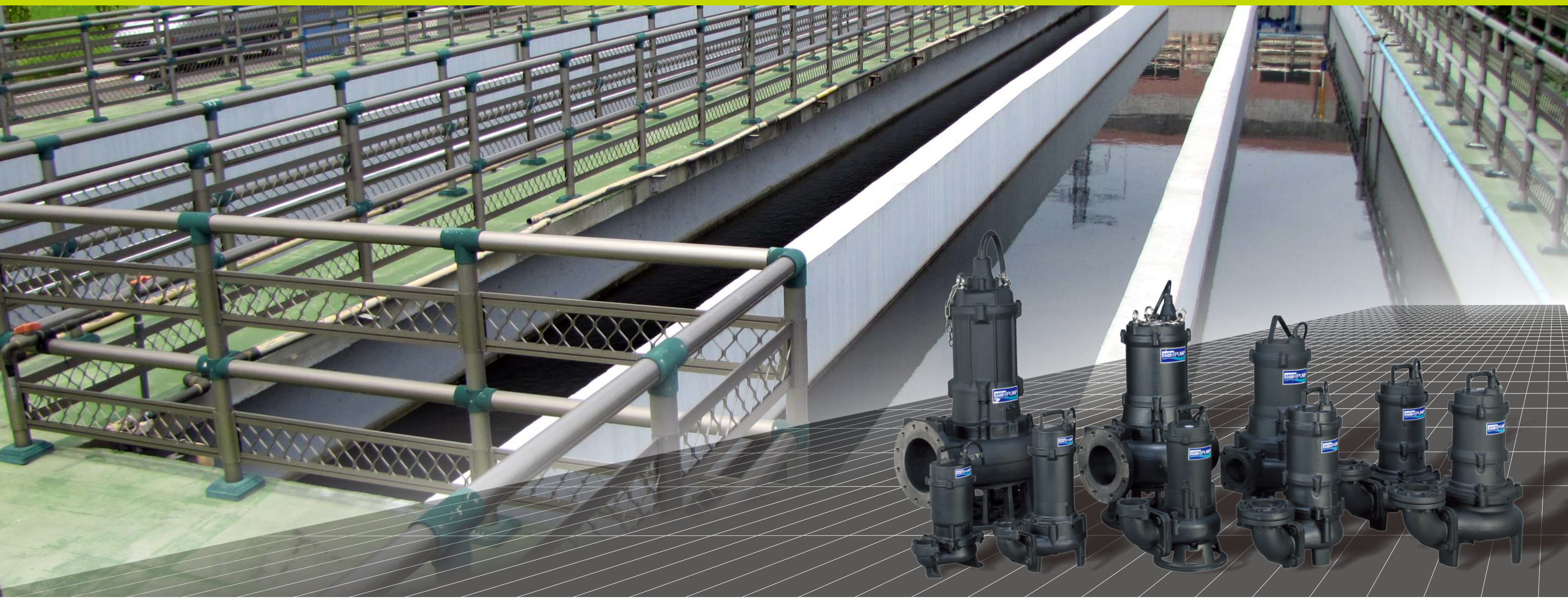


Wherever there is water,
there is HCP PUMP.



60Hz

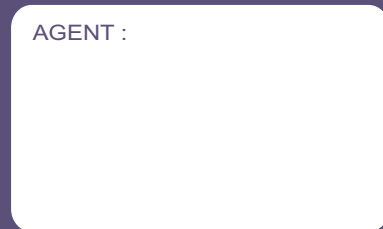
Innovation • Professionalism • Service



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 :



DAFEN6-1110A

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.



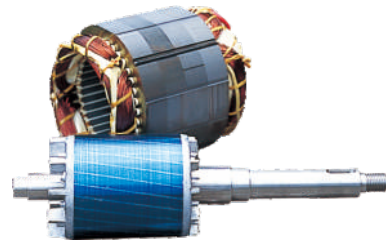
■ AUTO-CUT PROTECTOR

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

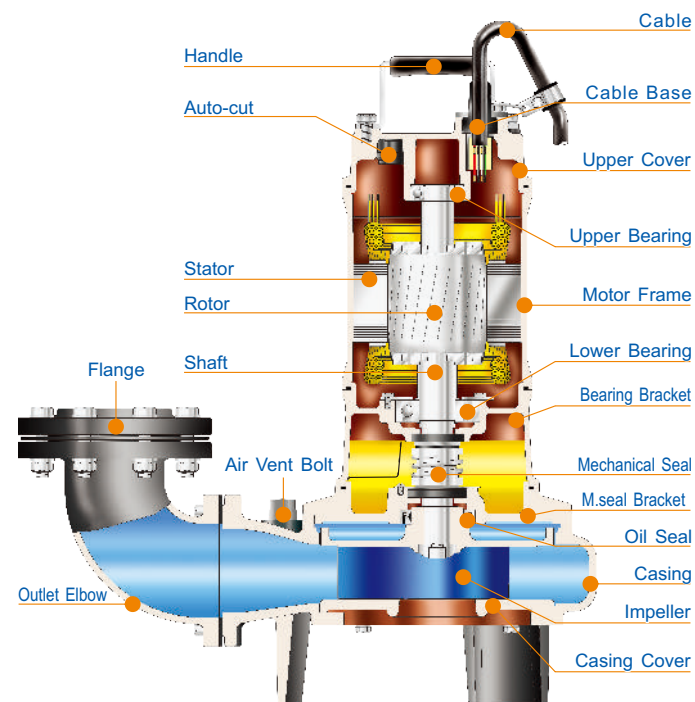


AF SERIES SEWAGE/WASTEWATER SUBMERSIBLE PUMPS

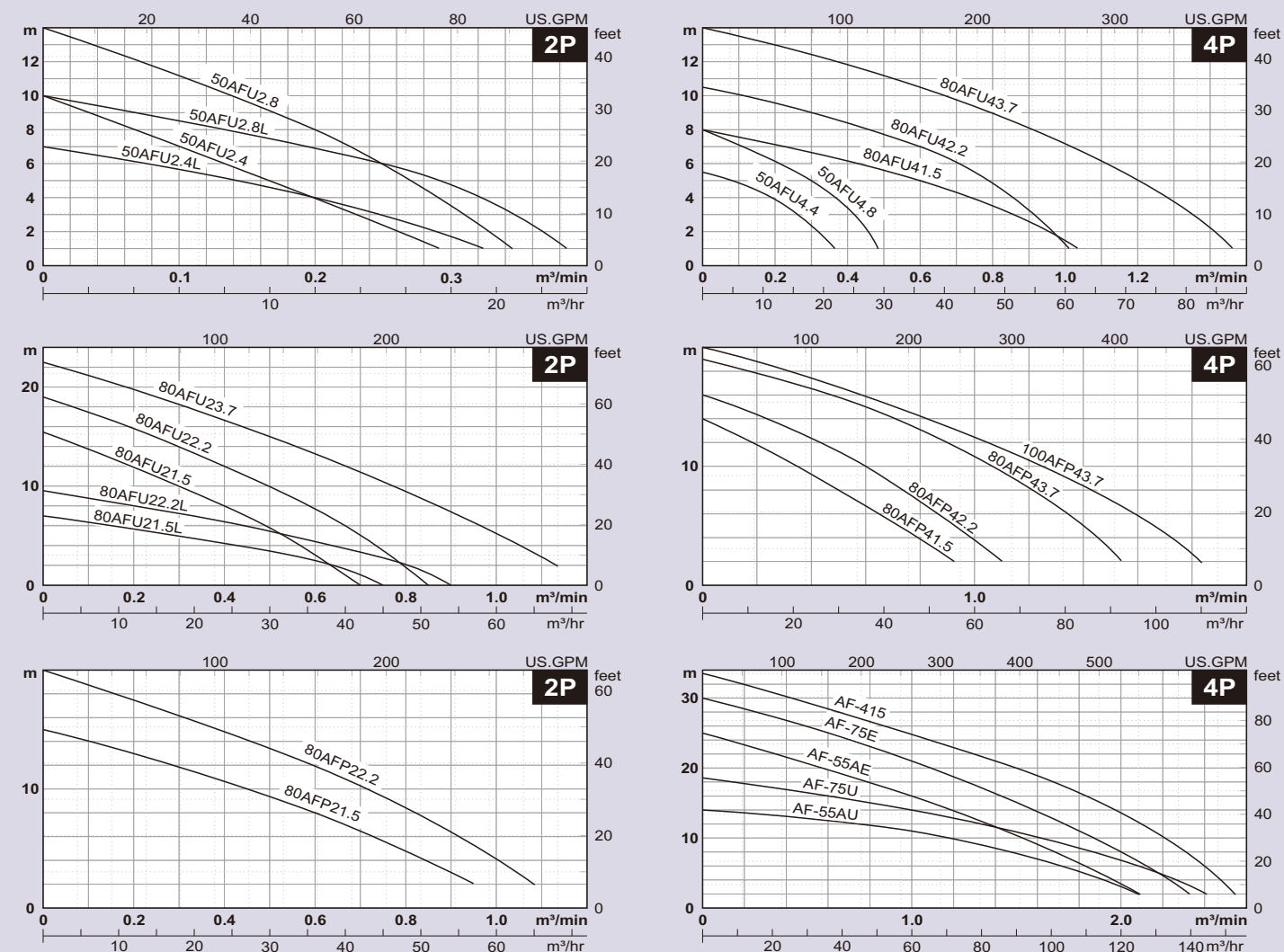
■ SPECIFICATIONS (Discharge 50~100mm)

Item		Description
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Municipal industrial wastewater
	Submersion Depth	30m (100feet)
Type	Frequency	60Hz
	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) 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	ft-GPM	m-m³/min	ft-GPM	1Ø kg(lb)	3Ø kg(lb)		Width	Length	Height 1Ø 3Ø	
50AFU2.4	½ (0.4)	2" (50)	2	1/3	Capacity Direct	5.5 - 0.15	18 - 40	10 - 0.32	32 - 85	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 - 0.2	13 - 58	7 - 0.35	21 - 92	20 (44)	19 (42)	50 (2)	306(12)	163(6½)	448(17¼)	448(17¼)
50AFU2.8	1 (0.75)	2" (50)	2	1/3	Capacity Direct	8 - 0.2	25 - 52	14 - 0.36	45 - 95	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 - 0.25	20 - 66	10 - 0.4	33 - 106	22 (49)	21 (46)	50 (2)	306(12)	163(6½)	448(17¼)	448(17¼)
80AFU21.5	2 (1.5)	3" (80)	2	1/3	Capacity Direct	8 - 0.4	25 - 106	15.5 - 0.7	50 - 185	40 (88)	36 (79)	50 (2)	379(15)	202(8)	575(22¼)	524(20¾)
80AFU21.5L	2 (1.5)	3" (80)	2	1/3	Capacity Direct	3.5 - 0.5	12 - 132	7 - 0.75	22 - 198	43 (95)	39 (86)	76 (3)	443(17¼)	255(10)	700(24¾)	622(22¾)
80AFU22.2	3 (2.2)	3" (80)	2	1/3	Capacity Direct	12 - 0.4	40 - 106	19 - 0.85	62 - 225	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	5.5 - 0.5	18 - 132	9.5 - 0.9	30 - 238	45 (99)	41 (90)	76 (3)	538(21¼)	289(11½)	695(27¼)	695(27¼)
80AFU23.7	5 (3.7)	3" (80)	2	3	Direct	15 - 0.5	50 - 132	22.5 - 1.2	75 - 317		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	25 - 158	15.5 - 1.05	50 - 278	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	40 - 158	20 - 1.15	65 - 318	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 - 0.23	12 - 60	5.5 - 0.4	18 - 106	30 (66)	28 (62)	50 (2)	346(13¾)	204(8)	516(20¼)	516(20¼)
50AFU4.8	1 (0.75)	2" (50)	4	1/3	Capacity Direct	5 - 0.3	15 - 80	8 - 0.5	25 - 132	31 (68)	29 (64)	50 (2)	346(13¾)	204(8)	516(20¼)	516(20¼)
80AFU41.5	2 (1.5)	3" (80)	4	1/3	Capacity Direct	5 - 0.6	15 - 158	8 - 1.1	25 - 290	52 (115)	52 (115)	76 (3)	443(17¼)	255(10)	700(27¼)	622(24¾)
80AFU42.2	3 (2.2)	3" (80)	4	3	Direct	7 - 0.6	22 - 158	10.5 - 1.2	35 - 317		68 (150)	80 (3)	538(21¼)	289(11½)		675(26½)
80AFU43.7	5 (3.7)	3" (80)	4	3	Direct	10.5 - 0.6	35 - 158	14 - 1.5	45 - 396		75 (165)	80 (3)	538(21¼)	289(11½)		695(27¼)
80AFP41.5	2 (1.5)	3" (80)	4	1/3	Capacity Direct	8 - 0.5	25 - 132	14 - 1.05	45 - 278	51 (122)	51 (122)	50 (2)	472(18¾)	290(11½)	645(25½)	567(22¾)
80AFP42.2	3 (2.2)	3" (80)	4	3	Direct	10 - 0.6	32 - 158	16 - 1.2	52 - 317		68 (150)	50 (2)	553(21¼)	313(12¼)		623(24½)
80AFP43.7	5 (3.7)	3" (80)	4	3	Direct	15 - 0.6	50 - 158	19 - 1.6	62 - 423		78 (172)	50 (2)	553(21¼)	313(12¼)		643(25¼)
100AFP43.7	5 (3.7)	4" (100)	4	3	Direct	12.5 - 1.0	42 - 265	20 - 1.9	66 - 502		81(179)	50 (2)	571(22¼)	313(12¼)		643(25¼)
AF-55AU	7½ (5.5)	4" (100)	4	3	Direct	11 - 1.0	32 - 265	14 - 2.2	46 - 580		129 (285)	25 (1)	687(27)	405(16)		795(31¼)
AF-55AE	7½ (5.5)	4" (100)	4	3	Direct	16 - 1.0	52 - 265	25 - 2.2	82 - 580		136 (300)	40 (1½)	687(27)	405(16)		795(31¼)
AF-75U	10 (7.5)	4" (100)	4	3	Direct	14.5 - 1.0	48 - 265	18.5 - 2.5	62 - 660		127 (280)	25 (1)	687(27)	405(16)		816(32¼)
AF-75E	10 (7.5)	4" (100)	4	3	Direct	21 - 1.0	70 - 265	30 - 2.4	98 - 634		150 (331)	40 (1½)	687(27)	405(16)		816(32¼)
AF-415	15 (11)	4" (100)	4	3	Direct	20 - 1.5	65 - 396	33.5 - 2.6	110 - 690		163 (359)	40 (1½)	687(27)	405(16)		816(32¼)

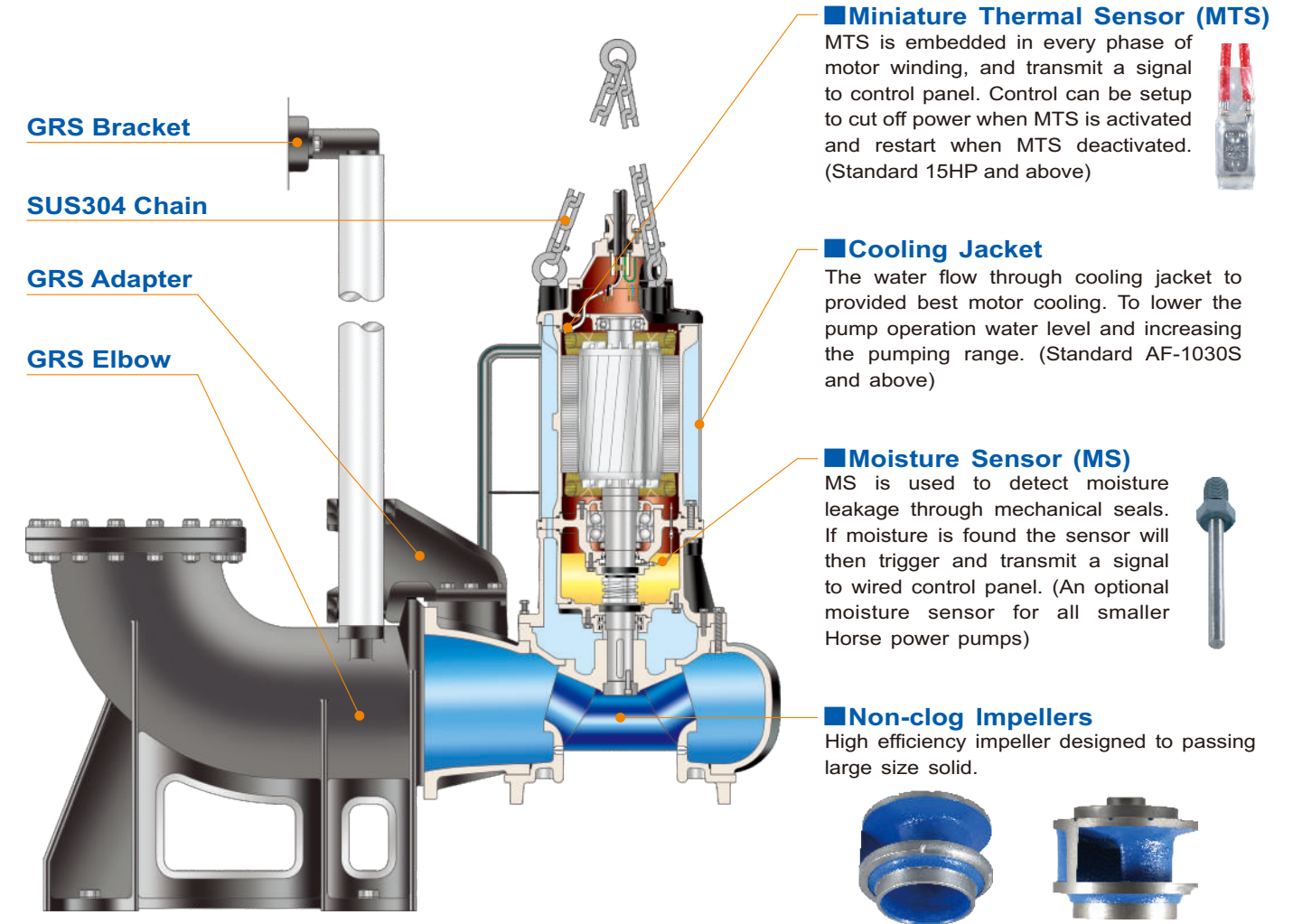
AF SERIES SEWAGE/WASTEWATER SUBMERSIBLE PUMPS

■ SPECIFICATIONS (Discharge 150~400mm)

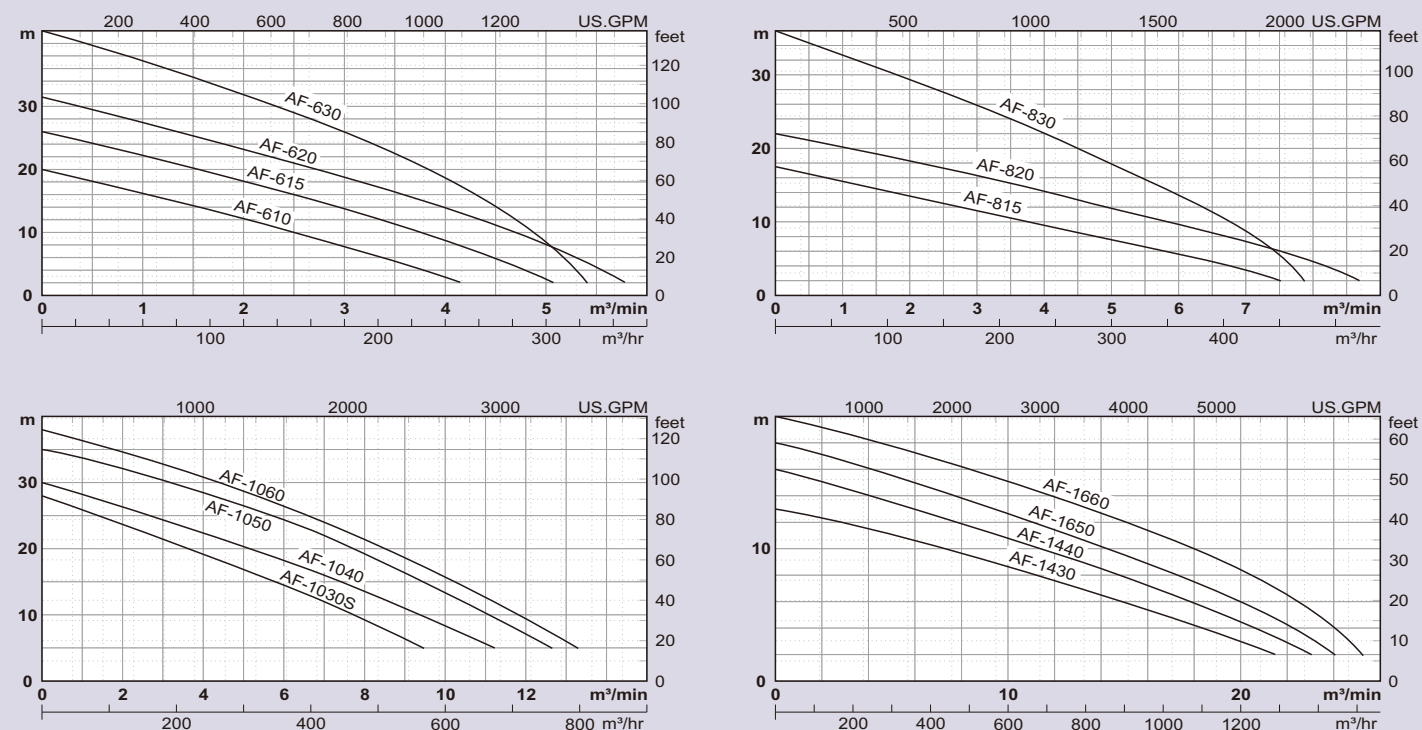
Item		Description
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	Municipal industrial wastewater
	Submersion Depth	30m (100feet)
Type	Frequency	60Hz
	Motor	4P ~ 8P Dry Motor
	Insulation	Class F
	Protection	IP68
	Protector	MTS - Miniature Thermal Sensor (AF-610 : Auto-cut) MS - Moisture Sensor (AF-610 • 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-m ³ /min	ft-GPM	m-m ³ /min	ft-GPM			Width	Length	Height
AF-610	10 (7.5)	6" (150)	4	3	Direct	10 - 2.5	32 - 660	20 - 4.5	65 - 1190	219 (483)	73 (2 3/4)	888 (35)	449 (17 1/4)	870 (34 1/4)
AF-615	15 (11)	6" (150)	4	3	Y - Δ	16 - 2.5	52 - 660	26 - 5.6	85 - 1480	259 (571)	70 (2 3/4)	895 (35 1/4)	477 (18 3/4)	988 (39)
AF-620	20 (15)	6" (150)	4	3	Y - Δ	20 - 2.5	68 - 660	31.5 - 6	102 - 1585	276 (608)	70 (2 3/4)	895 (35 1/4)	477 (18 3/4)	988 (39)
AF-630	30 (22)	6" (150)	4	3	Y - Δ	29 - 2.5	96 - 660	42 - 5.5	138 - 1453	232 (510)	76 (3)	850 (33 1/2)	497 (19 1/2)	1021 (40 1/4)
AF-815	15 (11)	8" (200)	4	3	Y - Δ	8.5 - 4.5	28 - 1190	17.5 - 8	58 - 2115	268 (591)	70 (2 3/4)	1045 (41 1/4)	501 (19 3/4)	994 (39 1/4)
AF-820	20 (15)	8" (200)	4	3	Y - Δ	13 - 4.5	42 - 1190	22 - 9	72 - 2380	281 (620)	70 (2 3/4)	1045 (41 1/4)	501 (19 3/4)	994 (39 1/4)
AF-830	30 (22)	8" (200)	4	3	Y - Δ	18 - 4.5	60 - 1200	36 - 8	118 - 2114	310 (680)	76 (3)	896 (35 1/4)	479 (18 3/4)	998 (39 1/4)
AF-1030S	30 (22)	10" (250)	4	3	Y - Δ	12 - 7	40 - 1850	28 - 11	92 - 2906	750 (1650)	60 (2 1/4)	1273 (50)	676 (26 1/2)	1621 (63 3/4)
AF-1040	40 (30)	10" (250)	4	3	Y - Δ	16 - 7	53 - 1850	30 - 13	98 - 3434	755 (1665)	60 (2 1/4)	1273 (50)	676 (26 1/2)	1621 (63 3/4)
AF-1050	50 (37)	10" (250)	4	3	Y - Δ	22 - 7	73 - 185	35 - 14	115 - 3699	765 (1690)	60 (2 1/4)	1273 (50)	676 (26 1/2)	1621 (63 3/4)
AF-1060	60 (45)	10" (250)	4	3	Y - Δ	24 - 7	80 - 1850	38 - 14.5	125 - 3831	770 (1700)	60 (2 1/4)	1273 (50)	676 (26 1/2)	1621 (63 3/4)
AF-1430	30 (22)	14" (350)	8	3	Y - Δ	6.5 - 14	21 - 3700	13 - 24	43 - 6340	950 (2095)	120 (4 3/4)	1564 (61 1/2)	813 (32)	1764 (69 1/2)
AF-1440	40 (30)	14" (350)	6	3	Y - Δ	8.5 - 14	28 - 3700	16 - 24.5	52 - 6472	955 (2105)	120 (4 3/4)	1564 (61 1/2)	813 (32)	1764 (69 1/2)
AF-1650	50 (37)	16" (400)	6	3	Y - Δ	7.5 - 18	25 - 4750	18 - 24.8	59 - 6552	965 (2125)	120 (4 3/4)	1564 (61 1/2)	813 (32)	1764 (69 1/2)
AF-1660	60 (45)	16" (400)	6	3	Y - Δ	10 - 18	33 - 4750	20 - 25	66 - 6604	970 (2140)	120 (4 3/4)	1564 (61 1/2)	813 (32)	1764 (69 1/2)