

ACI



***SUPMERSIBLE
SEWAGE PUMPS***

STRUCTURE INTRUCTIONS

1. Pump Body Impeller

Pump body and impeller are well matched by the repeated modifications and designs with AutoACD technology . Hydraulic model is high efficient , curve of output is flat , which can't 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 enduring 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) 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.

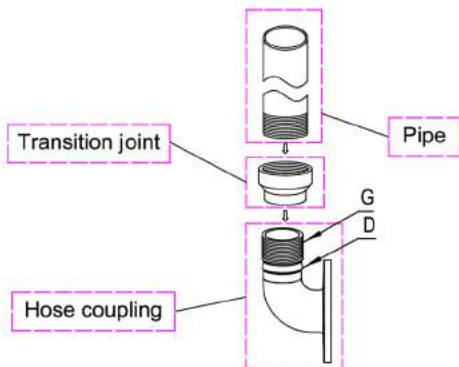
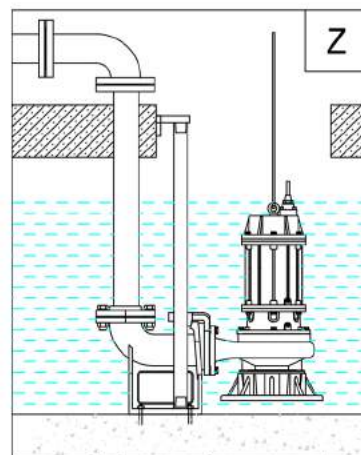
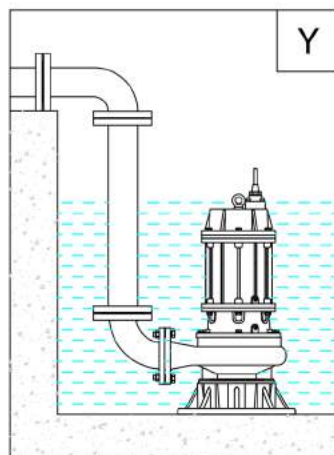
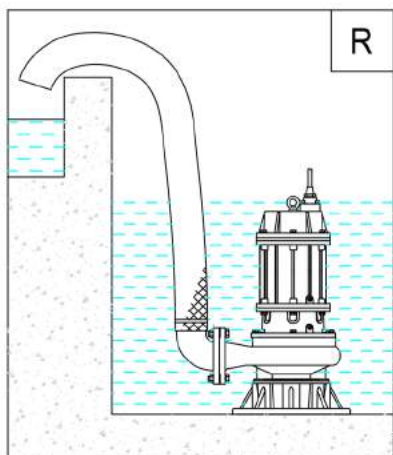
NOMENCLATURE

50 ACI 2 1.5 A S - R(Y, Z)

R: Movable Soft Pipe Installation
 Y: Hard Pipe Installation
 Z: Auto-Coupled Installation
 (There could be no "R" for R type)
 Single phase
 W/T(S) : Three phase
 Flange connect to the pipe
 Motor power (kW)
 Number of pole-pairs for motor
 2 means 2 poles, 4 means 4 poles
 Submersible sewage pump series
 including ACI/MCI
 Discharging hose inner diameter(mm)

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	Nominal pipe diameter
50	G1½"	G1½"→G2"	50
65	G2"	G2"→G2½"	65
80	G2½"	G2½"→G3"	80

0.75~1.5kW 2P

TYPE A

50Hz : 2850rpm

60Hz : 3450rpm

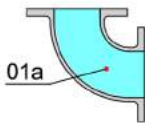
SPECIFICATION

- 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
single phase 220V ±10%, 50Hz
single phase 220V ±10%, 60Hz
- Motor protection : built in
- Capacity : up to 48m³/h
- Head : up to 21m
- Maximum immersion depth : 10m
- Cable Length : 8m

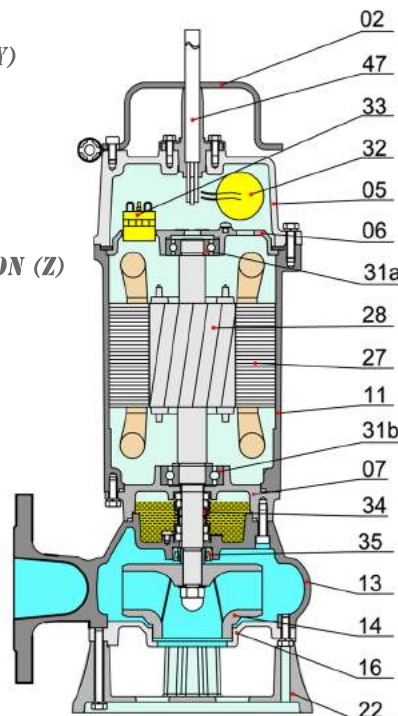
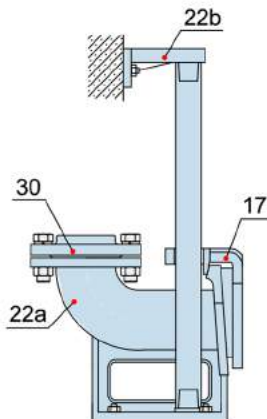
MOVABLE SOFT PIPE INSTALLATION (R)



HARD PIPE INSTALLATION (Y)



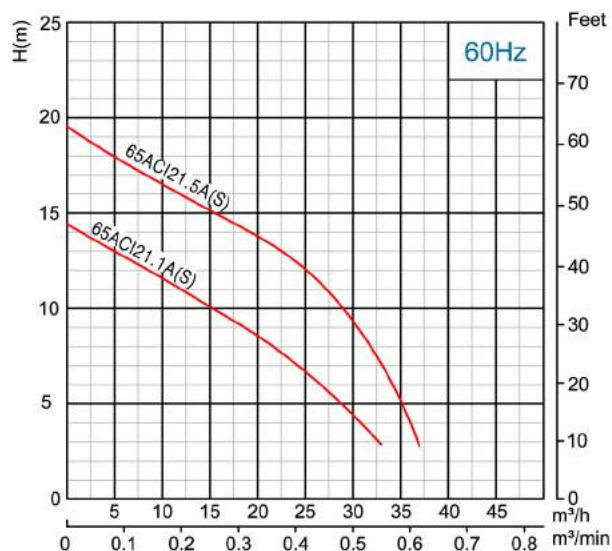
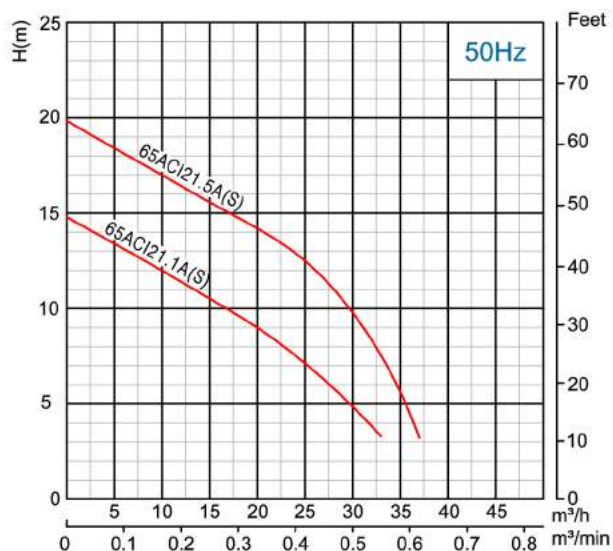
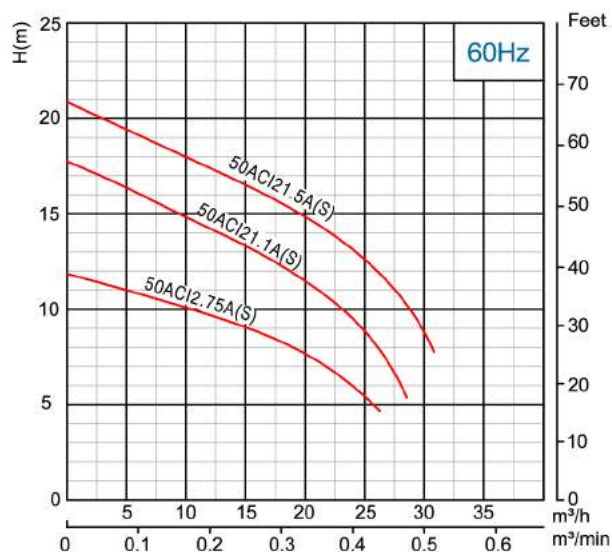
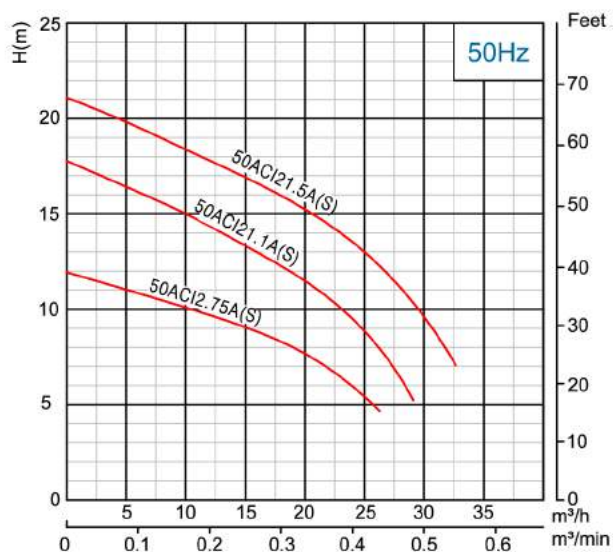
AUTO-COUPLED INSTALLATION (Z)



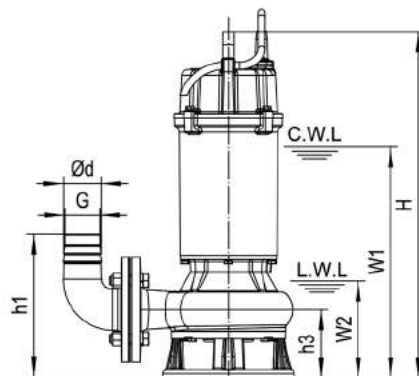
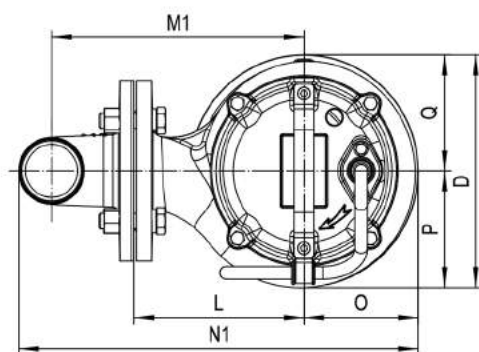
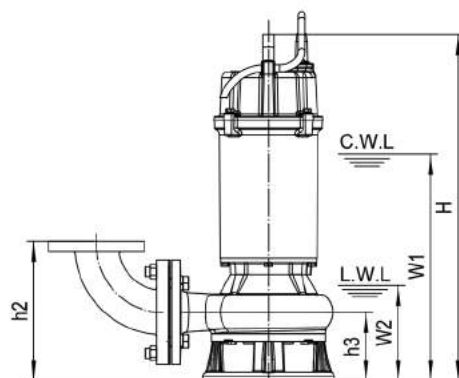
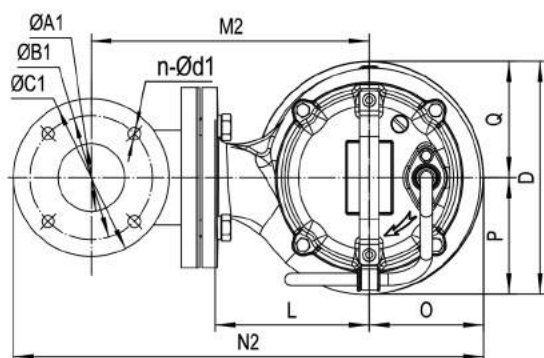
MATERIALS OF CONSTRUCTION

Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
02	Handle	Steel
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Cast iron
16	Inlet plate	Cast iron
17	Coupling adapter	Cast iron
22	Seat assembly	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
32	Capacitor	(Single phase only)
33	Motor protector	
34	Mechanical seal	Sic-Cerami/Carbon-Ceramic
35	Oil seal	
47	Cable	

CURVE



Model 50Hz/60Hz	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
50ACI2.75A	380	2	0.75	1	2	50	10	10	26	12	25	4G1.0
50ACI2.75SA	220	5.2	0.75	1	2	50	10	10	26	12	25	3G1.0
50ACI21.1A	380	2.8	1.1	1.5	2	50	8	15	29	18	20	4G1.0
50ACI21.1SA	220	7.2	1.1	1.5	2	50	8	15	29	18	20	3G1.0
65ACI21.1A	380	2.8	1.1	1.5	2½	65	15	10	33	15	25	4G1.0
65ACI21.1SA	220	7.2	1.1	1.5	2½	65	15	10	33	15	25	3G1.0
50ACI21.5A	380	3.2	1.5	2	2	50	8	19	33	21	20	4G1.0
50ACI21.5SA	220	10	1.5	2	2	50	8	19	33	21	20	3G1.5
65ACI21.5A	380	3.2	1.5	2	2½	65	15	15	37	20	25	4G1.0
65ACI21.5SA	220	10	1.5	2	2½	65	15	15	37	20	25	3G1.5

MOVABLE SOFT PIPE INSTALLATION (R)

HARD PIPE INSTALLATION (Y)


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

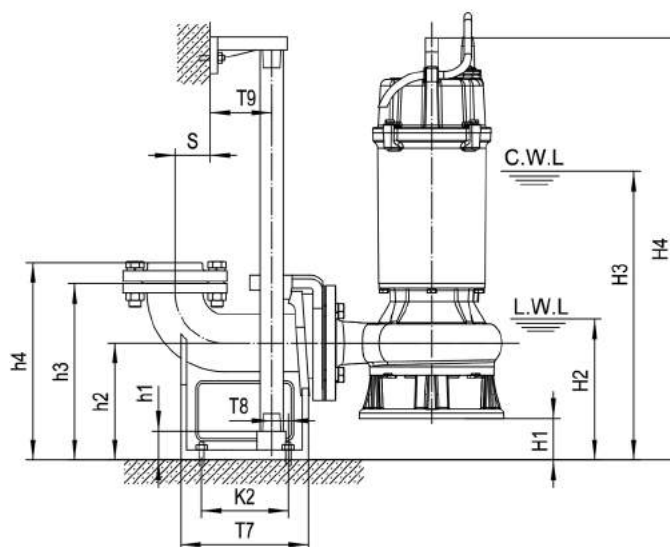
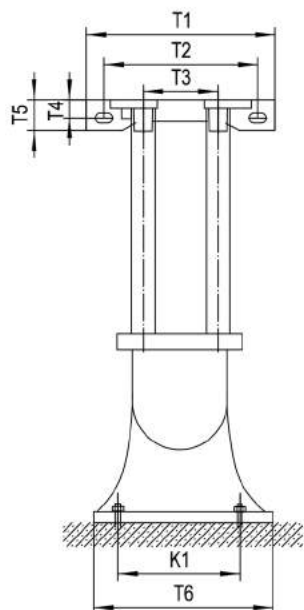
DIMENSIONS TABLE

Model	Ød	G	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
50ACI2.75A	50	1½"	50	110	140	4-Ø14	200	195	95	300	120	450	93	100	90	129	190	195	231	314	394
50ACI2.75SA	50	1½"	50	110	140	4-Ø14	200	195	95	315	120	450	93	100	90	129	190	195	231	314	394
50ACI21.1A	50	1½"	50	110	140	4-Ø14	197	192	92	325	120	464	90	90	90	134	180	200	236	316	396
50ACI21.1SA	50	1½"	50	110	140	4-Ø14	197	192	92	325	120	464	90	90	90	134	180	200	236	316	396
65ACI21.1A	65	2"	50	130	160	4-Ø14	212	192	92	325	120	464	90	90	90	134	180	200	236	323	406
65ACI21.1SA	65	2"	50	130	160	4-Ø14	212	192	92	325	120	464	90	90	90	134	180	200	236	323	406
50ACI21.5A	50	1½"	50	110	140	4-Ø14	197	192	92	345	120	484	90	90	90	134	180	200	236	316	396
50ACI21.5SA	50	1½"	50	110	140	4-Ø14	197	192	92	345	120	484	90	90	90	134	180	200	236	316	396
65ACI21.5A	65	2"	50	130	160	4-Ø14	212	192	92	345	120	484	90	90	90	134	180	200	236	323	406
65ACI21.5SA	65	2"	50	130	160	4-Ø14	212	192	92	345	120	484	90	90	90	134	180	200	236	323	406

WEIGHTS & PACKING DIMENSIONS

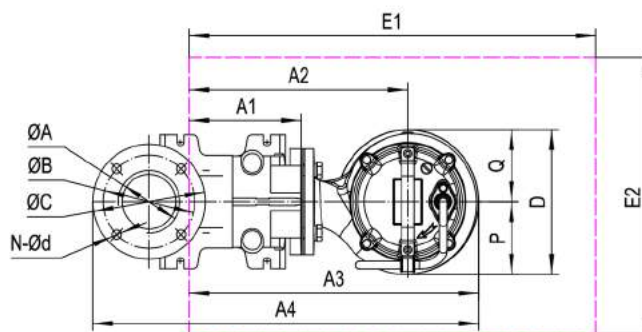
Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
50ACI2.75A	22	23.5	480×255×240	24	25.5	480×265×310
50ACI2.75SA	23	24.5	480×255×240	25	26.5	480×265×310
50ACI21.1A	24	25.5	495×255×240	26	27.5	495×265×310
50ACI21.1SA	25.5	27	495×255×240	26.5	29	495×265×310
65ACI21.5A	24	25.5	495×255×240	28	29.5	495×265×310

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
65ACI21.1SA	25.5	27	495×255×240	29.5	31	495×265×310
50ACI21.5A	26.5	28	515×255×240	28.5	30	515×265×310
50ACI21.5SA	29	30.5	515×255×240	31	32.5	515×265×310
65ACI21.5A	25.5	27	515×255×240	27.5	29	515×265×310
65ACI21.5SA	28.5	30	515×255×240	32.5	34	515×265×310

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 P73 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
50-50(PN6)	Ø50 / G2"	110	140	4-Ø14	265	215	105	25	42	200	215	13	67	165	135	63	25	160	250	281
65-65(PN6)	Ø65 / G2 ¹ / ₂ "	130	160	4-Ø14	280	235	125	30	50	230	235	19	70	190	155	90	25	170	265	291

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
50ACI2.75A	50-50(PN6)	65	185	365	515	157	286	379	512	100	90	190	650×550	20	21.5	480×255×240
50ACI2.75SA	50-50(PN6)	65	185	380	515	157	286	379	512	100	90	190	650×550	21	22.5	480×255×240
50ACI21.1A	50-50(PN6)	68	188	393	532	157	291	381	514	90	90	180	650×550	22	23.5	495×255×240
50ACI21.1SA	50-50(PN6)	68	188	393	532	157	291	381	514	90	90	180	650×550	23.5	25	495×255×240
65ACI21.1A	50-50(PN6)	68	188	393	532	157	291	381	514	90	90	180	650×550	21	22.5	495×255×240
65ACI21.1SA	50-50(PN6)	68	188	393	532	157	291	381	514	90	90	180	650×550	22.5	24	495×255×240
50ACI21.5A	50-50(PN6)	68	188	413	552	157	291	381	514	90	90	180	650×550	24.5	26	515×255×240
50ACI21.5SA	50-50(PN6)	68	188	413	552	157	291	381	514	90	90	180	650×550	27	28.5	515×255×240
65ACI21.5A	50-50(PN6)	68	188	413	552	157	291	381	514	90	90	180	650×550	22.5	24	515×255×240
65ACI21.5SA	50-50(PN6)	68	188	413	552	157	291	381	514	90	90	180	650×550	25.5	27	515×255×240

2.2~5.5kW 2P

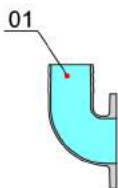
50Hz : 2850rpm

60Hz : 3450rpm

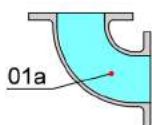
SPECIFICATION

- 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 : built in
- Capacity : up to 110m³/h
- Head : up to 42m
- Maximum immersion depth : 10m
- Cable Length : 8m

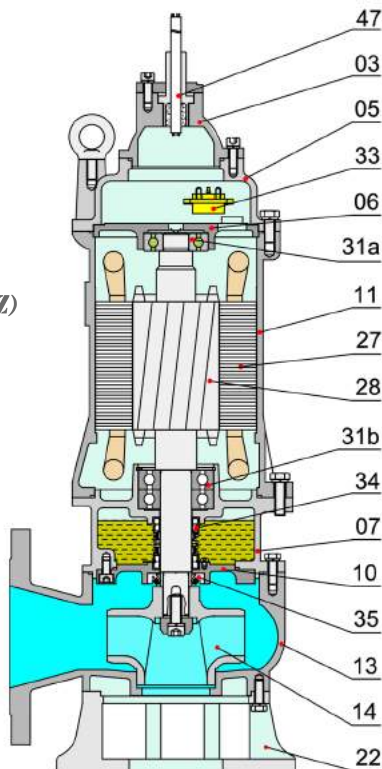
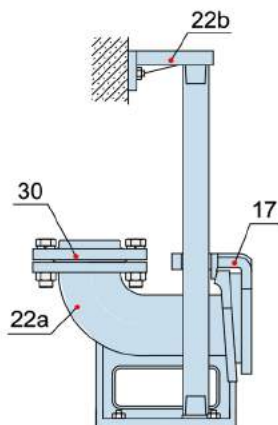
MOVABLE SOFT PIPE INSTALLATION (R)



HARD PIPE INSTALLATION (Y)

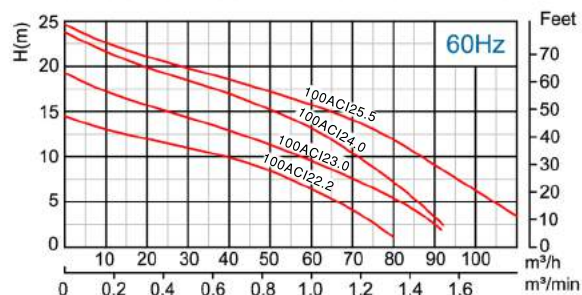
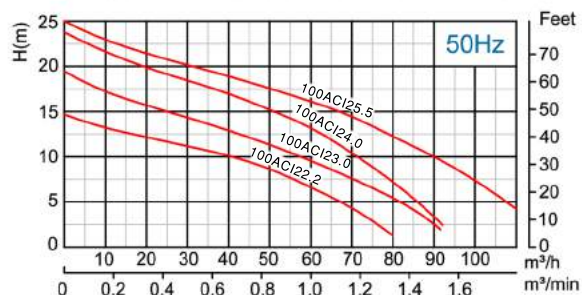
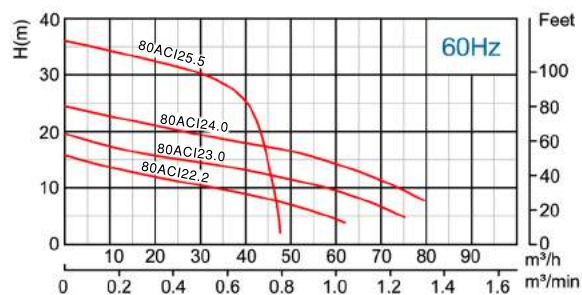
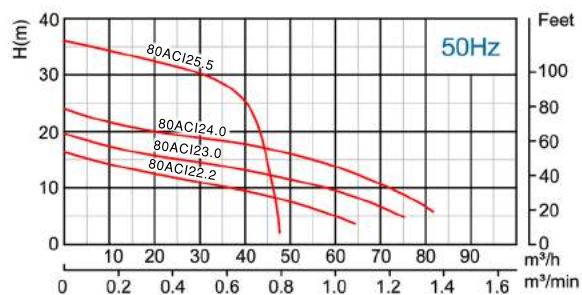
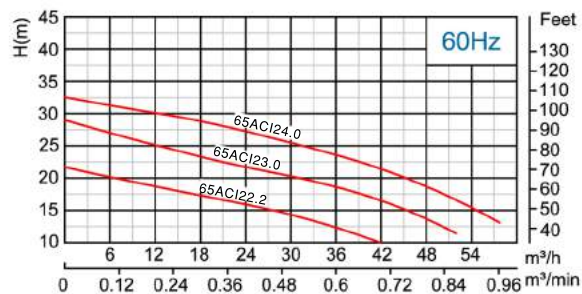
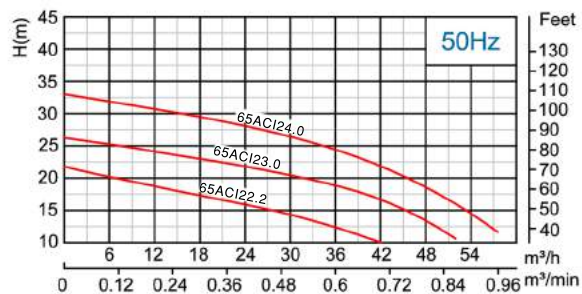
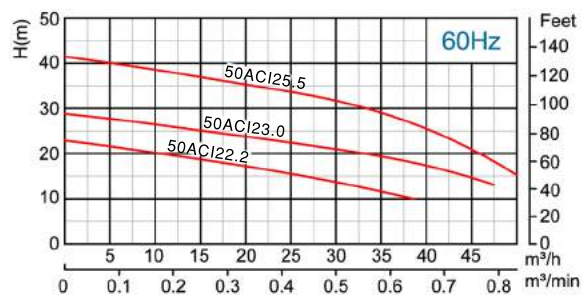
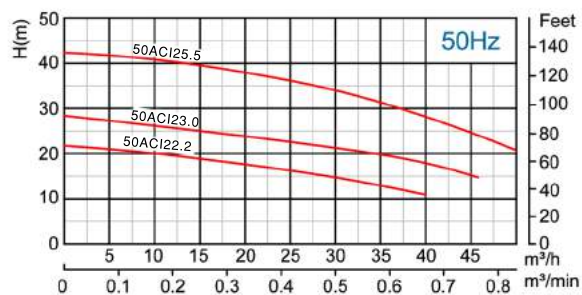


AUTO-COUPLED INSTALLATION (Z)



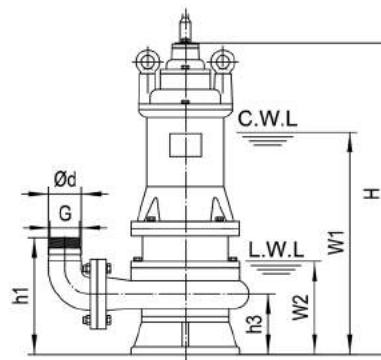
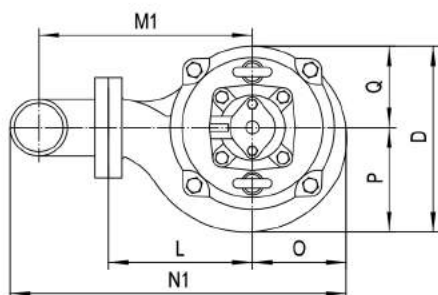
MATERIALS OF CONSTRUCTION

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
22	Seat assembly	Cast iron
22a	Coupling seat	Cast iron
22b	Upper guide support	Cast iron
27	Stator	Cast iron
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	

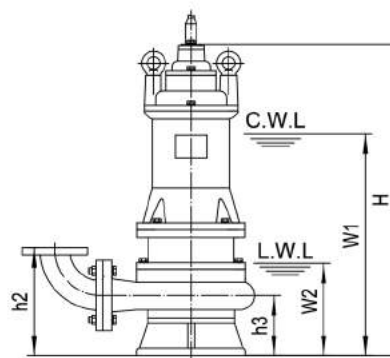
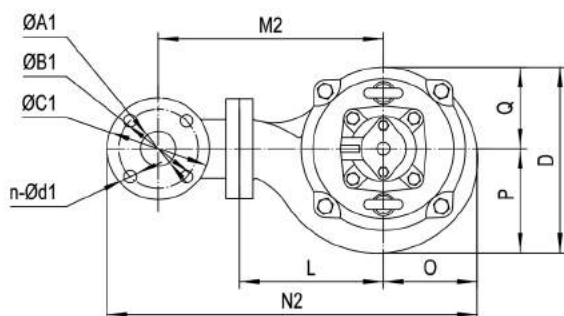
CURVE


Model 50Hz/60Hz	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
50ACI22.2	380	5	2.2	3	2	50	15	19	40	22	20	4G1.0
65ACI22.2	380	5	2.2	3	2½	65	25	16	42	22	20	4G1.0
80ACI22.2	380	5	2.2	3	3	80	40	9	64	16	30	4G1.0
100ACI22.2	380	5	2.2	3	4	100	50	8	80	15	30	4G1.0
50ACI23.0	380	6.5	3	4	2	50	15	25	46	28	20	4G1.5
65ACI23.0	380	6.5	3	4	2½	65	25	22	52	26/29	20	4G1.5
80ACI23.0	380	6.5	3	4	3	80	40	13	75	20	30	4G1.5
100ACI23.0	380	6.5	3	4	4	100	60	9	92	19	30	4G1.5
65ACI24.0	380	8.9	4	5.5	2½	65	25	28/27	58	33	20	4G1.5
80ACI24.0	380	8.9	4	5.5	3	80	40	18	81	24	30	4G1.5
100ACI24.0	380	8.9	4	5.5	4	100	60	13	93	24	30	4G1.5
50ACI25.5	380	11.7	5.5	7.5	2	50	15	40/38	52	42	20	4G2.5
80ACI25.5	380	11.7	5.5	7.5	3	80	30	30	47	36	25	4G2.5
100ACI25.5	380	11.7	5.5	7.5	4	100	65	15	110	25	30	4G2.5

MOVABLE SOFT PIPE INSTALLATION



HARD PIPE INSTALLATION (Y)



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

DIMENSIONS TABLE

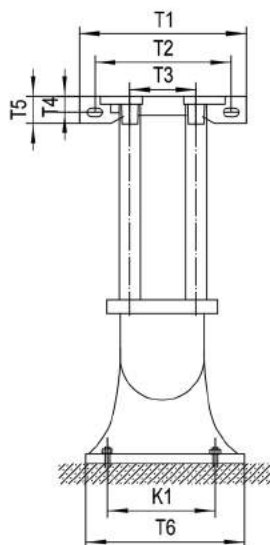
Model	Ød	G	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
50ACI22.2	50	G1½"	50	110	140	4-Ø14	211	205	106	410	145	573	106	113	100	164	213	230	266	363	438
65ACI22.2	65	G2"	65	130	160	4-Ø14	226	226	106	410	145	573	106	115	100	164	215	236	286	375	463
80ACI22.2	80	G2½"	80	150	190	4-Ø18	257	252	112	415	150	580	108	116	100	160	216	252	302	395	502
100ACI22.2	100	-	100	170	210	4-Ø18	293	252	122	425	160	589	107	116	100	164	216	266	316	422	528
50ACI23.0	50	G1½"	50	110	140	4-Ø14	211	205	105	425	145	600	106	113	100	164	213	230	266	363	438
65ACI23.0	65	G2"	65	130	160	4-Ø14	226	226	105	425	145	600	108	115	100	164	215	236	286	375	463
80ACI23.0	80	G2½"	80	150	190	4-Ø18	268	263	124	450	170	626	108	116	100	154	216	246	296	390	497
100ACI23.0	100	-	100	170	210	4-Ø18	293	272	122	450	170	624	107	116	100	164	216	266	316	425	528
65ACI24.0	65	G2"	65	130	160	4-Ø14	240	240	121	455	160	616	115	116	115	179	231	251	301	397	486
80ACI24.0	80	G2½"	80	150	190	4-Ø18	278	273	133	480	185	643	115	115	115	160	230	252	302	410	517
100ACI24.0	100	-	100	170	210	4-Ø18	303	283	133	480	185	643	115	115	115	175	230	277	327	443	547
50ACI25.5	50	G1½"	50	110	140	4-Ø14	233	228	128	475	160	667	125	128	125	175	253	241	277	390	467
80ACI25.5	80	G2½"	80	150	190	4-Ø18	274	269	129	495	175	683	125	125	125	175	250	267	317	430	537
100ACI25.5	100	-	100	170	210	4-Ø18	305	285	135	505	190	697	129	140	125	181	265	283	333	465	570

WEIGHTS & PACKING DIMENSIONS

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
50ACI22.2	42	48	690×260×315	44	50	690×260×315
65ACI22.2	44	50	690×260×315	48	54	690×260×315
80ACI22.2	47	52	710×260×315	51	56	710×260×325
100ACI22.2	48	53	720×260×345	52	57	720×280×365
50ACI23.0	50	55	710×260×315	52	57	710×260×315
65ACI23.0	51	57	710×260×315	55	61	710×260×315
80ACI23.0	55	60	750×240×325	59	64	750×240×335
100ACI23.0	57	63	750×260×345	63	69	750×280×365

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
65ACI24.0	61	69	745×260×335	65	73	780×260×335
80ACI24.0	65	71	765×260×325	69	75	800×260×335
100ACI24.0	67	73	765×260×355	73	79	800×280×375
50ACI25.5	74	81	790×290×355	76	83	790×290×365
80ACI25.5	77	83	800×290×335	81	87	800×290×365
100ACI25.5	81	89	810×300×375	87	95	810×300×405

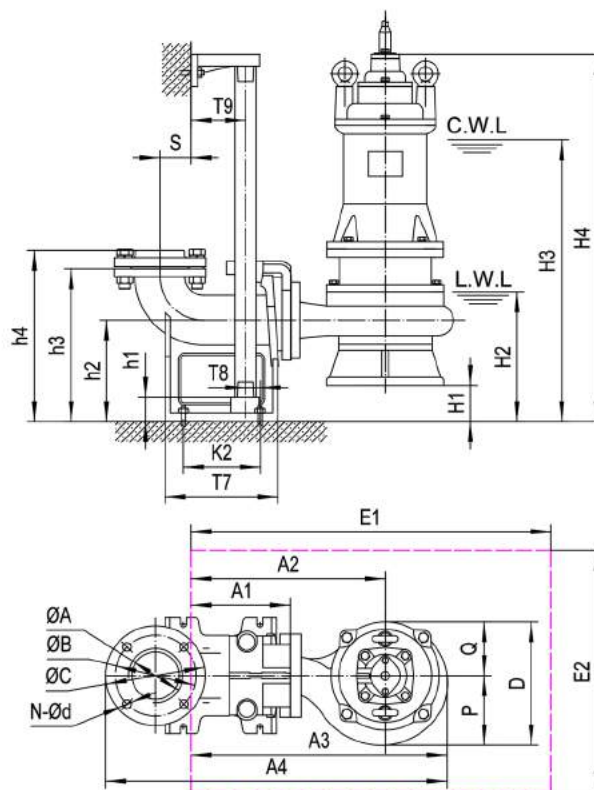
AUTO - COUPLED INSTALLATION (Z)



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 P73 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
50-50(PN6)	Ø50 / G2"	110	140	4-Ø14	265	215	105	25	42	200	215	15	67	165	135	63	25	160	250	280
65-65(PN6)	Ø65 / G2½"	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
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
50ACI22.2	50-50(PN6)	54	199	464	627	157	321	427	560	113	100	213	650×550	40	46	690×260×315
65ACI22.2	65-65(PN6)	65	210	475	638	157	321	429	599	115	100	215	650×550	42	48	690×260×315
80ACI22.2	80-80(PN6)	78	228	493	658	178	338	446	618	116	100	216	650×550	42	47	710×260×315
100ACI22.2	100-100(PN6)	108	268	533	696	200	366	473	678	116	100	216	650×550	42	47	720×260×345
50ACI23.0	50-50(PN6)	55	200	480	654	157	321	427	560	113	100	213	650×550	48	53	710×260×315
65ACI23.0	65-65(PN6)	65	210	490	664	157	321	429	599	115	100	215	650×550	48	54	710×260×315
80ACI23.0	80-80(PN6)	66	236	516	693	178	332	440	612	116	100	216	650×550	50	55	750×240×325
100ACI23.0	100-100(PN6)	108	278	558	731	202	366	473	678	116	100	216	700×550	51	57	750×260×345
65ACI24.0	65-65(PN6)	49	209	504	666	157	336	451	621	116	115	231	650×550	58	66	745×260×335
80ACI24.0	80-80(PN6)	57	242	537	700	178	338	453	625	115	115	230	650×550	60	66	765×260×325
100ACI24.0	100-100(PN6)	97	282	577	740	202	377	492	697	115	115	230	700×550	61	67	765×260×355
50ACI25.5	50-50(PN6)	32	192	507	699	157	332	457	590	128	125	253	650×550	72	79	790×290×355
80ACI25.5	80-80(PN6)	61	235	555	744	178	353	478	650	125	125	250	700×550	72	78	800×290×335
100ACI25.5	100-100(PN6)	95	285	600	793	202	383	512	717	140	125	265	700×550	75	83	810×300×375

7.5~11kW 2P

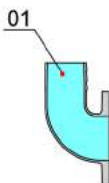
50Hz : 2850rpm

60Hz : 3450rpm

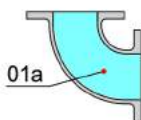
SPECIFICATION

- 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 : 7.5kW built in
- Capacity : up to 200m³/h
- Head : up to 52m
- Maximum immersion depth : 20m
- Cable Length : 8m

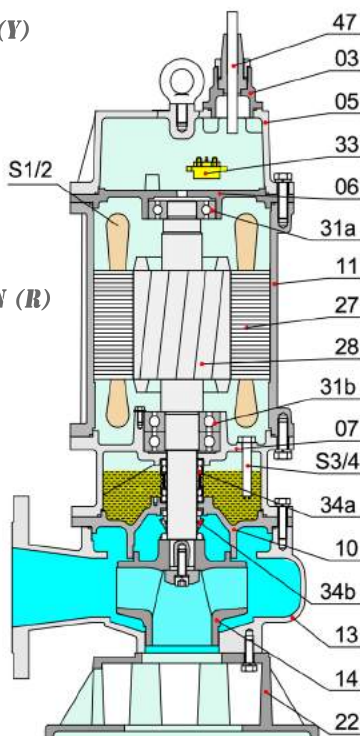
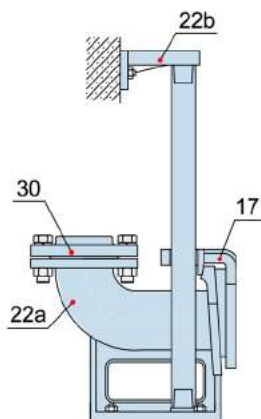
MOVABLE SOFT PIPE INSTALLATION (R)



HARD PIPE INSTALLATION (Y)



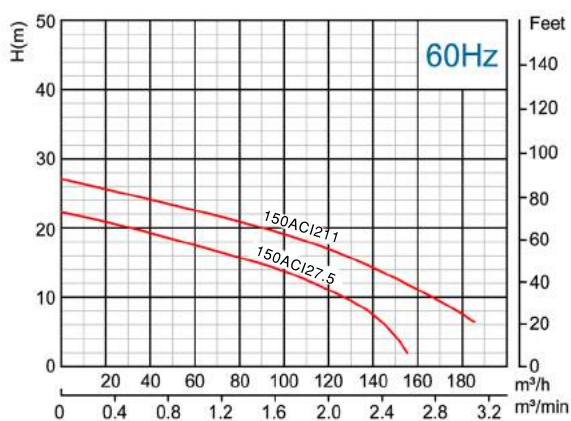
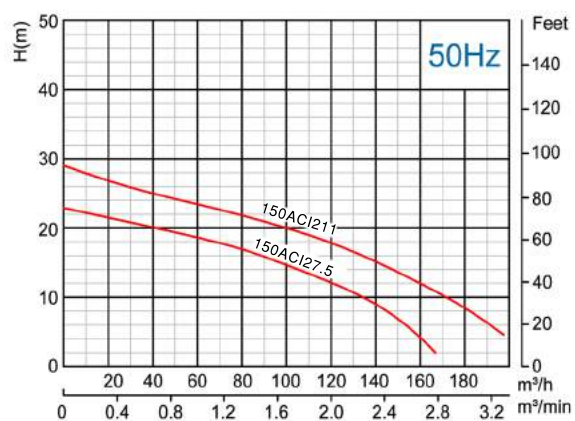
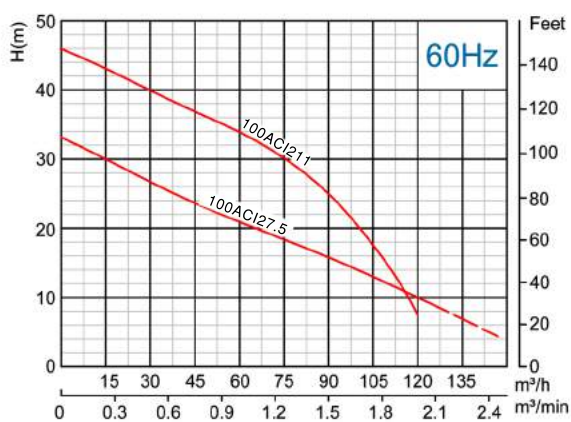
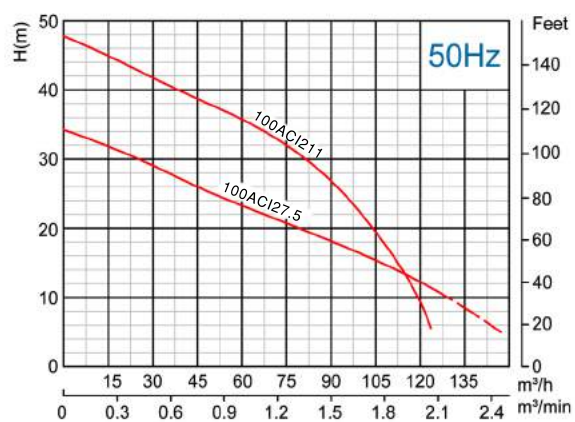
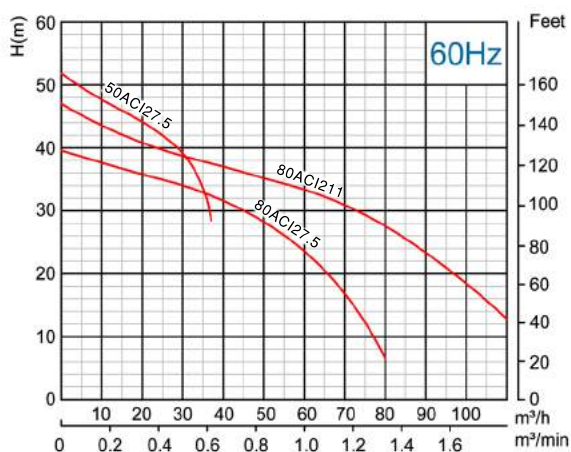
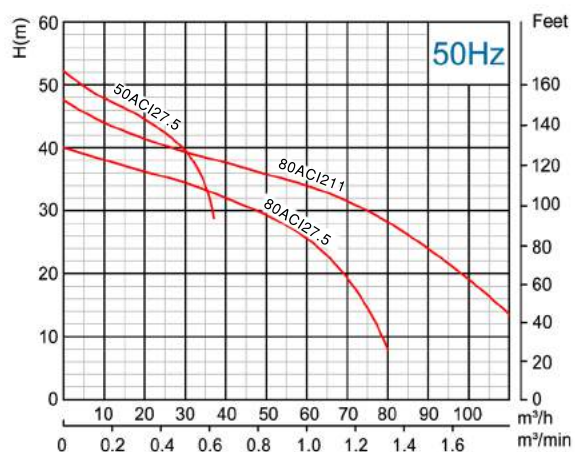
AUTO - COUPLED INSTALLATION (R)



MATERIALS OF CONSTRUCTION

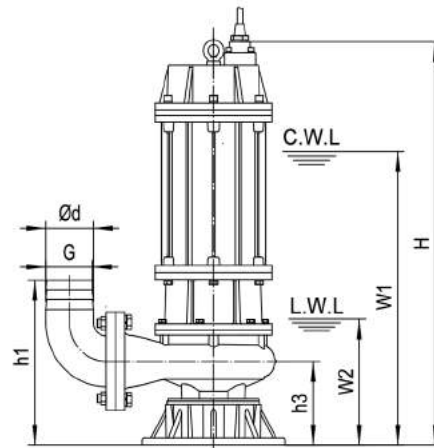
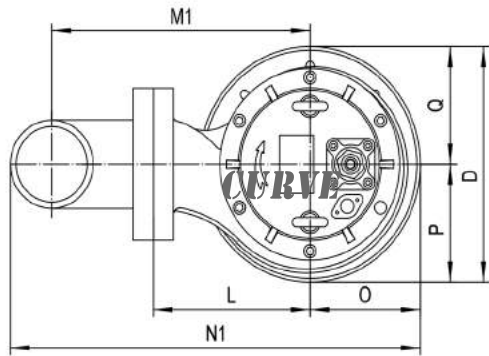
Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
03	Terminal box	Cast iron
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Ductile iron
17	Coupling adapter	Cast iron
22	Seat assembly	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	
34a	Mechanical seal	Sic-Sic/Carbon-Ceramic
34b	Mechanical seal	Sic-Sic
47	Cable	
S1/2	Overheat protector : on option	
S3/4	Oil water leakage probe : on option	

CURVE

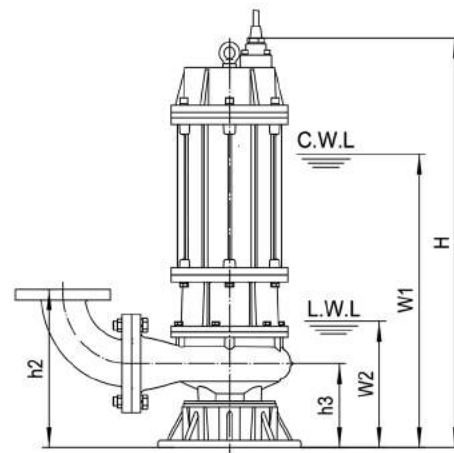
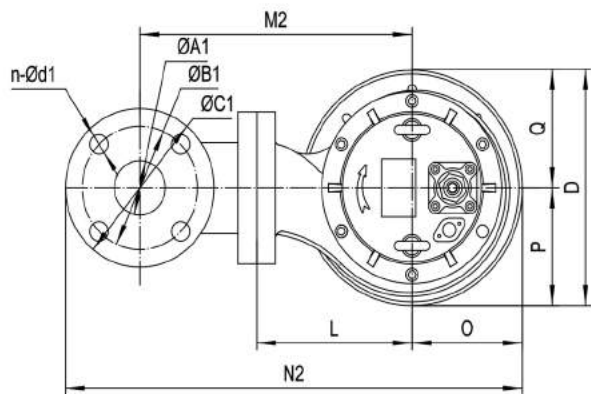


Model 50Hz/60Hz	Voltage	Current	Motor power		Outlet		Rated capacity	Rated head	Max capacity	Max Head	Impeller Passage	Cable
	V	A	kW	HP	in	mm	m³/h	m	m³/h	m	mm	mm²
50ACI27.5	380	15.7	7.5	10	2	50	20	45	37	52	25	4G4.0
80ACI27.5	380	15.7	7.5	10	3	80	30	35	80	40	30	4G4.0
100ACI27.5	380	15.7	7.5	10	4	100	65	22/20	145	35/33	35	4G4.0
150ACI27.5	380	15.7	7.5	10	6	150	100	14	168/155	23	40	4G4.0
80ACI211	380	22	11	15	3	80	45	37	110	48	35	4G4.0
100ACI211	380	22	11	15	4	100	65	35/33	125	48/46	35	4G4.0
150ACI211	380	22	11	15	6	150	100	20/19	200/185	29/27	50	4G4.0

MOVABLE SOFT PIPE INSTALLATION



HARD PIPE INSTALLATION (Y)



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

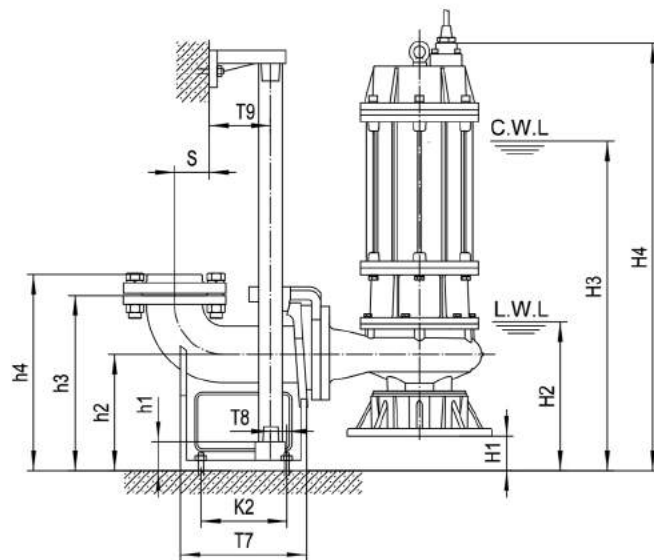
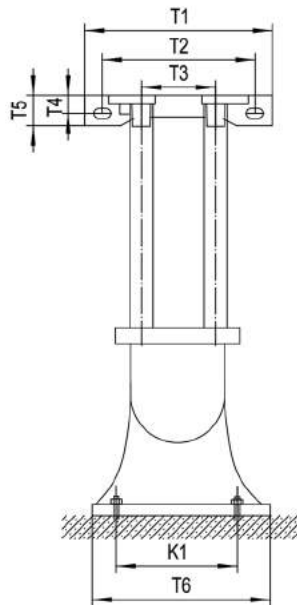
DIMENSIONS TABLE

Model	Ød	G	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
50ACI27.5	50	G1½"	50	110	140	4-Ø14	264	259	159	540	210	763	162	162	162	200	324	266	302	454	534
80ACI27.5	80	G1½"	80	150	190	4-Ø18	303	299	159	540	210	763	162	162	162	200	324	292	342	492	599
100ACI27.5	100	—	100	170	210	4-Ø18	344	324	174	560	230	784	162	162	162	202	324	304	354	516	621
150ACI27.5	150	—	150	225	265	8-Ø18	404	379	179	575	245	799	162	162	162	210	324	364	414	600	708
80ACI211	80	G1½"	80	150	190	4-Ø18	319	314	174	600	230	829	162	162	162	202	324	294	344	494	601
100ACI211	100	—	100	170	210	4-Ø18	344	324	174	600	230	829	162	162	162	202	324	304	354	516	621
150ACI211	150	—	150	225	265	8-Ø18	404	379	179	615	245	844	162	162	162	210	324	364	414	600	708

WEIGHTS & PACKING DIMENSIONS

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
50ACI27.5	114	127	865×365×485	116	129	865×365×485
80ACI27.5	118	130	865×365×485	122	134	865×365×495
100ACI27.5	122	134	895×365×485	128	140	895×365×505
150ACI27.5	134	146	915×385×535	142	154	915×385×545

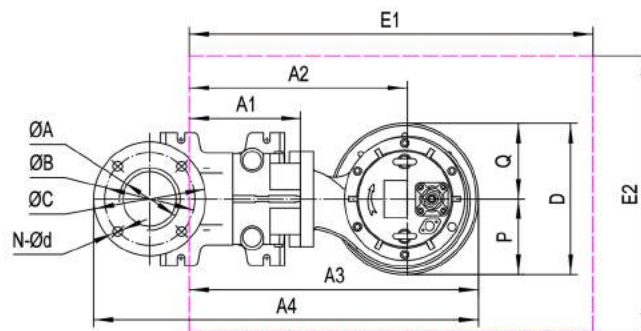
Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
80ACI211	131	143	935×365×485	135	147	935×365×495
100ACI211	133	145	935×365×485	139	151	935×365×505
150ACI211	145	157	955×385×535	153	165	955×385×545

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 P73 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	36	78	215	155	77	25	190	305	335
100-100(PN6)	Ø100 / G4"	170	210	4-Ø18	365	305	170	32	55	295	260	33	95	265	175	100	25	230	350	381
150-150(PN6)	Ø150	225	280	8-Ø18	400	260	280	24	48	400	410	87	95	280	300	192	390	300	480	—

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
50ACI27.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80ACI27.5	80-80(PN6)	32	242	572	794	178	378	538	713	162	162	324	750×550	113	125	865×365×485
100ACI27.5	100-100(PN6)	56	286	616	840	202	404	562	772	162	162	324	750×550	116	128	895×365×485
150ACI27.5	150-150(PN6)	121	366	696	920	287	497	659	992	162	162	324	850×550	122	134	915×385×535
80ACI211	80-80(PN6)	16	246	616	845	178	380	543	715	162	162	324	750×550	126	138	935×365×485
100ACI211	100-100(PN6)	56	286	656	885	202	404	567	772	162	162	324	750×550	127	139	935×365×485
150ACI211	150-150(PN6)	121	366	736	965	287	497	659	992	162	162	324	750×550	133	145	955×385×535

2.2~7.5kW 4P

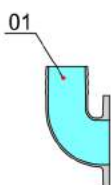
50Hz : 1450rpm

60Hz : 1750rpm

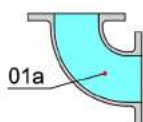
SPECIFICATION

- 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 : built in
- Capacity : up to 400m³/h
- Head : up to 24m
- Maximum immersion depth : 20m
- Cable Length : 8m

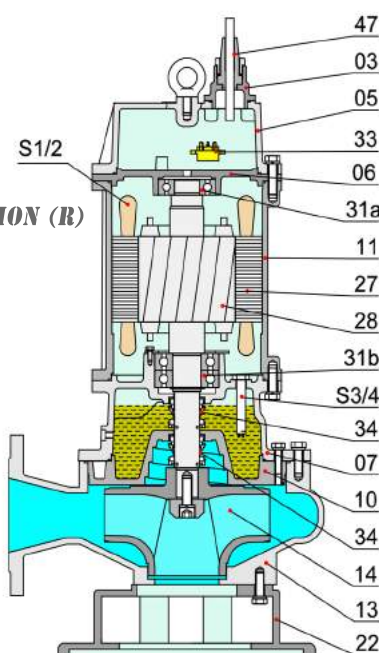
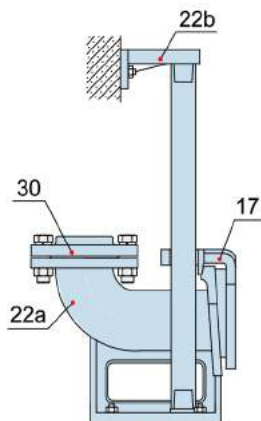
MOVABLE SOFT PIPE INSTALLATION (R)



HARD PIPE INSTALLATION (Y)



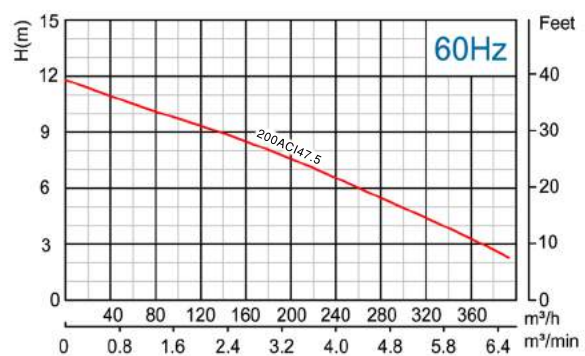
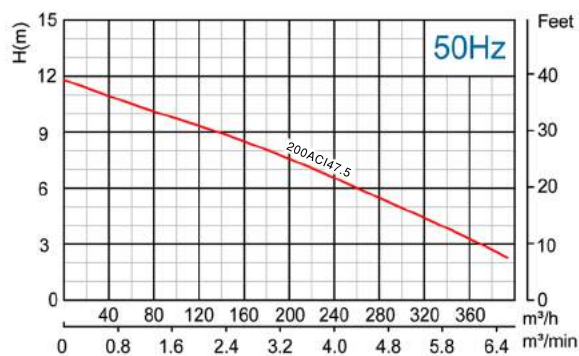
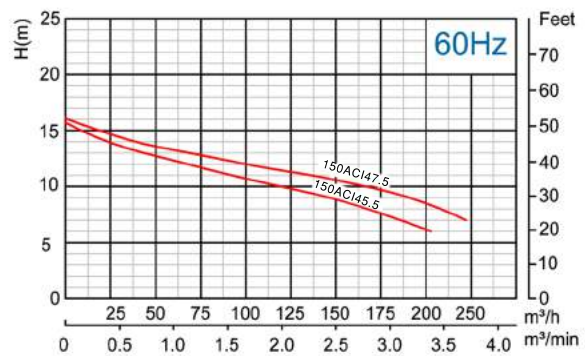
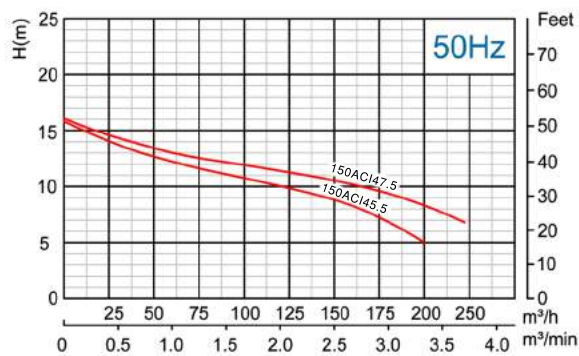
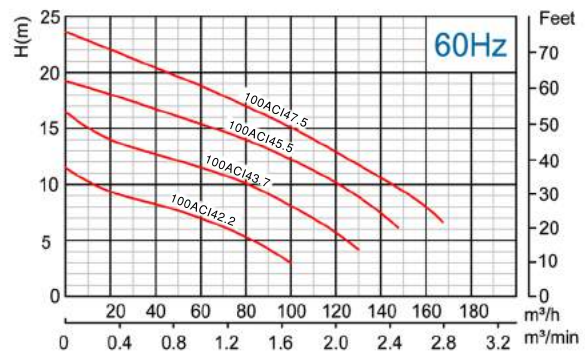
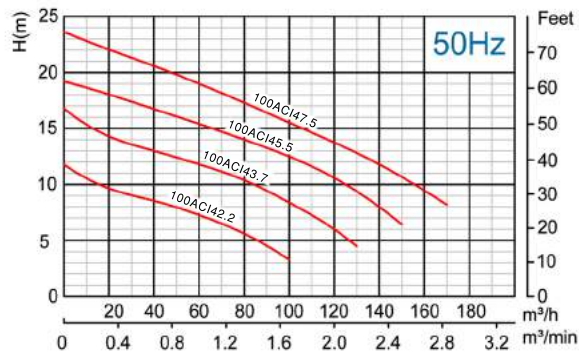
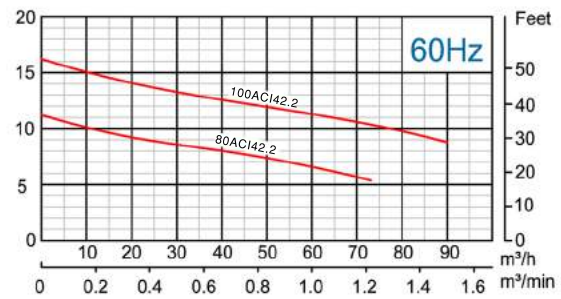
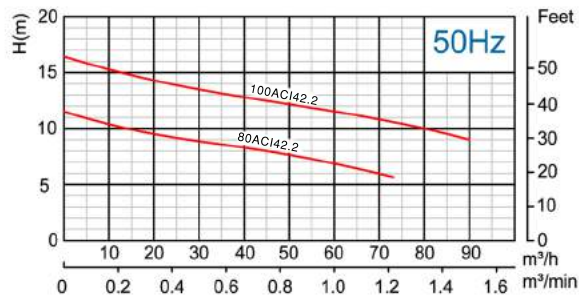
AUTO - COUPLED INSTALLATION (R)



MATERIALS OF CONSTRUCTION

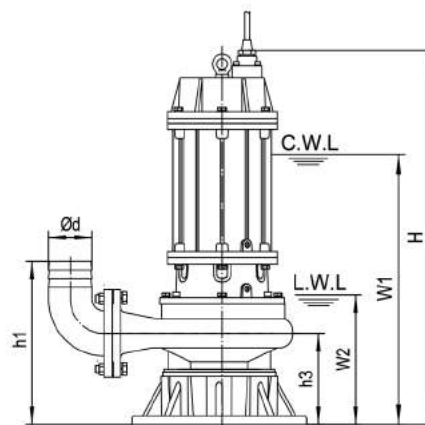
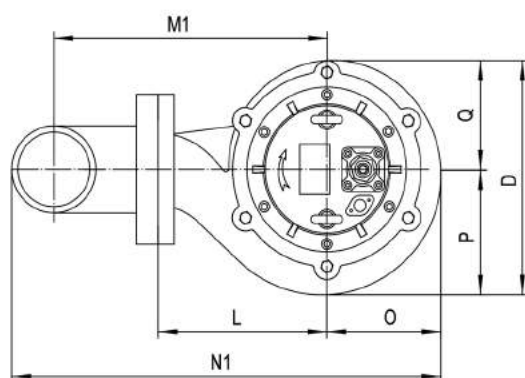
Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
03	Terminal box	Cast iron
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Ductile iron
17	Coupling adapter	Cast iron
22	Seat assembly	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 (Only for pumps ≥ 5.5kW)	

CURVE

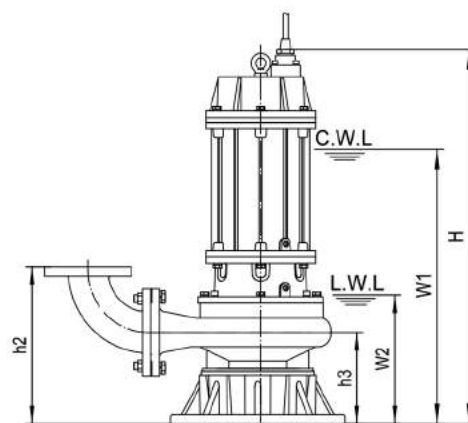
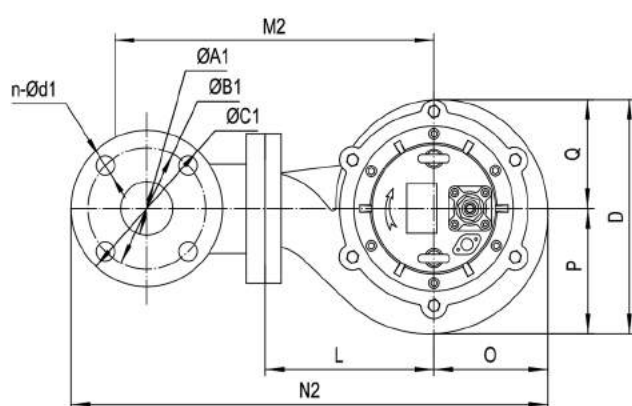


Model	Voltage	Current	Motor power	Outlet	Rated capacity	Rated head	Max capacity	Max Head	Impeller Passage	Cable
50Hz/60Hz	V	A	kW HP	in mm	m³/h	m	m³/h	m	mm	mm²
80ACI42.2	380	5.0	2.2 3	3 80	45	8	73	12	50	4G1.5
100ACI42.2	380	5.0	2.2 3	4 100	60	7	100	12	50	4G1.5
80ACI43.7	380	8.5	3.7 5	3 80	45	13	90	17	50	4G1.5
100ACI43.7	380	8.5	3.7 5	4 100	60	12	130	17	50	4G1.5
100ACI45.5	380	11.7	5.5 7.5	4 100	65	15	150	19	50	4G2.5
150ACI45.5	380	11.7	5.5 7.5	6 150	110	10	200	16	55	4G2.5
100ACI47.5	380	15.7	7.5 10	4 100	100	15	170	24	50	4G4.0
150ACI47.5	380	15.7	7.5 10	6 150	150	10	240	16	75	4G4.0
200ACI47.5	380	15.7	7.5 10	8 200	250	6	400	12	80	4G4.0

MOVABLE SOFT PIPE INSTALLATION



HARD PIPE INSTALLATION (Y)



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

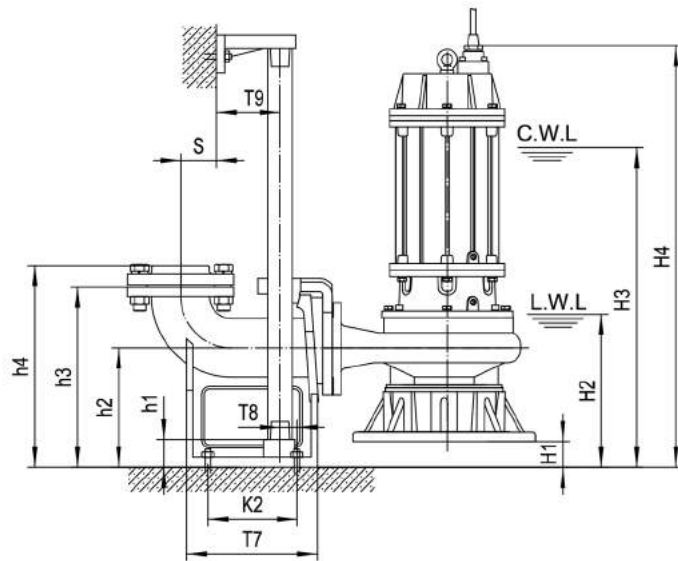
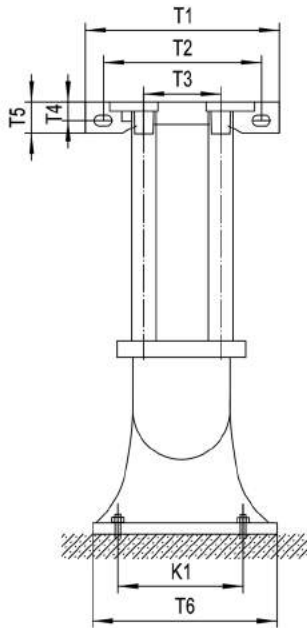
DIMENSIONS TABLE

Model	Ød	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
80ACI42.2	80	80	150	190	4-Ø18	310	305	165	475	232	592	163	176	160	225	336	317	367	518	625
100ACI42.2	100	100	170	210	4-Ø18	335	315	165	475	232	592	163	176	160	225	336	328	378	540	646
80ACI43.7	80	80	150	190	4-Ø18	310	305	165	540	232	657	163	176	160	225	336	317	367	518	625
100ACI43.7	100	100	170	210	4-Ø18	335	315	165	540	232	657	163	176	160	225	336	328	377	540	646
100ACI45.5	100	100	170	210	4-Ø18	358	338	188	585	255	806	185	197	175	280	372	383	433	617	722
150ACI45.5	150	150	225	265	8-Ø18	432	407	207	615	285	838	194	214	175	300	389	454	504	722	832
100ACI47.5	100	100	170	210	4-Ø18	358	338	188	630	255	851	185	197	175	280	372	382	432	616	722
150ACI47.5	150	150	225	265	8-Ø18	432	407	207	660	285	883	194	214	175	300	389	453	504	722	830
200ACI47.5	200	200	295	340	8-Ø22	539	459	229	695	320	917	225	257	192	350	449	553	583	878	978

WEIGHTS & PACKING DIMENSIONS

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
80ACI42.2	78	87	705x375x465	82	91	705x375x465
100ACI42.2	80	89	705x375x465	84	93	705x375x465
80ACI43.7	88	97	765x375x465	92	101	765x375x465
100ACI43.7	90	99	765x375x465	94	103	765x375x465

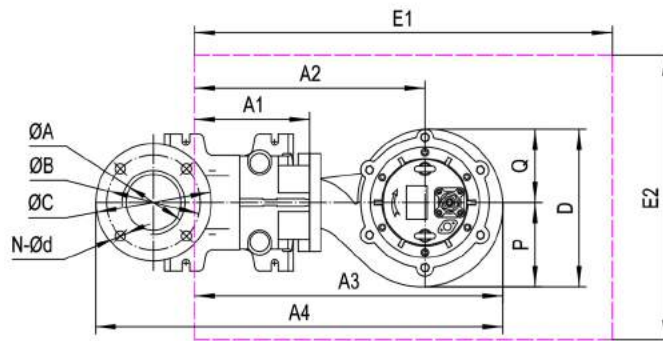
Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
100ACI45.5	143	156	905x415x605	149	162	905x415x605
150ACI45.5	154	167	935x445x635	162	175	935x445x635
100ACI47.5	159	172	955x415x605	165	178	955x415x605
150ACI47.5	172	184	985x445x635	180	192	985x445x635
200ACI47.5	203	218	1010x490x715	211	226	1010x490x715

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 P73 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	36	78	215	155	77	25	190	305	335
100-100(PN6)	Ø100 / G4"	170	210	4-Ø18	365	305	170	32	55	295	260	33	95	265	175	100	25	230	350	381
150-150(PN6)	Ø150	225	280	8-Ø18	400	260	280	24	48	400	410	87	95	280	300	192	390	300	480	—
200-200(PN10)	Ø200	295	330	8-Ø22	400	260	280	24	48	400	445	110	95	300	355	230	440	325	550	—

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
80ACI42.2	80-80(PN6)	25	260	500	617	178	403	566	738	176	160	336	800×600	73	82	705×375×465
100ACI42.2	100-100(PN6)	65	297	540	657	202	427	590	795	176	160	336	800×600	74	83	705×375×465
80ACI43.7	80-80(PN6)	25	260	560	682	178	403	566	738	176	160	336	800×600	83	92	765×375×465
100ACI43.7	100-100(PN6)	65	297	605	722	202	427	590	795	176	160	336	800×600	84	93	765×375×465
100ACI45.5	100-100(PN6)	42	297	627	848	202	482	667	872	197	175	372	900×600	137	150	905×415×605
150ACI45.5	150-150(PN6)	93	378	708	931	287	587	780	1113	214	175	389	1000×600	142	155	935×445×635
100ACI47.5	100-100(PN6)	42	297	672	893	202	482	667	872	197	175	372	900×600	153	166	955×415×605
150ACI47.5	150-150(PN6)	93	378	753	976	287	587	780	1113	214	175	389	1000×600	160	172	985×445×635
200ACI47.5	200-200(PN10)	96	416	791	1013	292	642	867	1262	257	192	449	1050×650	178	193	1010×490×715

11~22kW 4P

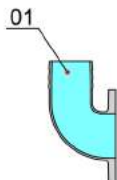
50Hz : 1450rpm

60Hz : 1750rpm

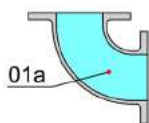
SPECIFICATION

- Insulation class : F
- Protection class : IP68
- Starting method : reduced-voltage starting
- 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
- Capacity : up to 760m³/h
- Head : up to 44m
- Maximum immersion depth : 20m
- Cable Length : 8m

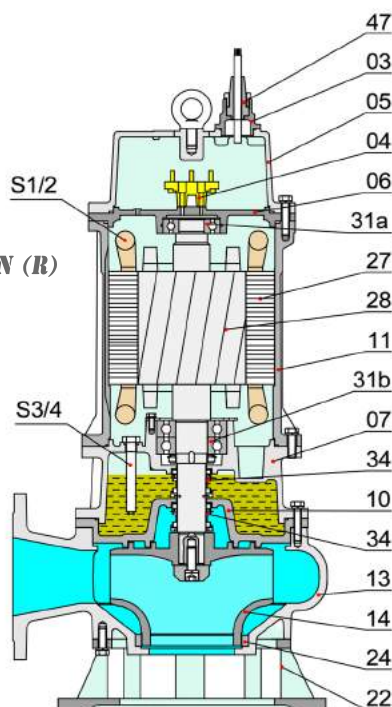
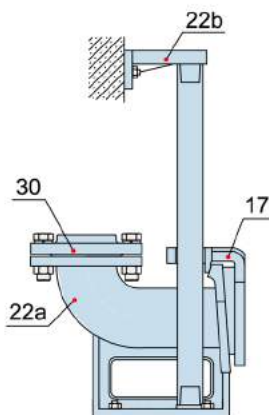
MOVABLE SOFT PIPE INSTALLATION (R)



HARD PIPE INSTALLATION (Y)



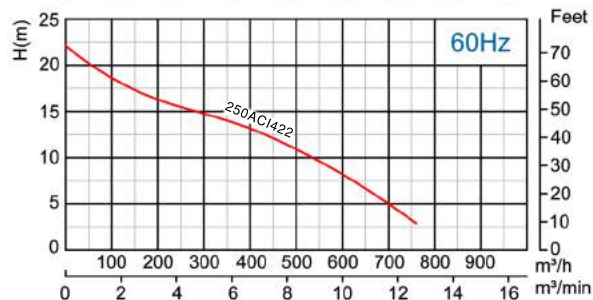
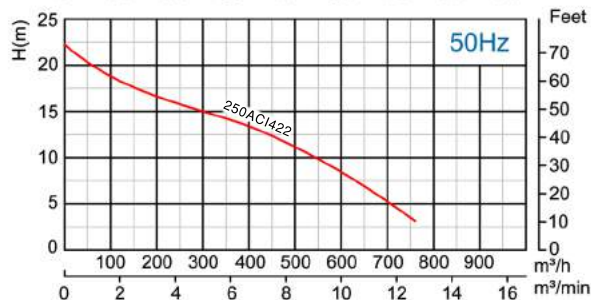
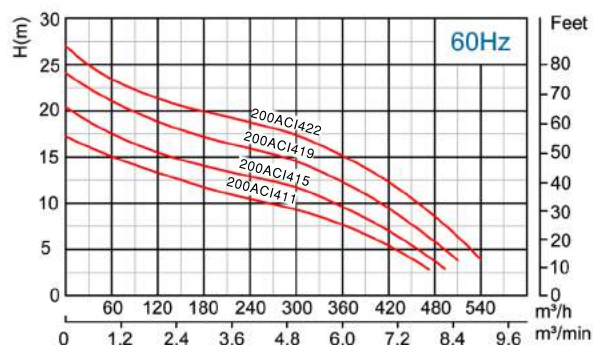
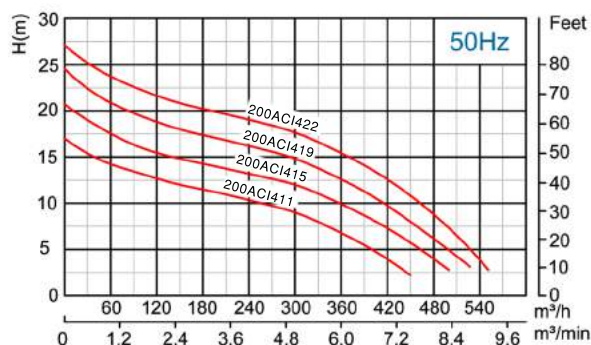
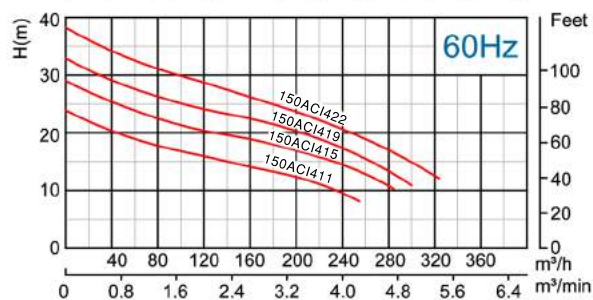
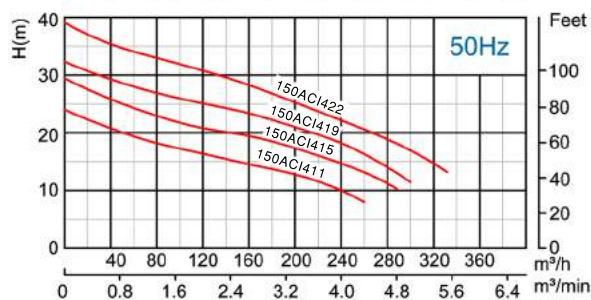
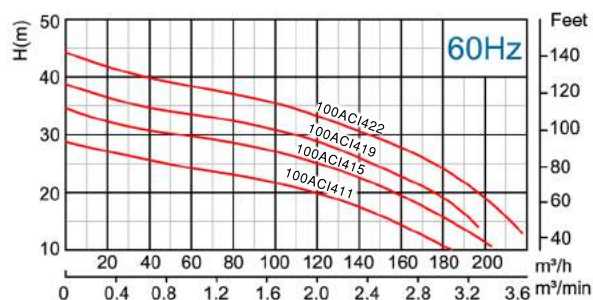
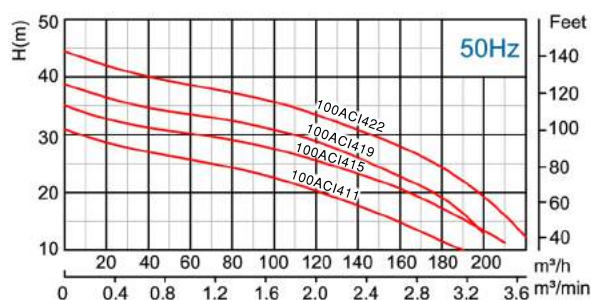
AUTO - COUPLED INSTALLATION (R)



MATERIALS OF CONSTRUCTION

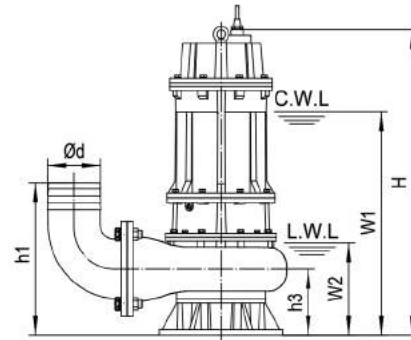
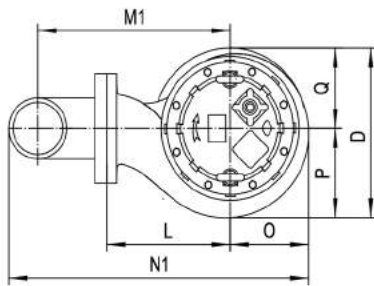
Item No.	Part name	Material
01	Hose coupling	Cast iron
01a	Hose coupling	Cast iron
03	Terminal box	Cast iron
04	Wiring terminal	
05	Upper cover	Cast iron
06	Up-Bearing house	Cast iron
07	Bearing house	Cast iron
10	Seal bracket	Cast iron
11	Motor body	Cast iron
13	Pump body	Cast iron
14	Impeller	Ductile iron
17	Coupling adapter	Cast iron
22	Seat assembly	Cast iron
22a	Coupling seat	Cast iron
22b	Upper guide support	Cast iron
24	Neck ring	High chrome alloy
27	Stator	
28	Rotor	Shaft : AISI420SS
30	Flange	Cast iron
31a	Bearing	Ball bearing
31b	Bearing	Ball bearing
34	Mechanical seal	Sic-Sic
47	Cable	
S1/2	Overheat protector : on option	
S3/4	Oil water leakage probe : on option	

CURVE

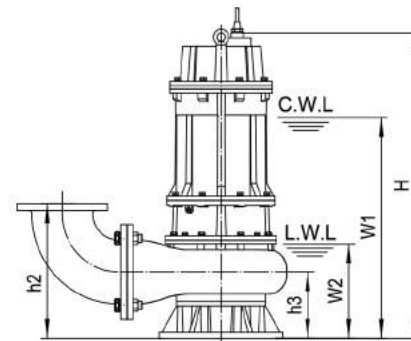
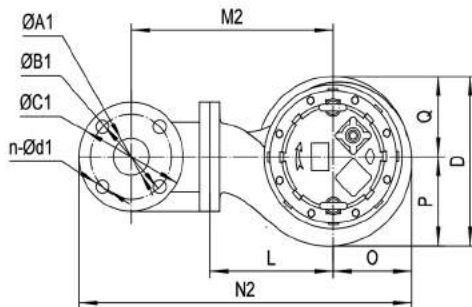


Model 50Hz/60Hz	Voltage V	Current A	Motor power kW HP	Outlet in mm	Rated capacity m³/h	Rated head m	Max capacity m³/h	Max Head m	Impeller Passage mm	Cable mm²
100ACI411	380	22	11 15	4 100	100	22	190	31/28	50	4G4.0
150ACI411	380	22	11 15	6 150	150	15	260	24	65	4G4.0
200ACI411	380	22	11 15	8 200	300	9	450/475	17	70	4G4.0
100ACI415	380	30.1	15 20	4 100	100	27	210	35	50	4G6.0
150ACI415	380	30.1	15 20	6 150	150	20	290	29	65	4G6.0
200ACI415	380	30.1	15 20	8 200	300	12	490	21	70	4G6.0
100ACI419	380	38	19 25	4 100	100	31	200	38	50	4G10.0
150ACI419	380	38	19 25	6 150	150	24	300	32	60	4G10.0
200ACI419	380	38	19 25	8 200	300	15	530	25	70	4G10.0
100ACI422	380	45	22 30	4 100	100	36	220	44	50	4G10.0
150ACI422	380	45	22 30	6 150	150	28	330	39	60	4G10.0
200ACI422	380	45	22 30	8 200	300	18	550	27	70	4G10.0
250ACI422	380	45	22 30	10 250	500	11	760	22	90	4G10.0

MOVABLE SOFT PIPE INSTALLATION



HARD PIPE INSTALLATION (Y)



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

DIMENSIONS TABLE

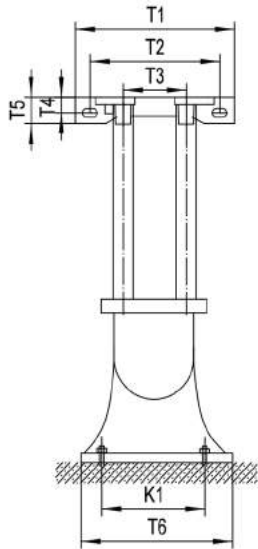
Model	Ød	ØA1	ØB1	ØC1	n-Ød1	h1	h2	h3	W1	W2	H	O	P	Q	L	D	M1	M2	N1	N2
100ACI411	100	100	170	210	4-Ø18	374	354	204	650	255	934	211	217	211	310	428	413	463	673	778
150ACI411	150	150	225	265	8-Ø18	449	424	224	680	285	953	211	225	211	320	436	474	524	759	867
200ACI411	200	200	295	340	8-Ø22	544	464	234	700	325	963	222	251	211	340	462	544	574	866	966
100ACI415	100	100	170	210	4-Ø18	374	354	204	695	255	979	211	217	211	310	428	412	463	673	778
150ACI415	150	150	225	265	8-Ø18	449	424	224	725	285	998	211	225	211	320	436	474	524	759	867
200ACI415	200	200	295	340	8-Ø22	544	464	234	740	325	1008	222	251	211	340	462	544	574	866	966
100ACI419	100	100	170	210	4-Ø18	364	344	194	715	255	1018	218	227	211	325	438	428	478	694	800
150ACI419	150	150	225	265	8-Ø18	439	414	214	740	285	1034	222	236	211	335	447	489	539	785	893
200ACI419	200	200	295	340	8-Ø22	544	464	234	760	325	1051	233	260	211	350	471	553	583	887	987
100ACI422	100	100	170	210	4-Ø18	364	344	194	736	255	1038	218	227	211	325	438	428	478	694	800
150ACI422	150	150	225	265	8-Ø18	439	414	214	760	285	1054	222	236	211	335	447	489	539	785	899
200ACI422	200	200	295	340	8-Ø22	544	464	234	780	325	1071	233	260	211	350	471	553	583	887	987
250ACI422	—	250	350	395	12-Ø22	—	660	277	830	400	1131	279	311	272	400	583	—	788	—	1265

※Standard equipment of 250mm outlet dimension does not include the bend hose coupling

WEIGHTS & PACKING DIMENSIONS

Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
100ACI411	253	271	700×480×1125	259	277	700×480×1125
150ACI411	256	274	700×480×1155	264	282	700×480×1155
200ACI411	280	299	740×510×1195	288	307	740×510×1195
100ACI415	275	293	700×480×1175	281	299	700×480×1175
150ACI415	277	295	700×480×1195	285	303	700×480×1195
200ACI415	302	321	740×510×1245	310	329	740×510×1245
100ACI419	326	345	700×480×1265	332	351	700×480×1265

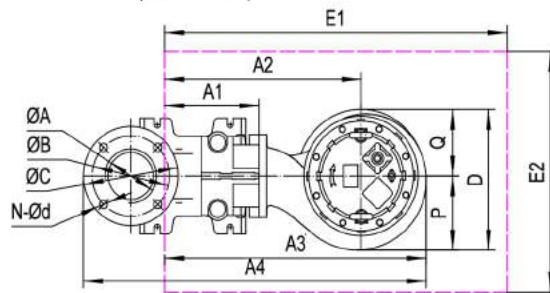
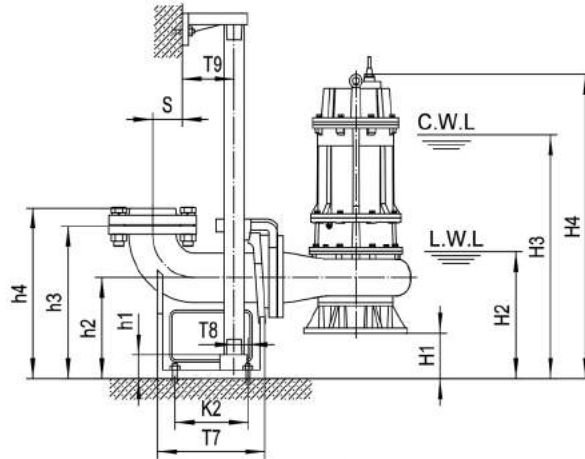
Model	R			Y		
	N.W	G.W	Packing dimension	N.W	G.W	Packing dimension
	kg	kg	mm	kg	kg	mm
150ACI419	327	346	700×480×1265	335	354	700×480×1265
200ACI419	354	373	740×510×1305	362	381	740×510×1305
100ACI422	346	366	700×480×1265	352	372	700×480×1265
150ACI422	347	367	700×480×1265	355	375	700×480×1265
200ACI422	374	394	740×510×1305	382	402	740×510×1305
250ACI422	360	381	740×630×1375	400	421	740×630×1375

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 P73 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
100-100(PN6)	Ø100 / G4"	170	210	4-Ø18	365	305	170	32	55	295	260	33	95	265	175	100	25	230	350	381
150-150(PN6)	Ø150	225	280	8-Ø18	400	260	280	24	48	400	410	87	95	280	300	192	390	300	480	—
200-200(PN10)	Ø200	295	330	8-Ø22	400	260	280	24	48	400	445	110	95	300	355	230	440	325	550	—
250-250(PN10)	Ø250	350	395	12-Ø22	400	260	280	24	48	460	560	94	95	360	430	301	460	315	630	—

※Standard equipment of 150,200,250mm outlet dimension does not include flange.

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
100ACI411	100-100(PN6)	26	281	676	960	202	512	723	928	217	211	428	900×600	247	265	700×480×1125
150ACI411	150-150(PN6)	76	361	756	1029	287	607	817	1150	225	211	436	1050×650	244	262	700×480×1155
200ACI411	200-200(PN10)	91	416	811	1054	293	633	855	1250	251	211	462	1050×650	255	284	740×510×1195
100ACI415	100-100(PN6)	26	281	721	1005	202	512	723	928	217	211	428	900×600	269	287	700×480×1175
150ACI415	150-150(PN6)	76	361	801	1074	287	607	817	1150	225	211	436	1050×650	265	283	720×480×1195
200ACI415	200-200(PN10)	91	416	830	1099	293	633	855	1250	251	211	462	1050×650	277	296	700×510×1245
100ACI419	100-100(PN6)	36	291	751	1054	202	527	745	950	227	211	438	900×600	320	339	700×480×1265
150ACI419	150-150(PN6)	86	371	826	1120	287	622	843	1176	236	211	447	1050×650	315	334	700×480×1265
200ACI419	200-200(PN10)	91	416	846	1142	292	642	876	1271	260	211	471	1050×650	329	348	740×510×1305
100ACI422	100-100(PN6)	36	291	772	1074	202	527	745	950	227	211	438	900×600	340	360	700×480×1265
150ACI422	150-150(PN6)	86	371	846	1140	287	622	843	1176	236	211	447	1050×650	335	355	700×480×1265
200ACI422	200-200(PN10)	91	416	870	1162	292	642	876	1271	260	211	471	1050×650	349	369	740×510×1305
250ACI422	250-250(PN10)	38	440	870	1169	311	711	990	1489	313	272	583	1100×850	360	381	740×630×1375