



# Model DS

## Submersible Sump Pumps

Open impeller design provides high heads and efficiencies. Suitable for many sump applications including:- draining wells, lift shafts, tanks, etc., irrigation, drainage, water supply, water features.



### Specifications

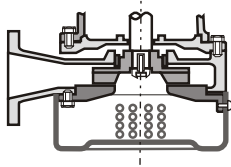
Submersible pump with semi-open impeller and strainer.  
 Maximum solids handling: 5 to 8mm  
 Maximum liquid temperature: 40°C  
 Maximum submergence: 8m

### Materials

Pump casing: Cast Iron  
 Impeller: Cast Iron  
 Suction cover: 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  
 3 phase, 415 Volt, 50 Hz  
 In built overload protection



Semi-Open



**Impeller Type & Solids Handling**

Model Ø	50	80	100
kW	All	All	All
Foreign matter Diameter (mm)	5	7	8
Length of Fibre (mm)	50	50	50

### Scope

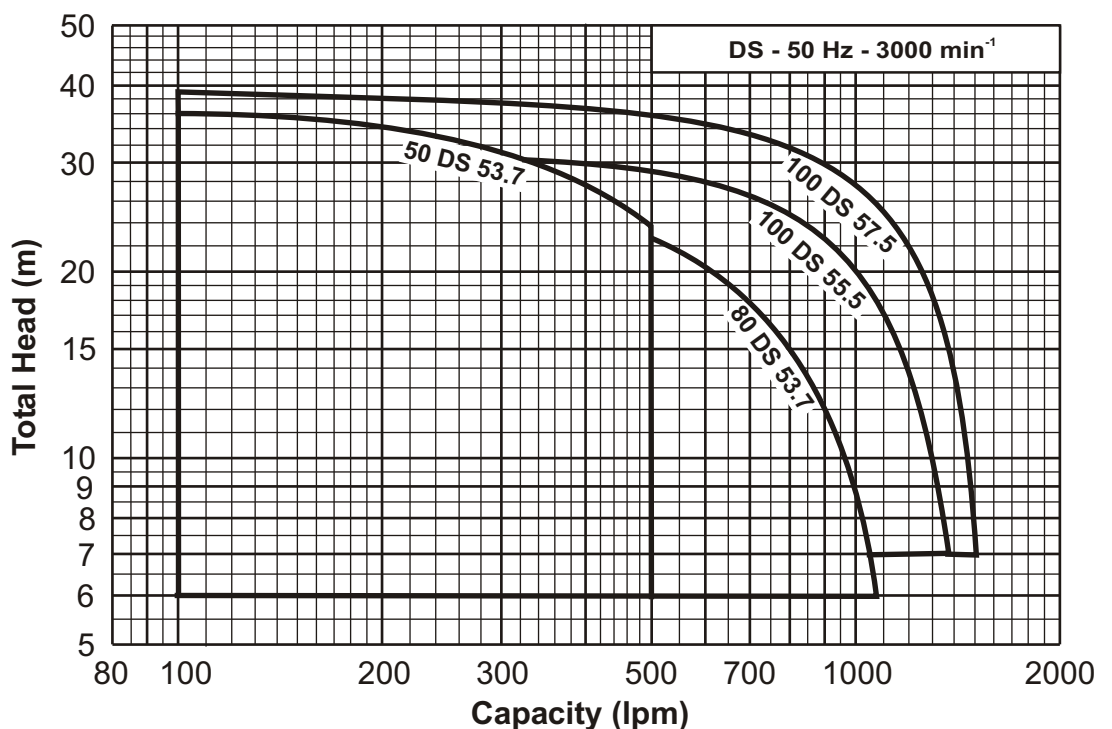
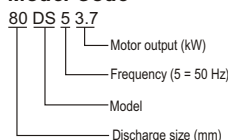
10 m of cable  
 Discharge elbow with companion flange,  
*Optional Quick Discharge Connectors available*

### Performance Curve

Synchronous Speed:  
 3000 r.p.m.

Applicable standard of test :  
**JIS B8301, B8302**

#### Model Code



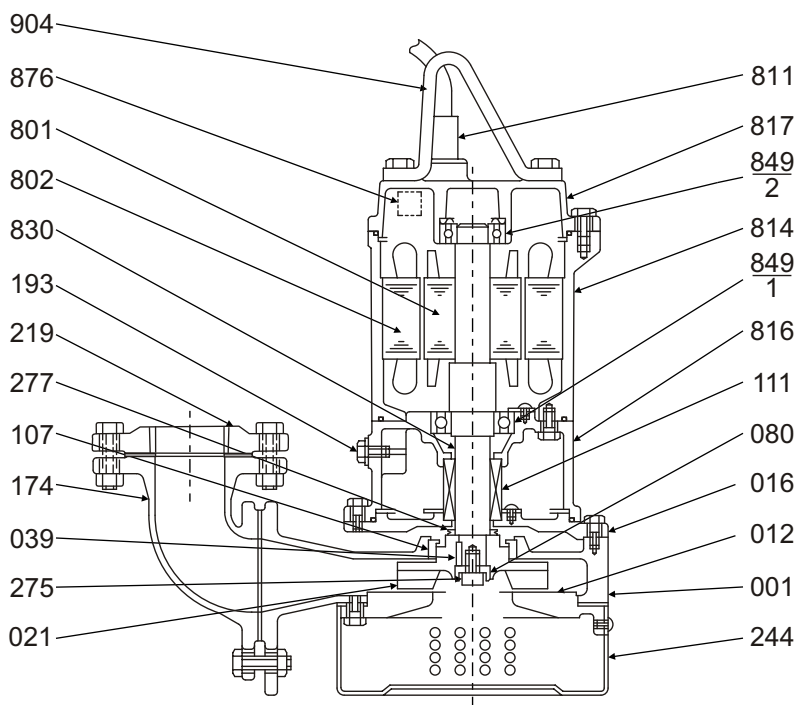
### Performance Table

Pump Model	Motor Output	Discharge Ø mm	Power Supply	Full Load Current	Q= Capacity - litres/min									
					110	250	500	700	800	1000	1100	1350	1500	
					H=Total Head - metres (m)									
50 DS 53.7	3.7 kW	50 mm	415 V, 3ph.	7.8 A	36.0	33.0	23.4	13.0						
80 DS 53.7	3.7 kW	80 mm	415 V, 3ph.	7.8 A		26.0	22.9	17.7	14.8	8.2				
100 DS 55.5	5.5 kW	100 mm	415 V, 3ph.	9.8 A			29.0	26.2	24.3	20.0	17.0	7.0		
100 DS 57.5	7.5 kW	100 mm	415 V, 3ph.	13.2 A			36.0	33.3	31.8	27.2	24.5	15.0	7.0	

# Sectional Drawing

Model **DS**

Note: Typical sectional drawing only.  
Refer to Technical Data for detail of individual models



Item Number	Description	Material	Quantity per unit
001	Casing	FC200 Cast iron	1
012	Suction Cover	FC200 Cast iron	1
016	Mechanical Seal Cover	FC200 Cast iron	1
021	Impeller	FCD400 Graphite Cast iron	1
039	Impeller Key	SUS304 Stainless Steel	1
080	Bushing	SS Steel	1
107	Casing Ring	SUS Stainless Steel	1
111	Mechanical Seal	Silicon Carbide lower faces Carbon vs Ceramic upper faces	1
174	Discharge Elbow	FC200 Cast Iron	1
193	Oil Plug	C3604 or SUS304 Brass or Stainless Steel	1
219	Companion Flange	FC200 Cast Iron	1
244	Strainer	SPCC Steel	1
275	Impeller Bolt	SUS304 Stainless Steel	1
277	Vee Ring	NBR Rubber	1
801	Rotor		1
802	Stator		1
811	Cable		1
814	Motor Frame	FC150 Cast iron	1
816	Lower Bracket	FC150 Cast iron	1
817	Upper Bracket	FC150 Cast iron	1
830	Shaft #	SUS403 Stainless Steel	1
849-1	Ball Bearing		1
849-2	Ball Bearing		1
876	Auto Cut		1
904	Lifting Hanger	SS Steel	1

# refers to pump side of shaft material

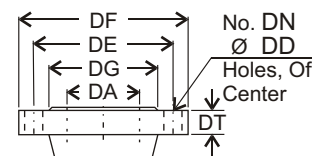
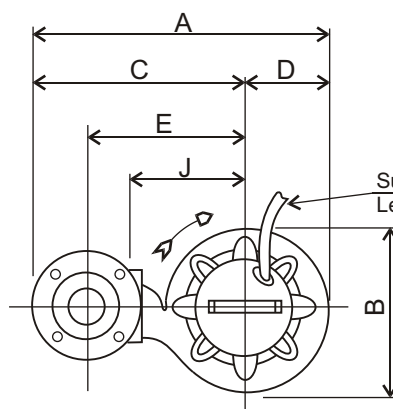
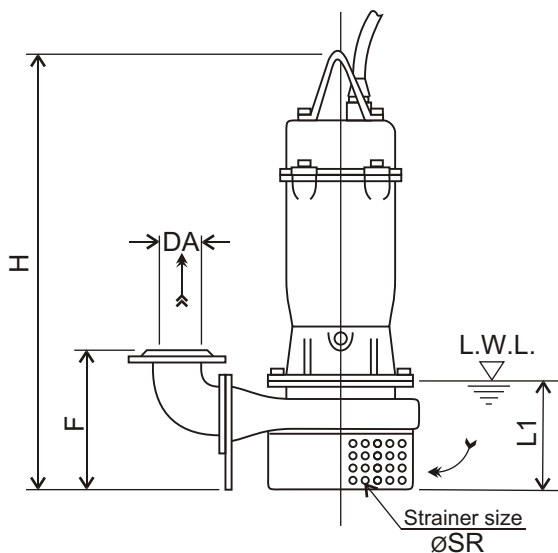
# Dimensions

Model **DS**

Units: mm unless otherwise specified

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

DA	DE	DF	DG	DT	DN	DD
50	120	155	96	18	4	15
80	150	185	126	18	8	15
100	175	210	151	20	8	15



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	DA	A	B	C	D	E	F	H	J	L1	ØSR	CL	Weight
50	<b>50 DS 53.7</b>	3.7	3	50	433	245	313	120	235	198	619	180	160	10	10 m	61 kg
80	<b>80 DS 53.7</b>	3.7	3	80	503	268	368	135	275	215	625	200	160	10	10m	64 kg
100	<b>100 DS 55.5</b>	5.5	3	100	615	309	460	155	355	257	730	250	200	13	10m	92 kg
	<b>100 DS 57.5</b>	7.5	3	100	615	309	460	155	355	257	730	250	200	13	10m	104 kg

Specifications subject to change without notice



EBARA PUMPS Australia Pty. Ltd

Data Sheet

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