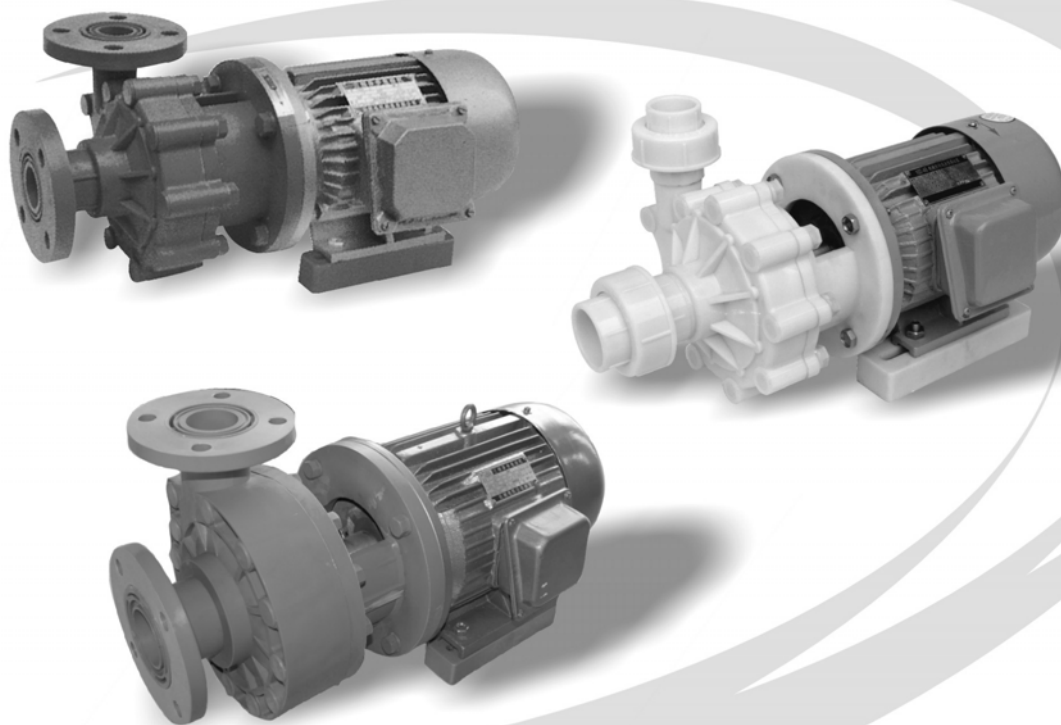


FP/FS TYPE

REINFORCED POLYOPYLENE PUMP

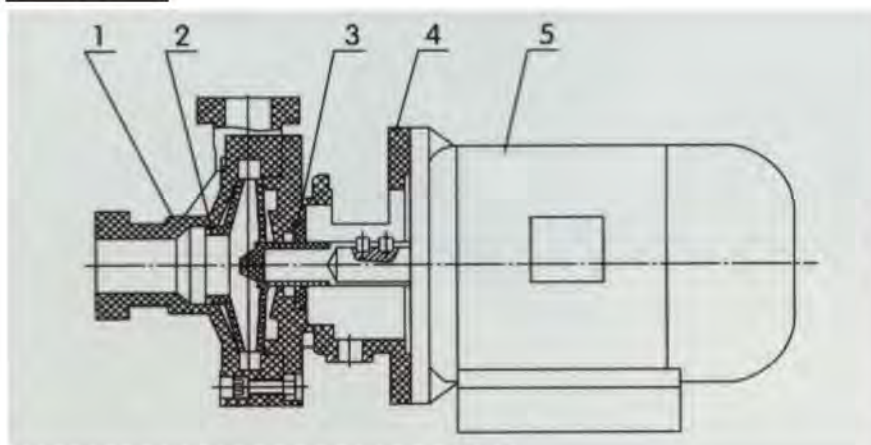


ZHEJIANG YANGTZE RIVER PUMP CO.,LTD.

Summary

FP-type reinforced polypropylene centrifugal pumps, FS-type engineering plastic centrifugal pump series both used mechanical seals, introducing advanced international technology and technical formula, using the CFR-PP (reinforced polypropylene), modified ABS (engineering plastic) as the pump Material, in the same series of plastic pumps, fully demonstrated its characteristics of advanced structure, light weight, small size, long duty life, etc, which is widely used in chemical, food, pharmaceutical, electroplating, paper making, environmental protection, water treatment and other departments, transporting acid, alkali, salt and other corrosive liquids.

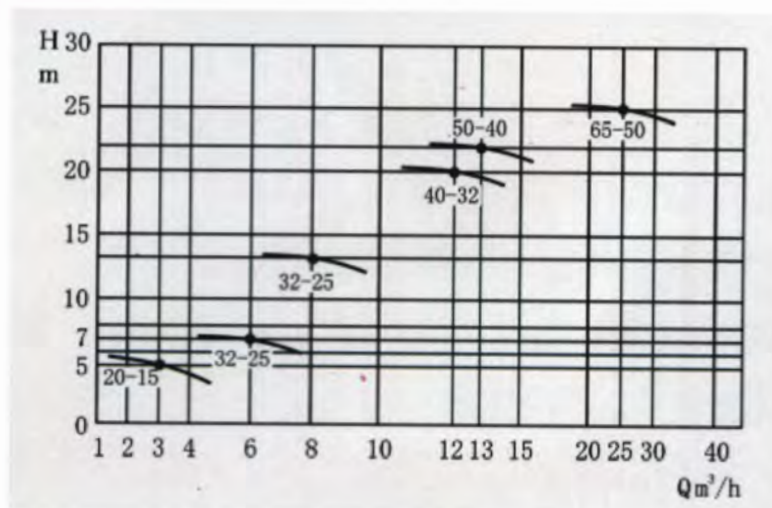
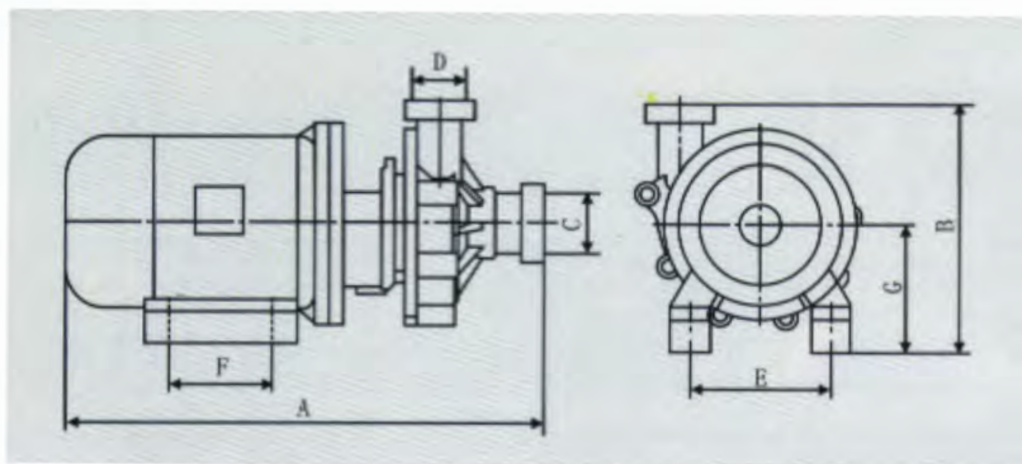
Parts



1. Casing
2. Impeller-shaft interget
3. Mechanical seals
4. Cover
5. Motor

Main Technology Data

Model	Caliber mm		Capacity m ³ /h	Head m	Suction m	Voltage V	Power kw	Speed r/min
	Outlet	Inlet						
20-15-160	20	15	1	5	3	380	0.12	2900
20-20-90	20	20	3	6	3	320	0.37	2900
32-25-100	32	25	5	7	6	380	0.55	2900
32-25-105	32	25	6.3	8	6	380	0.75	2900
32-25-110	32	25	8	14	6	380	1.1	2900
40-32-125	40	32	12.5	20	6	380	1.5	2900
50-40-145	50	40	13	22	6	380	2.2	2900
65-50-150	65	50	25	25	6	380	4	2900

**Performance Curve****Installation Dimension**

Model	A	B	C	D	E	F	G
20-15-160	310	190	20	15	90	70	100
20-20-90	355	200	20	20	110	100	105
32-25-100	370	198	32	25	125	100	110
32-25-105	370	198	32	25	125	100	110
32-25-110	450	235	32	25	125	100	110
40-32-125	470	235	40	32	140	100	125
50-40-145	550	290	50	40	140	100	125
65-50-150	610	340	65	50	190	140	145

Installation Usage

1. Plastic pump should be installed horizontally, the body can not withstand the weight of the pipeline, for the special requirements of vertical installation, the motor must be facing up.
2. pump body should add water before using. When the suction surface above the shaft center line, open the suction pipeline valve before the start. If the suction surface below the shaft center line, the pipeline shall match with foot valve.
3. Before start the motor, check whether the rotation direction is same as rotor direction mark on the pump.
4. The pump medium and temperature should be within the range of materials permitted (see table). Pump temperature FP $\leq 80^{\circ}\text{C}$, FS $\leq 60^{\circ}\text{C}$, motor temperature rise shall not exceed 80°C , ambient temperature $<40^{\circ}\text{C}$.
5. Prohibit no medium operation.

Attached sheet: anti-corrosive performance of Plastic pump material

Medium	Conce- ntration	CFR-PP			Medium	Conce- ntration	ABS		
		25°C	65°C	90°C			20°C	60°C	80°C
Sulfuric acid (H ₂ SO ₄)	98%	✓	✓	○	Sulfuric acid H ₂ SO ₄	< 30%	✓	×	
	70%	✓	✓	✓		30~70%	○	×	
	1~50%	✓	✓	✓		> 70%	×	×	
Nitrate (HNO ₃)	High	✓	✓	○	Nitrate HNO ₃	10%	✓	○	
	20%	✓	✓	✓		20%	✓		
	10%	✓	✓	✓		25~35%	○		
Hydrochloric acid (HCL)	0~30%	✓	○	×		> 50%	×	×	
Hydrofluoric acid		✓	○	×	(HCL)	< 30%	✓	×	
Acetic acid	1~50%	✓	✓	✓	Hydrofluoric acid	< 10%	✓	×	
Phosphate	All	✓	✓	✓		40~48%	✓	×	
Sodium hydroxide		✓	✓	✓	Acetic acid	< 20%	✓	○	
Sodium chloride		✓	✓	✓		> 30%	×	×	
Ethanol		✓	✓	✓	Sodium hydroxide		✓	✓	✓
Bleach		✓	✓	✓	Sodium chloride		✓	✓	×
					Ferric chloride		✓	✓	
					Ethanol		✓	✓	
					Bleach		○	○	×

Note: ✓---- good; ○---- suitable for usage, but corrosion;
 ×---- unsuitable, serious corrosion

Malfunctions and methods

Failure	Reasons	Methods
No liquid out	1. Reverse rotation 2. Leakage of Inlet pipeline 3. Too little liquid storage in pump chamber 4. Too high Suction 5. Leakage of bottom valve 6. Impeller blocked	1. Change the motor connection line 2. To prevent leakage 3. To increase the amount storage medium 4. Lower the pump mounting position 5. Clean up the bottom valve 6. Cleaning the pump casing, impeller
Lack of Flow	1. Too small suction pipe diameter 2. Impeller blocked 3. Too high head 4. There is air leak into the suction line 5. Impeller damaged	1. Adjust the dispenser 2. Cleaning impeller 3. Open Outlet valve 4. Prevent air leakage 5. Replace the impeller
Too low head	1. Too heavy flow 2. Too slow speed	1. Close smaller outlet valve 2. Restore the rated speed
Too high noise	1. Pump with debris inside 2. Rotating parts and fittings grazing 3. Axis seriously damaged	1, cleaning up seriously 2. Adjust the gap 3. Replace the pump shaft
Leakage	1. Loose of pump casing screw 2. Mechanical seal serious wear	1. Tighten screws 2. Replace the mechanical seal