



EBARA



D8001-5

D'SERIES SUBMERSIBLE PUMPS

Model DS / DVS / DL / DF

50Hz

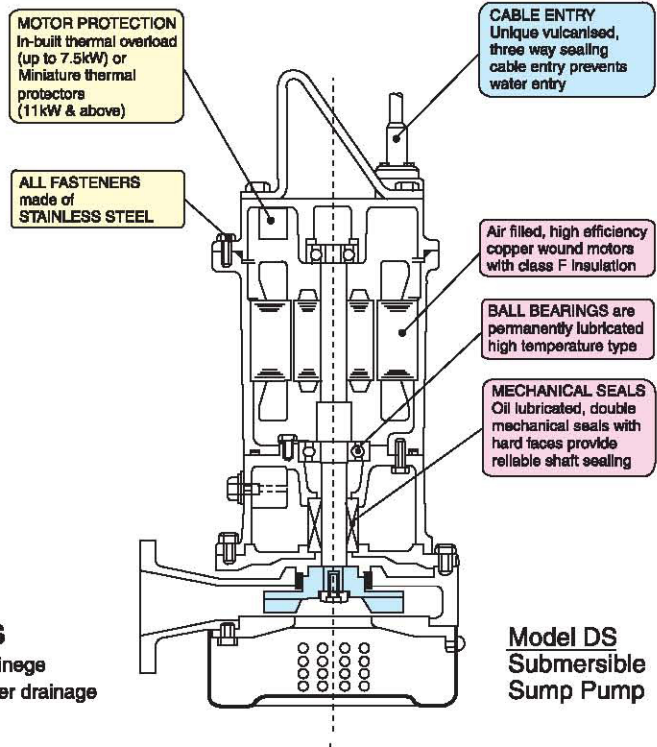


D'SERIES SUBMERSIBLE PUMPS

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

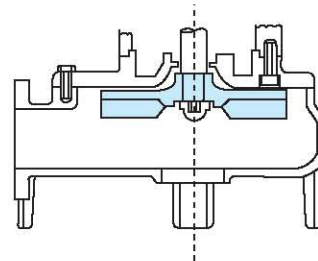
Model DVS

■ FEATURES

- Semi-Vortex Impeller offers non-clog operation and allows pumping of foreign matter up to 60-70% of discharge size.
- Easy Maintenance.

■ APPLICATIONS

- Ideal for waste water applications containing soft or fibrous solids
- Industrial waste water drainage
- Septic effluent
- Miscellaneous drainage



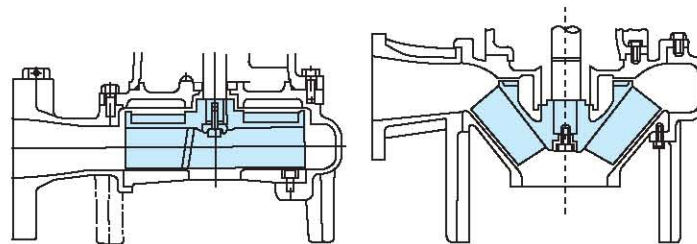
Model DL

■ FEATURES

- Non-Clog Semi-Open Impellers prevents clogging by fibrous matter.
- Full Range of Models up to 250 mm discharge size and 22 kW available.

■ APPLICATIONS

- Sewage
- Waste water



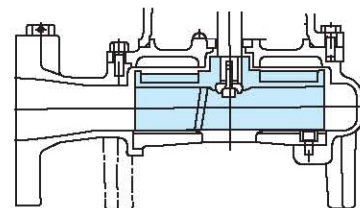
Model DF (with Cutter)

■ FEATURES

- Non-Clog Semi-Open Impellers prevents clogging by fibrous matter.
- Full Range of Models up to 100 mm discharge size and 3.7 kW available.

■ APPLICATIONS

- Sewage
- Waste water



Specifications

Description		Pump			
Model	DS	DVS	DL	DF (With Cutter)	
No. of Pole	2	2	4	4	
Liquid Handled	Type of liquid	River 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 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, 65DS : 6mm, 80DS : 7 mm	50DL : 35 mm, 65DL : 40 mm, 80DL, 100 DLC : 46 mm, 100DL, DLB : 57 MM, 150DL : 68 mm, 200dl : 73 mm, 250dl : 79 mm.	50DF : 35 mm, 65DF : 40 mm, 80DF : 46 mm, 100DF: 57 mm	
Maximum Submergence	0.4 1.5 kW = 4 m; 2.2 3.7 kW = 8 m	0.4 1.5 kW = 4 m; 2.2 3.7 kW = 8 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 ⁻¹	3000 min ⁻¹	1500 min ⁻¹	1500 min ⁻¹	
Construction	Mechanical Seal	Double Mechanical Seal	Double Mechanical Seal	Double Mechanical Seal	
	Impeller	Semi-open	Semi-vortex	Semi-open, non-dog	
	Bearing	Pre-lubricated bearing	Pre-lubricated bearing	Pre-lubricated bearing	
Material	Casing	Cast Iron	Cast Iron	Cast Iron	
	Impeller	Cast Iron	Cast Iron	Cast Iron	
	Shaft	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	
	Seal	Ceramic vs Carbon	Ceramic vs Carbon	Ceramic vs Carbon	
	Motor side				
	Packing	NBR	NBR	NBR	NBR
Motor					
Type	2 pole, air-filled watertight	4 pole, air-filled watertight			
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)			
Accessories					
Standard	Special Companion flange cast iron with bolts: 40- 50 DSS1.5, Submersible cable : 0.4 – 1.5 kW = 6 m; 2.2 – 3.7 kW = 10m, Float switch for DSA,DSJ				
Optional	Quick discharge connector				

■ SELECTION CHARTS

The graph plots Total Head (m) on the y-axis against Capacity (m³/min) on the x-axis. The y-axis is logarithmic, ranging from 1.5 to 50. The x-axis is linear, ranging from 0.02 to 2.0. Several performance curves are shown, each representing a different pump model and head rating. The curves are color-coded: purple for 5.25m head, pink for 5.4m and 5.76m, light blue for 51.5m, and dark blue for 53.7m and 65m. The curves generally show that total head decreases as capacity increases.

Capacity (m³/min)	DS 5.25, 40DSA 5.25S (m)	DS 5.4, 50DSA 5.4S (m)	DS 5.76, 50DSA 5.76 (m)	DS 51.5, 50DSA 51.5, DSJ 51.5 (m)	DS 53.7, 80DSA 53.7, DSJ 53.7 (m)	DS 65, 65DSA (m)
0.03	8.5	14.5	19.0	-	-	-
0.1	6.5	12.5	17.0	25.0	35.0	38.0
0.2	2.5	8.5	14.5	18.0	28.0	32.0
0.3	-	-	11.0	14.0	23.0	27.0
0.5	-	-	7.0	9.0	16.0	20.0
1.0	-	-	-	4.0	10.0	13.0

Diagram illustrating the marking method for the motor nameplate. The characters on the nameplate are connected to their corresponding specifications:

- 50** : Size (mm)
- DS** : Model DS : Manual Version
- 5** : Single Phase : S
Three Phase : T / No Marking
- .4** : Motor Output : kW
- T** : Frequency 50 Hz : 5

Size Ø	Model	Out Put kW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	H	DE	S	L1	
40	40DS5.25S	0.25	Single	219	156	80	358	80	7	85	12
	40DS5.25	0.25	Three	219	156	80	358	80	7	85	12
50	50DS5.4S	0.4	Single	260	186	99	433	96	8	110	17
	50DS5.4	0.4	Three	260	186	99	396	96	8	110	16
	50DS5.75	0.75	Three	260	186	99	396	96	8	110	17
	50DS5.1.5	1.5	Three	266	200	115	450	96	10	120	25

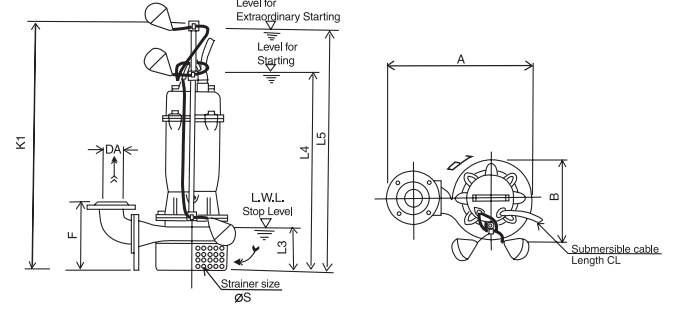
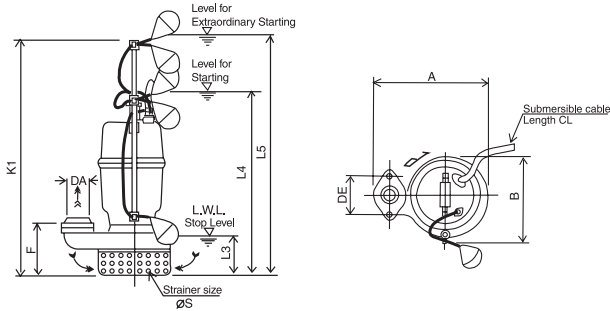
Unit : mm										
Size Ø	Model	Out Put kW	Phase	Pump and Motor						Weight (Mass) kg
				A	B	F	H	S	L1	
50	50DS5.2	2.2	Three	433	245	198	619	10	160	55
	50DS5.7	3.7	Three	433	245	198	619	10	160	61
65	65DS5.1.5	1.5	Three	407	210	197	503	10	120	35
80	80DS5.2.2	2.2	Three	503	268	215	625	10	160	59
	80DS5.7	3.7	Three	503	268	215	625	10	160	64

												Unit : mm
Size Ø	Model	Out Put kW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	DE	S	K	L1	L2	
40	40DSA5.25S	0.25	Single	219	185	80	80	7	530	150	490	13
	40DSA5.25	0.25	Three	219	185	80	80	7	530	150	490	13
50	50DSA5.4S	0.4	Single	260	200	99	96	8	530	150	490	18
	50DSA5.4	0.4	Three	260	200	99	96	8	530	150	490	17
	50DSA5.75	0.75		260	200	99	96	8	530	150	490	18
	50DSA5.1.5	1.5		266	207	115	96	10	530	150	490	26

 Stainless steel  Stainless steel											Unit : mm
Size Ø	Model	Out Put kW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	S	K	L1	L2	
50	50DSA52.2	2.2	Three	433	248	198	10	800	270	760	61
	50DSA53.7	3.7	Three	433	248	198	10	800	270	760	67
65	65DSA51.5	1.5	Three	407	210	197	10	530	150	490	36
80	80DSA52.2	2.2	Three	503	268	215	10	800	270	760	65
	80DSA53.7	3.7	Three	503	268	215	10	800	270	760	70

Unit : mm

Parallel Alternate type



													Unit : mm
Size Ø	Model	Out Put kW	Phase	Pump and Motor									Weight (Mass) kg
				A	B	F	DE	S	K1	L3	L4	L5	
40	40DSJ5.25S	0.25	Single	219	185	80	80	7	640	120	410	600	14
	40DSJ5.25	0.25	Three	219	185	80	80	7	640	120	410	600	14
50	50DSJ5.4S	0.4	Single	260	200	99	96	8	640	120	410	600	18
	50DSJ5.4	0.4	Three	260	200	99	96	8	640	120	410	600	17
	50DSJ5.75	0.75		260	200	99	96	8	640	120	410	600	18
	50DSJ51.5	1.5		268	207	115	96	10	640	120	410	600	27

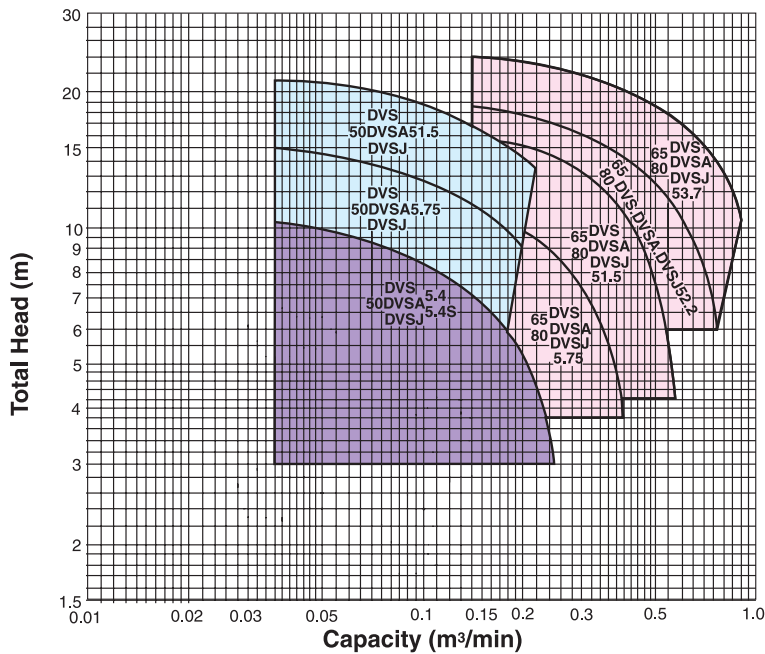
Unit : mm

Size Ø	Model	Out Put kW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	S	K1	L3	L4	L5	
50	50DSJ52.2	2.2	Three	433	248	198	10	910	240	680	870	62
	50DSJ53.7	3.7	Three	433	248	198	10	910	240	680	870	67
65	65DSJ51.5	1.5	Three	407	210	197	10	640	120	410	600	36
80	80DSJ52.2	2.2	Three	503	268	215	10	910	240	680	870	65
	80DSJ53.7	3.7		503	268	215	10	910	240	680	870	70

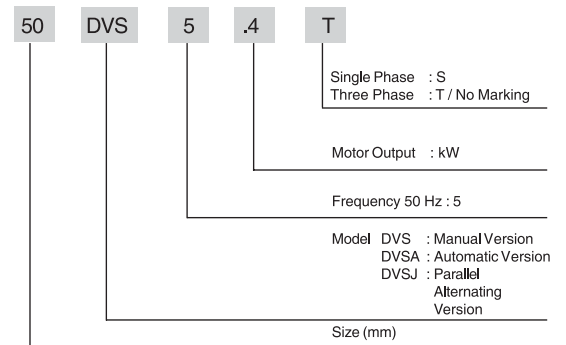
MODEL DVS

SELECTION CHARTS

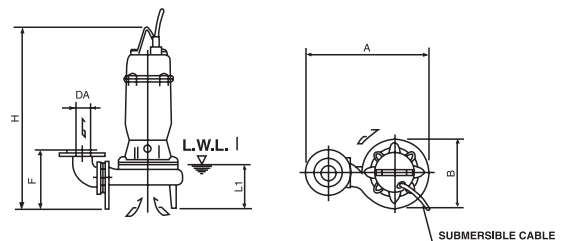
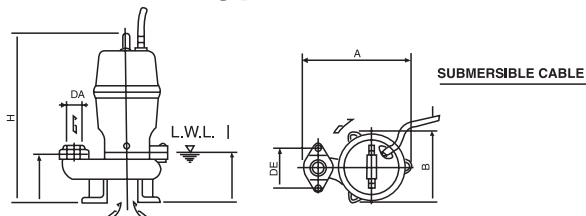
50 Hz (Synchronous speed 3000 min⁻¹)



MODEL CODE



Manual type



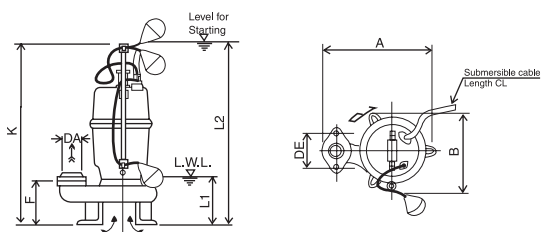
Unit : mm

Size Ø	Model	Out Put kW	Phase	Pump and Motor						Weight (Mass) kg
				A	B	F	H	DE	L1	
50	50DVS5.4S	0.4	Single	239	160	82	435	96	105	18
	50DVS5.4	0.4	Three	239	160	82	398	96	105	17
	50DVS5.75	0.75	Three	249	171	82	400	96	105	19
	50DVS51.5	1.5	Three	249	171	82	440	96	105	19

Unit : mm

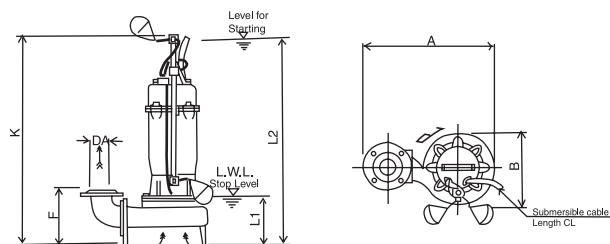
Size Ø	Model	Out Put kW	Phase	Pump and Motor					Weight (Mass) kg
				A	B	F	H	L1	
65	65DVS5.75	0.75	Three	396	195	178	503	125	25
	65DVS51.5	1.5		396	195	178	521	125	24
	65DVS52.2	2.2		427	227	201	643	155	50
	65DVS53.7	3.7		427	227	201	643	155	59
	80DVS5.75	0.75		411	195	183	503	125	26
80	80DVS51.5	1.5	Three	411	195	183	521	125	35
	80DVS52.2	2.2		442	227	206	643	155	51
	80DVS53.7	3.7		442	227	206	643	155	60

Automatic type



Unit : mm												
Size Ø	Model	Out Put kW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	DE	K	L1	L2		
50	50DVSA5.4S	0.4	Single	239	183	82	96	530	150	490	20	
	50DVSA5.4	0.4	Three	239	183	82	96	530	150	490	18	
	50DVSA5.75	0.75	Three	249	197	82	96	530	150	490	20	
	50DVSA5.1.5	1.5	Three	249	201	82	96	530	150	490	30	

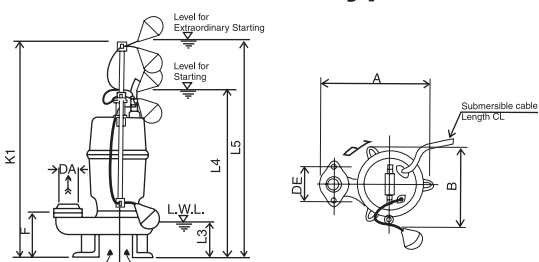
Unit : mm



Unit : mm

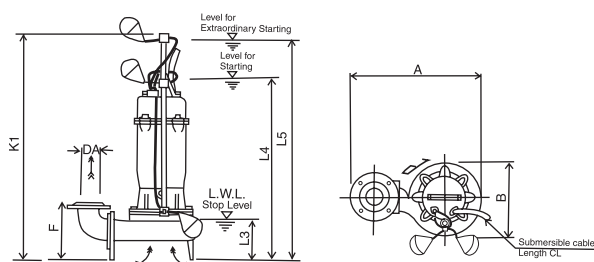
Size Ø	Model	Out Put kW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	H	J	K	L1	L2	
65	65DVSA5.75	0.75	Three	396	206	178	540	145	530	150	490	26
	65DVSA5.1.5	1.5		396	210	178	572	145	530	150	490	35
	65DVSA5.2.2	2.2		427	237	201	736	160	770	250	730	51
	65DVSA5.3.7	3.7		427	237	201	796	160	770	250	730	60
	80DVSA5.75	0.75		411	206	183	540	145	530	150	490	27
80	80DVSA5.1.5	1.5	Three	411	210	183	572	145	530	150	490	36
	80DVSA5.2.2	2.2		442	237	206	736	160	770	250	730	52
	80DVSA5.3.7	3.7		442	237	206	736	160	770	250	730	61
	80DVSA5.75	0.75		411	206	183	540	145	530	150	490	27

Parallel Alternate type



Size Ø	Model	Out Put kW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	DE	K1	L3	L4	L5	
50	50DVSJ5.4S	0.4	Single	239	183	82	96	530	120	410	600	20
	50DVSJ5.4	0.4	Three	239	183	82	96	530	120	410	600	19
	50DVSJ5.75	0.75	Three	249	197	82	96	530	120	410	600	20
	50DVSJ5.7	0.7	Three	249	197	82	96	530	120	410	600	20
	50DVSJ5.1.5	1.5	Three	249	201	82	96	530	120	410	600	30

Unit : mm



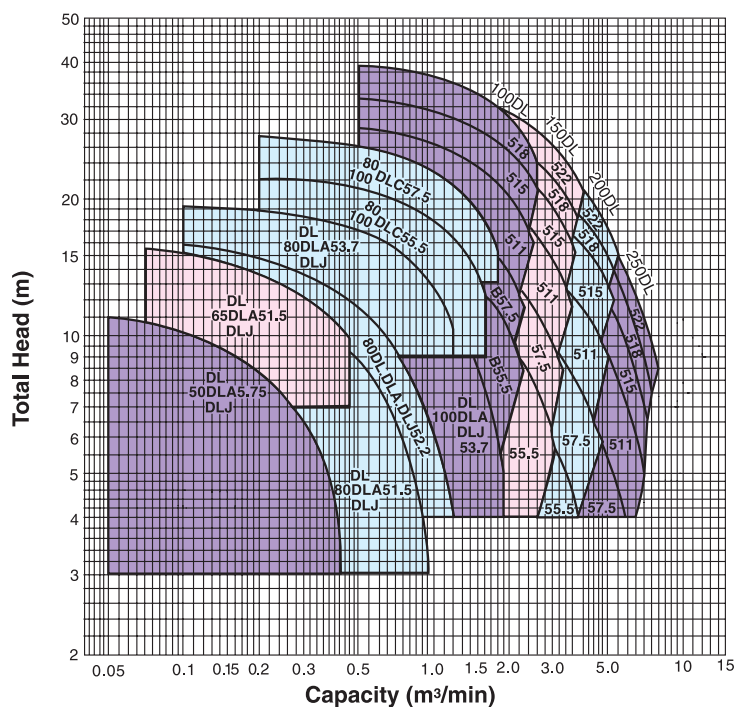
Unit : mm

Size Ø	Model	Out Put kW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	K1	L3	L4	L5	
65	65DVSJ5.75	0.75	Three	396	206	178	640	120	410	600	26
	65DVSJ5.15	1.5		396	210	178	640	120	410	600	35
	65DVSJ5.22	2.2		427	237	201	880	220	650	840	51
	65DVSJ5.37	3.7		427	237	201	880	220	650	840	60
80	80DVSJ5.75	0.75	Three	411	206	183	640	120	410	600	27
	80DVSJ5.15	1.5		411	210	183	640	120	410	600	36
	80DVSJ5.22	2.2		442	237	206	880	220	650	840	52
	80DVSJ5.37	3.7		442	237	206	880	220	650	840	61

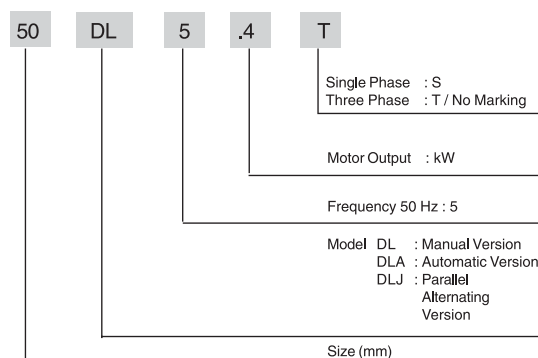
MODEL DL

SELECTION CHARTS

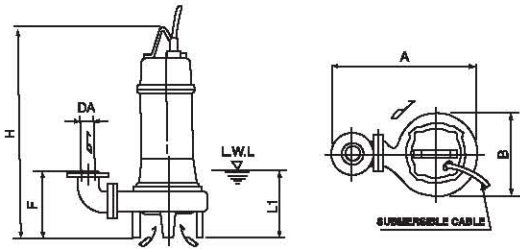
50 Hz (Synchronous speed 1500 min⁻¹)



MODEL CODE



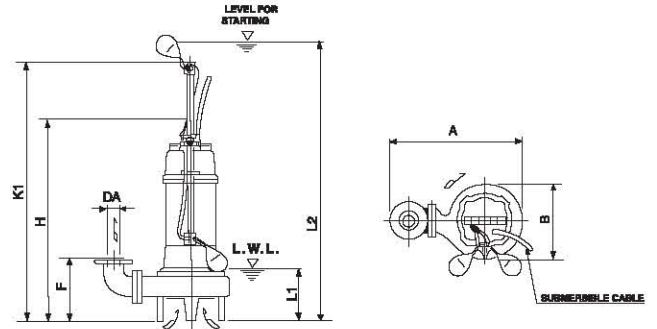
Manual type



Unit mm

Size Ø	Model	Output kW	Pump and Motor					Weight (Mass) kg
			A	B	F	H	L1	
50	50DLS.75	0.75	411	239	175	510	120	34
65	65DLS1.5	1.5	497	291	200	576	140	52
80	80DLS1.5	1.5	524	292	220	597	165	55
	80DLS2.2	2.2	542	308	220	654	165	67
	80DLS3.7	3.7	567	328	220	687	165	75
	100DLS3.7	3.7	614	335	250	705	185	79
100	100DLS5.5	5.5	646	369	323	767	205	123
	100DLC55.5	5.5	660	379	322	752	205	134
	100DLS57.5	7.5	673	385	323	759	205	141
	100DLC57.5	7.5	690	399	320	750	205	148
	100DLS11	11	701	402	323	858	205	180
	100DLS15	15	741	441	330	954	205	230
	100DLS18	18.5	741	441	330	958	205	285
	150DLS5.5	5.5	760	398	381	798	245	146
150	150DLS7.5	7.5	780	418	377	783	245	168
	150DLS11	11	810	438	377	882	245	199
	150DLS15	15	810	438	377	971	245	237
	150DLS18	18.5	848	476	381	979	245	300
	150DLS22	22	848	476	381	979	245	325
	200	200DLS5.5	5.5	832	430	414	825	285
200DLS7.5		7.5	863	453	410	808	285	176
200DLS11		11	863	453	410	907	285	212
200DLS15		15	896	479	411	994	285	260
200DLS18		18.5	932	512	415	1001	285	305
200DLS22		22	932	512	415	1001	285	330
250	250DLS7.5	7.5	969	525	622	903	400	260
	250DLS11	11	993	541	634	999	400	320
	250DLS15	15	1007	549	646	1085	400	380
	250DLS18	18.5	1007	549	646	1089	400	420
	250DLS22	22	1007	549	646	1089	400	440

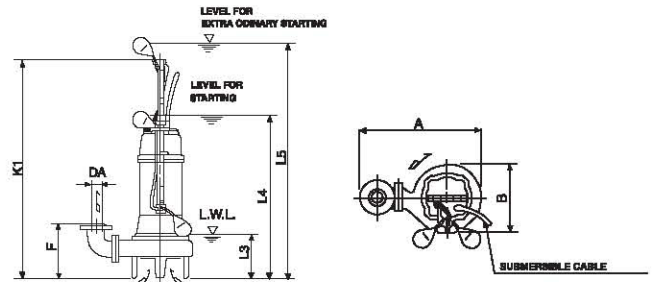
Automatic type



Unit mm

Size Ø	Model	Output kW	Pump and Motor						Weight (Mass) kg
			A	B	F	K	L1	L2	
50	50DLA5.75	0.75	411	239	175	630	250	650	36
65	65DLA51.5	1.5	497	291	200	840	320	860	55
	80DLA51.5	1.5	524	292	220	840	320	860	58
	80DL52.2	2.2	542	308	220	840	320	860	70
80	80DLA53.7	3.7	567	328	220	840	320	860	78
	100DLA53.7	3.7	614	335	250	840	320	860	85

Parallel Alternate type

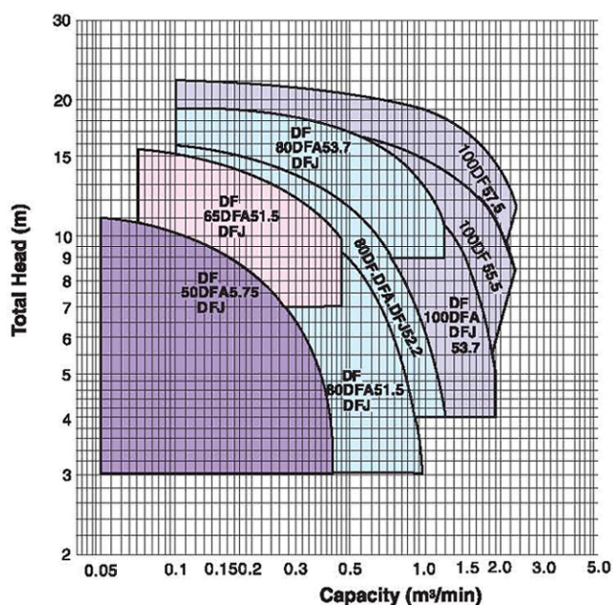


Unit mm

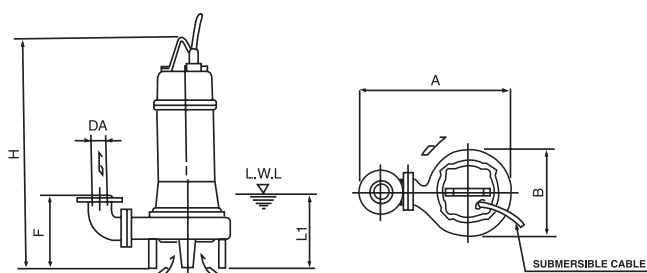
Size Ø	Model	Output kW	Pump and Motor							Weight (Mass) kg
			A	B	F	K1	L3	L4	L5	
50	50DLJ5.75	0.75	411	239	175	740	220	570	760	36
65	65DLJ51.5	1.5	497	291	200	950	290	780	970	55
	80DLJ51.5	1.5	524	292	220	950	290	780	970	58
80	80DLJ52.2	2.2	542	308	220	950	290	780	970	70
	80DLJ53.7	3.7	567	328	220	950	290	780	970	78
100	100DLJ53.7	3.7	614	335	250	950	290	780	970	85

MODEL DF (With Curtter)

SELECTION CHARTS



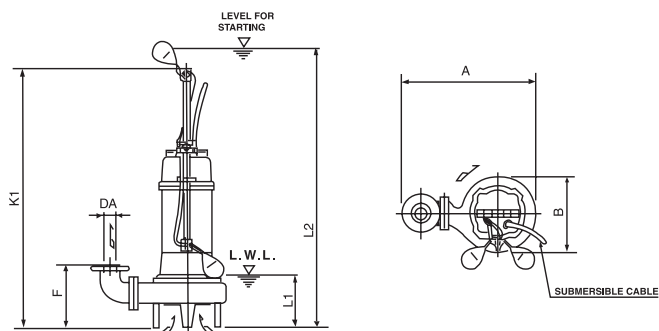
Manual type



Unit mm

Size Ø	Model	Output kW	Pump and Motor					Weight (Mass) kg
			A	B	F	H	L1	
50	50DF5.75	0.75	411	239	175	510	120	34
65	65DF51.5	1.5	497	291	200	576	140	52
80	80DF51.5	1.5	524	292	220	597	165	55
	80DF52.2	2.2	542	308	220	654	165	67
	80DF53.7	3.7	567	328	220	687	165	75
100	100DF53.7	3.7	614	335	250	705	185	79
	100DF55.5	5.5	646	369	323	767	205	123
	100DF57.5	7.5	673	385	323	759	205	141

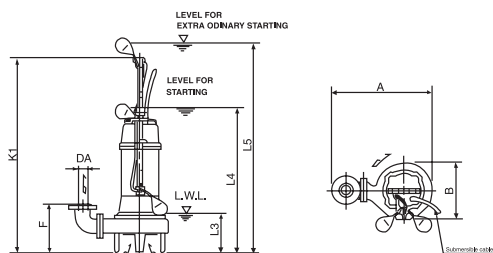
Automatic type



Unit mm

Size Ø	Model	Output kW	Pump and Motor						Weight (Mass) kg
			A	B	F	K	L1	L2	
50	50DFA5.75	0.75	411	239	175	630	250	650	36
65	65DFA51.5	1.5	497	291	200	840	320	860	55
80	80DFA51.5	1.5	524	292	220	840	320	860	58
	80DFA52.2	2.2	542	308	220	840	320	860	70
	80DFA53.7	3.7	567	328	220	840	320	860	78
100	100DFA53.7	3.7	614	335	250	840	320	860	85

Parallel Alternate type

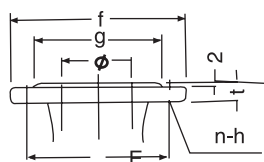


Unit mm

Size Ø	Model	Output kW	Pump and Motor							Weight (Mass) kg
			A	B	F	K1	L3	L4	L5	
50	50DFJ5.75	0.75	411	239	175	740	220	570	760	36
65	65DFJ51.5	1.5	497	291	200	950	290	780	970	55
80	80DFJ51.5	1.5	524	292	220	950	290	780	970	58
	80DFJ52.2	2.2	542	308	220	950	290	780	970	70
	80DFJ53.7	3.7	567	328	220	950	290	780	970	78
100	100DFJ53.7	3.7	614	335	250	950	290	780	970	85

Flang Dimension type

Flange



Unit: mm

Ø	e	f	g	t	n	h
50	120	155	100	18	4	15
65	140	175	120	18	4	15
80	150	185	130	18	8	15
100	175	210	155	20	8	15
150	240	280	215	22	8	19
200	290	330	265	24	12	19
250	355	400	325	30	12	25
300	400	445	370	32	16	25

OPTIONS

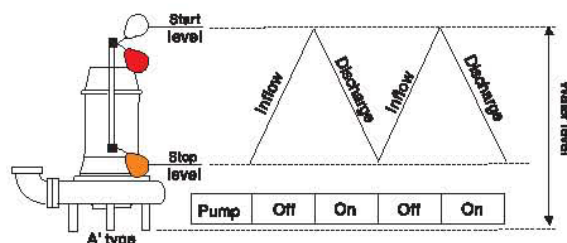
■ AUTOMATIC OPERATION (A', J' TYPE)

All models up to 3.7kW are available as automatic (A' type) or parallel alternating (J' type) pumps with built-in 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.

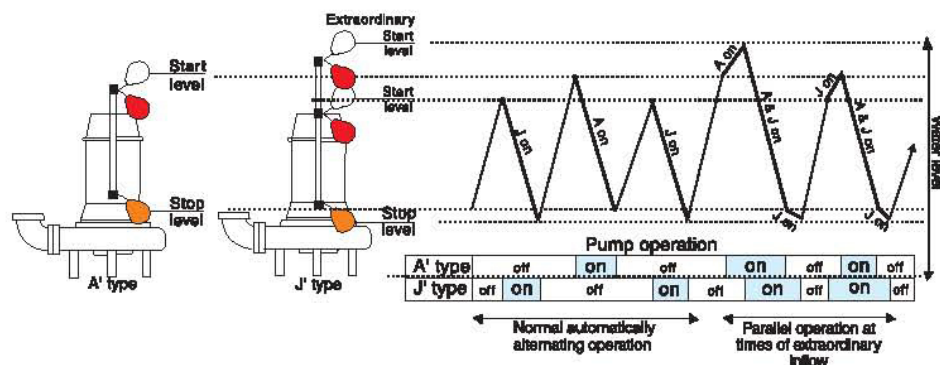
The pump automatically starts when the water level in the sump reaches the "start level", and stops when the pump has lowered the water level to the "stop level".



DUPLEX PUMP INSTALLATION (A' & J' TYPE)

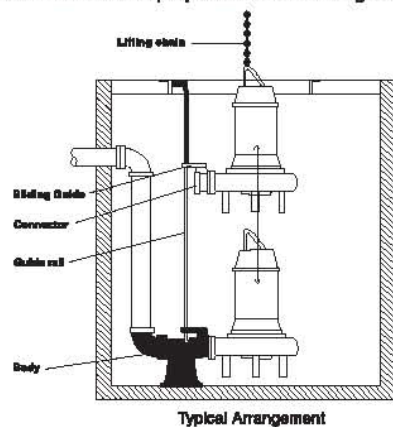
Two pumps, one A' type and one J' type are installed in the sump. In normal operating conditions, operation alternates between the two pumps.

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.



■ FLOAT SWITCH

FLOAT SWITCH	
Model	CDL024080 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 ² x6m



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

Distributor / Dealer