



# Horizontal Type Vortex Submersible Pumps

SV Models



**Ebasho**

Ebarashoji co.,LTD.

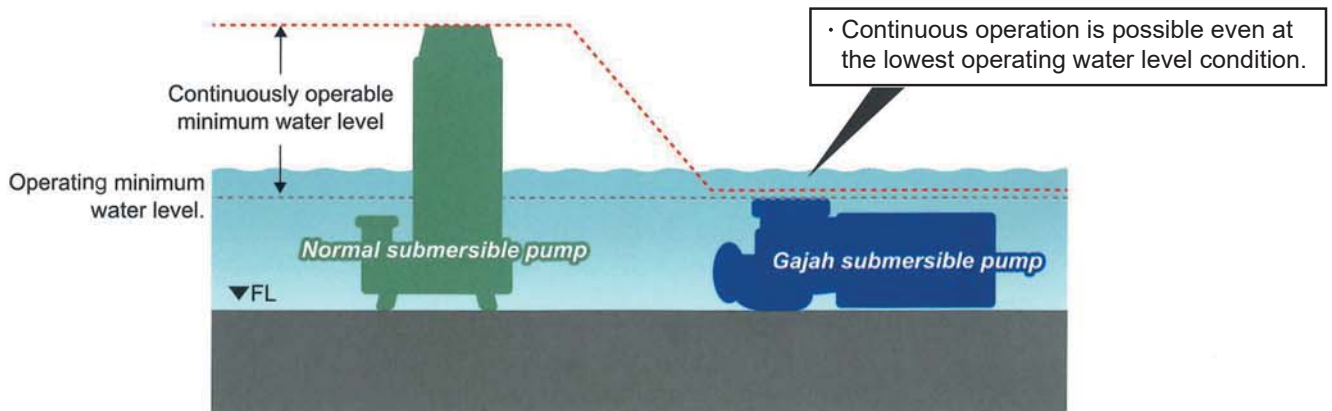
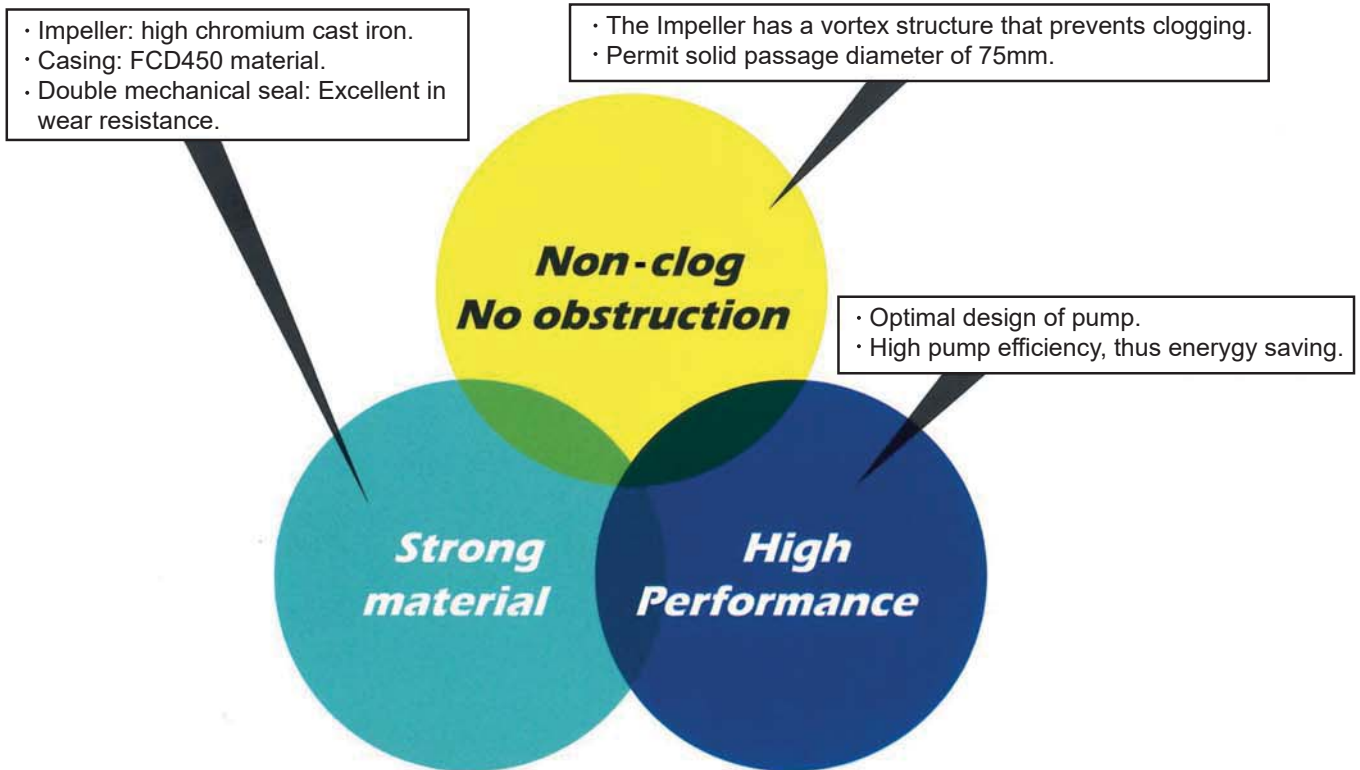
## TORQUE-FLOW VORTEX SUBMERSIBLE PUMPS

### Feature 1

- Best impeller design promotes non-overloading of shaftpower's output
- Possible to operate in no-discharge operation and low head condition

### Feature 2

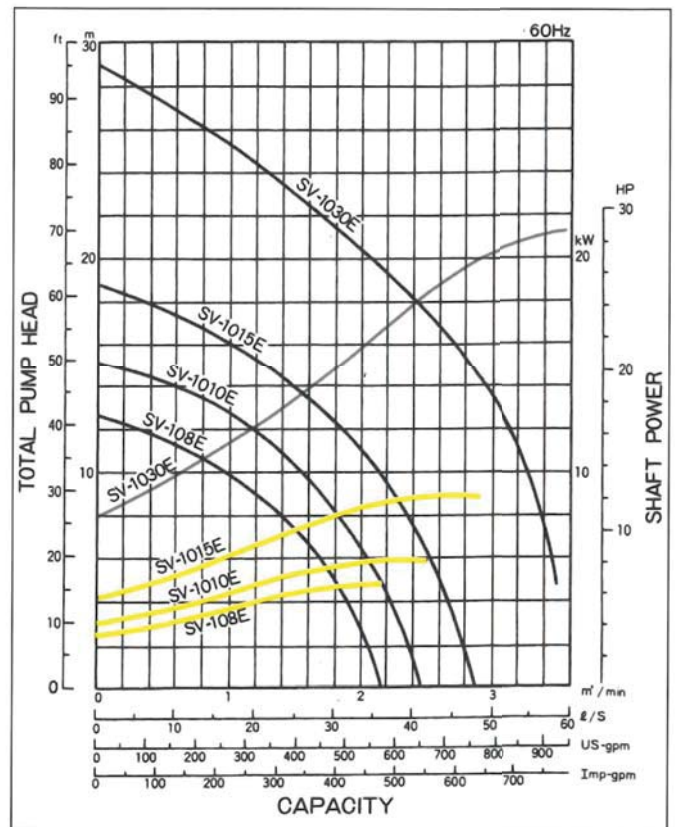
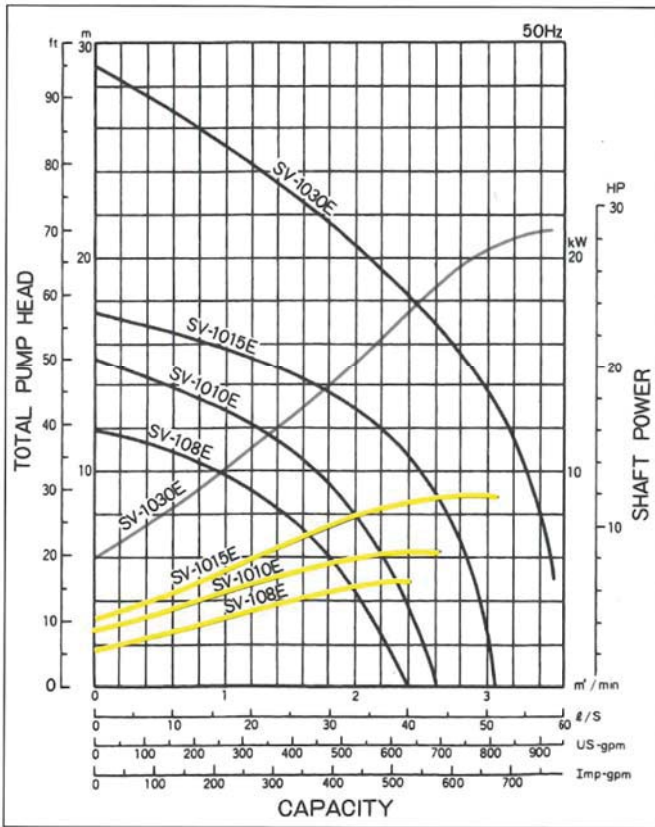
- Permit horizontal installation, thus allow pump operating at low water levels.





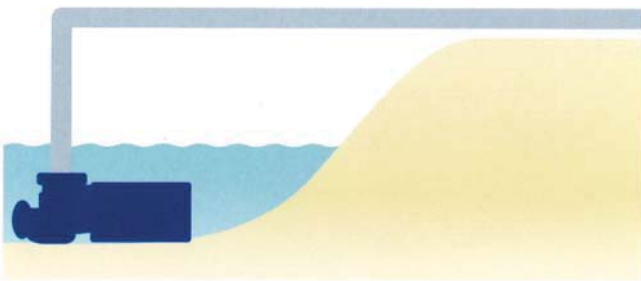
## Performance Curves

— TOTAL PUMP HEAD    — SHAFT POWER

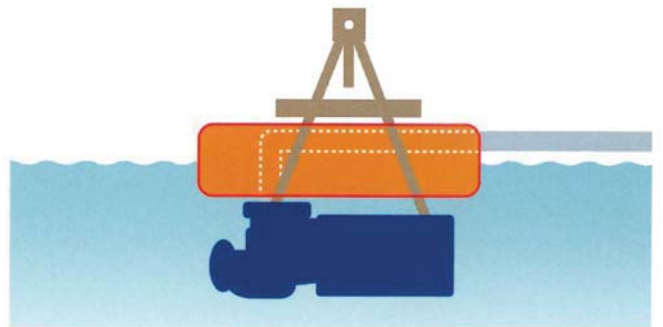


## Example of use

■ In shallow water level



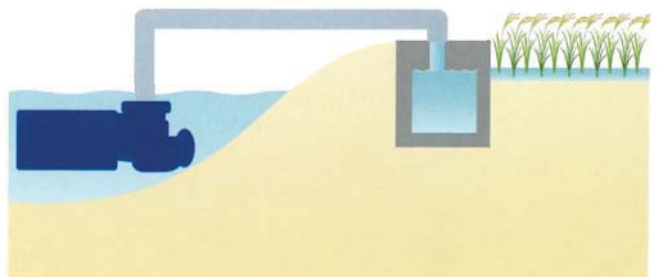
■ In the pond with float



■ In mining and ore drainage



■ Agricultural pumping



**Liquid** Clean water/Diety water/Mine drainage/Drainage of tunnel construction site/Pond water

Liquid containing bentonite, Fly ash, Coke fines, ore fines, and cement.

\*Mixing rate : Sand, clay (20-30%)·Gravel, Ore powder (5-15%)·Mine muddy water, Ash (20-40%)

\*Note the pipe flow rate so as not to precipitation of solids.

Reference value : Bentonite,cement raw material more than 1m/s,

Fly ash,Coke powder 2m/s or more.

Fine sand,mud 3m/s or more.

Coarse sand,soft clay 3.5m/s or more.

Gravel,Hard clay 4m/s or more.

**Liquid temperature** 0-40°C

**Starting method** Direct-on-line

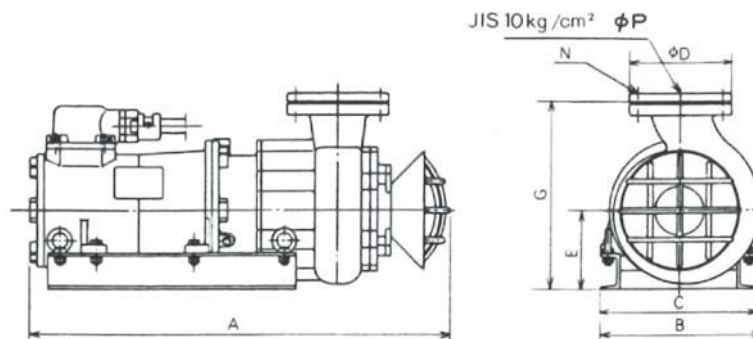
**Voltage** 200 / 220 / 380 / 400 / 440 / 550 / 1000v (Choice)

**Staff Seals** Double mechanical seals.

## Standard Specifications

Model	Discharge mm(in)	Motor		Nomal Head m(ft)	Nomal Capacity		Solids Handling mm(in)	weight kg(lbs)	Cabtyre Cable	
		Output kW(HP)	Number of poles		m <sup>3</sup> /min	(USgpm) [Impgpm]			Core × mm <sup>2</sup> (AWG)	× Length m (ft)
SV-108E	100 (4)	5.5 (7.5)	4	10 (33)	0.9	(238) [198]	75 (3)	160 (353)	4 × 3.5 (11)	× 10 (33)
SV-1010E	100 (4)	7.5 (10)	4	12 (39)	1.2	(317) [264]	75 (3)	160 (353)	4 × 5.5 (9)	× 10 (33)
SV-1015E	100/150 (4)/(6)	11 (15)	4	15 (49)	1.25	(330) [275]	75 (3)	180 (397)	4 × 14 (6)	× 10 (33)
SV-1030E	100/150 (4)/(6)	22 (30)	4	20 (66)	2.0	(528) [440]	75 (3)	330 (728)	4 × 22 (4)	× 10 (33)

## Dimensions

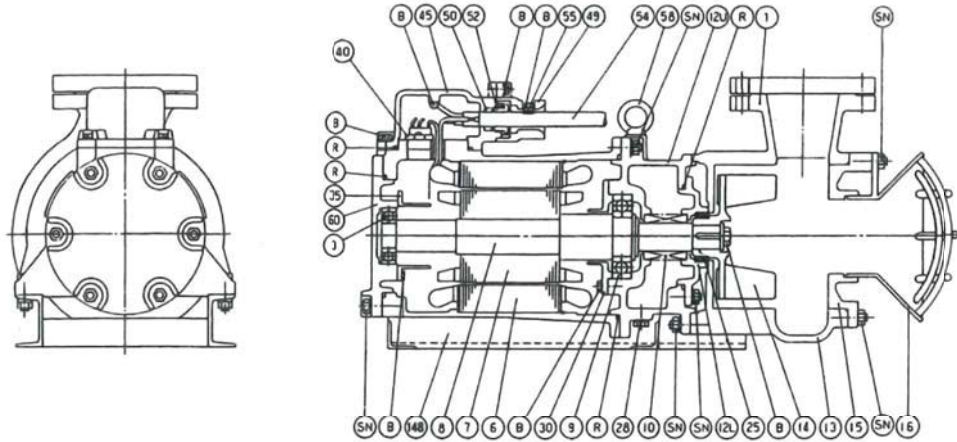


Unit:mm(in)

Model	Frequency Hz	A	B	C	D	E	G	N	P
SV-108E	50/60	821 (32 <sup>3</sup> / <sub>8</sub> )	325 (12 <sup>3</sup> / <sub>8</sub> )	320 (12 <sup>5</sup> / <sub>8</sub> )	210 (8 <sup>1</sup> / <sub>4</sub> )	163 (6 <sup>3</sup> / <sub>8</sub> )	383 (15 <sup>1</sup> / <sub>8</sub> )	8- M16 (5/8)	100 (4)
SV-1010E	50	845 (33 <sup>3</sup> / <sub>4</sub> )	371 (14 <sup>3</sup> / <sub>8</sub> )	350 (13 <sup>3</sup> / <sub>8</sub> )	210 (8 <sup>1</sup> / <sub>4</sub> )	203 ( 8 )	483 ( 19 )	8- M16 (5/8)	100 (4)
	60	864 (34 <sup>3</sup> / <sub>8</sub> )	340 (13 <sup>3</sup> / <sub>8</sub> )	320 (12 <sup>5</sup> / <sub>8</sub> )	210 (8 <sup>1</sup> / <sub>4</sub> )	163 (6 <sup>3</sup> / <sub>8</sub> )	383 (15 <sup>1</sup> / <sub>8</sub> )	8- M16 (5/8)	100 (4)
SV-1015E	50/60	948 (37 <sup>3</sup> / <sub>8</sub> )	371 (14 <sup>3</sup> / <sub>8</sub> )	350 (13 <sup>3</sup> / <sub>8</sub> )	210 (8 <sup>1</sup> / <sub>4</sub> )	215 (7 <sup>7</sup> / <sub>8</sub> )	495 (18 <sup>3</sup> / <sub>8</sub> )	8- M16 (5/8)	100 (4)
SV-1030E	50/60	1086 (42 <sup>3</sup> / <sub>4</sub> )	446 (17 <sup>1</sup> / <sub>2</sub> )	480 (18 <sup>3</sup> / <sub>8</sub> )	210 (8 <sup>1</sup> / <sub>4</sub> )	240 (9 <sup>1</sup> / <sub>2</sub> )	520 (20 <sup>1</sup> / <sub>2</sub> )	8- M16 (5/8)	100 (4)



## Construction



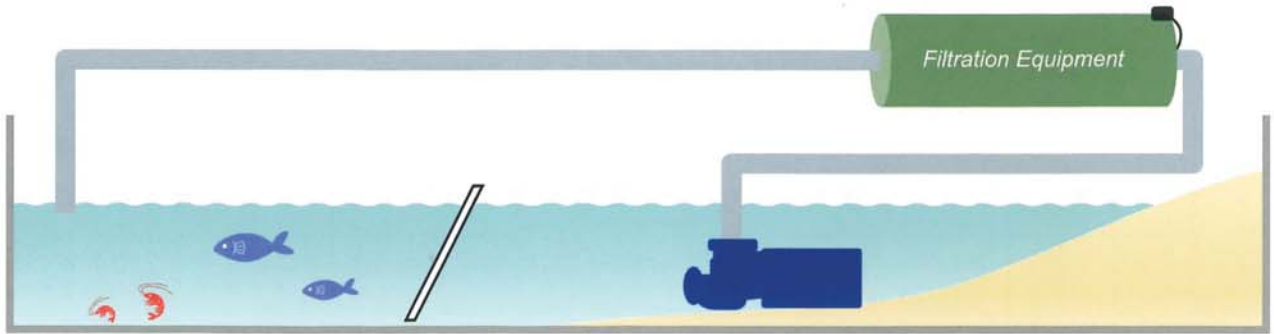
No.	PART	MATERIAL			No.	PART	MATERIAL		
		JIS	ASTM or AISI std.	BS std.			JIS	ASTM or AISI std.	BS std.
1	Discharge opening	FCD 450	A 536 65-45-12	2789 420/12	30	Bearing cover	FC 200	A 48 30 A	1452-180
3	Opposite-drive-end bearing	High carbon chromium steel	AISI 52100	534 A 99	35	Lead wire retainer	SS 400	A 283 D	4360 40 A-E
6	Stator	—	—	—	40	Motor protector	Auto-cut	—	—
7	Rotor	—	—	—	45	Terminal box	FC 200	A 48 30 A	1452-180
8	Motor Shaft	SUS 403	AISI A276-403	403 S 17	49	Bell mouth	FC 200	A 48 30 A	1452-180
9	Drive-end bearing	High carbon chromium steel	AISI 52100	534 A 99	50	Cable packing	Nitril butadiene rubber	—	—
10	Shaft seal	Sintered carbide	—	—	52	Cable screw gland	SS 400	A 283 D	4360 40 A-E
12L	Oil box-lower half	FC 200	A 48 30 A	1452-180	54	Cabletyre cable	3CT 4-core	—	—
13U	Oil box-upper half	FC 200	A 48 30 A	1452-180	55	Cable clamp	SS 400	A 283 D	4360 40 A-E
13	Pump casing	FCD 450	A 536 65-45-12	2789 420/12	58	Eyebolt	SS 400	A 283 D	4360 40 A-E
14	Impeller ※	High Chromium Cast Iron	—	—	60	Bearing housing	FC 200	A 48 30 A	1452-180
15	Suction cover	FCD 450	A 536 65-45-12	2789 420/12	148	Base	SS 400	A 283 D	4360 40 A-E
16	Stariner	SS 400	A 283 D	4360 40 A-E	B	Bolt or Machine screw	Rolled steel or Stainless steel	A 283 or AISI 304	4360 or 304S15
25	Dust seal	Nitril butadiene rubber	—	—	R	O-ring	Nitril butadiene rubber	—	—
28	Oil plug	SS 400	A 283 D	4360 40 A-E	SN	Stud and Nut	SUS 410	AISI A276-410	970-410-A21

※High Chromium Cast Iron 15% Cr content is also available for more anti-abrasion



## Typical example of installation

Water circulation of aquaculture



\*All details provided for reference only, and subject to change without prior notice

## gajah Series

Also available :

**Floating Pump**



# Ebasho

**Ebarashoji co.,LTD.**

9-10, Nihonbashikayabacho 3-Chome, Chuo-ku, Tokyo 103-0025 Japan  
TEL.+81-3-5645-0173 FAX.+81-3-5645-0179



**EBARA Pumps Malaysia Sdn Bhd**  
6, Jalan TP3, UEP Subang Jaya Industrial Park,  
47620 Subang Jaya, Selangor, Malaysia.  
Tel : 03-8023 6622 Fax : 03-8023 9355  
Email : sales@ebara.com.my  
Website : www.ebara.com.my



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