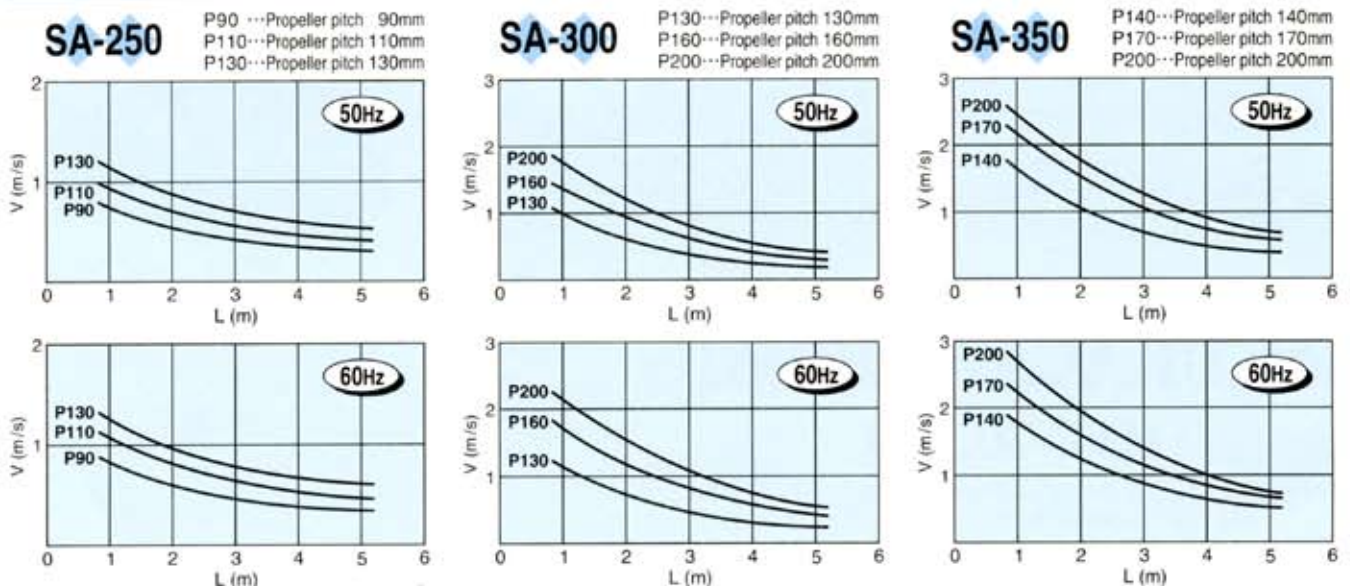
Specifications

Model		SA-250	SA-300	SA-350
Motor	Type	Submersible dry induction		
	Output	1.2kW	3.3kW	5.5kW
	Pole · Insulation	6 pole · class B		
	Synch. speed (50Hz/60Hz)	1,000/1,200 rpm		
	Thermal protector	Auto-cut		
	Material	Cast iron (FC200)		
Material	Frame	Cast iron (FC200)		
	Shaft	S.S. (SUS304)	S.S. (SUS420J2)	
	Cable and length	Vinyl 10m	Chloroprene 10m	
Liquid	Disposition	Various slurry, Sludge, General fluid		
	PH	5~13		
	Temperature	0~40°C		
	Maximum submergence	30m		
Agitator	Lubricant	Turbine oil ISO VG32		
	Shaft seal	Double mechanical seal		
	Material	High chrome alloy (24Cr)		
	Propeller	Mild steel hot dipped galvanised		
	Guide ring	Cast iron (FC200)		
	Seal housing	Cast iron (FC200)		
	Material	Cast iron (FC200)		
Material	Seal	Ceramic X BC		
	Motor side	Ceramic X BC		
Material	Seal surface	Tungsten carbide X Tungsten carbide		
	Propeller side	Tungsten carbide X Tungsten carbide		
Net weight (w/o cable)		34kg	80kg	94kg

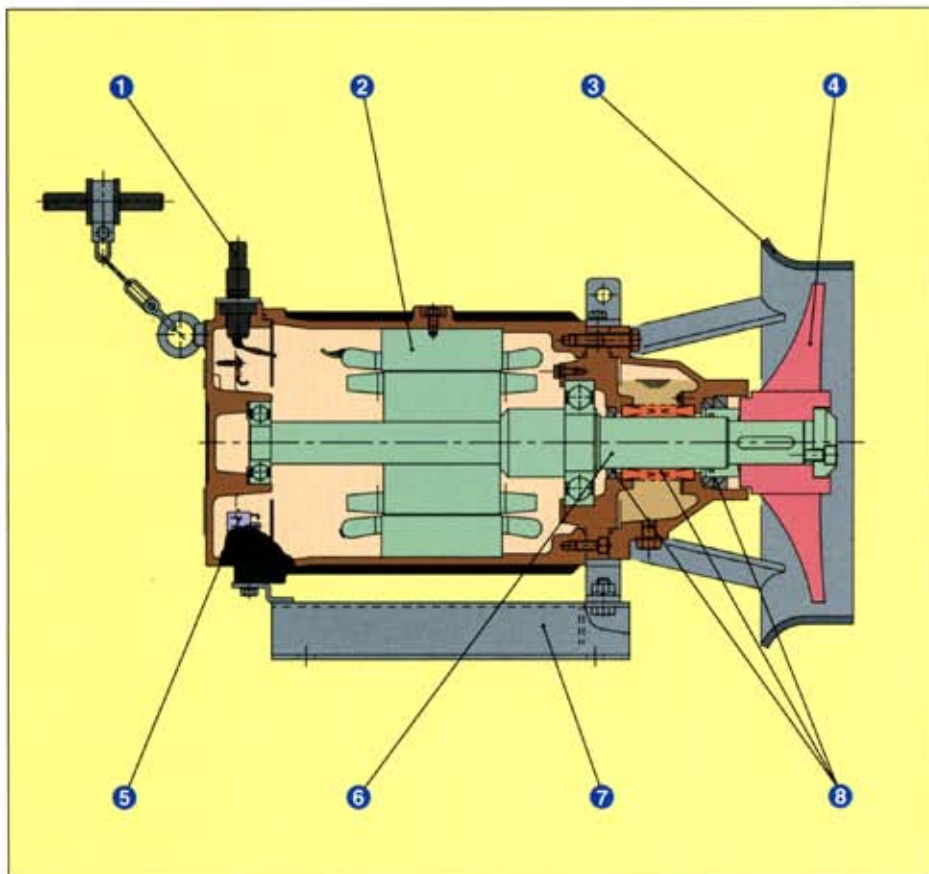


Model	Frequency Hz	Propeller pitch mm	Flow speed at guide ring m/s	Capacity m³/min	Power input at fresh water kW	Force N
SA-250	50	90	0.93	2.8	0.38	44
		110	1.11	3.4	0.42	62
		130	1.32	4.0	0.44	88
	60	90	1.08	3.3	0.54	59
		110	1.34	4.1	0.59	91
		130	1.52	4.6	0.62	118
SA-300	50	130	1.41	6.2	1.0	145
		160	1.72	7.5	1.2	220
		200	2.02	8.8	1.5	300
	60	130	1.64	7.2	1.5	200
		160	2.04	8.9	1.8	305
		200	2.36	10.3	2.3	410
SA-350	50	140	1.54	8.4	1.5	215
		170	1.92	10.5	1.9	335
		200	2.22	12.1	2.3	450
	60	140	1.82	9.9	2.1	300
		170	2.25	12.3	2.8	460
		200	2.61	14.3	3.3	620

Performance Curves



Cut-away section



① Power Cable

Safety-minded power cable, sealed at the joint where rubber-moulding is provided into the core of the cable to protect water-infiltration into the motor.

② Motor

High efficiency six pole motor which is especially designed for submersible agitators.

③ Guide Ring

Press-machined thick steel pipe, designed to be excellent in generating powerful current as well as causing strong sucking force.

④ Propeller

The efficient propeller made of high chrome alloy with inlet side specifically curved to prevent clogging.

⑤ Motor Protector

Built-in automatic reset type "AUTO-CUT" is provided to protect the motor from burning out due to phase failure of power source, etc.

⑥ Motor Shaft

One piece stainless steel shaft minimises vibration while running for longer life of the unit.

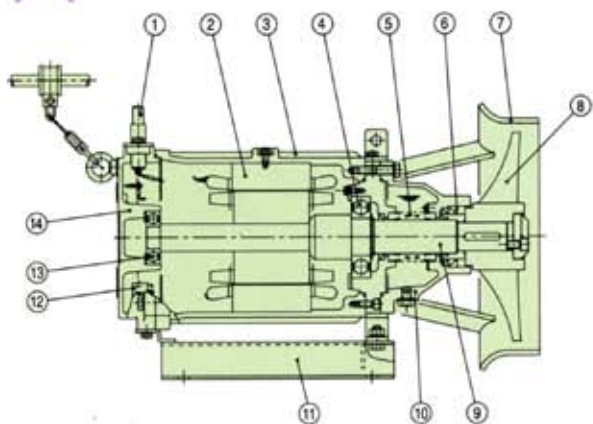
⑦ Base

Stable at the time of installation as well as placing the unit out of the pit. The unit can be fixed in a pit by means of bolts and nuts at the base.

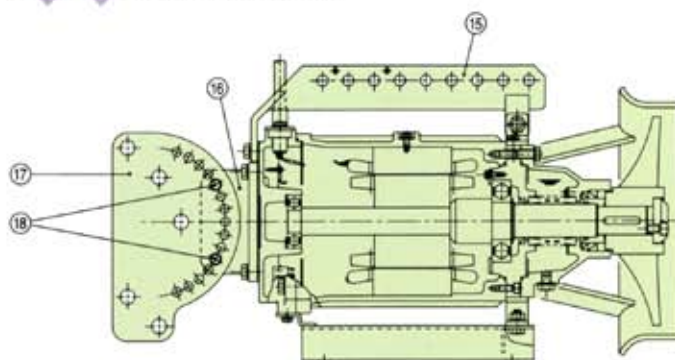
⑧ Shaftseal

Backed with our long years of experience in submersible pumps, an excellent Mechanical Seal supported by oil seals is provided to ensure reliable sealing effect.

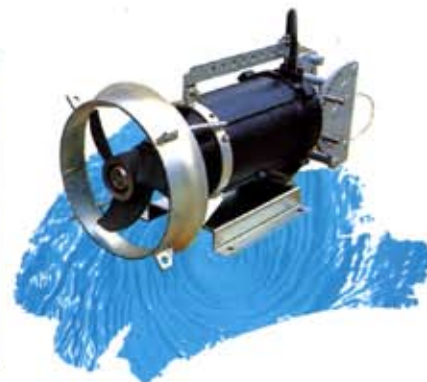
SA-300 Standard type



SA-300 Quick installation type



Mark	Part name	Material	Mark	Part name	Material
1	Power cable	Chloroprene	10	Seal housing	Cast iron (FC200)
2	Motor		11	Base	Mild steel hot dipped galvanised
3	Motor frame	Cast iron (FC200)	12	Motor protector	
4	Bearing		13	Bearing	
5	Mechanical seal		14	Head cover	Cast iron (FC200)
6	Oil seal	Synthetic rubber	15	Lifting bar	Mild steel hot dipped galvanised
7	Guide ring	Mild steel hot dipped galvanised	16	Junction bracket	Mild steel hot dipped galvanised
8	Propeller	High chrome alloy (24Cr)	17	Guide slide	Mild steel hot dipped galvanised
9	Shaft	Stainless steel	18	Junction pin	Stainless steel



SAKURAGAWA PUMP
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