

D8001-5

# D'SERIES SUBMERSIBLE PUMPS

Model DS / DVS / DL / DF

**50Hz**



## D'SERIES SUBMERSIBLE PUMPS

For Sump, Effluent,  
Waste water  
and Sewage.

A comprehensive range  
of Reliable, High quality  
Submersible pumps.

Of Robust Cast iron  
construction, with many  
design features.

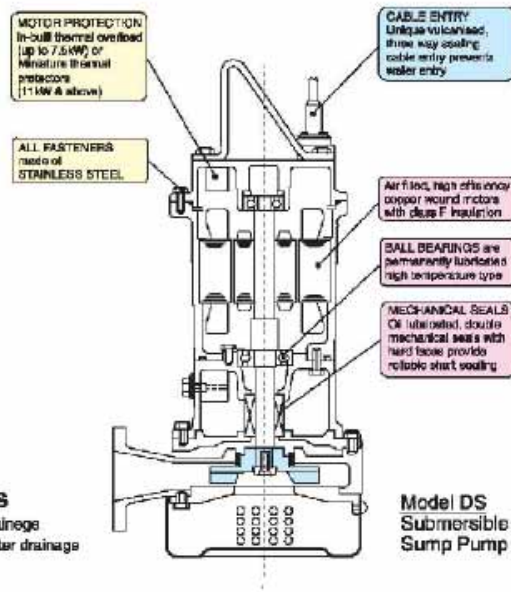
### Model DS

#### ■ FEATURES

- Efficient Semi-Open Impeller.
- Strainer prevents blockages.

#### ■ APPLICATIONS

- Purification tank drainage
- Rain and spring water drainage
- Water supply



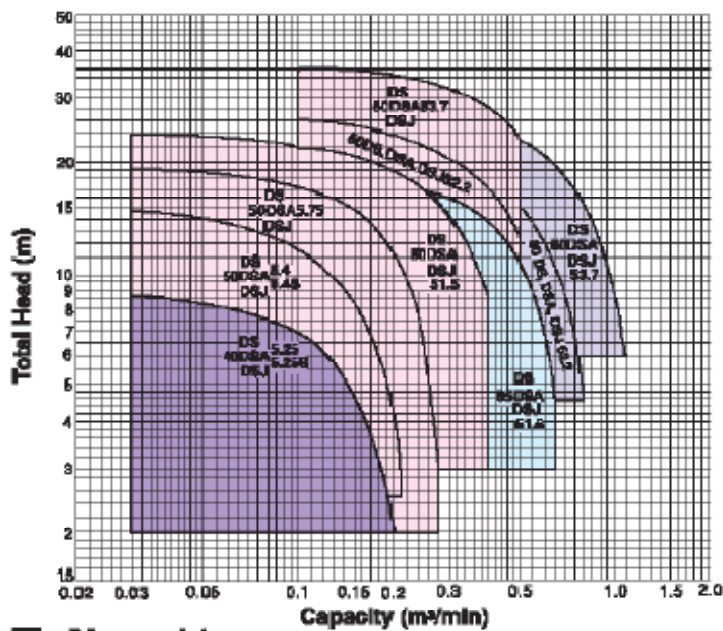
## Specifications

Description		Pump			
Model		DS	DVS	DL	DF (With Cutter)
No. of Pole		2	2	4	4
Liquid Handled	Type of liquid	Sump	Finer water, Sewage	Sewage, Waste water	Sewage
	Temperature	0°C - 40°C for DS, DSA 0°C - 32°C for DSJ	0°C - 40°C for DVS, DVSA 0°C - 32°C for DVSJ	0°C - 40°C for DL, DLA 0°C - 32°C for DLJ	0°C - 40°C for DF, DFA 0°C - 32°C for DFJ
	Maximum solids size	40DS : 3 mm, 50DS : 5mm, 60DS : 6mm, 80DS : 7 mm	40DVS : 25 mm, 50DVS : 32 mm 60(80) : 45 mm	50DL : 35 mm, 60DL : 40 mm, 80DL, 100 DL : 46 mm, 100DL, DLB : 57 mm, 150DL : 66 mm, 200dl : 73 mm, 250dl : 79 mm	50DF : 35 mm, 60DF : 40 mm, 80DF : 46 mm, 100DF : 57 mm
Maximum Submergence	0.4 1.5 kW = 4 m; 2.2 3.7 kW = 6 m	0.4 1.5 kW = 4 m; 2.2 3.7 kW = 6 m	8 m	8 m	
Minimum Submergence	Refer to water level (L.W.L.) in Dimensions	Refer to water level (L.W.L.) in Dimensions	Refer to water level (L.W.L.) in Dimensions	Refer to water level (L.W.L.) in Dimensions	
Synchronous speed	3000 min <sup>-1</sup>	3000 min <sup>-1</sup>	1500 min <sup>-1</sup>	1500 min <sup>-1</sup>	
Construction	Mechanical Seal	Double Mechanical Seal	Double Mechanical Seal	Double Mechanical Seal	Double Mechanical Seal
	Impeller	Semi-open	Semi-vortex	Semi-open, non-clog	Semi-open, nonclog
	Bearing	Pre-lubricated bearing	Pre-lubricated bearing	Pre-lubricated bearing	Pre-lubricated bearing
Material	Casing	Cast Iron	Cast Iron	Cast Iron	Cast Iron
	Impeller	Cast Iron	Cast Iron	Cast Iron	Cast Iron
	Shaft	403 Stainless Steel	403 Stainless Steel	403 Stainless Steel	403 Stainless Steel
	Mechanical Impeller side	Silicon carbide vs Silicon carbide	Silicon carbide vs Silicon carbide	Silicon carbide vs Silicon carbide	Silicon carbide vs Silicon carbide
	Seal Motor side	Ceramic vs Carbon	Ceramic vs Carbon	Ceramic vs Carbon	Ceramic vs Carbon
	Packing	NBR	NBR	NBR	NBR
<b>Motor</b>					
Type	2 pole, air-filled waterlight			4 pole, air-filled waterlight	
Insulation	Class F			Class F	
Protection	Built in overload protector			Built in overload protector (up to 7.5 kW) ; Built in temperature detector protection (11 - 22 kW)	
<b>Accessories</b>					
Standard	Special Companion flange cast iron with bolts: 40-50 DS51.5, Submersible cable : 0.4 - 1.5 kW = 6 m; 2.2 - 3.7 kW = 10m. Flex switch for DS/DSJ			Submersible cable : 0.4 - 1.5 kW = 6 m; 2.2 - 3.7 kW = 10m, Flex switch for D.A, D.L, D.VA, D.VJ, D.FA, D.FJ	
Optional	Quick discharge connector			Quick discharge connector	

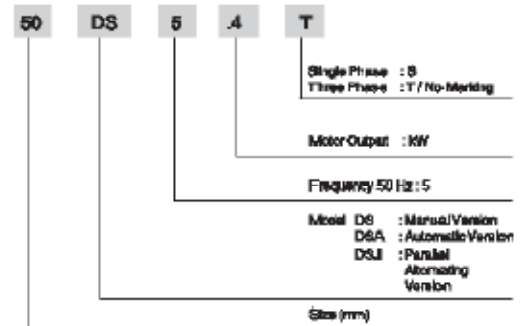
# MODEL DS

## SELECTION CHARTS

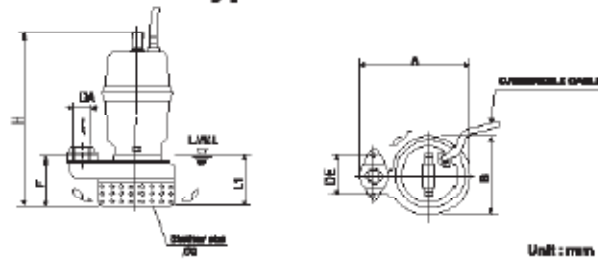
50 Hz (Synchronous speed 3000 min<sup>-1</sup>)



## MODEL CODE

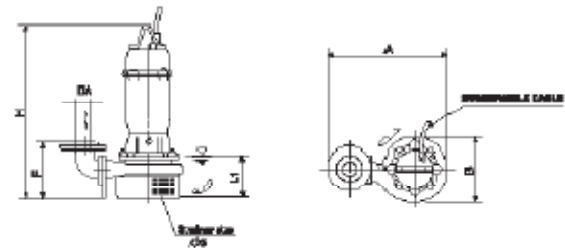


## Manual type



Size φ	Model	Out Put KW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	H	DE	S	L1	
48	40DBA5.25B	0.25	Single	210	195	80	95	80	7	85	12
	40DBA5.25	0.25	Three	210	195	80	95	80	7	85	12
	40DBA5.4B	0.4	Single	280	195	99	103	98	8	110	17
80	50DBA5.4	0.4	Three	280	195	99	103	98	8	110	16
	40DBA5.75	0.75	Three	280	195	99	103	98	8	110	17
	60DBA5.5	1.5	Three	280	200	116	116	98	10	120	25

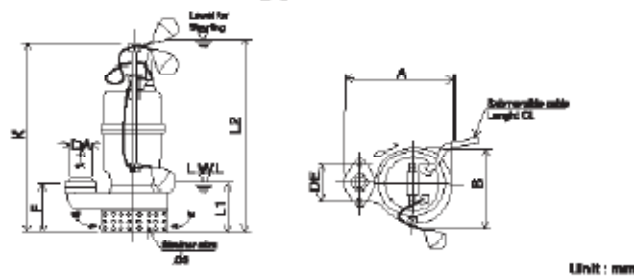
Unit : mm



Size φ	Model	Out Put KW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	H	S	L1		
50	50DBA5.2	2.2	Three	435	245	195	113	10	190	66	
	50DBA5.7	3.7	Three	435	245	195	113	10	190	61	
68	68DBA5.5	1.5	Three	497	210	197	103	10	190	35	
80	60DBA5.2	2.2	Three	535	265	215	125	10	190	68	
	60DBA5.7	3.7	Three	535	265	215	125	10	190	64	

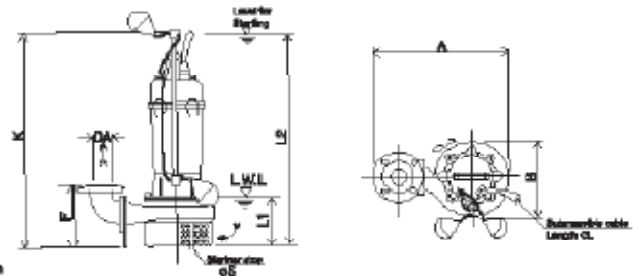
Unit : mm

## Automatic type



Size φ	Model	Out Put KW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	DE	S	K	L1	L2	
40	40DBA5.25B	0.25	Single	210	195	80	95	7	530	150	490	13
	40DBA5.25	0.25	Three	210	195	80	95	7	530	150	490	13
80	50DBA5.4	0.4	Single	280	200	99	98	8	530	150	490	16
	40DBA5.4	0.4	Three	280	200	99	98	8	530	150	490	17
	50DBA5.75	0.75	Three	280	200	99	98	8	530	150	490	16
80	60DBA5.5	1.5	Three	280	207	116	98	10	530	150	480	20

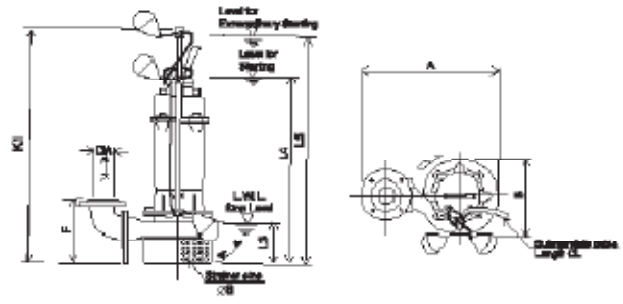
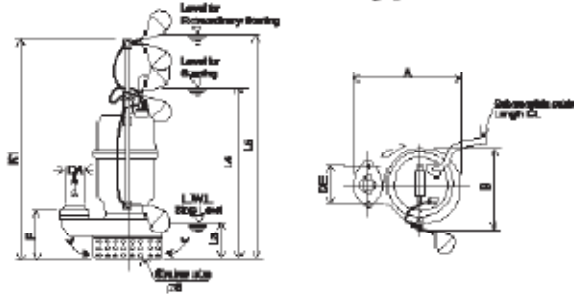
Unit : mm



Size φ	Model	Out Put KW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	S	K	L1	L2		
50	50DBA5.2	2.2	Three	435	245	195	10	800	270	780	81	
	50DBA5.7	3.7	Three	435	245	195	10	800	270	780	87	
68	68DBA5.5	1.5	Three	497	210	197	10	530	150	490	38	
80	60DBA5.2	2.2	Three	505	265	215	10	800	270	780	65	
	60DBA5.7	3.7	Three	505	265	215	10	800	270	780	70	

Unit : mm

## Parallel Alternate type



Unit : mm

Size $\varnothing$	Model	Out Put kW	Phase	Pump and Motor										Weight (Mass) kg
				A	B	F	DE	S	K1	L3	L4	L5		
40	40DSJ9.25B	0.25	Single	218	185	80	80	7	640	120	410	600	14	
	40DSJ6.25	0.25	Three	218	185	80	80	7	640	120	410	600	14	
80	80DSJ6.4B	0.4	Single	280	200	99	98	8	640	120	410	600	18	
	80DSJ6.4	0.4	Three	280	200	99	98	8	640	120	410	600	17	
	80DSJ6.75	0.75	Three	280	200	99	98	8	640	120	410	600	18	
	80DSJ1.5	1.5	Three	298	207	118	88	10	640	120	410	600	27	

Unit : mm

Size $\varnothing$	Model	Out Put kW	Phase	Pump and Motor										Weight (Mass) kg
				A	B	F	S	K1	L3	L4	L5			
80	80DSJ6.2	2.2	Three	433	248	198	18	910	240	580	870	62		
	80DSJ3.7	3.7	Three	433	248	198	18	910	240	580	870	67		
85	85DSJ5.5	5.5	Three	467	210	197	18	940	120	410	600	36		
80	80DSJ6.2	2.2	Three	563	288	218	13	910	240	680	870	86		
	80DSJ3.7	3.7	Three	563	288	218	13	910	240	680	870	79		

## OPTIONS

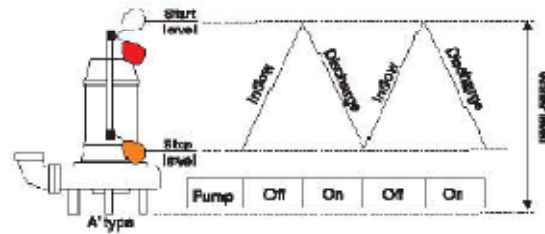
### ■ AUTOMATIC OPERATION (A', J' TYPE)

All models up to 3.7kW are available as automatic (A' type) or parallel alternating (J' type) pumps with inbuilt control devices and float switches. There is no need for an external control panel, and operation can begin as soon as the pumps are installed and connected to a power source.

#### SINGLE PUMP INSTALLATION (A' TYPE)

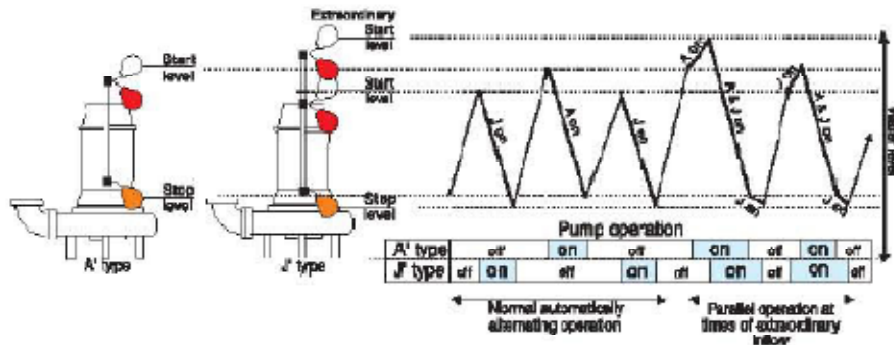
A single automatic (A' type) pump is installed in the sump.

The pump automatically starts when the water level in the sump reaches the 'start level', and stops when the pump has lowered the water level to the 'stop level'.



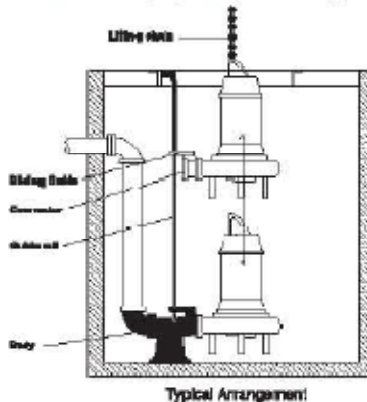
#### DUPLEX PUMP INSTALLATION (A' & J' TYPE)

Two pumps, one A' type and one J' type are installed in the sump. In normal operating conditions, operation alternates between the two pumps. In times of extraordinary inflow (inflow is greater than the capacity of a single pump), then the two pumps will operate together in parallel operation.



### ■ QUICK DISCHARGE CONNECTION (QDC)

An optional quick discharge connector is available to suit all Ebara D-series submersible pumps, allowing easy removal and replacement of the pumps for maintenance purposes without having to enter the sump.



Typical Arrangement

### ■ FLOAT SWITCH

FLOAT SWITCH	
Model	CDL02-4060 A
Temperature	0-50°C
Function of contact	Up = ON Down = OFF
Voltage	AC 24V DC 24 V
Max Current	AC 0.5A DC 0.5A
Contact Capacity	AC 10 VA DC 10 VA
Lead Wire	2x0.2mm <sup>2</sup> x6m



Note: (1) Full details of the A' type, J' type and QDC dimensions are available in the respective models Technical Data.  
(2) All specifications subject to change without prior notice.



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