



# SF/SA

SUBMERSIBLE  
STAINLESS STEEL PUMPS

50Hz

make future flow

# FEATURES

- Corrosion-resistant design: made from investment-cast SUS316/SCS14 stainless steel, ensuring durability in low-pH and corrosive environments.
- Chemical resistance: chemically treated Viton O-rings give enhanced protection against acidic and corrosive fluids.
- Reliable Motor Protection: Equipped with an auto-cut motor protector to prevent overheating and overload, ensuring stable pump operation in corrosive liquid applications.
- pH tolerance: effectively between pH range 2 to 10 at 0–40°C.
- Durability: corrosive resistant to light acidic and basic liquid exposure.

## PRODUCT NOMENCLATURE

80	SF	P	2	3.7
Discharge mm	Type	Impeller type	Pole	kW
50	SA	2	.8	B
Discharge mm	Type	Pole	kW	Style



## SPECIFICATIONS

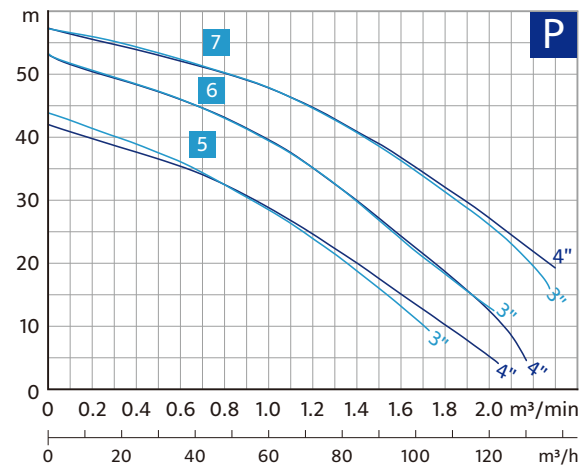
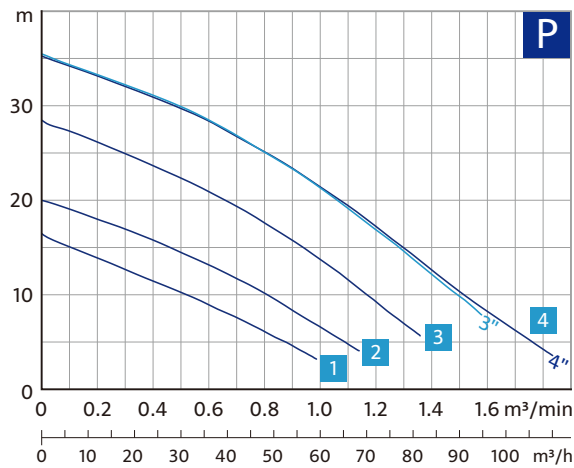
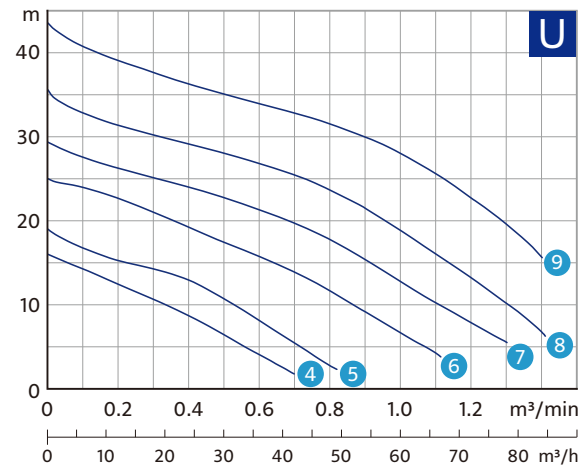
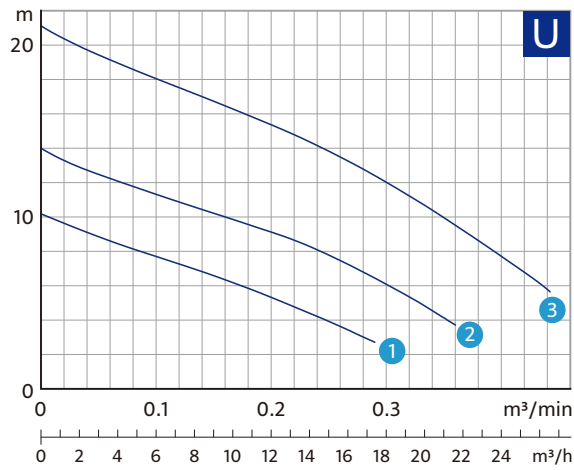
Spec.	Description
Liquid Temp.	0~40°C (32~104°F)
Motor	2P ( 3000rpm ) • Dry Motor
Insulation	Class B • Class F • Class H
Protection	IP68
Protector	Thermal / Auto-cut / MTS & MS
M.seal Type	Double M.seals
Impeller Type	Vortex (U) • Open (P)
Item	Material
Upper Cover	SCS14 / G-X6CrNiMo1810
Motor Frame	SUS316 / X5CrNiMo17-12-2
Shaft	SUS316 / X5CrNiMo17-12-2 • SUS630 / X5CrNiCuNb17-4
M.seal	CA/CE & SiC/SiC
O-ring	Viton
Casing	SCS14 / G-X6CrNiMo1810
Impeller	SCS14 / G-X6CrNiMo1810
Cable	VCT or H07RN-F

## APPLICATIONS

- Industrial Wastewater Treatment in food processing, brewing, dyeing, and petrochemical industries
- Acidic liquid drainage in mining and quarry operations
- Low pH corrosive fluid transportation in chemical processing industries such as pharmaceuticals, refining, and electroplating
- Seawater transport and drainage systems in aquaculture farms
- Corrosive wastewater management in municipal and sewage treatment plants



# SF SERIES PERFORMANCE CURVES AND SPECS



Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Standard	MAX	Solid Passage mm	Casing Type	Weight kg	
					m-m/min				1Ø	3Ø
1 50SFU2.4B	0.5(0.4)	2"(50)	1	Capacitor	6-0.17	10-0.29	35	V	14.5	14
			3	DOL						
2 50SFU2.8B	1(0.75)	2"(50)	1	Capacitor	9-0.2	14-0.36	35	V	16.5	15
			3	DOL						
3 50SFU21.5	2(1.5)	2"(50)	1	Capacitor	14-0.24	21-0.45	35	V	29	25
			3	DOL						
4 80SFU21.5	2(1.5)	3"(80)	1	Capacitor	8.5-0.4	16-0.75	50	H	31	27
			3	DOL						
5 80SFU22.2	3(2.2)	3"(80)	1	Capacitor	13-0.4	19-0.85	50	H	34	29
			3	DOL						
6 80SFU23.7	5(3.7)	3"(80)	3	DOL	17.5-0.5	25-1.15	50	H	-	40
7 80SFU25.5	7.5(5.5)	3"(80)	3	DOL	21.5-0.6	29.5-1.3	50	H	-	61
8 80SFU27.5	10(7.5)	3"(80)	3	DOL	26.5-0.6	35.5-1.45	50	H	-	67
9 80SFU211	15(11)	3"(80)	3	Y-D/DOL	33.5-0.6	43.5-1.5	50	H	-	76
1 80SFP21.5	2(1.5)	3"(80)	1	Capacitor	8.5-0.6	16.5-1.05	35	H	33	29
			3	DOL						
2 80SFP22.2	3(2.2)	3"(80)	1	Capacitor	12.5-0.6	20-1.15	35	H	37	32
			3	DOL						
3 80SFP23.7	5(3.7)	3"(80)	3	DOL	20.5-0.6	28.5-1.4	32	H	-	43
4 80(100)SFP25.5	7.5(5.5)	3"(80)	3	DOL	28-0.6	35-1.6	30	H	-	67
		4"(100)			21.5-1.0	35-1.9				
5 80(100)SFP27.5	10(7.5)	3"(80)	3	DOL	35.5-0.6	42-1.8	30	H	-	73
		4"(100)			28.5-1.0	42-2.1				
6 80(100)SFP211	15(11)	3"(80)	3	Y-D/DOL	45.5-0.6	53-2.05	30	H	-	82
		4"(100)			39-1.0	53-2.2				
7 80(100)SFP215	20(15)	3"(80)	3	Y-D/DOL	50-0.8	57-2.25	30	H	-	92
		4"(100)			44-1.2	57-2.3				

※ Excludes Cable & Elbow Weight.

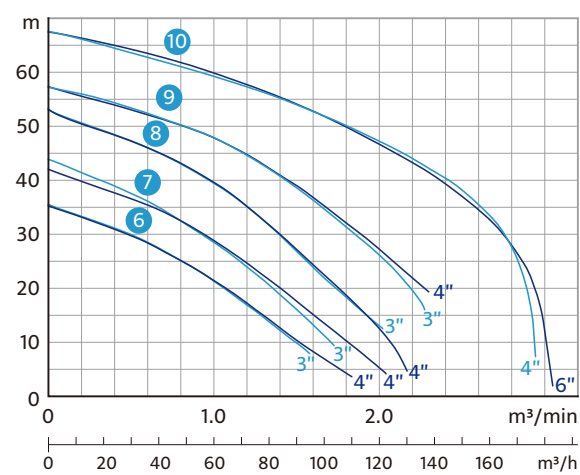
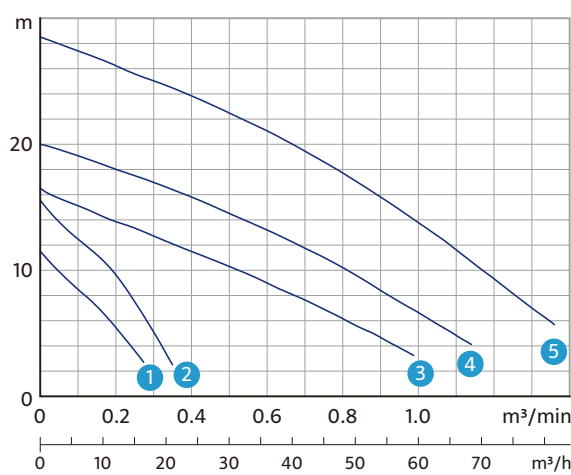
※ Casing type : V stands for Vertical and H for Horizontal.

※ Start Method : Y-D = STAR-DELTA





SA SERIES PERFORMANCE CURVES AND SPECS



Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Standard	MAX	Solid Passage mm	Casing Type	Weight kg	
					m-m/min				1Ø	3Ø
1 50SA2.4B	0.5(0.4)	2"(50)	1	Capacitor	6.5-0.17	11.5-0.27	7	V	14	13.5
			3	DOL						
2 50SA2.8B	1(0.75)	2"(50)	1	Capacitor	10.5-0.18	15.5-0.35	7	V	16	15
			3	DOL						
3 80SA21.5	2(1.5)	3"(80)	1	Capacitor	8.5-0.6	16.5-1.05	20	H	34	30
			3	DOL						
4 80SA22.2	3(2.2)	3"(80)	1	Capacitor	12.5-0.6	20-1.15	20	H	38	33
			3	DOL						
5 80SA23.7	5(3.7)	3"(80)	3	DOL	20.5-0.6	28.5-1.4	20	H	-	44.5
6 80(100)SA25.5	7.5(5.5)	3"(80)	3	DOL	28-0.6	35-1.6	20	H	-	67
		4"(100)			21.5-1.0	35-1.9				
7 80(100)SA27.5	10(7.5)	3"(80)	3	DOL	35.5-0.6	42-1.8	20	H	-	73
		4"(100)			28.5-1.0	42-2.1				
8 80(100)SA211	15(11)	3"(80)	3	Y-D/DOL	45.5-0.6	53-2.05	20	H	-	82
		4"(100)			39-1.0	53-2.2				
9 80(100)SA215	20(15)	3"(80)	3	Y-D/DOL	50-0.8	57-2.25	20	H	-	95
		4"(100)			44-1.2	57-2.3				
10 100(150)SA222	30(22)	4"(100)	3	Y-D/DOL	57-1.2	67-3.0	20	H	-	126
		6"(150)			45-2.0	67-3.05				

※ Excludes Cable & Elbow Weight.  
※ Casing type : V stands for Vertical and H for Horizontal.  
※ Start Method : Y-D = STAR-DELTA

# APPLICATIONS

Wastewater treatment involves multiple processes to ensure safe and efficient handling. Research institutions, universities, and hospitals often deal with wastewater containing extreme pH values, while industries such as PCB manufacturing and mining generate corrosive liquids that require specialized handling.

For these demanding applications, our SA Series Stainless Steel Submersible Wastewater/Effluent Pumps and SF Series Stainless Steel Sewage/Wastewater Submersible Pumps offer superior corrosion resistance. Built with investment-cast SUS316/SCS14 stainless steel, these pumps provide exceptional durability beyond standard materials. Additionally, chemically treated Viton O-rings enhance resistance to acidic and corrosive fluids, ensuring reliable operation across a pH range of 2-10, particularly in environments frequently encountered in mining and industrial wastewater treatment.

## Mining Industry

- Acid Mine Drainage Management in copper mines or other mines.



## Research Laboratory

- Industrial Wastewater Treatment.
- Hospital Wastewater Transport and Treatment.



## Factory Wastewater Treatment

- PCB factory circuit board acidic and basic wastewater treatment.
- Brewing Factory liquid transport/treatment.



## Processing Wastewater

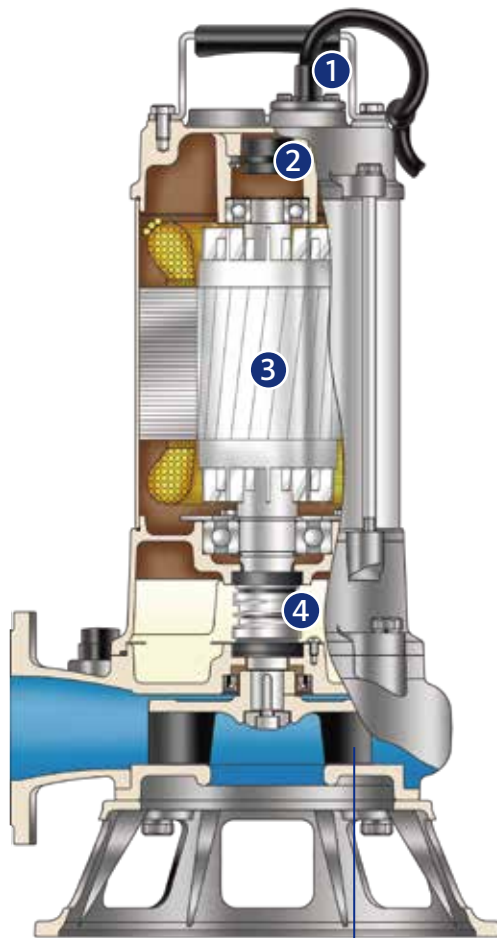
- Galvanization wastewater treatment.
- Electroplating wastewater treatment.







## PRODUCT FEATURES



### 1 Epoxy Cable Base

An epoxy resin seal cable base prevents moisture from entering the motor through the core wires.



### 2 Auto-cut Protector

Automatic On / Off motor protector to prevent motor burn out due to high temperature and excess amperage draw.



### 3 High Efficiency Dry Motors

All stator coils are treated with insulating vanish procedures to achieve the best insulation, efficiency and durability.



### 4 Double Mechanical Seals

Superior abrasion resistant mechanical seal is manufactured with silicon carbide to ensure the best seal effect.



### U Type Vortex Impeller

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



### P Type Open Impeller

Open impeller (Single or Two Vanes) design. Impeller is excellent to use for waste materials to prevent clogging.



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Selection  
system



Catalog