



SUBMERSIBLE SUMP PUMPS

EU SERIES

0.45~1.5kW 2P

0.45~1.5kW 2P Type B

2.2~5.5kW 2P

5.5~11kW 4P

Australia, 7 Ruck St, Wattle Grove, WA, 6107

Email: salesenquiry.epro@gmail.com

Structure Instructions

1. Pump Body Impeller

Pump body and impeller are well matched by the repeated modifications and designs with AutoCAD technology. Hydraulic model is high efficient, curve of output is flat, which cant easily lead to overload. The impeller is strictly balanced so as to reduce vibration to the minimum degree and extend the life of bearing and mechanical seal to the greatest extent.

2. Motor

Motor with protection grade IP 68 can work under water, making it best and most effective in cooling. It is more endurable than the common motors.

3. Mechanical seal

Mechanical seal of motor is made of high quality double mechanical seal or 2 sets of individual single mechanical seal, which makes reliable sealing line of defense. Under normal usage, non-failure operation time exceeds 8000h.

4. Bearing

Bearings are all high quality deep groove ball bearings, which constitute reliable support for shaft of motor and pump, leads larger bearing margin of radial force, axial force and other forces produced when the pump is working and make sure smooth running and long-time life of the whole set.

5. Cable and seal

- 1) Cable applied is soft and sewage water tolerable with excellent mechanical strength and oil resistant ability. Cross section of cable and capacity is selected in condition of 40℃ (regularly 25℃) and long time continuous working. So it is safe and long life in usual condition.
- 2) Rubber sleeve of cable has impact seal with motor gland , which prevents medium from getting into motor through cable sleeve.
- 3) There's resin sealing between cable sleeve and wire core . Even after rubber sleeve is cut , it can still prevent medium from getting into motor through cable sleeve.

6. Motor casing

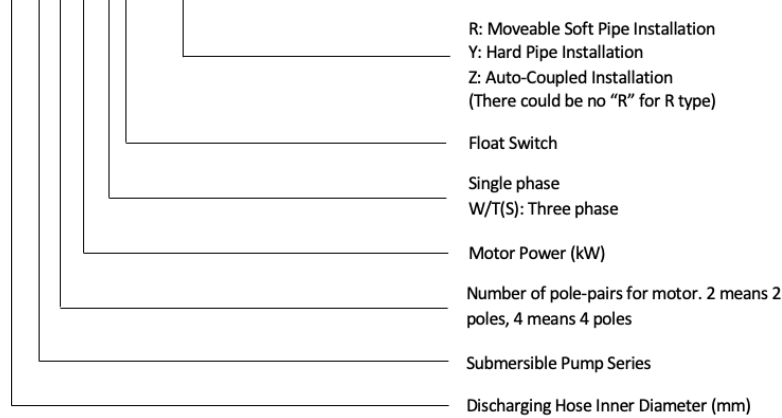
Upper cover 、 Up-Bearing house 、 Bearing house 、 Motor body etc. constitute pump casing, every joint of components has reliable static seal. Each unit is checked by strict hydraulic testing, making sure there's no leakage.

7. protection device

- 1) Built-in protection device : Pump $\leq 7.5\text{kW}$ is equipped with built-in protection device, which can prevent burning caused by over-load and missing phase.
- 2) Oil water leakage probe (on option) : For 4-poles pump $\geq 5.5\text{kW}$, 2-poles pump $\geq 7.5\text{kW}$, there can be oil water leakage probe installed in oil house, to test the leakage of first mechanical seal (from medium), when the medium is leaked into oil seal and reaches certain proportion, it will send the signal.
- 3) Floating switch (on option): For 4-poles pump $\geq 30\text{kW}$, there can be floating switch installed in motor cavity, to test the leakage of second mechanical seal, when oil (oil water mixture) is leaked into motor, it will send the signal.
- 4) Overheat protector (on option): The overheat protector can be installed inside the stator winding of motor, when the temperature of winding (or winding is heating caused of other reasons) reaches a specific value, it will send the signal.

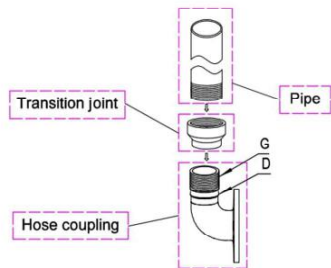
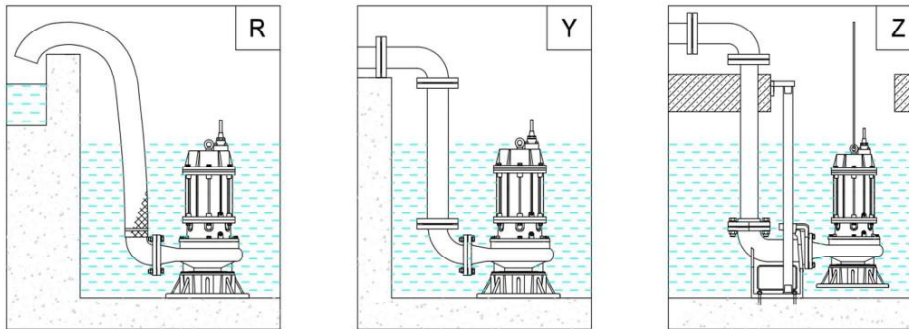
Nomenclature

50 EU 2 1.5 S F - (R/Y/Z)



Installation mode

- 1) Movable Soft Pipe Installation (R) 、 Hard Pipe Installation (Y) 、 Auto-Coupled Installation (Z)
- 2) In auto-coupled installation, we will provide complete equipment of coupling seat, upper guide support, coupling adapter and flange ($\leq 4''$) etc. to match the pump.



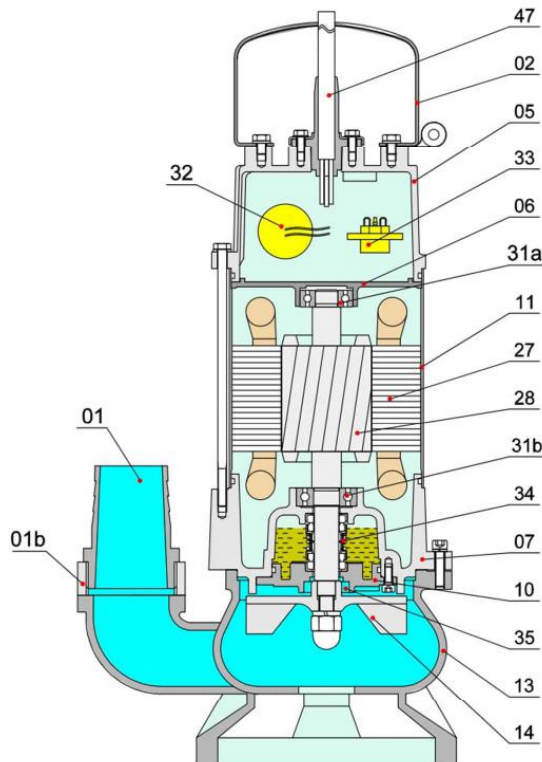
← **Special usage for TYPE R**

Outlet	Steel pipe		
	D	G	Transition joint
50	G1½"	G1½"→G2"	50
65	G2"	G2"→G2½"	65
80	G2½"	G2½"→G3"	80

0.45~1.5kW 2P
 50Hz : 2850rpm
 60Hz : 3450rpm

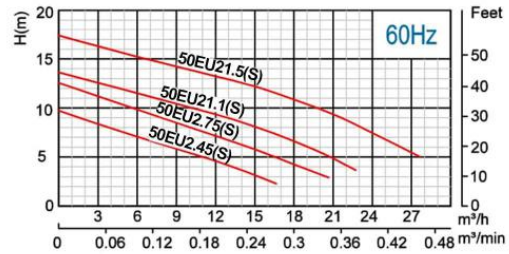
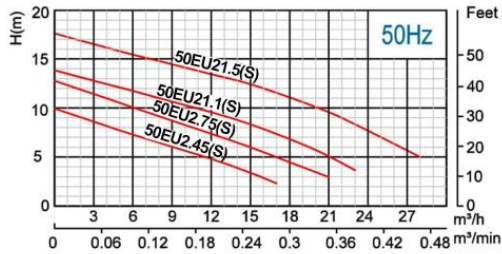
Specification

- Insulation class : B
- Protection class : IP68
- Water temperature : up to 40°C
- PH : 6 to 10
- Density of liquid : 1.3g/cm³
- Power supply : three phase 380V ±10%, 50Hz
 three phase 380V ±10%, 60Hz
 single phase 220V ±10%, 50Hz
 single phase 220V ±10%, 60Hz
- Motor protection : built in
- Capacity : up to 28m³/h
- Head : up to 18m
- Maximum immersion depth : 10m
- Cable Length : 8m



Materials of construction

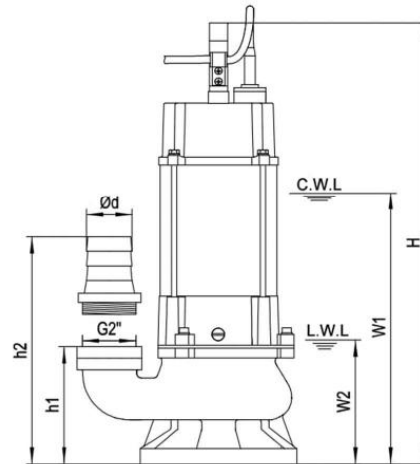
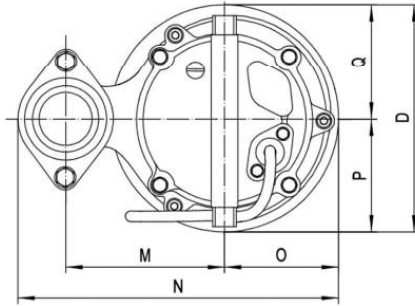
Item No.	Part name	Material
01	Hose coupling	ABS
01b	Hose coupling	Cast iron
02	Handle	Stainless steel
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Stainless steel
13	Pump body	Cast iron
14	Impeller	Cast iron
27	Stator	
28	Rotor	Shaft : AISI304SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
32	Capacitor	(Single phase only)
33	Motor protector	
34	Mechanical seal	SiC-Ceramic/Carbon-Ceramic
35	Oil seal	
47	Cable	



Model	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max Head	Impeller Passage	Cable
	V	A	kW	HP	in	mm	m³/h	m	m³/h	m	mm	mm²
50EU2.45	380	1.3	0.45	0.6	2	50	10	6	17	10	50	4G1.0
50EU2.45S	220	3.5	0.45	0.6	2	50	10	6	17	10	50	3G1.0
50EU2.75	380	2	0.75	1	2	50	10	8	21	13	50	4G1.0
50EU2.75S	220	5.2	0.75	1	2	50	10	8	21	13	50	3G1.0
50EU21.1	380	2.8	1.1	1.5	2	50	15	8	23	14	50	4G1.0
50EU21.1S	220	7.2	1.1	1.5	2	50	15	8	23	14	50	3G1.0
50EU21.5	380	3.2	1.5	2	2	50	15	12	28	18	50	4G1.0
50EU21.5S	220	10	1.5	2	2	50	15	12	28	18	50	3G1.5

Single Phase: S

C.W.L : Continuous running water lever
L.W.L : Lowest running water lever



Dimensions table

Model	Ød	h1	h2	W1	W2	H	O	P	Q	D	M	N	N.W	G.W	Packing dimension
													kg	kg	
50EU2.45	50	135	200	280	130	475	86	86	86	172	120	240	17.5	19	495×260×220
50EU2.45S	50	135	200	280	130	475	86	86	86	172	120	240	17.5	19	495×260×220
50EU2.75	50	135	200	290	130	485	86	86	86	172	120	240	19	20.5	505×260×220
50EU2.75S	50	135	200	300	130	495	86	86	86	172	120	240	19.5	21	515×260×220
50EU21.1	50	135	200	305	125	495	90	90	90	180	140	265	20	21.5	520×285×225
50EU21.1S	50	135	200	320	125	510	90	90	90	180	140	265	21	22.5	535×285×225
50EU21.5	50	135	200	320	125	510	90	90	90	180	140	265	22	23.5	535×285×225
50EU21.5S	50	135	200	335	125	530	90	90	90	180	140	265	23.5	25	555×285×225

Single Phase: S

0.45~1.5kW 2P

TYPE B

50Hz : 2850rpm

60Hz : 3450rpm

Specification

Insulation class : B

Protection class : IP68

Water temperature : up to 40°C

PH : 6 to 10

Density of liquid : 1.3g/cm³

Power supply : three phase 380V ±10%, 50Hz
 three phase 380V ±10%, 60Hz
 single phase 220V ±10%, 50Hz
 single phase 220V ±10%, 60Hz

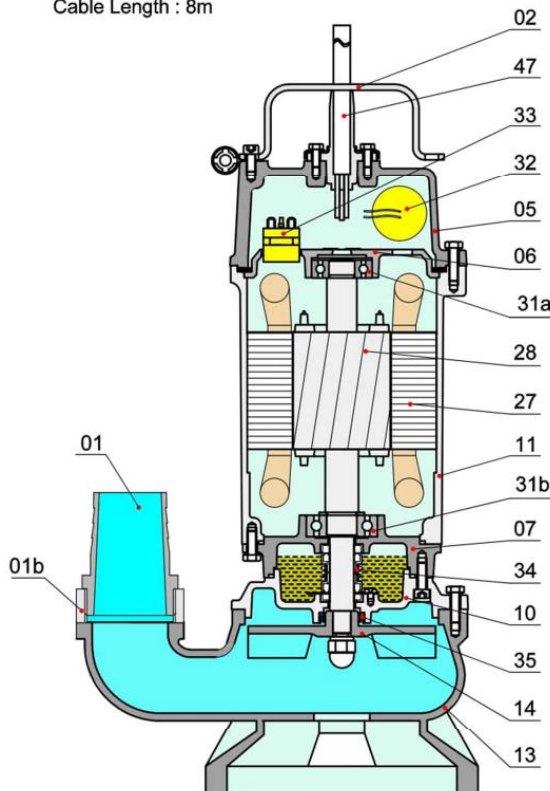
Motor protection : built in

Capacity : up to 28m³/h

Head : up to 18m

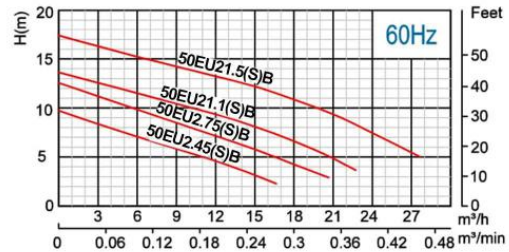
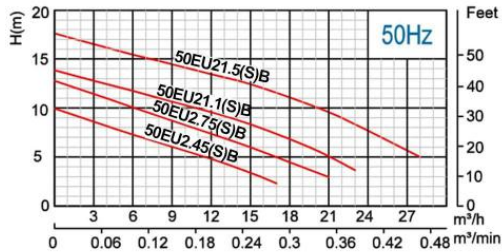
Maximum immersion depth : 10m

Cable Length : 8m



Materials of construction

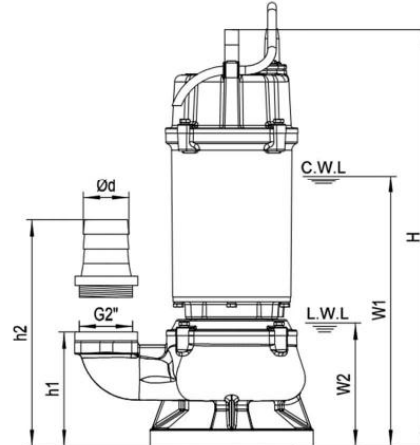
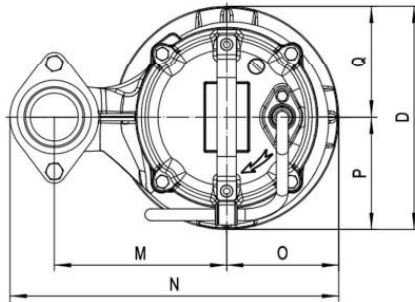
Item No.	Part name	Material
01	Hose coupling	ABS
01b	Hose coupling	Cast iron
02	Handle	Steel
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Cast iron
27	Stator	
28	Rotor	Shaft : AISI304SS
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
32	Capacitor	(Single phase only)
34	Mechanical seal	SiC-Ceramic/Carbon-Ceramic
35	Oil seal	
47	Cable	



Model	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max Head	Impeller Passage	Cable
			kW	HP	in	mm						
50EU2.45B	380	1.3	0.45	0.6	2	50	10	6	17	10	50	4G1.0
50EU2.45SB	220	3.5	0.45	0.6	2	50	10	6	17	10	50	3G1.0
50EU2.75B	380	2	0.75	1	2	50	10	8	21	13	50	4G1.0
50EU2.75SB	220	5.2	0.75	1	2	50	10	8	21	13	50	3G1.0
50EU2.1B	380	2.8	1.1	1.5	2	50	15	8	23	14	50	4G1.0
50EU2.1SB	220	7.2	1.1	1.5	2	50	15	8	23	14	50	3G1.0
50EU2.1.5B	380	3.2	1.5	2	2	50	15	12	28	18	50	4G1.0
50EU2.1.5SB	220	10	1.5	2	2	50	15	12	28	18	50	3G1.5

Single Phase: S

C.W.L : Continuous running water lever
L.W.L : Lowest running water lever



Dimensions table

Model	Ød	h1	h2	W1	W2	H	O	P	Q	D	M	N	N.W	G.W	Packing dimension
													kg	kg	
50EU2.45B	50	135	200	280	125	450	90	90	90	180	140	265	18	19.5	480×285×225
50EU2.45SB	50	135	200	280	125	450	90	90	90	180	140	265	18.5	19.5	480×285×225
50EU2.75B	50	135	200	290	125	450	90	90	90	180	140	265	19	20.5	480×285×225
50EU2.75SB	50	135	200	300	125	450	90	90	90	180	140	265	20	21.5	480×285×225
50EU2.1B	50	135	200	320	125	465	90	90	90	180	140	265	22	23.5	495×285×225
50EU2.1SB	50	135	200	320	125	465	90	90	90	180	140	265	23	24.5	495×285×225
50EU2.1.5B	50	135	200	340	125	485	90	90	90	180	140	265	24	25.5	515×285×225
50EU2.1.5SB	50	135	200	340	125	485	90	90	90	180	140	265	25	26.5	515×285×225

Single Phase: S

2.2~5.5kW 2P

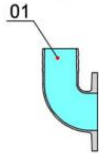
50Hz : 2850rpm

60Hz : 3450rpm

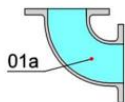
Specification

- Insulation class : B
- Protection class : IP68
- Water temperature : up to 40°C
- PH : 6 to 10
- Density of liquid : 1.3g/cm³
- Power supply : three phase 380V ±10%, 50Hz
three phase 380V ±10%, 60Hz
- Motor protection : built in
- Capacity : up to 70m³/h
- Head : up to 23 m
- Maximum immersion depth : 10m
- Cable Length : 8m

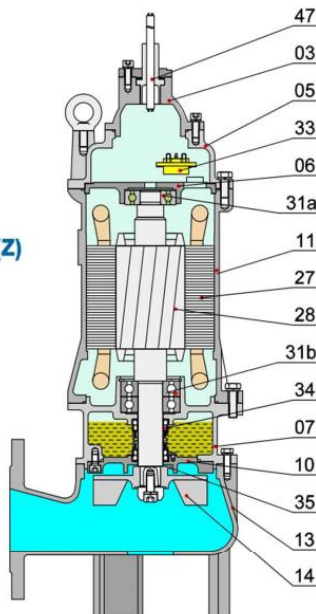
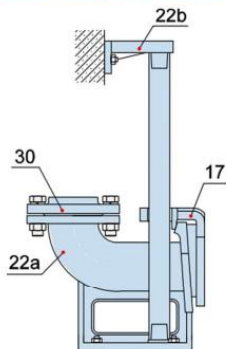
Movable Soft Pipe Installation (R)



Hard Pipe Installation(Y)



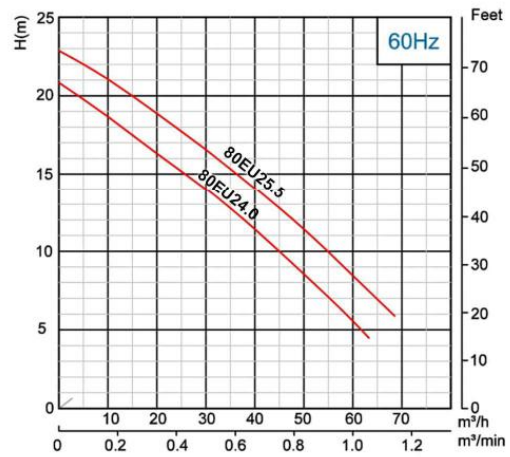
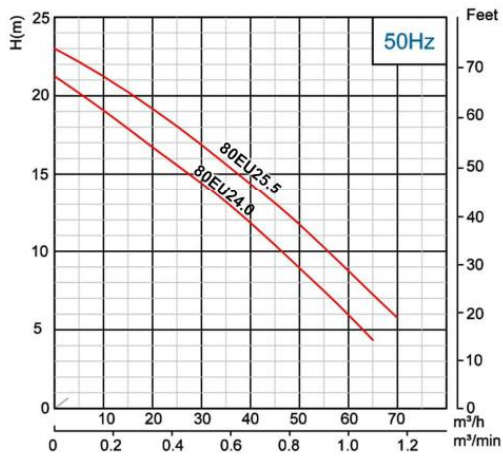
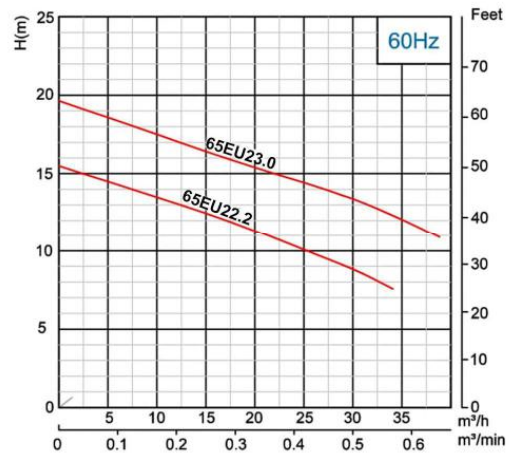
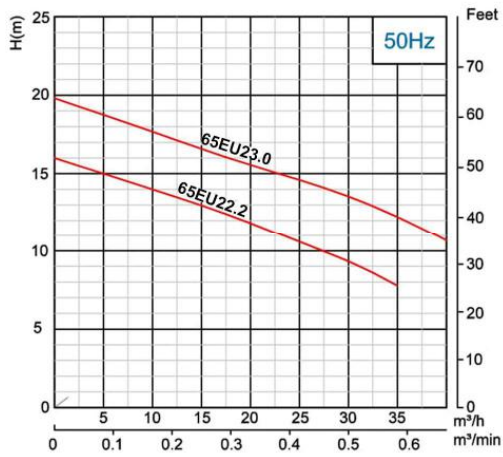
Auto-coupled Installation (Z)



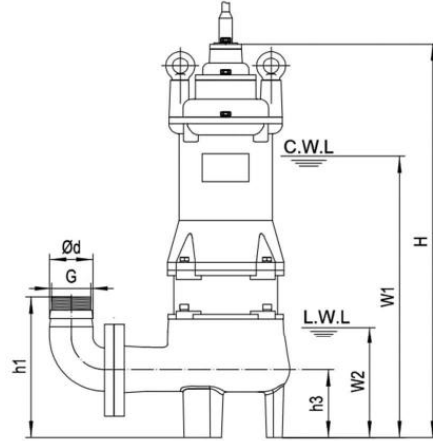
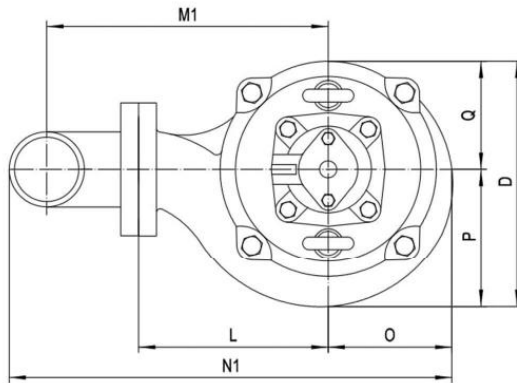
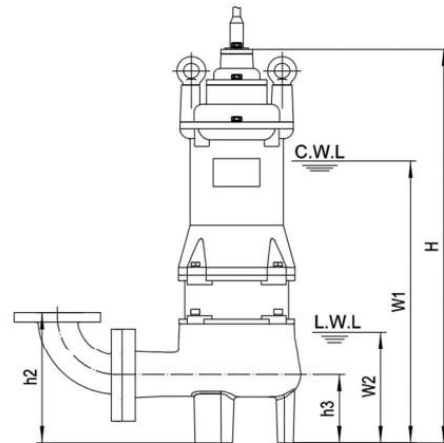
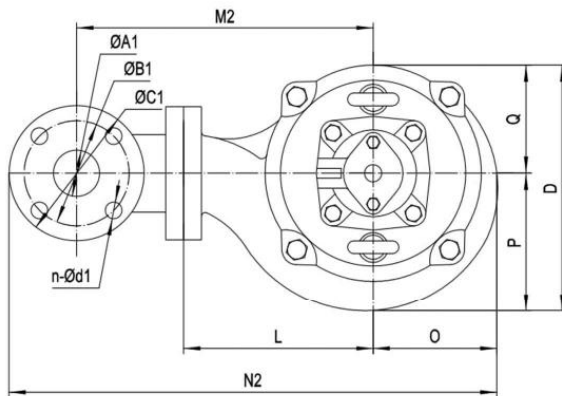
Materials of construction

Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
03	Terminal box	Cast iron
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Cast iron
17	Coupling adapter	Cast iron
22a	Coupling seat	Cast iron
22b	Upper guide support	Cast iron
27	Stator	
28	Rotor	Shaft : AISI304SS
30	Flange	Cast iron
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
33	Motor protector	
34	Mechanical seal	SiC-SiC/Carbon-Ceramic
35	Oil seal	
47	Cable	





Model	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max Head	Impeller Passage	Cable
			kW	HP	in	mm						
65EU22.2	380	5	2.2	3	2½	65	25	10	35	16	65	4G1.0
65EU23.0	380	6.5	3	4	2½	65	25	15	40	20	65	4G1.5
80EU24.0	380	8.9	4	5.5	3	80	40	12	65	21	65	4G1.5
80EU25.5	380	11.7	5.5	7.5	3	80	50	12	70	23	65	4G2.5

Movable Soft Pipe Installation (R)

Hard Pipe Installation(Y)


C.W.L : Continuous running water level
L.W.L : Lowest running water level

Dimensions table

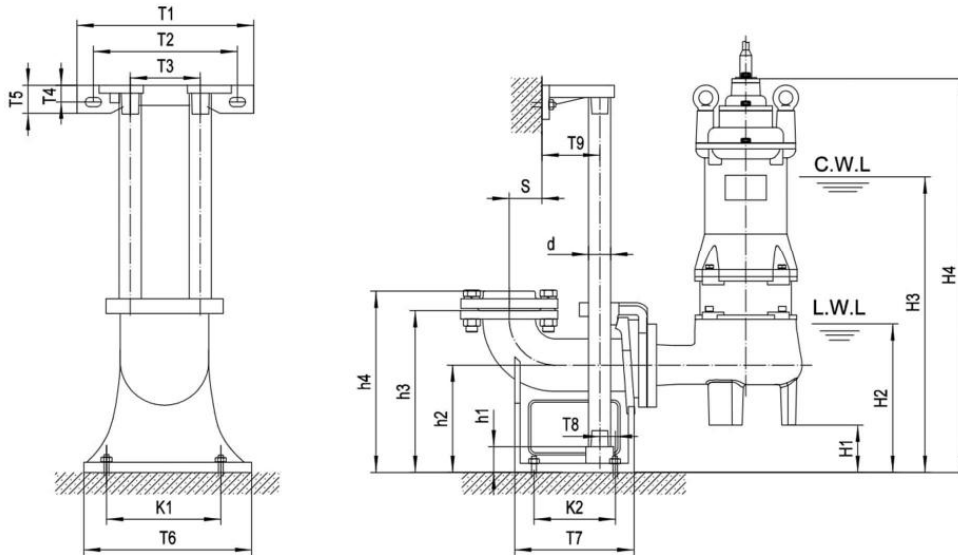
Model	Ød	G	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
65EU22.2	65	G2"	65	130	160	4-Ø14	210	210	90	425	170	585	100	102	93	155	195	227	267	360	447
65EU23.0	65	G2"	65	130	160	4-Ø14	210	210	90	440	170	620	100	102	93	155	195	227	267	360	447
80EU24.0	80	G2½"	80	150	190	4-Ø18	245	240	100	455	170	645	105	110	100	175	210	267	317	410	517
80EU25.5	80	G2½"	80	150	190	4-Ø18	245	240	100	480	170	675	110	113	105	175	223	267	317	413	520

Weights & Packing dimensions

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
65EU22.2	39	45	700×230×305	43	49	700×230×315
65EU23.0	48	54	740×230×305	52	58	740×230×315

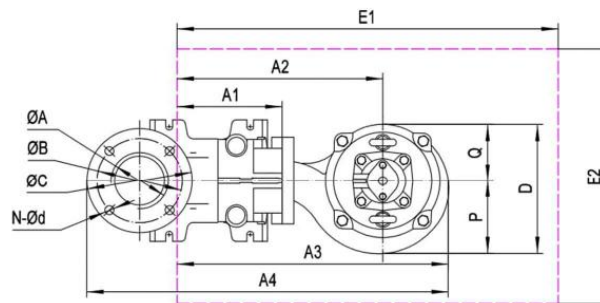
Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
80EU24.0	59	64	760×250×335	63	68	760×250×355
80EU25.5	73	77	790×260×335	77	81	790×260×355

Auto-Coupled Installation (Z)



C.W.L : Continuous running water level
L.W.L : Lowest running water level

The coupling and pump will be packed individually, packing dimension and weight in table only refer to the pump, please refer to P58 to check coupling's packing dimension and weight.



Dimensions table

Auto oupling	ØA	ØB	ØC	N-Ød	T1	T2	T3	T4	T5	T6	T7	T8	T9	K1	K2	S	h1	h2	h3	h4
65-65(PN6)	Ø65 / G2 ^{1/2} "	130	160	4-Ø14	280	230	125	30	50	230	235	20	70	190	155	90	25	165	265	295
80-80(PN6)	Ø80 / G3"	150	190	4-Ø18	315	265	145	27	50	255	225	30	78	215	155	77	25	190	305	335

Dimensions table

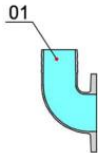
Model	Auto coupling	H1	H2	H3	H4	A1	A2	A3	A4	P	Q	D	E1×E2	Pump weight & packing dimension		
														N.W	G.W	Packing dimension
65EU22.2	65-65(PN6)	75	245	500	660	155	245	410	580	102	93	195	650×550	36	42	700×230×305
65EU23.0	65-65(PN6)	75	245	515	695	155	245	410	580	102	93	195	650×550	45	51	740×230×305
80EU24.0	80-80(PN6)	90	260	545	735	175	260	455	628	110	100	210	650×550	54	59	760×250×335
80EU25.5	80-80(PN6)	90	260	570	765	175	260	460	632	113	105	218	650×550	68	72	790×260×335

5.5~11kW 4P
 50Hz : 1450rpm
 60Hz : 1750rpm

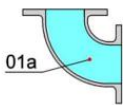
Specification

- Insulation class : F
- Protection class : IP68
- Water temperature : up to 40°C
- PH : 6 to 10
- Density of liquid : 1.3g/cm³
- Power supply : three phase 380V ±10%, 50Hz
 three phase 380V ±10%, 60Hz
- Motor protection : 5.5 ~ 7.5kW built in
- Capacity : up to 190m³/h
- Head : up to 18m
- Maximum immersion depth : 20m
- Cable Length : 8m

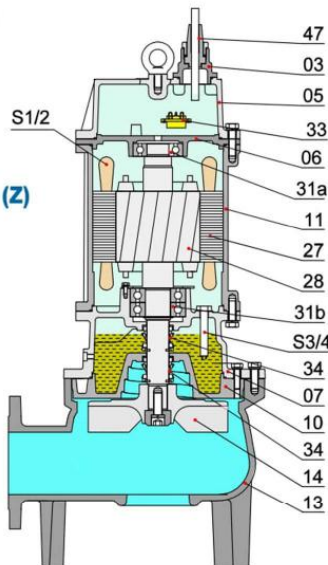
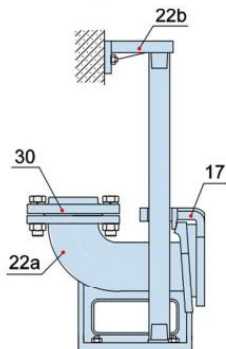
Movable Soft Pipe Installation (R)



Hard Pipe Installation(Y)

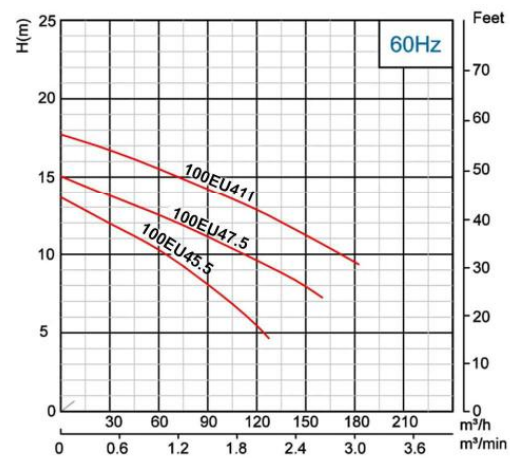
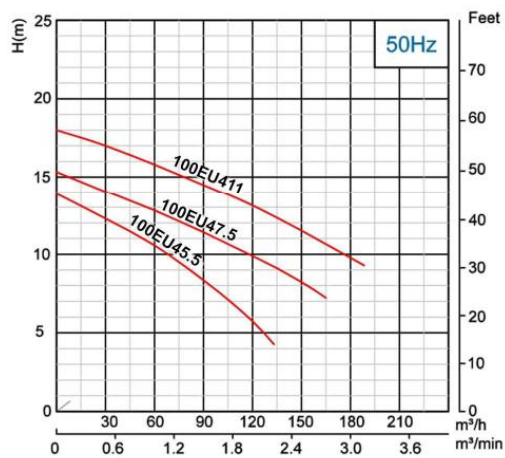
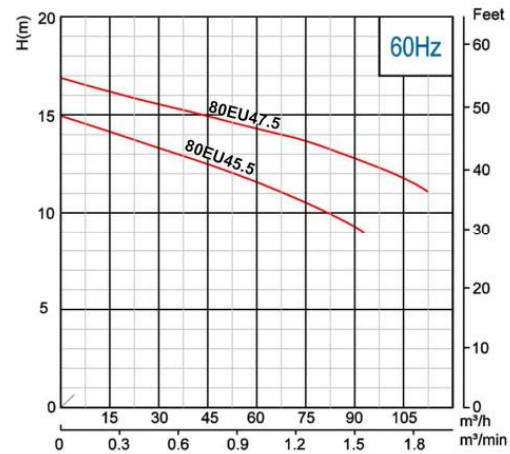
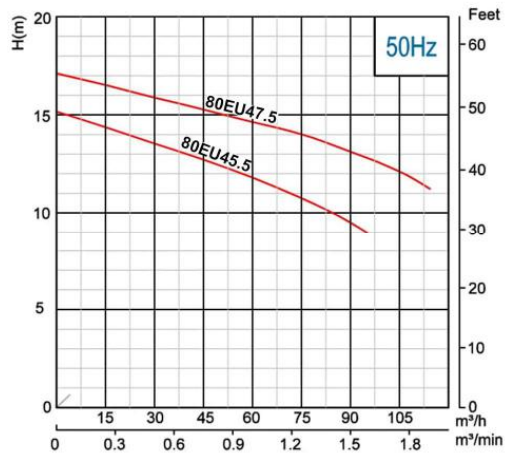


Auto-coupled Installation (Z)

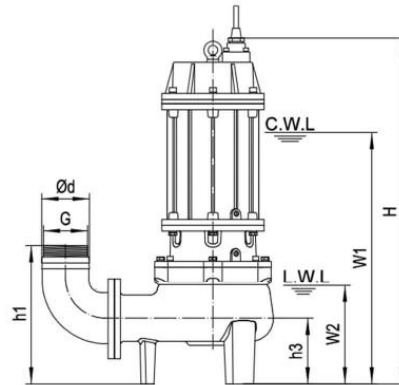
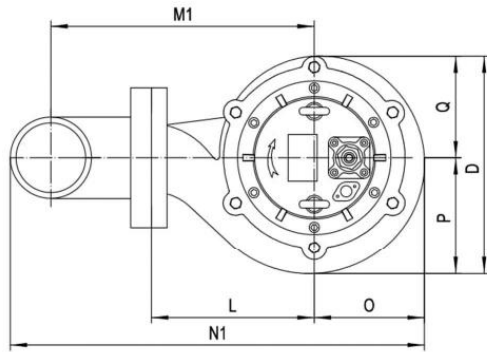
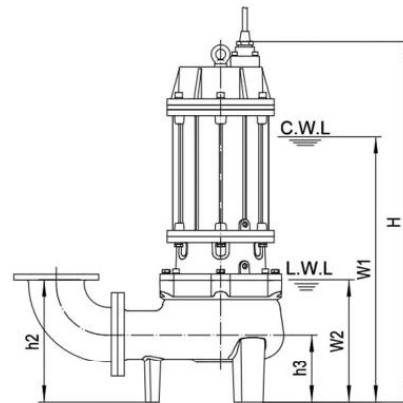
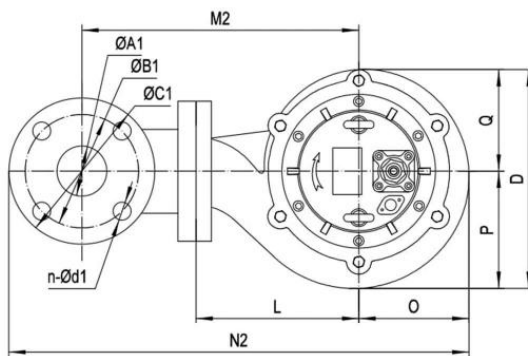


Materials of construction

Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
03	Terminal box	Cast iron
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Ductile iron
17	Coupling adapter	Cast iron
22a	Coupling seat	Cast iron
22b	Upper guide support	Cast iron
27	Stator	
28	Rotor	Shaft : AISI304SS
30	Flange	Cast iron
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
33	Motor protector	
34	Mechanical seal	Sic-Sic
47	Cable	
S1/2	Overheat protector	on option
S3/4	Oil water leakage probe	on option



Model	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max Head	Impeller Passage	Cable
	V	A	kW	HP	in	mm	m³/h	m	m³/h	m	mm	mm²
80EU45.5	380	11.7	5.5	7.5	3	80	60	12	95	15	80	4G2.5
100EU45.5	380	11.7	5.5	7.5	4	100	80	9	135	14	100	4G2.5
80EU47.5	380	15.7	7.5	10	3	80	80	14	110	17	80	4G4.0
100EU47.5	380	15.7	7.5	10	4	100	110	10	165	15	100	4G4.0
100EU411	380	22	11	15	4	100	110	13	190	18	100	4G4.0

Movable Soft Pipe Installation (R)

Hard Pipe Installation(Y)


C.W.L. : Continuous running water level
L.W.L. : Lowest running water level

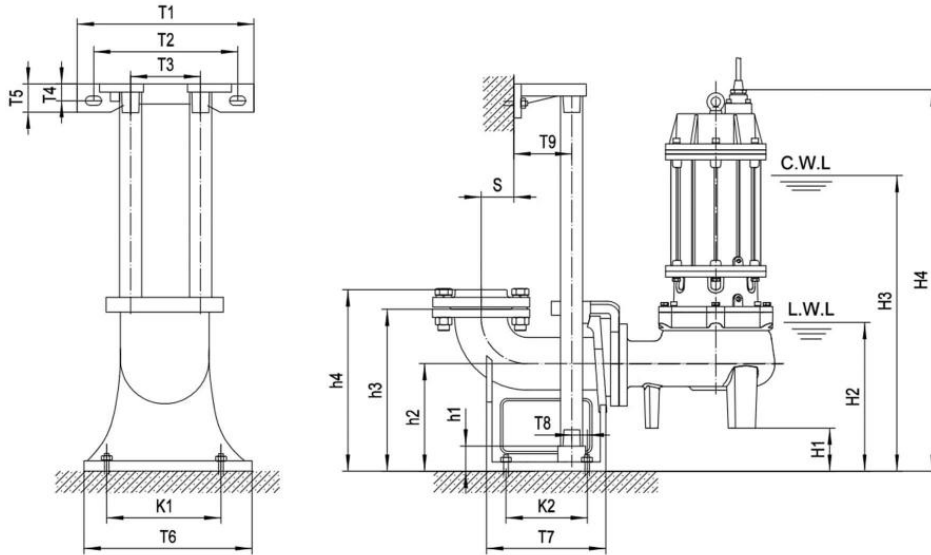
Dimensions table

Model	Ød	G	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
80EU45.5	80	G2½"	80	150	190	4-Ø18	285	280	140	590	255	805	153	172	172	230	344	322	372	512	620
100EU45.5	100	—	100	170	210	4-Ø18	340	320	170	630	300	850	156	172	172	260	344	362	412	568	673
80EU47.5	80	G2½"	80	150	190	4-Ø18	285	280	140	635	255	850	153	172	172	230	344	322	372	512	620
100EU47.5	100	—	100	170	210	4-Ø18	340	320	170	675	300	895	156	172	172	260	344	362	412	568	673
100EU411	100	—	100	170	210	4-Ø18	340	320	170	735	300	955	156	172	172	260	344	362	412	568	673

Weights & Packing dimensions

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
80EU45.5	132	145	904×384×465	136	149	904×384×485
100EU45.5	136	149	944×384×495	172	155	944×384×525
80EU47.5	147	161	954×384×465	151	165	954×384×485
Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
100EU47.5	151	165	994×384×495	157	171	1024×384×525
100EU411	170	185	1064×384×495	176	191	1094×384×525

Auto-Coupled Installation (Z)



C.W.L : Continuous running water level
L.W.L : Lowest running water level

The coupling and pump will be packed individually, packing dimension and weight in table only refer to the pump, please refer to P58 to check coupling's packing dimension and weight.

Dimensions table

Auto coupling	ØA	ØB	ØC	N-Ød	T1	T2	T3	T4	T5	T6	T7	T8	T9	K1	K2	S	h1	h2	h3	h4
80-80(PN6)	Ø80 / G3"	150	190	4-Ø18	315	265	145	27	50	255	225	30	78	215	155	77	25	190	305	335
100-100(PN6)	Ø100 / G4"	170	210	4-Ø18	365	305	170	32	55	295	260	35	95	265	175	100	25	230	350	380

Dimensions table

Model	Auto coupling	H1	H2	H3	H4	A1	A2	A3	A4	P	Q	D	E1×E2	Pump weight & packing dimension		
														N.W	G.W	Packing dimension
80EU45.5	80-80(PN6)	50	305	640	855	175	405	560	730	172	172	344	750×550	127	140	934×384×465
100EU45.5	100-100(PN6)	60	360	690	910	200	460	615	822	172	172	344	850×550	130	143	974×384×495
80EU47.5	80-80(PN6)	50	305	685	900	175	405	560	730	172	172	344	750×550	142	156	984×384×465
100EU47.5	100-100(PN6)	60	360	735	950	200	460	615	822	172	172	344	850×550	145	159	1024×384×495
100EU411	100-100(PN6)	60	360	795	1015	200	460	615	822	172	172	344	850×550	164	179	1094×384×495