EBARA

D8001-5

D'SERIES SUBMERSIBLE PUMPS

Model DS / DVS / DL / DF

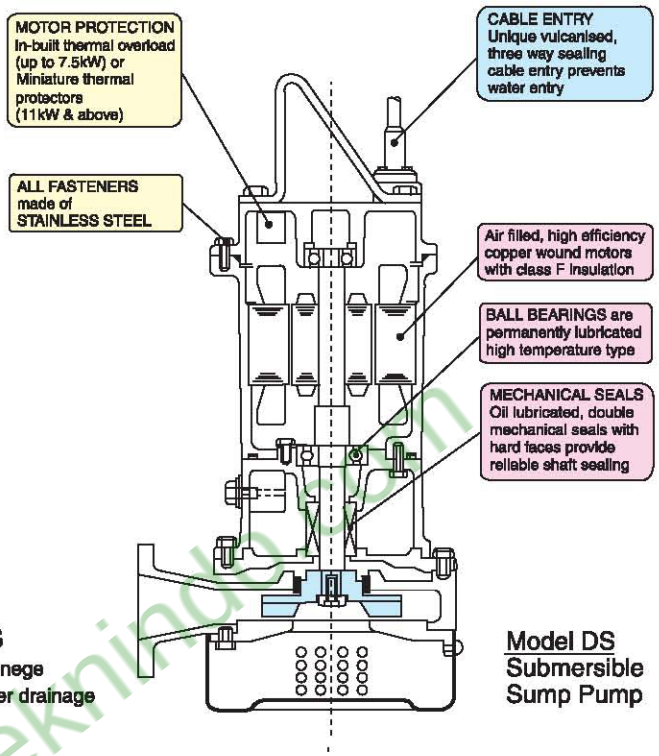
50Hz

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 DS
Submersible
Sump Pump

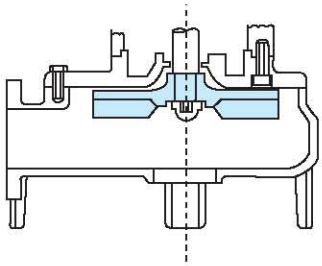
Model DVS

■ 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 DVS
Submersible
Semi-Vortex
Pump

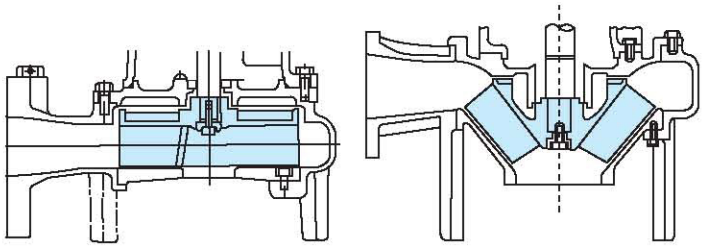
Model DL

■ 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 DL
Submersible
Sewage
Pump

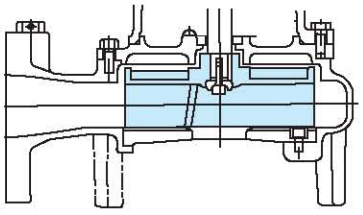
Model DF (with Cutter)

■ 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



Model DF
Submersible
Sewage
Pump

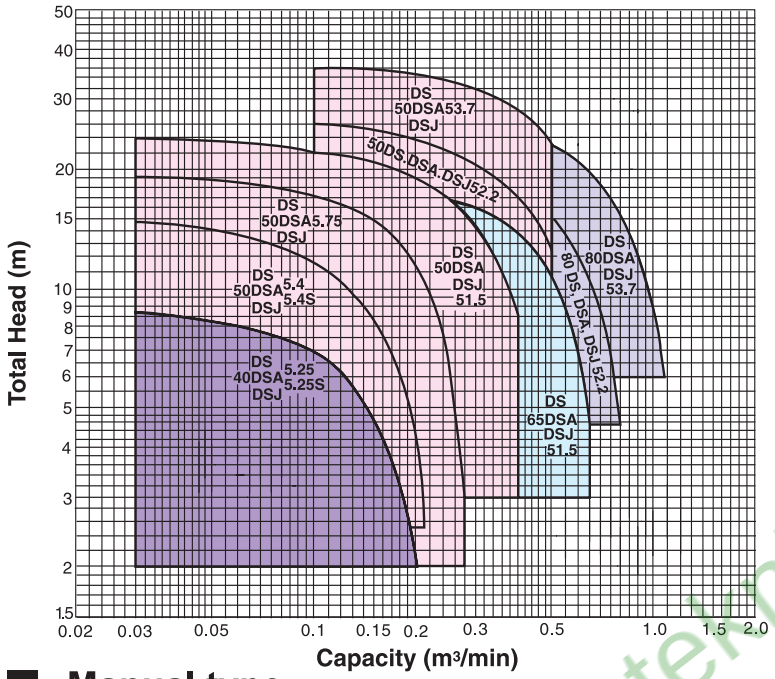
Specifications

Description		Pump				
Model		DS	DVS	DL	DF (With Cutter)	
No. of Pole		2	2	4	4	
Liquid Handled	Type of liquid	Sump	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 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, 65DS : 6mm, 80DS : 7 mm	40DVS : 25 mm, 50DVS : 32 mm, 65(80) : 45 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	Double Mechanical Seal	
	Impeller	Semi-open	Semi-vortex	Semi-open, non-clog	Semi-open, non-clog	
	Bearing	Prelubricated bearing	Prelubricated bearing	Prelubricated bearing	Prelubricated 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 Seal 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	
Motor						
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)		
Accessories						
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. Float switch for DSA,DSJ			Submersible cable : 0.4 ~ 1.5 kW = 6 m; 2.2 ~ 3.7 kW = 10m, Float switch for DLA, DLJ, DVA, DVJ, DFA, DFJ		
Optional	Quick discharge connector			Quick discharge connector		

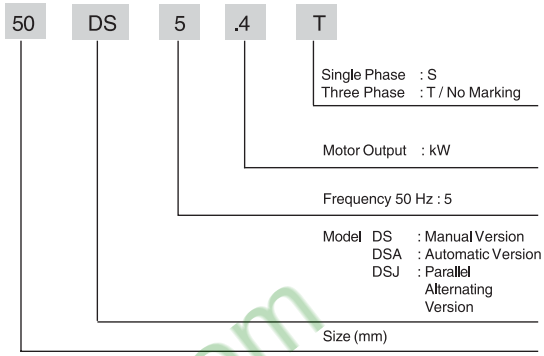
MODEL DS

SELECTION CHARTS

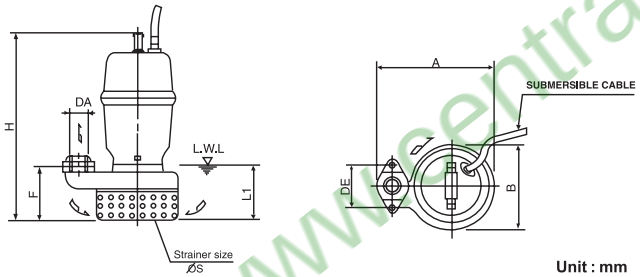
50 Hz (Synchronous speed 3000 min^{-1})



MODEL CODE

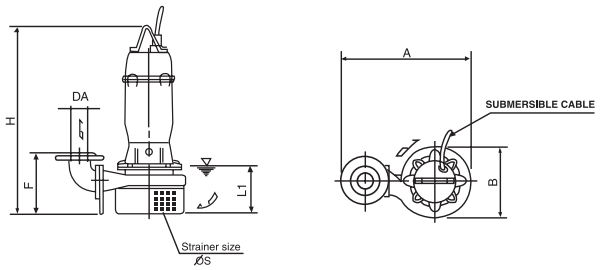


Manual type



Unit : mm

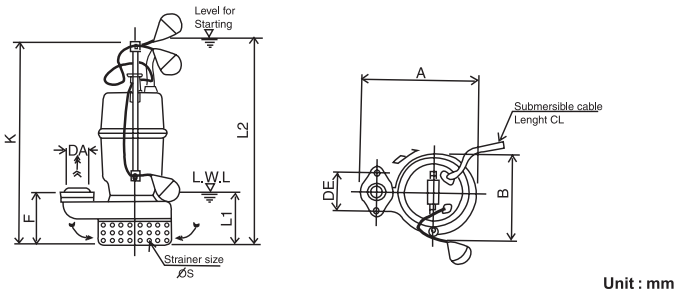
Size Ø	Model	Out Put kW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	H	DE	S	L1	
40	40DS5.25S	0.25	Single	219	156	80	358	80	7	85	12
	40DS5.25	0.25	Three	219	156	80	358	80	7	85	12
50	50DS5.4S	0.4	Single	260	186	99	433	96	8	110	17
	50DS5.4	0.4	Three	260	186	99	396	96	8	110	16
	50DS5.75	0.75	Three	260	186	99	396	96	8	110	17
	50DS51.5	1.5	Three	266	200	115	450	96	10	120	25



Unit : mm

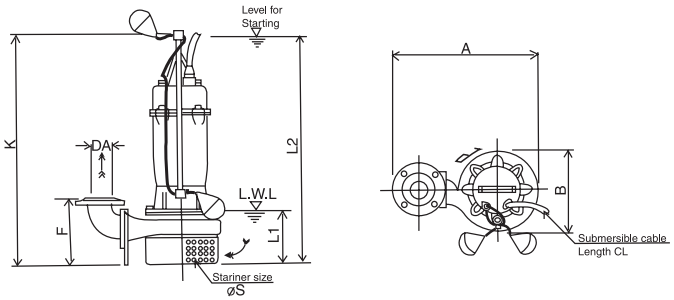
Size Ø	Model	Out Put kW	Phase	Pump and Motor						Weight (Mass) kg
				A	B	F	H	S	L1	
50	50DS5.2	2.2	Three	433	245	198	619	10	160	55
	50DS53.7	3.7	Three	433	245	198	619	10	160	61
65	65DS51.5	1.5	Three	407	210	197	503	10	120	35
80	80DS52.2	2.2	Three	503	268	215	625	10	160	59
	80DS53.7	3.7	Three	503	268	215	625	10	160	64

Automatic type



Unit : mm

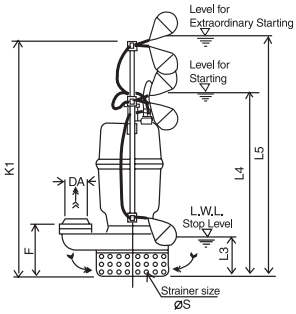
Size Ø	Model	Out Put kW	Phase	Pump and Motor								Weight (Mass) kg
				A	B	F	DE	S	K	L1	L2	
40	40DSA5.25S	0.25	Single	219	185	80	80	7	530	150	490	13
	40DSA5.25	0.25	Three	219	185	80	80	7	530	150	490	13
50	50DSA5.4S	0.4	Single	260	200	99	96	8	530	150	490	18
	50DSA5.4	0.4	Three	260	200	99	96	8	530	150	490	17
	50DSA5.75	0.75	Three	260	200	99	96	8	530	150	490	18
	50DSA51.5	1.5	Three	266	207	115	96	10	530	150	490	26

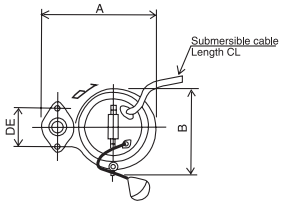


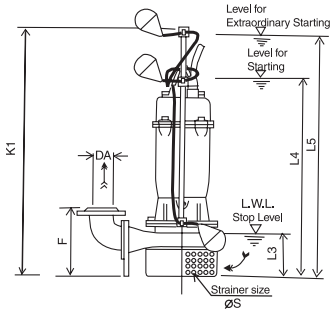
Unit : mm

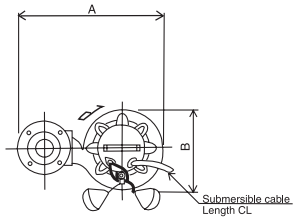
Size Ø	Model	Out Put kW	Phase	Pump and Motor							Weight (Mass) kg
				A	B	F	S	K	L1	L2	
50	50DSA52.2	2.2	Three	433	248	198	10	800	270	760	61
	50DSA53.7	3.7	Three	433	248	198	10	800	270	760	67
65	65DSA51.5	1.5	Three	407	210	197	10	530	150	490	36
80	80DSA52.2	2.2	Three	503	268	215	10	800	270	760	65
	80DSA53.7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

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

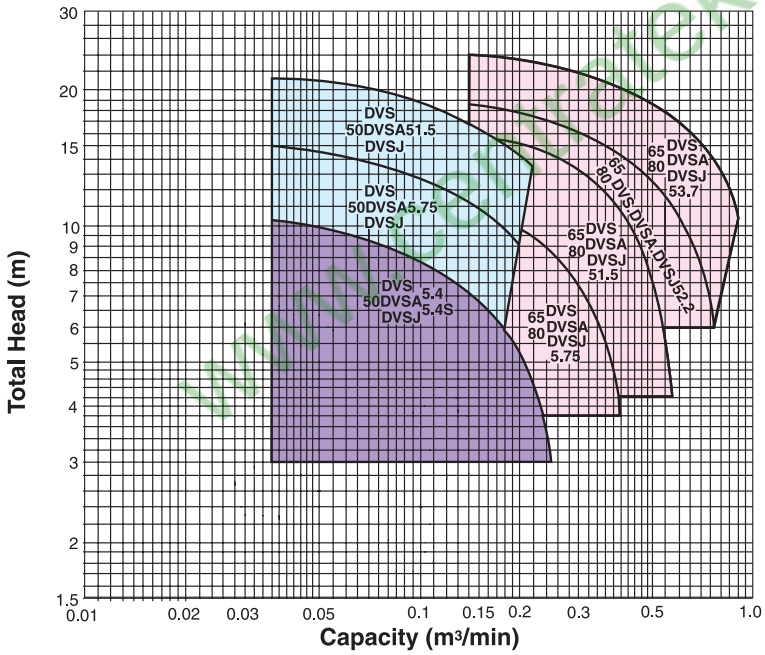
Unit : mm

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		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		503	268	215	10	910	240	680	870	65
	80DSJ53.7	3.7		503	268	215	10	910	240	680	870	70

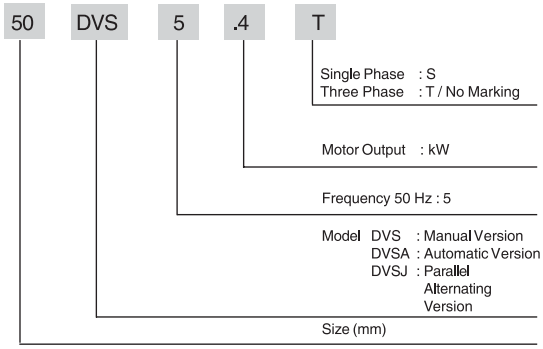
MODEL DVS

SELECTION CHARTS

50 Hz (Synchronous speed 3000 min^{-1})



MODEL CODE



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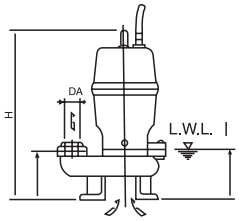
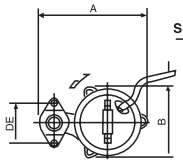
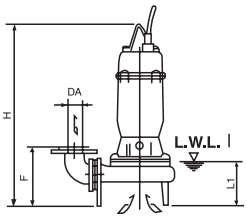


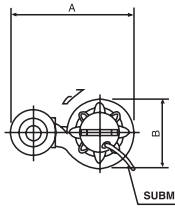


SUBMERSIBLE CABLE

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



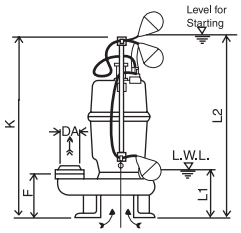


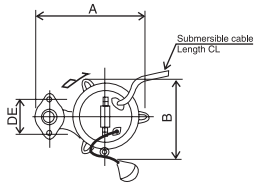
SUBMERSIBLE CABLE

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
80	80DVS5.75	0.75	Three	411	195	183	503	125	26
	80DVS51.5	1.5		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

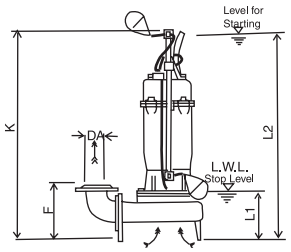
Automatic type

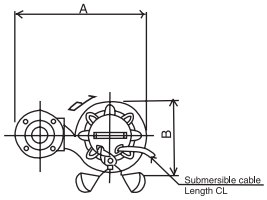




Unit : mm

Size ∅	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
	50DVSA51.5	1.5	Three	249	201	82	96	530	150	490	30

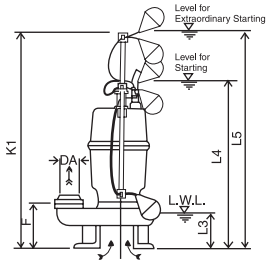


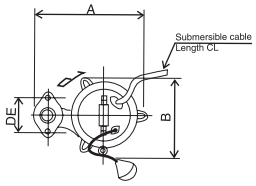


Unit : mm

Size ∅	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
	65DVSA51.5	1.5		396	210	178	572	145	530	150	490	35
	65DVSA52.2	2.2		427	237	201	736	160	770	250	730	51
	65DVSA53.7	3.7		427	237	201	796	160	770	250	730	60
80	80DVSA5.75	0.75	Three	411	206	183	540	145	530	150	490	27
	80DVSA51.5	1.5		411	210	183	572	145	530	150	490	36
	80DVSA52.2	2.2		442	237	206	736	160	770	250	730	52
	80DVSA53.7	3.7		442	237	206	736	160	770	250	730	61

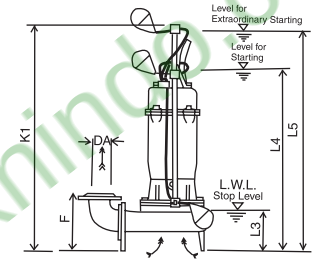
Parallel Alternate type

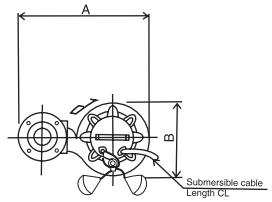




Unit : mm

Size ∅	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
	50DVSJ51.5	1.5	Three	249	201	82	96	530	120	410	600	30





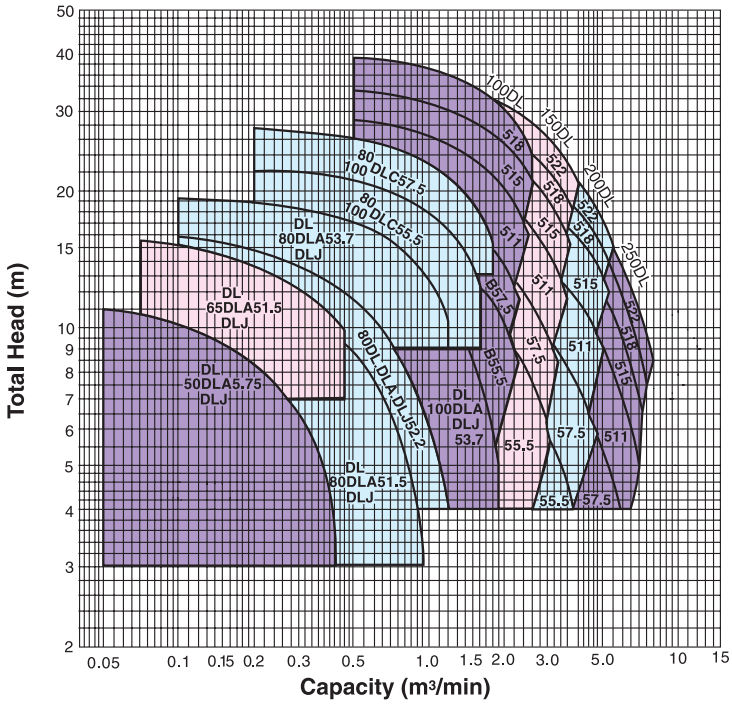
Unit : mm

Size ∅	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
	65DVSJ51.5	1.5		396	210	178	640	120	410	600		35
	65DVSJ52.2	2.2		427	237	201	880	220	650	840		51
	65DVSJ53.7	3.7		427	237	201	880	220	650	840		60
80	80DVSJ5.75	0.75	Three	411	206	183	640	120	410	600		27
	80DVSJ51.5	1.5		411	210	183	640	120	410	600		36
	80DVSJ52.2	2.2		442	237	206	880	220	650	840		52
	80DVSJ53.7	3.7		442	237	206	880	220	650	840		61

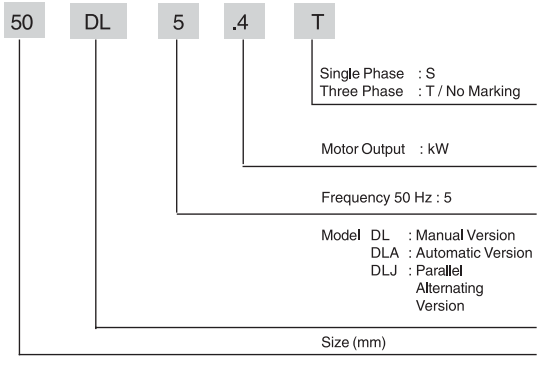
MODEL DL

SELECTION CHARTS

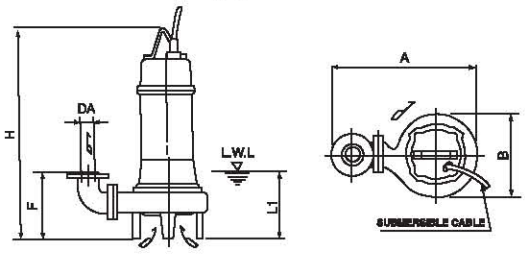
50 Hz (Synchronous speed 1500 min^{-1})



MODEL CODE



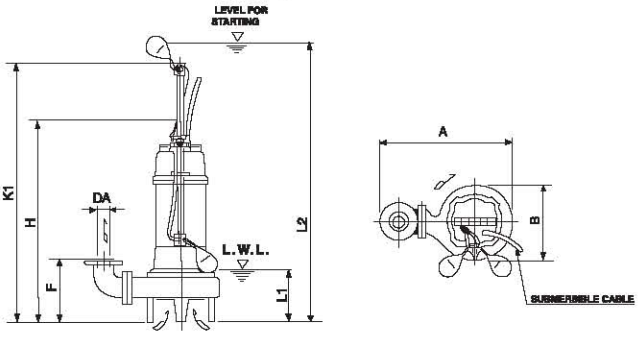
Manual type



Unit mm

Size ∅	Model	Output kW	Pump and Motor					Weight (Mass) kg
			A	B	F	H	L1	
50	50DL5.75	0.75	411	239	175	610	120	34
65	65DL51.5	1.5	497	291	200	576	140	52
80	80DL51.5	1.5	524	292	220	597	165	55
	80DL52.2	2.2	542	308	220	654	165	67
	80DL53.7	3.7	567	328	220	687	165	75
100	100DL53.7	3.7	614	335	250	705	185	79
	100DLB55.5	5.5	646	369	323	767	205	123
	100DLC55.5	5.5	660	379	322	752	205	134
	100DLB57.5	7.5	673	385	323	759	205	141
	100DLC57.5	7.5	690	399	320	750	205	148
	100DL511	11	701	402	323	858	205	180
	100DL515	15	741	441	330	954	205	230
	100DL518	18.5	741	441	330	958	205	285
150	150DL55.5	5.5	750	398	381	798	245	146
	150DL57.5	7.5	780	418	377	783	245	158
	150DL511	11	810	438	377	882	245	199
	150DL515	15	810	438	377	971	245	237
	150DL518	18.5	848	476	381	979	245	300
	150DL522	22	848	476	381	979	245	325
200	200DL55.5	5.5	832	430	414	825	285	160
	200DL57.5	7.5	863	453	410	808	285	176
	200DL511	11	863	453	410	907	285	212
	200DL515	15	896	479	411	994	285	260
	200DL518	18.5	932	512	415	1001	285	305
	200DL522	22	932	512	415	1001	285	330
250	250DL57.5	7.5	969	525	622	903	400	260
	250DL511	11	993	541	634	999	400	320
	250DL515	15	1007	549	646	1085	400	380
	250DL518	18.5	1007	549	646	1089	400	420
	250DL522	22	1007	549	646	1089	400	440

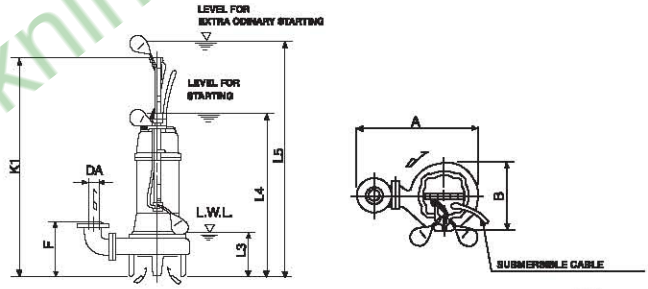
Automatic type



Unit mm

Size ∅	Model	Output kW	Pump and Motor						Weight (Mass) kg
			A	B	F	K	L1	L2	
50	50DLA5.75	0.75	411	239	175	690	250	650	36
65	65DLA51.5	1.5	497	291	200	840	320	860	55
80	80DLA51.5	1.5	524	292	220	840	320	860	58
	80DL52.2	2.2	542	308	220	840	320	860	70
	80DLA53.7	3.7	567	328	220	840	320	860	78
100	100DLA53.7	3.7	614	335	250	840	320	860	85

Parallel Alternate type

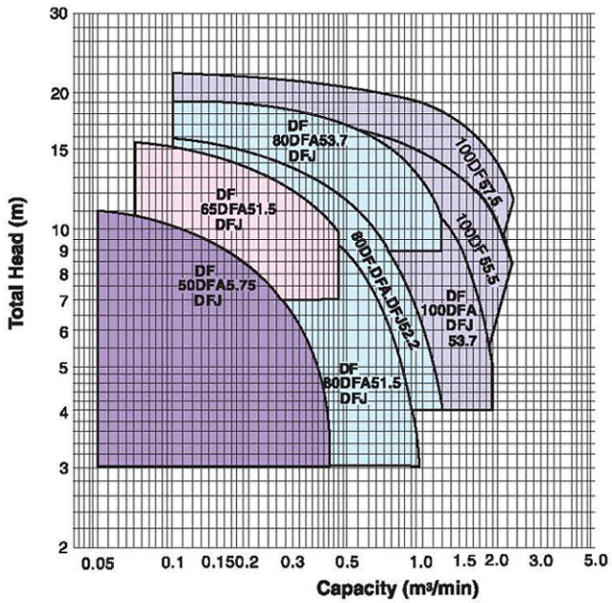


Unit mm

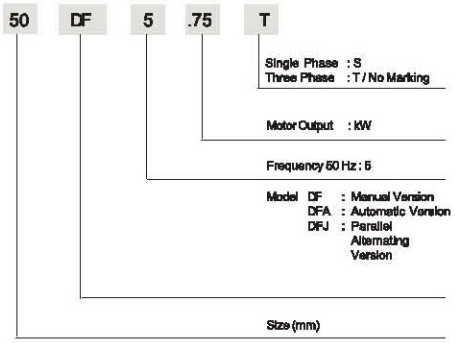
Size ∅	Model	Output kW	Pump and Motor							Weight (Mass) kg
			A	B	F	K1	L3	L4	L5	
50	50DLJ5.75	0.75	411	239	175	740	220	570	760	36
65	65DLJ51.5	1.5	497	291	200	950	290	780	970	55
80	80DLJ51.5	1.5	524	292	220	950	290	780	970	58
	80DLJ52.2	2.2	542	308	220	950	290	780	970	70
	80DLJ53.7	3.7	567	328	220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

MODEL DF (With Curtter)

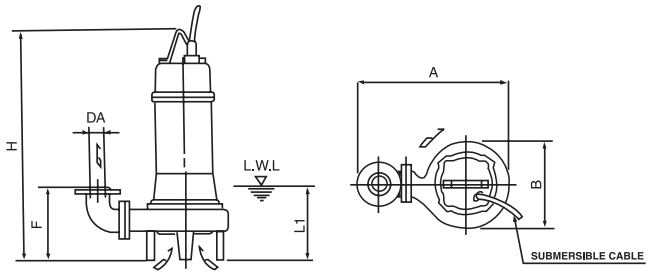
SELECTION CHARTS



MODEL CODE



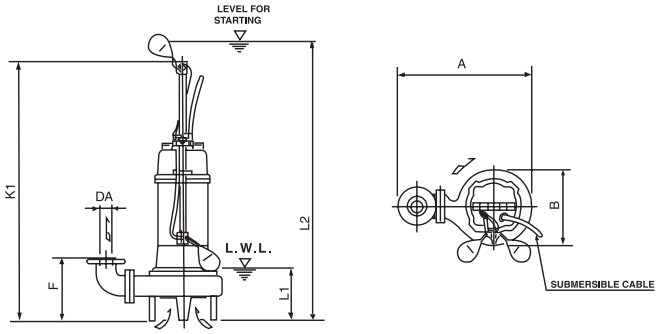
Manual type



Unit mm

Size ∅	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

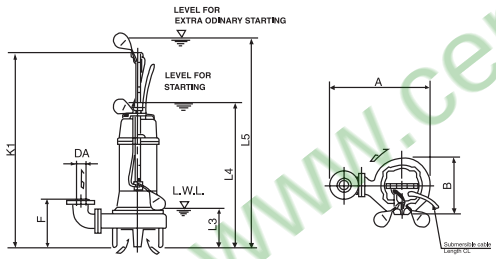
Automatic type



Unit mm

Size ∅	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

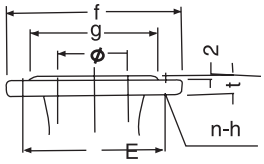


Unit mm

Size ∅	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

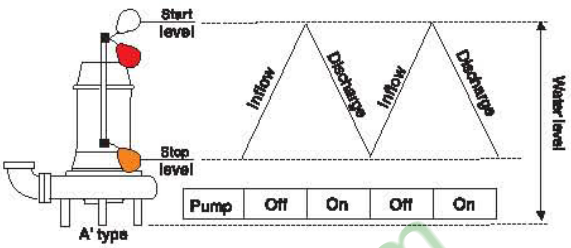
■ AUTOMATIC OPERATION (A', J' TYPE)

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

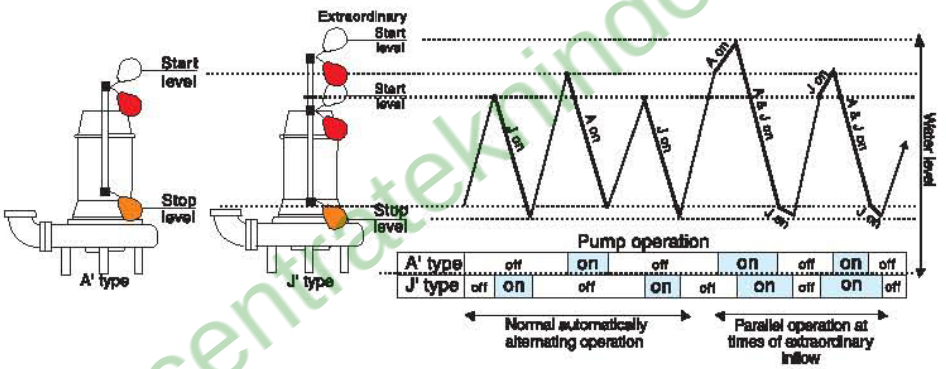
The pump automatically starts when the water level in the sump reaches the "start level", and stops when the pump has lowered the water level to the "stop level".



DUPLEX PUMP INSTALLATION (A' & J' TYPE)

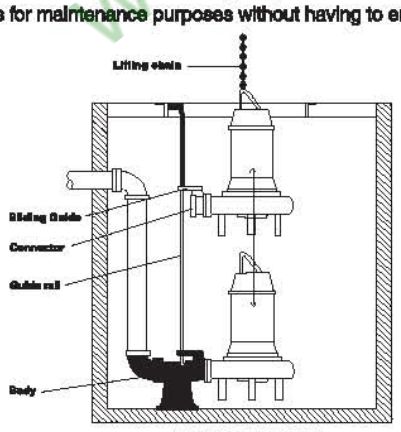
Two pumps, one A' type and one J' type are installed in the sump. In normal operating conditions, operation alternates between the two pumps.

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)

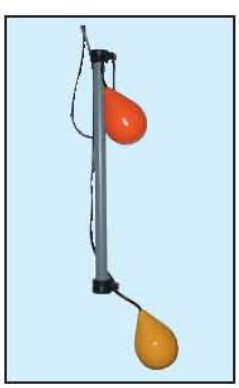
An optional quick discharge connector is available to suit all Ebara D'series submersible pumps, allowing easy removal and replacement of the pumps for maintenance purposes without having to enter the sump.



Typical Arrangement

■ FLOAT SWITCH

FLOAT SWITCH	
Model	CDL024060 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	2x0.2mm²x6m



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.

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