



EBARA

SUBMERSIBLE SEMI-VORTEX SEWAGE PUMPS

CF3602UE

Model **DVS**

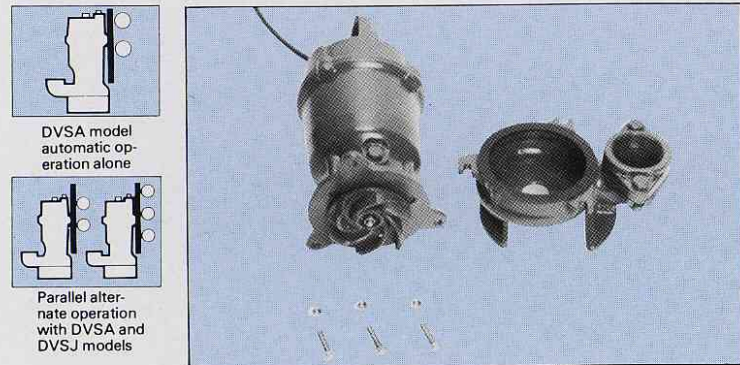
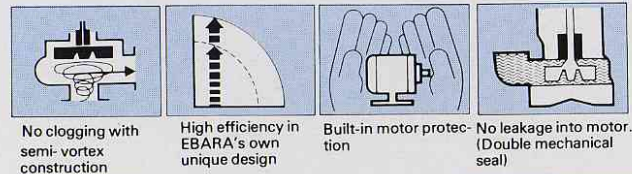


Model DVSA
Automatic type

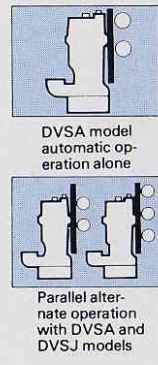
Model DVS/DVSH
Manual type

Model DVSJ
Parallel
Alternate type

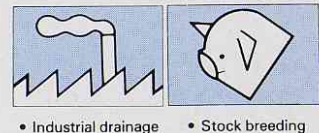
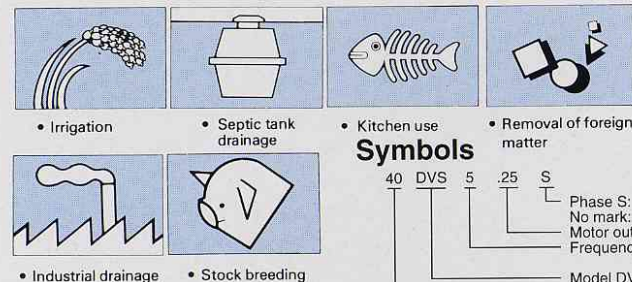
Features



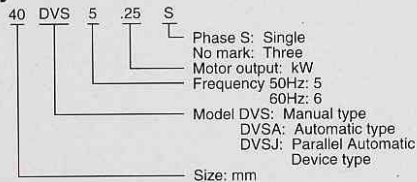
Easy handling construction. (Pump size 40 & 50mm)



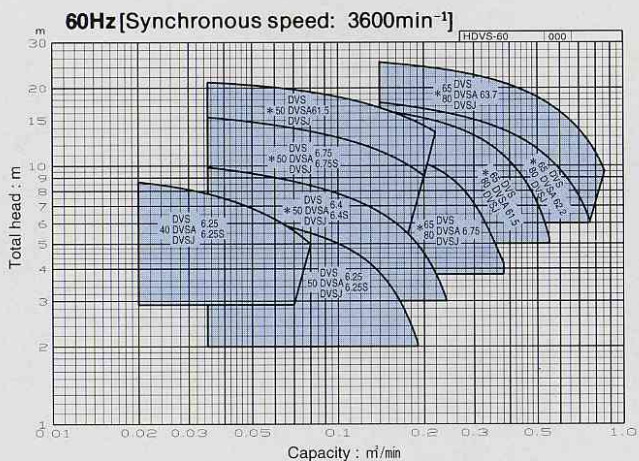
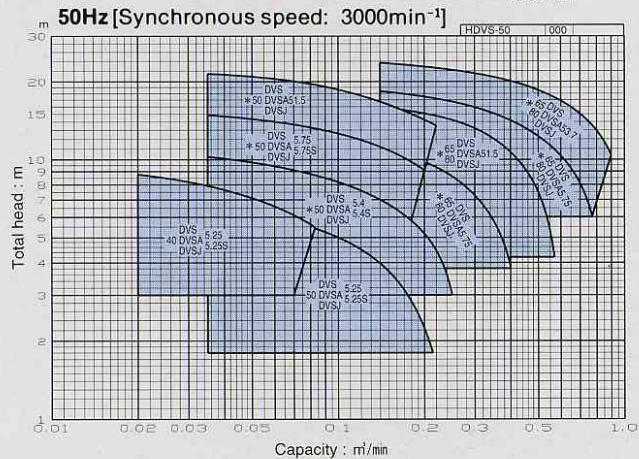
Applications



Symbols



Selection charts



Note: DVSH models for hot water are limited to asterisk* marked, 3 phase pumps only.

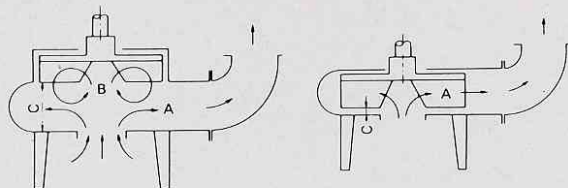
The Semi-Vortex Pump: See the Difference!

The DVS model pump has a unique semi-vortex construction of EBARA's own design. This pump is as efficient as a conventional non-clog pump which uses the centrifugal force of eddy "A" (see below) to pump a liquid. As you can see, any foreign matter sucked into the pump must pass by the impeller, which can result in trouble caused by clinging grass and clogged stones.

With the vortex pump, foreign matter is expelled by the force of eddy "B" which is formed in the wide space between the impeller and the suction cover ("C").

There is less likelihood of clogging.

EBARA vortex pump **Conventional non-clog pump**



Specifications & Accessories

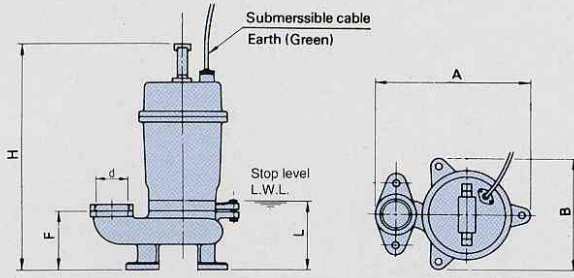
Specifications:

Liquid handled:	River water, sewage
Liquid temperature:	40°C for Model DVS, DVSA 70°C for Model DVSH (0.4 to 0.75kW, Three phase, manual type) 80°C for Model DVSH (1.5 to 3.7kW, Three phase, manual type) 32°C for Model DVSJ

Maximum Spherical Solids diameter:	Pump size	Solid size
	40	25 mm
	50	32 mm
	65 (80)	45 mm
Max. submergence:	0.25 to 1.5 kW	4 m
	2.2, 3.7 kW.	8 m
Min. submergence:	Refer to water level (L.W.L) in dimensions. It is possible to operate at low water level for 30 minutes.	
Synchronous speed:	3000 min ⁻¹ /50Hz, 3600 min ⁻¹ /60Hz	
Construction:	Mechanical seal	Double mechanical seal
	Impeller	Semi-vortex
Material:	Casing	Cast iron
	Impeller	Cast iron
	Shaft	403 stainless steel
Mechanical seal	Impeller side:	Silicon carbide/Silicon carbide
	Motor side:	Ceramic/Carbon
	Packing	NBR
Motor:	2 pole, dry	
Insulation class	E,H(model DVSH only)	
Output	Single phase	0.25 to 0.75kW
	Three phase	0.25 to 3.7kW
Protection	Built-in thermal protector	
Bearing	Sealed ball	
Accessories:	Companion flange with bolts	1 set
	Submersible cable	
	0.25 to 1.5 kW	6 m
	2.2, 3.7 kW	10 m
	Quick discharge connector (option)	

Dimensions

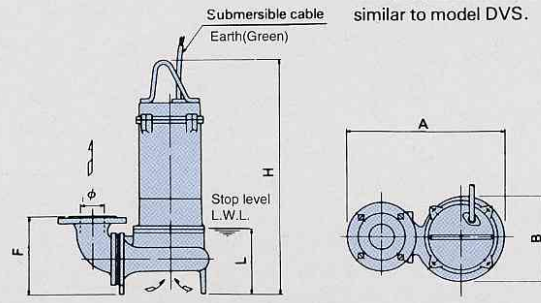
Manual type (Model DVS, DVSH)



Unit: mm

Size mm	Model		Out-put kW	Phase	Pump and Motor						Mass kg
	50Hz	60Hz			d	A	B	F	H	L	
40	40DVS5.25S	40DVS6.25S	0.25	Single	PT-1 1/2	233	160	66	316	95	15
	40DVS5.25	40DVS6.25	0.25	Three	PT-1 1/2	233	160	66	361	95	14
	50DVS6.25S	50DVS6.25	0.25	Single	PT-2	227	139	83	378	105	15
50	50DVS5.25S	50DVS6.25	0.25	Three	PT-2	227	139	83	378	105	14
	50DVS5.25S	50DVS6.25	0.25	Single	PT-2	239	160	82	377	105	15
	50DVS5.25	50DVS6.25	0.25	Three	PT-2	239	160	82	377	105	14
	50DVS5.4S	50DVS6.4S	0.4	Single	PT-2	239	160	82	436	105	18
	50DVS5.4	50DVS6.4	0.4	Three	PT-2	239	160	82	399	105	17
	50DVS5.75S	50DVS6.75S	0.75	Single	PT-2	249	171	82	479	105	25
	50DVS5.75	50DVS6.75	0.75	Three	PT-2	249	171	82	398	105	19
	50DVS5.15	50DVS6.15	1.5	Three	PT-2	249	171	82	440	105	27

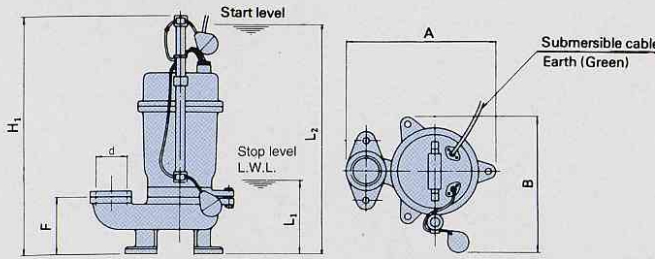
Dimensions of model DVSH is similar to model DVS.



Unit: mm

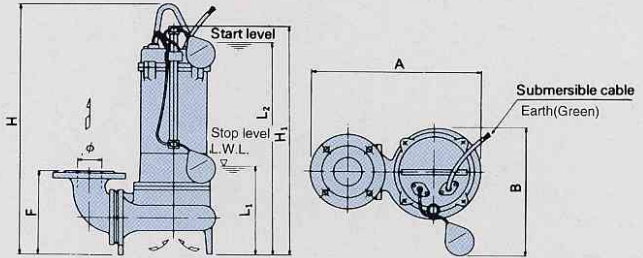
Size φ mm	Model		Out-put kW	Phase	Pump and Motor						Mass kg
	50Hz	60Hz			A	B	F	H	L		
65	65DVS5.75S	65DVS6.75S	0.75	Single	396	195	178	531	125	33	
	65DVS5.75	65DVS6.75	0.75	Three	396	195	178	467	125	25	
	65DVS51.5	65DVS61.5	1.5	Three	396	195	178	526	125	34	
	65DVS52.2	65DVS62.2	2.2	Three	427	227	201	643	155	50	
	65DVS53.7	65DVS63.7	3.7	Three	427	227	201	643	155	59	
	80DVS5.75S	80DVS6.75S	0.75	Single	411	195	183	531	125	33	
80	80DVS5.75	80DVS6.75	0.75	Three	411	195	183	467	125	26	
	80DVS51.5	80DVS61.5	1.5	Three	411	195	183	526	125	35	
	80DVS52.2	80DVS62.2	2.2	Three	442	227	206	643	155	51	
	80DVS53.7	80DVS63.7	3.7	Three	442	227	206	643	155	60	

Automatic type (Model DVSA)



Unit: mm

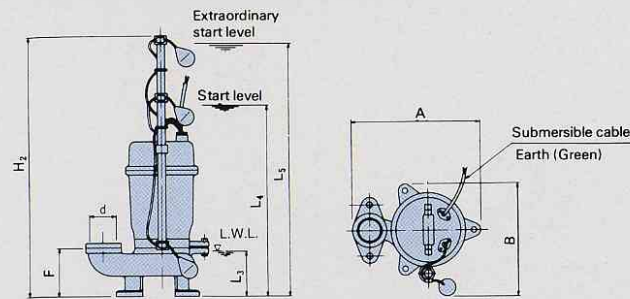
Size mm	Model		Out-put kW	Phase	Pump and Motor								Mass kg
	50Hz	60Hz			d	A	B	F	H ₁	L ₁	L ₂		
40	40DVSA5.25S	40DVSA6.25S	0.25	Single	PT-1 1/2	233	183	66	530	150	490	15	
	40DVSA5.25	40DVSA6.25	0.25	Three	PT-1 1/2	233	183	66	530	150	490	15	
	50DVSA6.25S	50DVSA6.25	0.25	Single	PT-2	227	178	83	530	150	490	16	
50	50DVSA6.25	50DVSA6.25	0.25	Three	PT-2	227	178	83	530	150	490	15	
	50DVSA5.25S	50DVSA6.25	0.25	Single	PT-2	239	183	82	530	150	490	16	
	50DVSA5.25	50DVSA6.25	0.25	Three	PT-2	239	183	82	530	150	490	15	
	50DVSA5.4S	50DVSA6.4S	0.4	Single	PT-2	239	183	82	530	150	490	20	
	50DVSA5.4T	50DVSA6.4	0.4	Three	PT-2	239	183	82	530	150	490	18	
	50DVSA5.75S	50DVSA6.75S	0.75	Single	PT-2	249	197	82	530	150	490	27	
	50DVSA5.75	50DVSA6.75	0.75	Three	PT-2	249	197	82	530	150	490	20	
	50DVSA5.15	50DVSA6.15	1.5	Three	PT-2	249	201	82	530	150	490	30	



Unit: mm

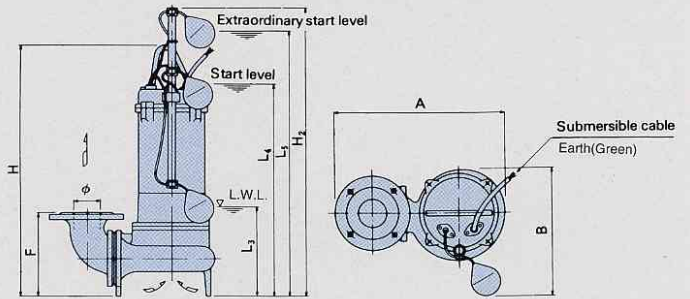
Size φ mm	Model		Out-put kW	Phase	Pump and Motor								Mass kg
	50Hz	60Hz			A	B	F	H	H ₁	L ₁	L ₂		
65	65DVSA5.75S	65DVSA6.75S	0.75	Single	396	206	178	531	530	150	490	34	
	65DVSA5.75	65DVSA6.75	0.75	Three	396	206	178	504	530	150	490	26	
	65DVSA51.5	65DVSA61.5	1.5	Three	396	210	178	600	530	150	490	35	
	65DVSA52.2	65DVSA62.2	2.2	Three	427	237	201	717	770	250	730	51	
	65DVSA53.7	65DVSA63.7	3.7	Three	427	237	201	717	770	250	730	60	
	80DVSA5.75S	80DVSA6.75S	0.75	Single	411	206	183	531	530	150	490	34	
80	80DVSA5.75	80DVSA6.75	0.75	Three	411	206	183	504	530	150	490	27	
	80DVSA51.5	80DVSA61.5	1.5	Three	411	210	183	600	530	150	490	36	
	80DVSA52.2	80DVSA62.2	2.2	Three	442	237	206	717	770	250	730	52	
	80DVSA53.7	80DVSA63.7	3.7	Three	442	237	206	717	770	250	730	61	

Paralle Alternate type (Model DVSJ)



Unit: mm

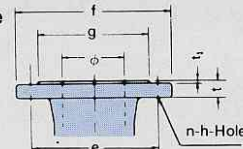
Size mm	Model		Out-put kW	Phase	Pump and Motor								Mass kg
	50Hz	60Hz			d	A	B	F	H ₂	L ₁	L ₂	L ₃	
40	40DVSJ5.25S	40DVSJ6.25S	0.25	Single	PT-1 1/2	233	183	66	640	120	410	600	15
	40DVSJ5.25	40DVSJ6.25	0.25	Three	PT-1 1/2	233	183	66	640	120	410	600	15
	50DVSJ6.25S	50DVSJ6.25	0.25	Single	PT-2	227	178	83	640	120	410	600	16
50	50DVSJ6.25	50DVSJ6.25	0.25	Three	PT-2	227	178	83	640	120	410	600	15
	50DVSJ5.25S	50DVSJ6.25	0.25	Single	PT-2	239	183	82	640	120	410	600	16
	50DVSJ5.25	50DVSJ6.25	0.25	Three	PT-2	239	183	82	640	120	410	600	15
	50DVSJ5.4S	50DVSJ6.4S	0.4	Single	PT-2	239	183	82	640	120	410	600	20
	50DVSJ5.4	50DVSJ6.4	0.4	Three	PT-2	239	183	82	640	120	410	600	19
	50DVSJ5.75S	50DVSJ6.75S	0.75	Single	PT-2	249	197	82	640	120	410	600	27
	50DVSJ5.75	50DVSJ6.75	0.75	Three	PT-2	249	197	82	640	120	410	600	20
	50DVSJ5.15	50DVSJ6.15	1.5	Three	PT-2	249	201	82	640	120	410	600	30



Unit: mm

Size φ mm	Model		Out-put kW	Phase	Pump and Motor								Mass kg
	50Hz	60Hz			A	B	F	H	H ₂	L ₁	L ₂	L ₃	
65	65DVSJ5.75S	65DVSJ6.75S	0.75	Single	396	338	206	531	640	120	410	600	34
	65DVSJ5.75	65DVSJ6.75	0.75	Three	396	338	206	504	640	120	410	600	26
	65DVSJ51.5	65DVSJ61.5	1.5	Three	396	338	210	600	640	120	410	600	35
	65DVSJ52.2	65DVSJ62.2	2.2	Three	427	359	237	717	880	220	650	840	51
	65DVSJ53.7	65DVSJ63.7	3.7	Three	427	359	237	717	880	220	650	840	60
	80DVSJ5.75S	80DVSJ6.75S	0.75	Single	411	338	206	531	640	120	410	600	34
80	80DVSJ5.75	80DVSJ6.75	0.75	Three	411	338	206	504	640	120	410	600	27
	80DVSJ51.5	80DVSJ61.5	1.5	Three	411	338	210	600	640	120	410	600	36
	80DVSJ52.2	80DVSJ62.2	2.2	Three	442	359	237	717	880	220	650	840	52
	80DVSJ53.7	80DVSJ63.7	3.7	Three	442	359	237	717	880	220	650	840	61

Flange

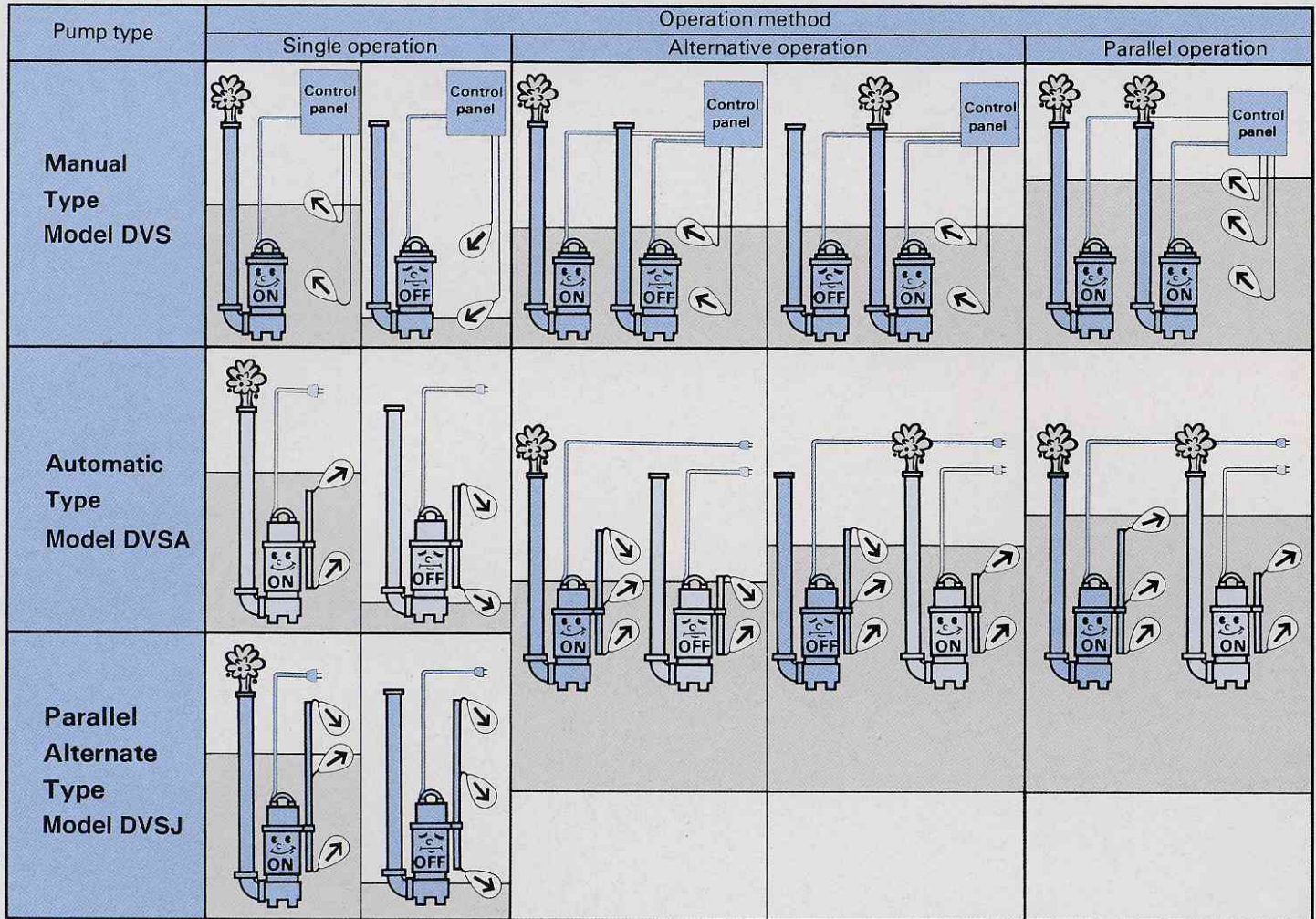


Unit: mm

φ	e	f	g	t	t ₁	n	h
65	140	175	116	18	2	4	15
80	150	185	126	18	2	8	15

Automatic operation of a submersible pump

Nearly all sewage pumps operate automatically according to the liquid level in the sewage tank. A manual pump requires a control panel and float switches for automatic operation. EBARA submersible pumps feature built in automatic operation mechanisms which make control panels and float switches unnecessary.



⚠ CAUTION

- Do not attempt to operate, inspect or service this pump before you have read and understood manual of pump.
- Wiring and grounding work must NOT be performed by unqualified persons. It is extremely dangerous for unqualified persons to perform such work. The user should install electrical leakage breakers and overload safety devices to prevent electric shock and fire.

*All specifications subject to change without notice.



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