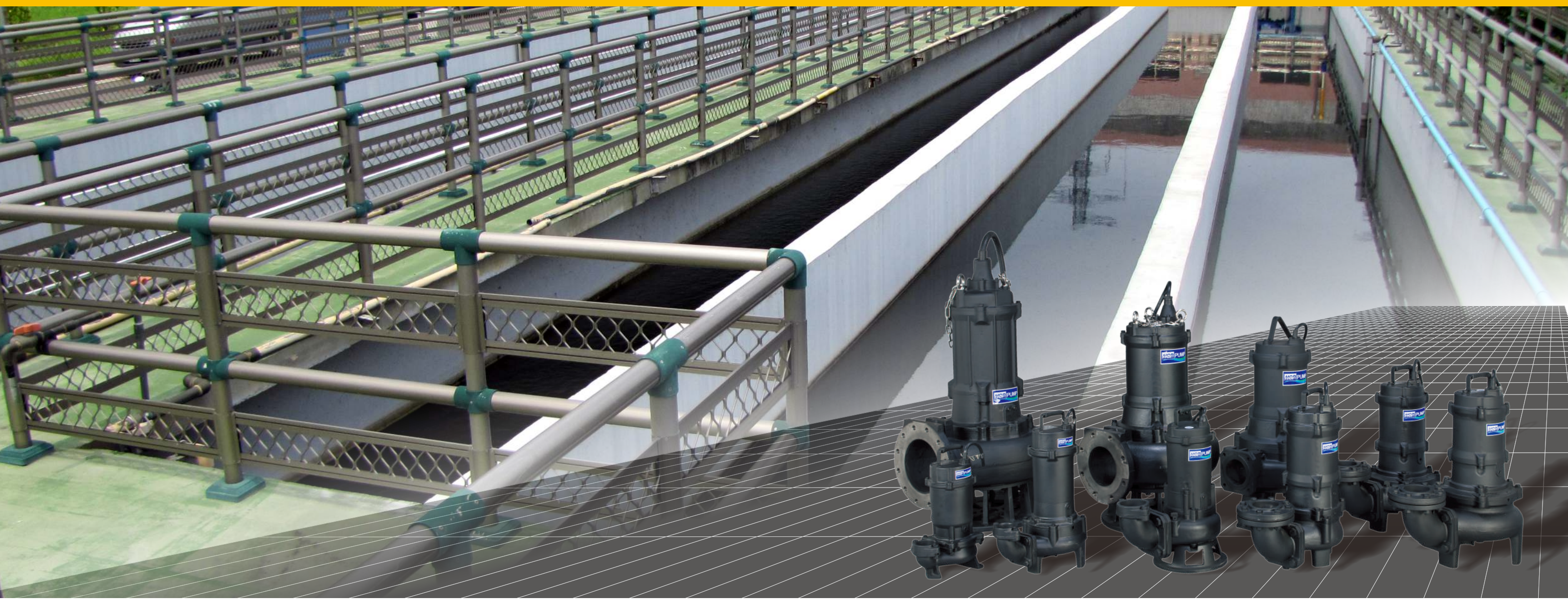


Wherever there is water,  
there is HCP PUMP.



50Hz

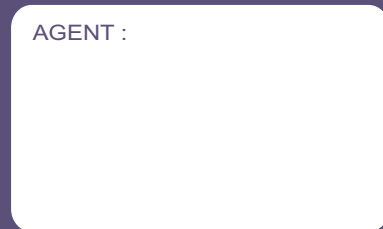
Innovation • Professionalism • Service



# We reserve the right to alter specifications of product at any time without giving prior notice.

 Innovation • Professionalism • Service  
HCP PUMP MANUFACTURER CO., LTD.

AGENT :



DAFENS-1110A

**AF SERIES**  
SEWAGE/WASTEWATER SUBMERSIBLE PUMPS



# AF SERIES SEWAGE/WASTEWATER SUBMERSIBLE PUMPS

## ■ EPOXY CABLE BASE

Epoxy resin seal cable base to prevent moisture intrude into motor through the core wires.



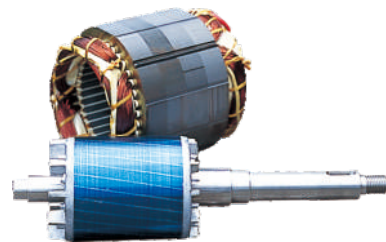
## ■ AUTO-CUT PROTECTOR

The Auto-cut protector is an automatic cut-off switch installed inside the motor. The switch automatically cuts off power to the motor in the event of a power surge or overheating. The switch automatically restarts the motor once the temperature drops to about 60~70°C.



## ■ ELECTRIC MOTOR

High efficiency dry motor design to minimize operation energy costs. 8 hours of stator winding impregnated with varnish and heat dried in industrial oven to attained highest insulation class..



## ■ HIGH QUALITY MECHANICAL SEAL

Dual mechanical seals with single spring coiled in oil chamber design for more flexibility to accommodate misalignment, shaft deflection, and break away shock loading.



## ■ IMPELLER

Multiple impeller designs for to suit different application requirements.



P Type Impeller  
Semi-open  
Single Vane Impeller



P Type Impeller  
Semi-open  
Two Vane Impeller



U Type Impeller  
Semi-open  
Vortex Impeller



E Type Impeller  
Enclosed-channel  
Impeller



## ■ FEATURE

1. International standard design: cable, Auto-cut, dry motor, silicon carbide mechanical seal, high grade cast iron offering highest quality and performance.
2. P/U/E multiple impeller designs to handle sewage applications solids and/or fibrous substances.
3. Full range offering low to high head and flow capabilities, with compact and ease installation.
4. Epoxy surface coating for long last pump protection.

## ■ APPLICATIONS

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

## ■ GRS (GUIDE RAIL SYSTEM)

Auto coupling system for pump submerged installation. GRS will provide easier and safer when coming to pump maintain and repair. GRS elbow is required to fixed probably in sump. Pump cab be low down by stainless steel chain to connection with GRS elbow.

## ■ GRS ACCESSORIES

1. GRS Elbow
2. GRS Bracket
3. GRS Adapter
4. SUS304 Chain 4m
5. Packing / Bolts



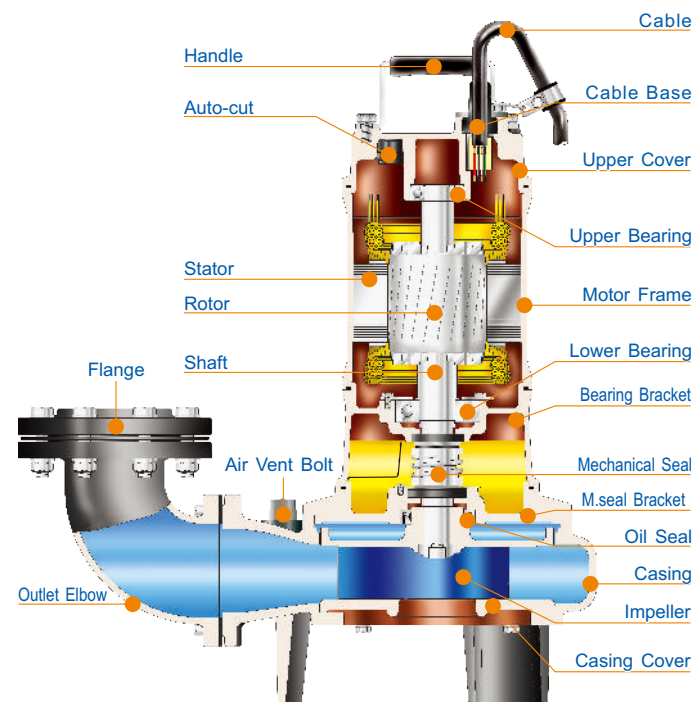


# AF SERIES SEWAGE/WASTEWATER SUBMERSIBLE PUMPS

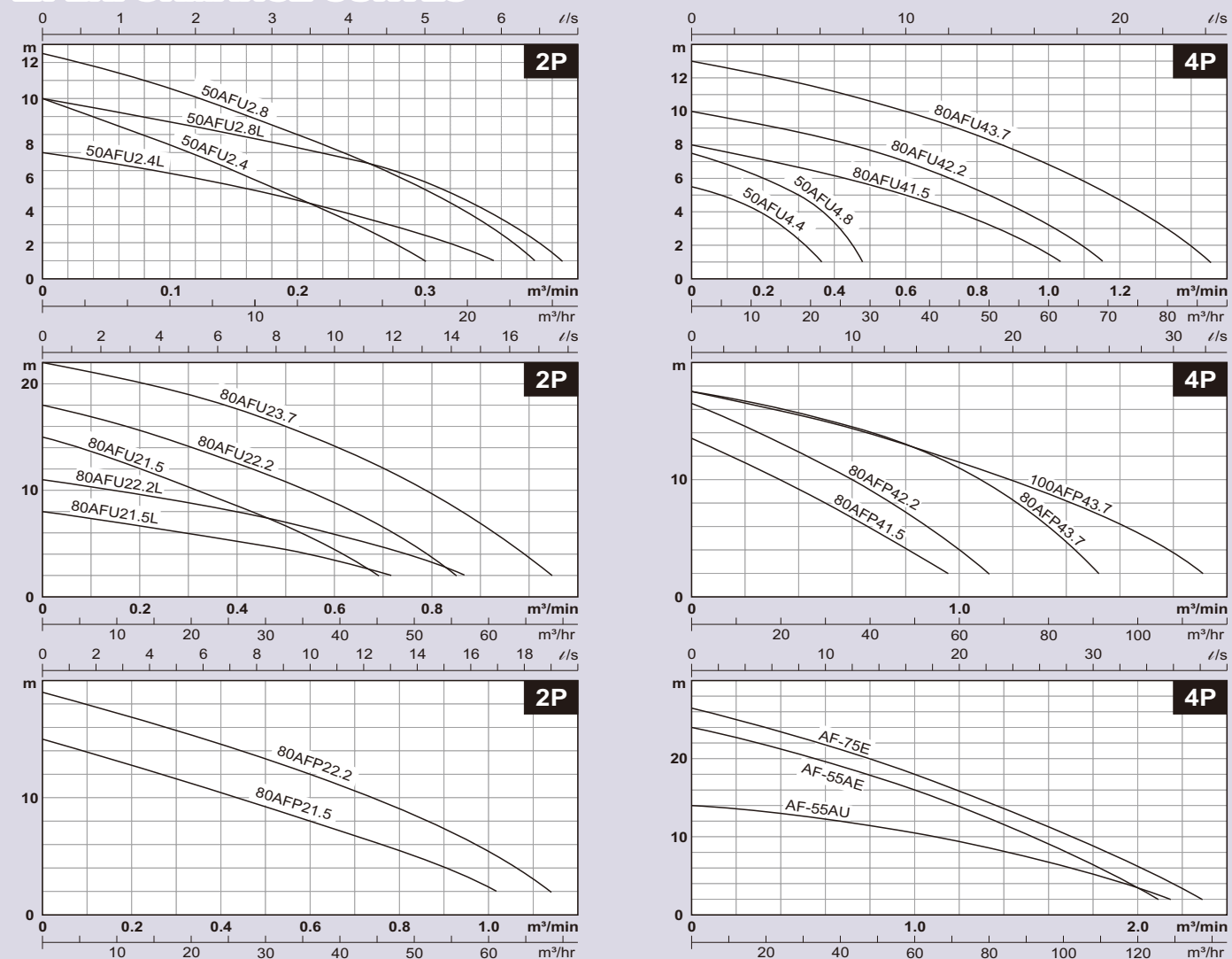
## ■ SPECIFICATIONS (Discharge 50~100mm)

Item		Description
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Municipal industrial wastewater
	Submersion Depth	30m (100feet)
Type	Frequency	50Hz
	Motor	2P ~ 4P • Dry Motor
	Insulation	Class F (½~3HP : Class B)
	Protection	IP68
	Protector	Auto-cut
	Bearing	Ball Type
	M.seal	Double M.seals
Material	Upper Cover	FC-200
	Motor Frame	FC-200
	Main Shaft	2P SUS410 (2~5HP : SUS403)
	Shaft	4P SUS420J2 (½~1HP : SUS403)
	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

## ■ SECTIONAL DRAWING



## ■ PERFORMANCE CURVES



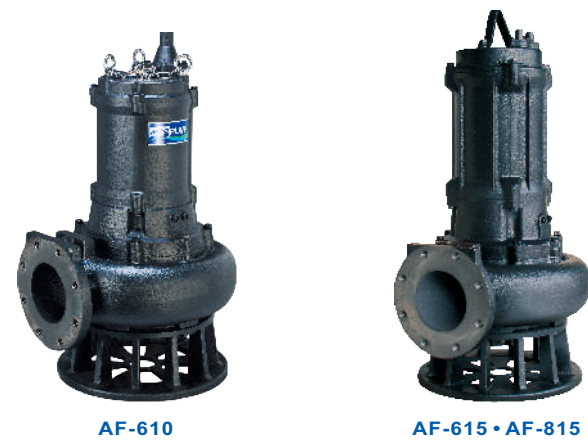
## ■ PERFORMANCE SPEC.

Model	Power HP(kW)	Discharge inch(mm)	Motor			Standard		MAX		Weight(W/O Cable)		Solid Passage mm(inch)	Dimensions mm(inch)			
			Pole	Phase	Start Method	m-m³/min	m-m³/h	m-m³/min	m-m³/h	1Ø kg(lb)	3Ø kg(lb)		Width	Length	Height 1Ø 3Ø	
50AFU2.4	½ (0.4)	2" (50)	2	1/3	Capacity Direct	6 - 0.15	6 - 9	10 - 0.32	10 - 19.2	19 (42)	18 (40)	35 (1½)	236(9¼)	155(6)	418(16½)	418(16½)
50AFU2.4L	½ (0.4)	2" (50)	2	1/3	Capacity Direct	4 - 0.22	4 - 13.2	7 - 0.38	7 - 22.8	20 (44)	19 (42)	50 (2)	306(12)	163(6½)	448(17¾)	448(17¾)
50AFU2.8	1 (0.75)	2" (50)	2	1/3	Capacity Direct	8 - 0.2	8 - 12	12.5 - 0.4	12.5 - 24	20 (44)	19 (42)	35 (1½)	236(9¼)	155(6)	418(16½)	418(16½)
50AFU2.8L	1 (0.75)	2" (50)	2	1/3	Capacity Direct	6.5 - 0.25	6.5 - 15	10 - 0.42	10 - 25.2	22 (49)	21 (46)	50 (2)	306(12)	163(6½)	448(17¾)	448(17¾)
80AFU21.5	2 (1.5)	3" (80)	2	1/3	Capacity Direct	8.5 - 0.4	8.5 - 24	15 - 0.75	15 - 45	40 (88)	36 (79)	50 (2)	379(15)	202(8)	575(22¾)	524(20¾)
80AFU21.5L	2 (1.5)	3" (80)	2	1/3	Capacity Direct	4.5 - 0.5	4.5 - 30	8 - 0.85	8 - 51	43 (95)	39 (86)	76 (3)	443(17½)	255(10)	700(24¼)	622(22¼)
80AFU22.2	3 (2.2)	3" (80)	2	1/3	Capacity Direct	12.5 - 0.4	12.5 - 24	18 - 0.9	18 - 54	42 (93)	38 (84)	50 (2)	379(15)	202(8)	607(24)	524(20¾)
80AFU22.2L	3 (2.2)	3" (80)	2	1/3	Capacity Direct	7 - 0.5	7 - 30	11 - 0.95	11 - 57	45 (99)	41 (90)	76 (3)	538(21¼)	289(11½)	695(27¼)	695(27¼)
80AFU23.7	5 (3.7)	3" (80)	2	3	Direct	16 - 0.5	16 - 30	22 - 1.2	22 - 72	56 (124)	56 (2¼)	478(18¾)	220(8¾)	588(23¼)		
80AFP21.5	2 (1.5)	3" (80)	2	1/3	Capacity Direct	8 - 0.6	8 - 36	15 - 1.1	15 - 66	42 (93)	38 (84)	35 (1½)	413(16¼)	260(10¼)	576(22¾)	525(20¾)
80AFP22.2	3 (2.2)	3" (80)	2	1/3	Capacity Direct	12 - 0.6	12 - 36	19 - 1.2	19 - 72	45 (99)	40 (88)	35 (1½)	413(16¼)	260(10¼)	608(24)	525(20¾)
50AFU4.4	½ (0.4)	2" (50)	4	1/3	Capacity Direct	3.5 - 0.25	3.5 - 15	5.5 - 0.4	5.5 - 24	30 (66)	28 (62)	50 (2)	346(13½)	204(8)	516(20¼)	516(20¼)
50AFU4.8	1 (0.75)	2" (50)	4	1/3	Capacity Direct	5 - 0.3	5 - 18	7.5 - 0.5	7.5 - 30	31 (68)	29 (64)	50 (2)	346(13½)	204(8)	516(20¼)	516(20¼)
80AFU41.5	2 (1.5)	3" (80)	4	1/3	Capacity Direct	5 - 0.6	5 - 36	8 - 1.1	8 - 66	52 (115)	52 (115)	76 (3)	443(17½)	255(10)	700(27¼)	622(24¼)
80AFU42.2	3 (2.2)	3" (80)	4	3	Direct	7 - 0.6	7 - 36	10 - 1.2	10 - 72	70 (154)	76 (3)	538(21¼)	289(11½)	675(26½)		
80AFU43.7	5 (3.7)	3" (80)	4	3	Direct	10 - 0.6	10 - 36	13 - 1.5	13 - 90	75 (165)	76 (3)	538(21¼)	289(11½)	695(27¼)		
80AFP41.5	2 (1.5)	3" (80)	4	1/3	Capacity Direct	8 - 0.5	8 - 30	13.5 - 1.1	13.5 - 66	51 (113)	52 (115)	50 (2)	472(18½)	290(11½)	645(25½)	567(22¼)
80AFP42.2	3 (2.2)	3" (80)	4	3	Direct	10 - 0.6	10 - 36	16.5 - 1.2	16.5 - 72	70 (154)	50 (2)	553(21¾)	313(12¼)	623(24½)		
80AFP43.7	5 (3.7)	3" (80)	4	3	Direct	14.5 - 0.6	14.5 - 36	17.5 - 1.6	17.5 - 96	79 (174)	50 (2)	553(21¾)	313(12¼)	643(25¼)		
100AFP43.7	5 (3.7)	4" (100)	4	3	Direct	11.5 - 1.0	11.5 - 60	17.5 - 2	17.5 - 120	82(181)	50 (2)	571(22¾)	313(12¼)	643(25¼)		
AF-55AU	7½ (5.5)	4" (100)	4	3	Direct	10.5 - 1.0	10.5 - 60	14 - 2.3	14 - 138	131 (289)	25 (1)	687(27)	405(16)	795(31¼)		
AF-55AE	7½ (5.5)	4" (100)	4	3	Direct	16 - 1.0	16 - 60	24 - 2.2	24 - 132	139 (307)	40 (1½)	687(27)	405(16)	795(31¼)		
AF-75E	10 (7.5)	4" (100)	4	3	Direct	18 - 1.0	18 - 60	28.5 - 2.4	28.5 - 144	153 (337)	40 (1½)	687(27)	405(16)	816(32¼)		

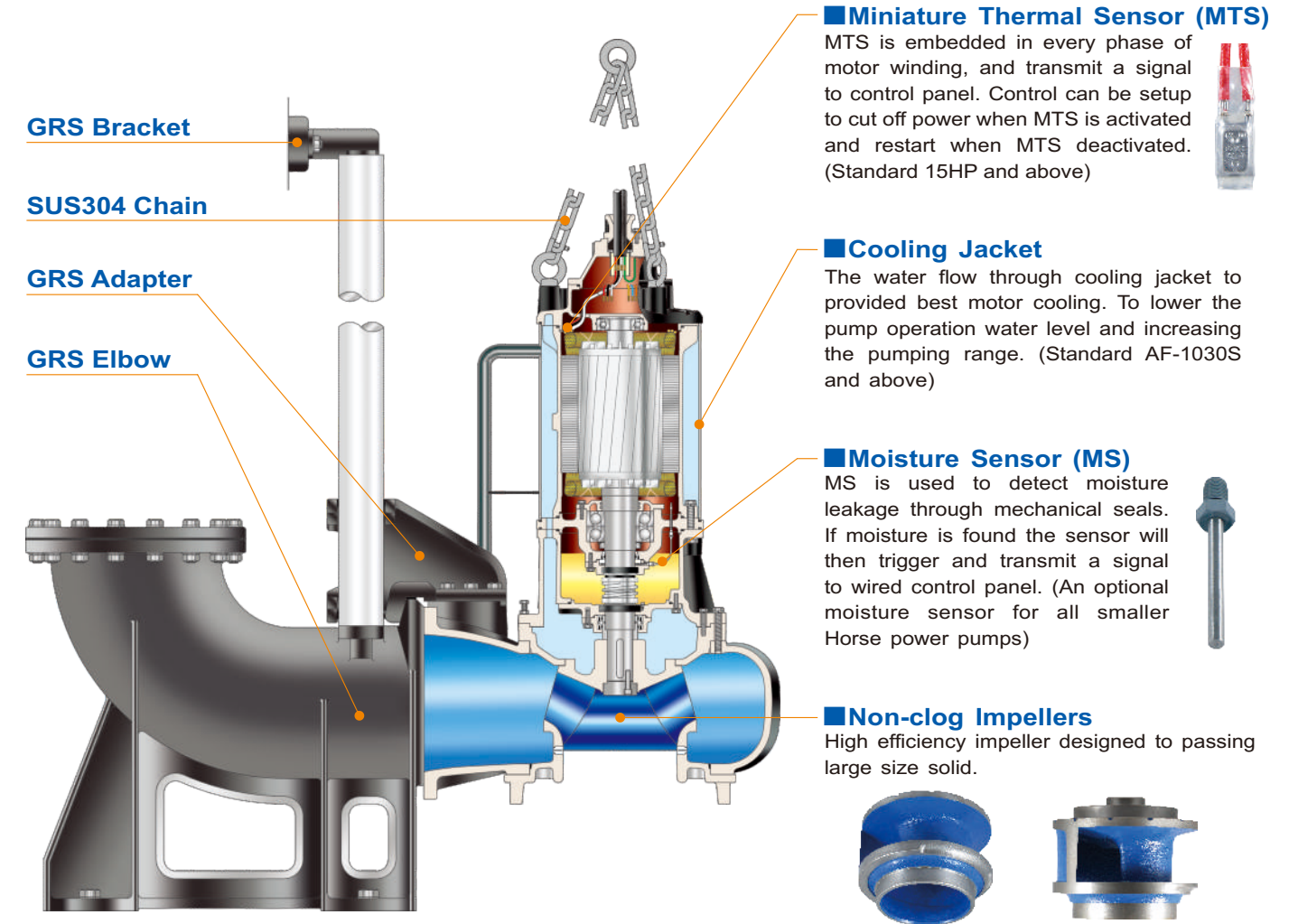
# AF SERIES SEWAGE/WASTEWATER SUBMERSIBLE PUMPS

## ■ SPECIFICATIONS (Discharge 150~400mm)

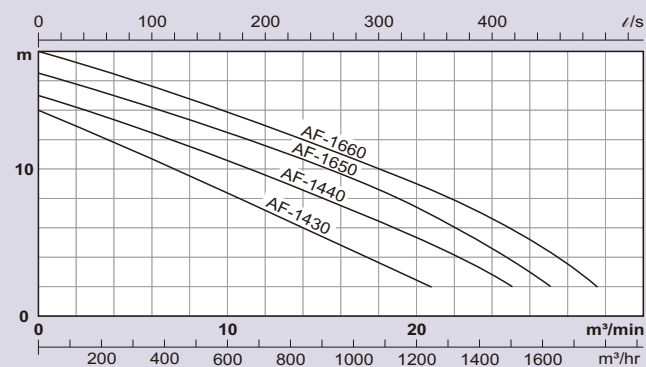
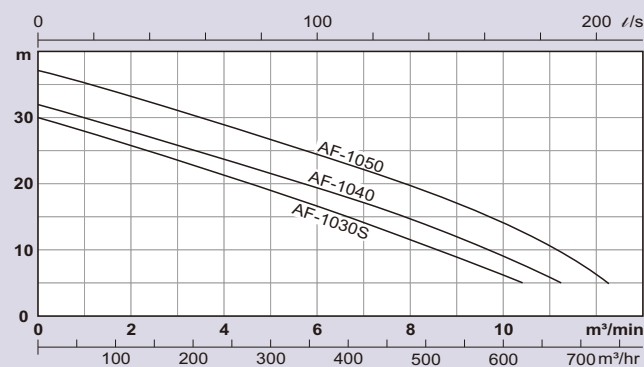
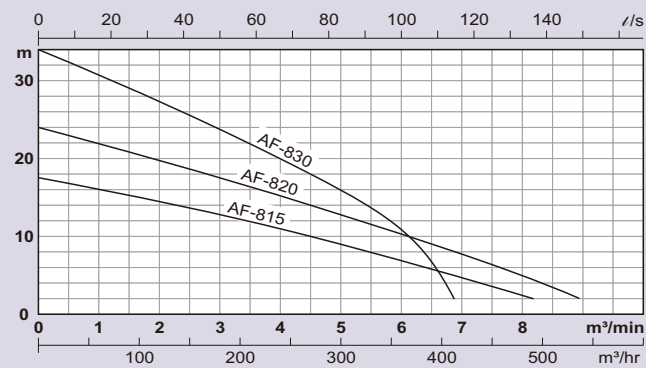
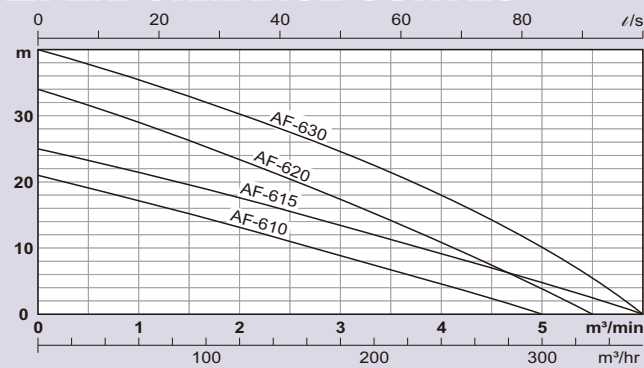
Item		Description
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Municipal industrial wastewater
	Submersion Depth	30m (100feet)
Type	Frequency	50Hz
	Motor	4P ~ 6P Dry Motor
	Insulation	Class F
	Protection	IP68
	Protector	MTS - Miniature Thermal Sensor (AF-610 : Auto-cut) MS - Moisture Sensor (AF-610 • 620 • 630 • 830 : Optional)
	Bearing	Ball Type
	M.seal	Double M.seals
Material	Upper Cover	FC-200
	Motor Frame	FC-200
	Main Shaft	SUS420J2
	M.seal	Upper : Carbon/Ceramic Lower : Silicon/Silicon
	Casing	FC-200
	Impeller	FC-200
	Wear Ring	Stainless Steel
	Cable	PNCT (10HP : VCT/SOW 10~30HP: H07RN-F)
	Optional	Pumps can be customized to fit specifications



## ■ SECTIONAL DRAWING



## ■ PERFORMANCE CURVES



## ■ PERFORMANCE SPEC.

Model	Power HP(kW)	Discharge inch(mm)	Motor			Standard		MAX		Weight (W/O Cable) kg(lb)	Solid Passage mm(inch)	Dimensions mm(inch)		
			Pole	Phase Ø	Start Method	m-m³/min	m-m³/h	m-m³/min	m-m³/h			Width	Length	Height
AF-610	10 (7.5)	6" (150)	4	3	Direct	11 - 2.5	11 - 150	21 - 5	21 - 300	221 (487)	70 (2¾)	888 (35)	449 (17¾)	870 (34¾)
AF-615	15 (11)	6" (150)	4	3	Y - Δ	15.5 - 2.5	15.5 - 150	25 - 6	25 - 360	260 (573)	70 (2¾)	895 (35¼)	477 (18¾)	988 (39)
AF-620	20 (15)	6" (150)	4	3	Y - Δ	20.5 - 2.5	20.5 - 150	34 - 5.5	34 - 330	183 (403)	76 (3)	806 (31¾)	455 (18)	938 (37)
AF-630	30 (22)	6" (150)	4	3	Y - Δ	27.5 - 2.5	27.5 - 150	40 - 6	40 - 360	232 (510)	76 (3)	850 (33½)	497 (19½)	1021 (40¼)
AF-815	15 (11)	8" (200)	4	3	Y - Δ	10 - 4.5	10 - 270	17.5 - 9	17.5 - 570	270 (595)	75 (2¾)	1045 (41¼)	501 (19¾)	994 (39¾)
AF-820	20 (15)	8" (200)	4	3	Y - Δ	14 - 4.5	14 - 270	24 - 9.5	24 - 570	281 (620)	75 (2¾)	1045 (41¼)	501 (19¾)	994 (39¾)
AF-830	30 (22)	8" (200)	4	3	Y - Δ	18 - 4.5	18 - 270	34 - 7	34 - 420	310 (680)	76 (3)	896 (35¼)	479 (18¾)	998 (39¾)
AF-1030S	30 (22)	10" (250)	4	3	Y - Δ	14 - 7	14 - 420	30 - 12	30 - 720	745 (1640)	60 (2¼)	1273 (50)	676 (26½)	1621 (63¾)
AF-1040	40 (30)	10" (250)	4	3	Y - Δ	17 - 7	17 - 420	32 - 12.5	32 - 750	765 (1690)	60 (2¼)	1273 (50)	676 (26½)	1621 (63¾)
AF-1050	50 (37)	10" (250)	4	3	Y - Δ	22 - 7	22 - 420	37 - 13	37 - 780	770 (1700)	60 (2¼)	1273 (50)	676 (26½)	1621 (63¾)
AF-1430	30 (22)	14" (350)	6	3	Y - Δ	6 - 14	6 - 840	14 - 24	14 - 1440	950 (2095)	120 (4¾)	1564 (61½)	813 (32)	1764 (69½)
AF-1440	40 (30)	14" (350)	6	3	Y - Δ	8.5 - 14	8.5 - 840	15 - 27	15 - 1620	955 (2105)	120 (4¾)	1564 (61½)	813 (32)	1764 (69½)
AF-1650	50 (37)	16" (400)	6	3	Y - Δ	7.5 - 20	7.5 - 1200	16.5 - 29	16.5 - 1740	965 (2125)	120 (4¾)	1564 (61½)	813 (32)	1764 (69½)
AF-1660	60 (45)	16" (400)	6	3	Y - Δ	9 - 20	9 - 1200	18 - 31	18 - 1860	970 (2140)	120 (4¾)	1564 (61½)	813 (32)	1764 (69½)