



# HCP PUMP

We make the reliable pumps

## PROFESSIONAL MANUFACTURERS OF SUBMERSIBLE PUMPS

50Hz GENERAL CATALOGUE

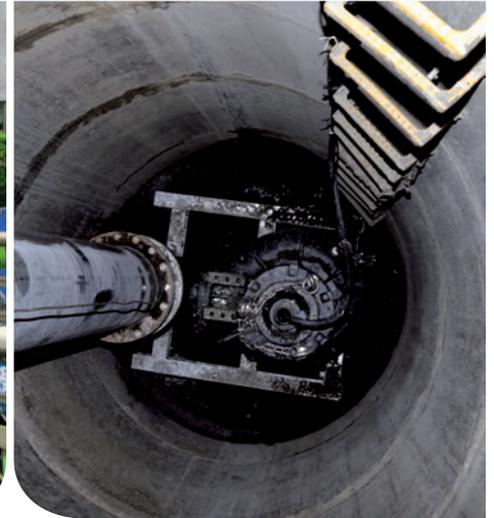
ISO 9001 CE DQS UL TÜV



sewage pump, waste water pump, stainless pump, grinder pump, dewatering pump, construction drainage pump,  
large volume pump, axial pump, ejector, deep well pump.

### HCP PUMP MANUFACTURER.,CO.LTD.

# AF SEWAGE/WASTEWATER SUBMERSIBLE PUMPS



## FEATURE

- International standard design : Epoxy Resin Sealed cable, Auto Cut (MTS: Miniature Thermal Sensor equip to >15HP model), dry-motor, silicon carbide mechanical seal, high grade cast iron offering highest quality and performance.
- P/U/C/E multiple impellers designed to handle sewage solids and/or fibrous substances.
- Double Mechanical Seal: Superior abrasion resistant mechanical seal manufactured with silicon carbide to ensure the best seal effect.
- Mechanical Seal Bracket designed with Oil Elevating Chip to enhance the lubricant, and extend the lifetime of the Mechanical Seal.
- Full range offering low to high head and flow capabilities, with compact and easy installation. Also, available with Guide Rail System, which allows automatic remote connection and disconnection without entering the pit.
- AFC Pump is designed with 6 lobes input, equipped with double tungsten blade; which can strongly cut off the foreign materials and avoid the impeller clog.

## APPLICATIONS

- Drainage of waste water from the attenuation tank, purifying tank and sewage tank in water treatment plant.
- Drainage of waste water containing fibrous additives from leather factory, dyeing factory and food processing factory.
- Sewage management, accumulated water, septic tank, stock farm.
- Pumping sewage from hotels, restaurants, schools and public buildings.
- Sewage management, accumulated water, septic tank, stock farm.

## IMPELLER TYPE

### P Type Impeller

#### Semi-open (Single or Two Vane Impeller):

Excellent to use with waste materials to prevent from clogging.



### C Type Impeller

#### Semi-open:

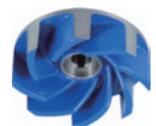
Equipped with Tungsten Blade. Excellent to use with waste materials to prevent from clogging.



### U Type Impeller

#### Semi-open (Vortex Impeller):

Produces a vortex (whirlpool effect) allowing long fibrous materials and other solid waste to pass through, without contact with the impeller

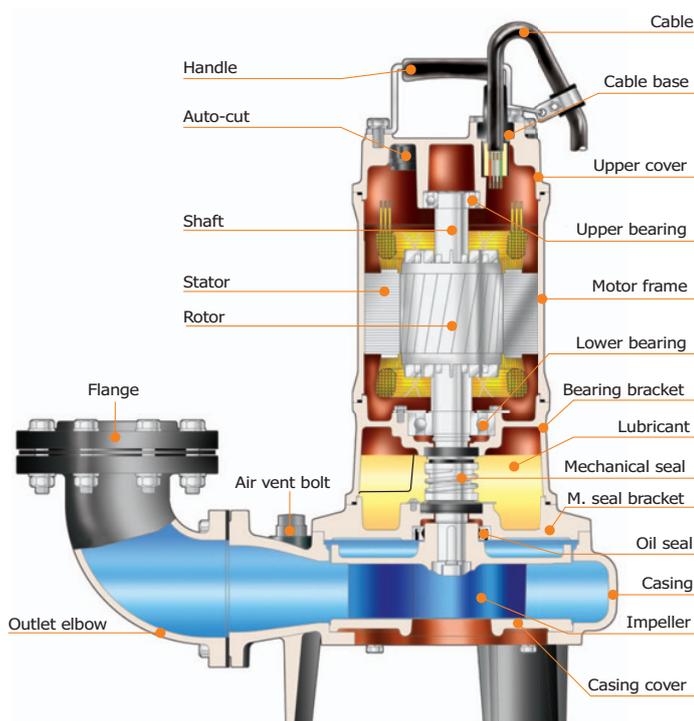


Note: 3Phase U type The vortex impeller will cause higher amperage when Operated in reverse direction.

### E Type Impeller

#### Enclosed Channel impeller :

High impeller efficiency and clog-resistant design, primarily used for large pump applications.





50AFU2.4  
50AFU2.8



50AFU2.4L  
50AFU2.8L



80AFU21.5L  
80AFU22.2L



80AFU23.7A  
80AFU23.7LA

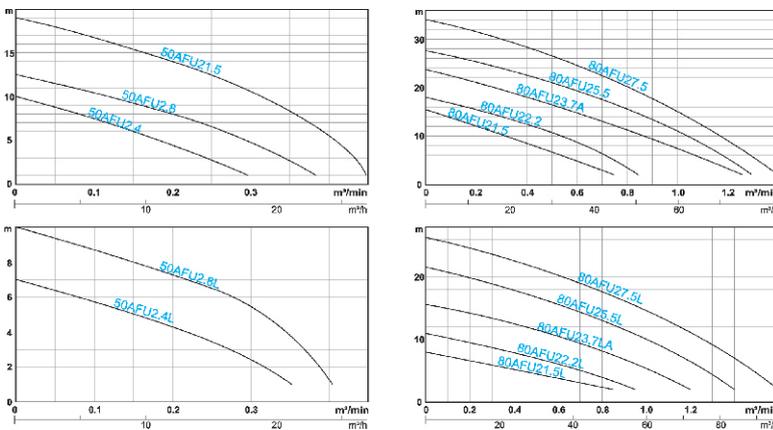


80AFU25.5(L)  
80AFU27.5(L)

### PRODUCT NOMENCLATURE

80	AF	U	4	2.2
Discharge mm	Type	Impeller type (P/U)	Pole	kW

### PERFORMANCE CURVES



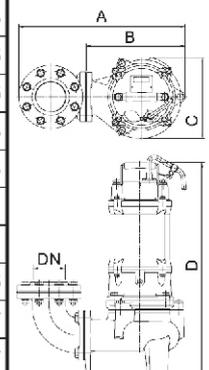
### SPECIFICATIONS

Discharge (mm)		50 • 80 • 100
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Wastewater • Sewage
	Submersion Depth	30m (100feet)
Type	Frequency	50Hz
	Motor	2P (3000RPM) • 4P (1500RPM) • Dry Motor
	Insulation	Class B (0.5~3HP) Class F (5~10HP)
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball Type
	M.seal	Double M.seals
Material	Impeller	Semi-open (P/U) Enclosed-channel (E)
	Upper Cover	FC-200
	Motor Frame	FC-200
	Shaft End	SUS410 (2P:0.5~1HP) SUS403 (2P:2~10HP • 4P:0.5~5HP) SUS420J2 (4P:7.5~10HP)
	M.seal	Upper: Carbon/Ceramic Lower: Silicon/Silicon
	Casing	FC-200
	Impeller	FC-200
Cable	VCT or H07RN-F or SJOW/SOW	
Optional	Pumps can be customized to fit specifications	

### PERFORMANCE SPEC.

Pole	Model	Output HP(kW)	Size DN Inch(mm)	Phase Ø	Start Method	Head (m)	Capacity		Solid Passage mm	Weight (kg)		Dimension (mm)				
							m³/min	m³/h		1Ø	3Ø	A	B	C	D	
2P	50AFU2.4	½ (0.4)	2" (50)	1	Capacitor	6	0.15	9	35	19	18	236	-	155	418	418
	50AFU2.8	1 (0.75)	2" (50)	3	Direct	8	0.2	12	35	20	19	236	-	155	418	418
	50AFU21.5	2 (1.5)	2" (50)	1	Capacitor	14	0.2	12	35	33	29	288	-	202	532	477
	80AFU21.5	2 (1.5)	3" (80)	3	Direct	8.5	0.4	24	50	35	32	397	260	202	574	519
	80AFU22.2	3 (2.2)	3" (80)	1	Capacitor	12.5	0.4	24	50	38	34	397	260	202	601	519
	80AFU23.7A	5 (3.7)	3" (80)	3	Direct	16.5	0.5	30	50	-	46	481	286	222	-	573
	80AFU25.5	7½ (5.5)	3" (80)	3	Direct	19.5	0.6	36	50	-	68	504	309	258	-	665
	80AFU27.5	10 (7.5)	3" (80)	3	Direct	24.5	0.6	36	50	-	74	504	309	258	-	665
	50AFU2.4L	½ (0.4)	2" (50)	1	Capacitor	4	0.22	13.2	50	20	19	306	201	163	448	448
	50AFU2.8L	1 (0.75)	2" (50)	3	Direct	6.5	0.25	15	50	22	21	306	201	163	448	448
	80AFU21.5L	2 (1.5)	3" (80)	1	Capacitor	4.5	0.5	30	76	38	34	402	265	221	626	571
	80AFU22.2L	3 (2.2)	3" (80)	3	Direct	7	0.5	30	76	40	36	402	265	221	653	571
	80AFU23.7LA	5 (3.7)	3" (80)	3	Direct	10.5	0.6	36	76	-	48	481	286	235	-	625
	80AFU25.5L	7½ (5.5)	3" (80)	3	Direct	13	0.8	48	76	-	70	509	314	273	-	717
	80AFU27.5L	10 (7.5)	3" (80)	3	Direct	17.5	0.8	48	76	-	76	509	314	273	-	717

Note: Weight Without Cable & Elbow Set





80AFP/AFC21.5  
80AFP/AFC22.2



50AFU4.4  
50AFU4.8



80AFP23.7A  
80/100AFP25.5/27.5



80AFU41.5  
80AFU42.2  
80AFU43.7



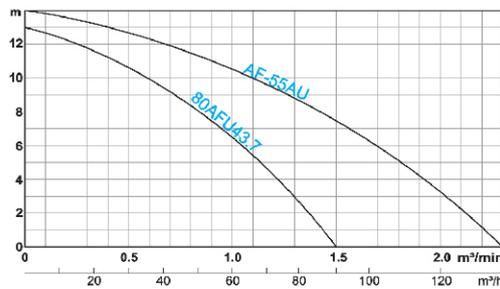
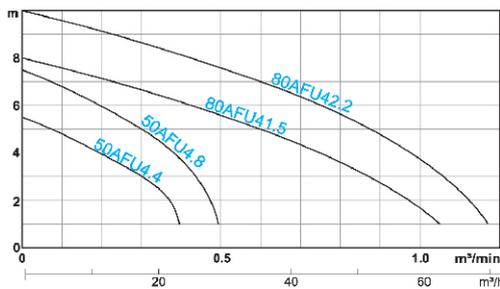
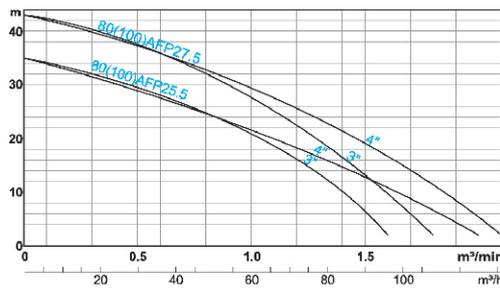
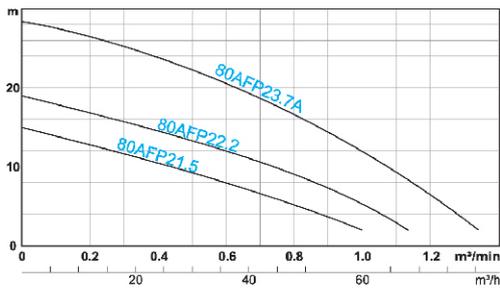
AF-55AU  
AF-55AE

### PRODUCT NOMENCLATURE

AF	-	55	A	U
Type		kW	Style	Impeller type (E/U)

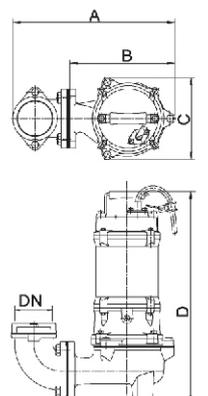
AF	-	6	10
Type		Discharge inch	HP

### PERFORMANCE CURVES



### PERFORMANCE SPEC.

Pole	Model	Output HP(kW)	Size DN Inch(mm)	Phase Ø	Start Method	Head (m)	Capacity		Solid Passage mm	Weight (kg)		Dimension (mm)				
							m³/min	m³/h		1Ø	3Ø	A	B	C	D	
2P	80AFP21.5	2 (1.5)	3" (80)	1	Capacitor	8	0.6	36	35	37	33	413	275	260	576	525
	80AFP22.2	3 (2.2)	3" (80)	1	Capacitor	12	0.6	36	35	40	35	413	275	260	608	525
	80AFP23.7A	5 (3.7)	3" (80)	3	Direct	20.5	0.6	36	32	-	48	500	305	290	-	578
	80(100)AFP25.5	7½ (5.5)	3" (80) 4" (100)	3	Direct	28 21.5	0.6 1.0	36 60	30	-	75	568 596	373	345	-	689
	80(100)AFP27.5	10 (7.5)	3" (80) 4" (100)	3	Direct	36 29.5	0.6 1.0	36 60	30	-	81	568 596	373	345	-	689
4P	50AFU4.4	½ (0.4)	2" (50)	1	Capacitor	3.5	0.25	15	50	30	28	346	241	204	516	516
	50AFU4.8	1 (0.75)	2" (50)	1	Capacitor	5	0.3	18	50	30	29	346	241	204	516	516
	80AFU41.5	2 (1.5)	3" (80)	1	Capacitor	5	0.6	36	76	47	47	443	305	255	700	622
	80AFU42.2	3 (2.2)	3" (80)	3	Direct	7	0.6	36	76	-	57	538	422	289	-	675
	80AFU43.7	5 (3.7)	3" (80)	3	Direct	10	0.6	36	76	-	65	538	422	289	-	695
	AF-55AU	7½ (5.5)	4" (100)	3	Direct	10.5	1.0	60	25	-	115	687	453	405	-	795



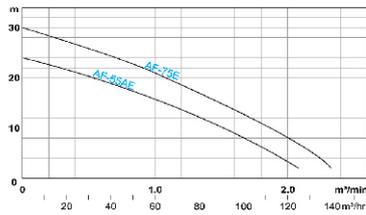
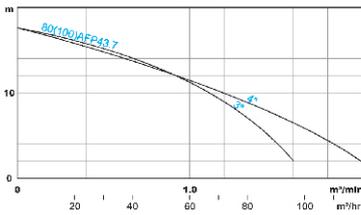
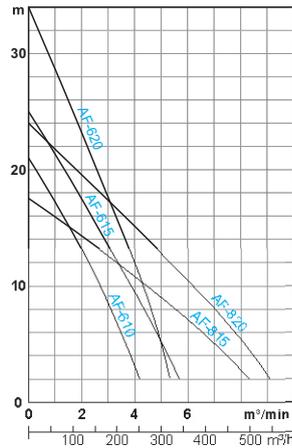
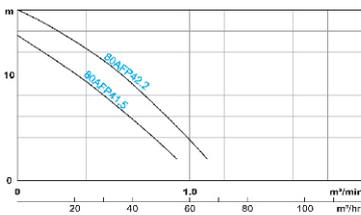
Note: Weight Without Cable & Elbow Set



**PRODUCT NOMENCLATURE**

AF	55	A	E
Type	kW	Style	impeller type
AF	6	10	
Type	Discharge inch	HP	

**PERFORMANCE CURVES**



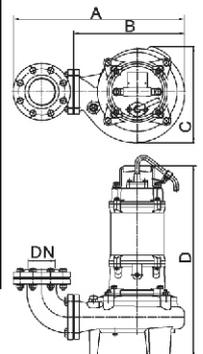
**SPECIFICATIONS**

<b>Discharge (mm)</b>		<b>150 • 200</b>
<b>Limits Of Use</b>	Liquid Temp.	0~40°C (32~104°F)
	Applications	Wastewater • Sewage
	Submersion Depth	30m (100feet)
<b>Type</b>	Frequency	50Hz
	Motor	4P: 1500RPM • Dry Motor
	Insulation	Class F(10~20HP)
	Protection	IP68
	Protector	Auto-cut(10HP) • MTS / MS(15~20HP)
	Bearing	Ball Type
<b>Material</b>	M.seal	Double M.seals
	Impeller	Enclosed-channel (E)
	Upper Cover	FC-200
	Motor Frame	FC-200
	Shaft End	SUS420J2 (4P:10~20HP)
	M.seal	Upper: Carbon/Ceramic Lower: Silicon/Silicon
	Casing	FC-200
	Impeller	FC-200
Cable	VCT or H07RN-F or SOW	
Optional	Pumps can be customized to fit specifications	

**PERFORMANCE SPEC.**

Pole	Model	Output HP(kW)	Size DN Inch(mm)	Phase Ø	Start Method	Head (m)	Capacity		Solid Passage (mm)	Weight (kg)		Dimension (mm)				
							m³/min	m³/h		1Ø	3Ø	A	B	C	D	
4P	80AFP41.5	2 (1.5)	3" (80)	1	Capacitor	8	0.5	30	50	47	47	472	334	290	645	567
	80AFP42.2	3 (2.2)	3" (80)		3											
	80(100)AFP43.7	5 (3.7)	3" (80)	3	Direct	14.5	0.6	36	50	-	67	553	437	313	-	643
			4" (100)			11.5	1.0	60				571				
	AF-55AE	7½ (5.5)	4" (100)	3	Direct	16	1.0	60	40	-	124	687	453	405	-	795
AF-75E	10 (7.5)	4" (100)	3	Direct	18	1.0	60	40	-	138	687	453	405	-	816	

Note: Weight Without Cable & Elbow Set



Pole	Model	Output HP(kW)	Size DN Inch(mm)	Phase Ø	Start Method	Head (m)	Capacity		Solid Passage (mm)	Weight (kg)		Dimension (mm)				
							m³/min	m³/h		1Ø	3Ø	A	B	C	D	
4P	AF-610	10 (7.5)	6" (150)	3	Direct	11	2.5	150	70	-	183	888	559	449	-	870
	AF-615	15 (11)	6" (150)	3	Y-Δ	15.5	2.5	150	70	-	224	895	566	477	-	988
	AF-620	20 (15)	6" (150)	3	Y-Δ	20.5	2.5	150	76	-	153	806	536	455	-	938
	AF-815	15 (11)	8" (200)	3	Y-Δ	10	4.5	270	75	-	225	1045	661	501	-	994
	AF-820	20 (15)	8" (200)	3	Y-Δ	14	4.5	270	75	-	193	1045	661	501	-	994

Note: Weight Without Cable & Elbow Set

