



# Model DVS

## Submersible Semi Vortex Pumps

Semi vortex impeller design provides non clog operation, suitable for waste water applications that contain soft or fibrous solids:-

Septic effluent, textile & woollen mills, food processing plants, dairy & piggery washdown, etc.

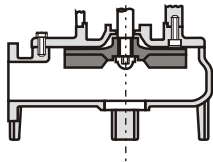


Automatic version



Manual version

### Impeller Type & Solids Handling



Semi-Vortex



Model	Ø	50	80	80
	kW	All	0.75, 1.5	2.2, 3.7
Foreign matter Diameter (mm)		32	45	56
Length of Fibre (mm)		150-250	200-320	245-350

### Specifications

- Submersible pump with semi vortex impeller
- Maximum solids handling:
  - 50Ø models - 32mm
  - 80Ø 0.75, 1.5 kW - 45mm
  - 80Ø 2.2, 3.7 kW - 56mm
- Maximum liquid temperature: 40°C
- Maximum submergence:
  - 0.4 - 1.5 kW - 4 m
  - 2.2 - 3.7 kW - 8 m

### Materials

- Pump casing : Cast Iron
- Impeller : Cast Iron
- Shaft : 403 Stainless Steel
- Motor frame : Cast Iron
- Fasteners : 304 Stainless Steel
- Mechanical seal : Double mechanical seal in oil lubricated chamber, Silicon Carbide lower faces, Carbon/Ceramic upper faces.

### Motor Data

- Air filled dry submersible, 2 pole motor
- Insulation class F
- IP58 protection
- 1 phase, 240 Volt, 50 Hz (0.4 & 0.75 kW only)
- or 3 phase, 415 Volt, 50 Hz (0.75 to 3.7 kW)
- In built overload protection

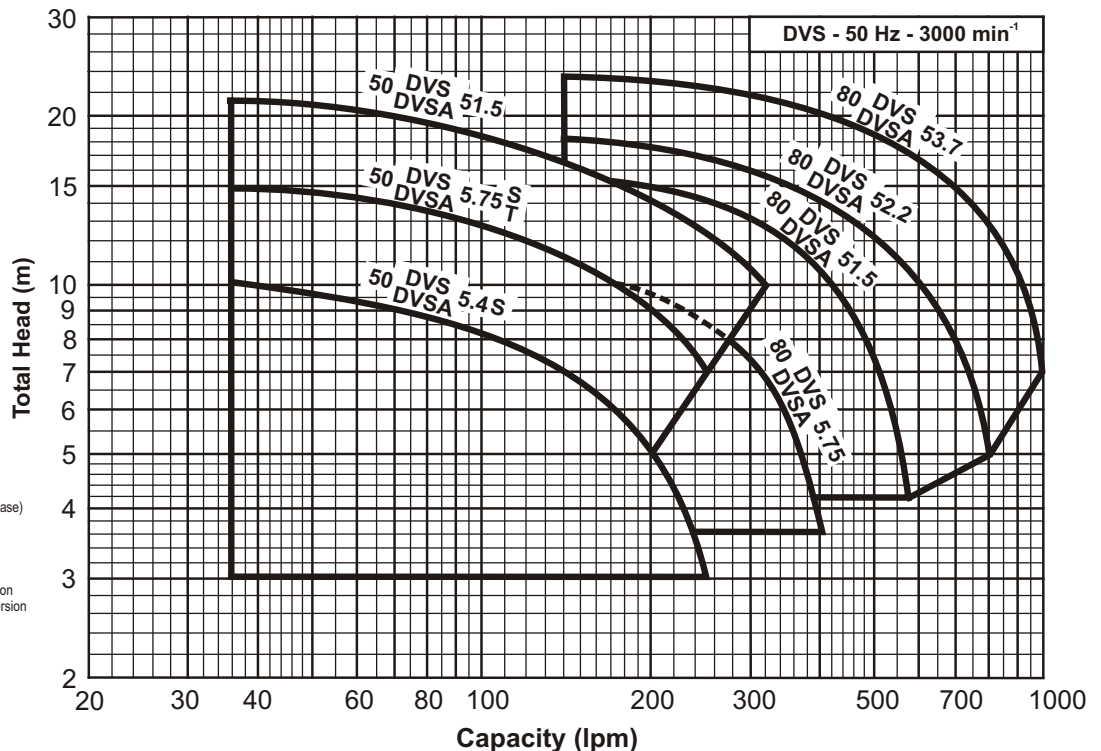
### Scope

- Manual or automatic versions available for all models
- Cable: 6m (0.4 to 1.5 kW) 10 m (2.2 & 3.7 kW)
- Screwed companion flange (50mm models)
- or Discharge elbow with comp. flange (80 mm models)
- Optional Quick Discharge Connectors

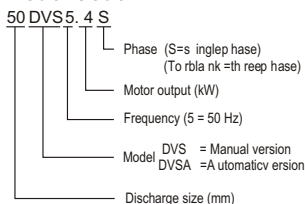
### Performance Curve

Synchronous Speed: 3000 r.p.m.

Applicable standard of test : JIS B8301, B8302



### Model Code



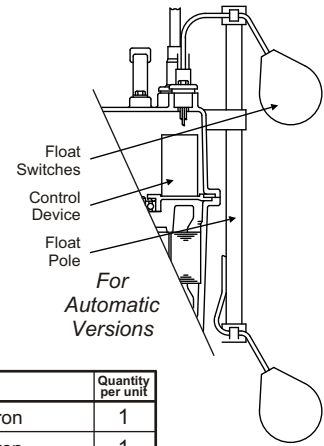
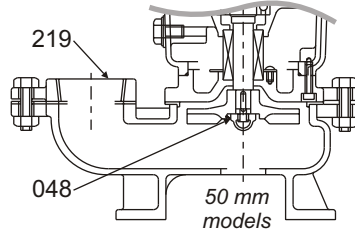
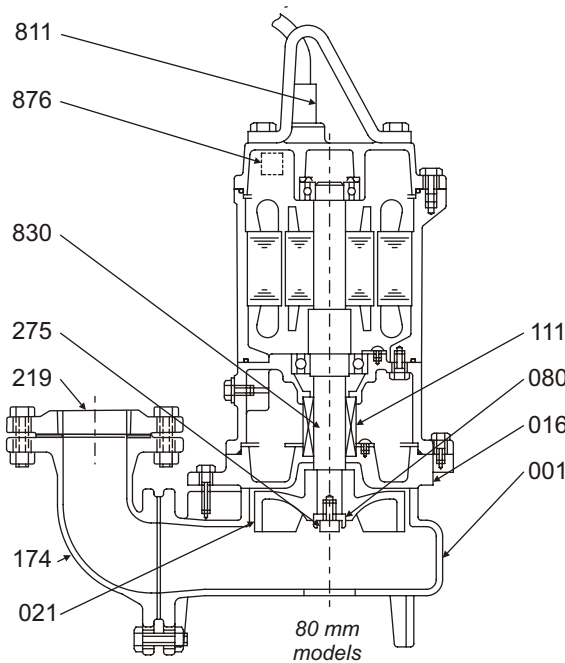
### Performance Table

Basic Pump Model	Motor Output	Discharge Ø mm	Full Load Current		Q= Capacity - litres/min												
			240 V, 1ph.	415 V, 3ph.	80	140	180	250	320	400	500	570	800	1000			
					H=Total Head - metres (m)												
50 DVS 5.4	0.4 kW	50 mm	3.8 A		8.8	7.0	5.8	3.0									
50 DVS 5.75	0.75 kW	50 mm	6.0 A	1.7 A	13.3	11.2	9.8	7.1									
50 DVS 51.5	1.5 kW	50 mm		3.3 A	19.6	16.5	15.0	12.5	10.0								
80 DVS 5.75	0.75 kW	80 mm		1.7 A		10.7	10.0	8.6	6.7	3.8							
80 DVS 51.5	1.5 kW	80 mm		3.3 A				14.0	12.6	10.6	7.4	4.2					
80 DVS 52.2	2.2 kW	80 mm		4.6 A					15.5	14.0	12.3	10.9	5.0				
80 DVS 53.7	3.7 kW	80 mm		7.8 A						21.2	20.1	18.5	17.4	12.8	7.0		

# Sectional Drawing

Model **DVS**

Note: Typical section drawings only.  
Refer to Technical Data for detail of individual models



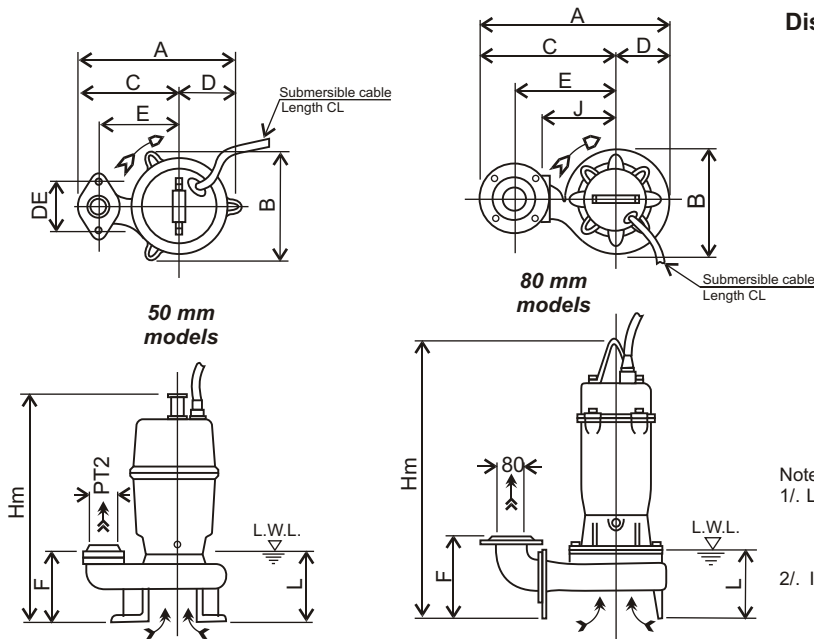
Item Number	Description	Material	Quantity per unit
001	Casing	FC200 Cast Iron	1
016	Mechanical Seal Cover	FC200 Cast Iron	1
021	Impeller	FC200 Cast Iron	1
048	Impeller Nut	SUS304 Stainless Steel	1
080	Bushing	SS Steel	1
111	Mechanical Seal		1
174	Discharge Bend	FC200 Cast Iron	1
219	Companion Flange	FC200 Cast Iron	1
275	Impeller Bolt	SUS304 Stainless Steel	1
811	Cable		1
830	Shaft #	SUS403 Stainless Steel	1
876	Auto Cut		1

# refers to pump side of shaft material

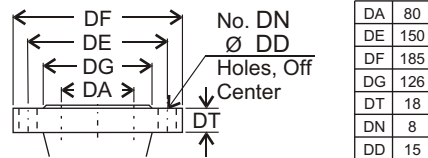
# Dimensions

Model **DVS**

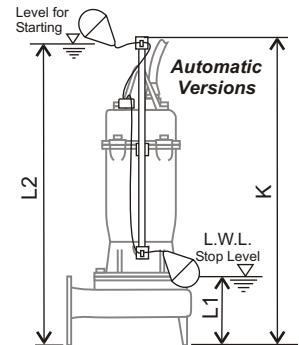
Units: mm unless otherwise specified



## Discharge Flange Dimensions (JIS 10kgf/cm<sup>2</sup>)



Note:  
1/. L.W.L (Low Water Level)  
Is limited to 10 minutes operation at low water level.  
2/. Is limited to 30 minutes operation with water level below top of motor.



Size	Model	Output KW	Phase	Automatic Versions											Automatic Versions				
				A	B	C	D	E	F	Hm	DE	J	L	CL	Weight	L1	L2	K	Weight
50	50 DVS 5.4S	0.4	1	239	160	148	91	110	82	435	96	-	105	6 m	18 kg	150	490	530	20 kg
	50 DVS 5.75S	0.75	1	249	171	163	86	125	82	497	96	-	105	6 m	26 kg	150	490	530	27 kg
	50 DVS 5.75T	0.75	3	249	171	163	86	125	82	397	96	-	105	6 m	19 kg	150	490	530	20 kg
	50 DVS 51.5	1.5	3	249	171	163	86	125	82	439	96	-	105	6 m	27 kg	150	490	530	30 kg
80	80 DVS 5.75T	0.75	3	411	195	313	98	220	183	467	-	145	125	6 m	26 kg	150	490	530	27 kg
	80 DVS 51.5	1.5	3	411	195	313	98	220	183	519	-	145	125	6 m	35 kg	150	490	530	36 kg
	80 DVS 52.2	2.2	3	442	227	328	114	235	206	643	-	160	155	10m	51 kg	250	730	770	52 kg
	80 DVS 53.7	3.7	3	442	227	328	114	235	206	643	-	160	155	10m	60 kg	250	730	770	61 kg

Specifications subject to change without notice



EBARA PUMPS Australia Pty. Ltd

Data Sheet

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