CNP

SZ

50Hz

Fluorin Plastic Centrifugal Pump

Nanfang Pump Industry Co.,Ltd.

CNP Headquarter
Address: Renhe Town, Hangzhou,China
Post code: 311107
Tel: +86 571 86051667,86390516,86390517
Fax:+86 571 86051696
E-mail: info@nanfang-pump.com
http: //www.cnppump.com

E150306
309010100025

subject to amendments

CNP

General Data

Definition of Model

SZ50-32-160

SZ — 50 — 32 — 160

- 160: Nominal diameter(mm) of impeller
- 32: Drainage diameter(mm)
- 50: Suction diameter(mm)
- SZ: Fluorin plastic centrifugal pump

Structure feature

- SZ pump has one impeller, axial suction and radical discharge.
- Simple structure, shaft is directly connected with impeller.
- Easy for pipe works, inlet and outlet are connected by standard flanges.
- Wet parts are made of F26.F46, accessories are made of cast iron(HT200).

Typical application

- Any concentration of acid alkali, salty solution, strong oxidants, organic solvent etc. Strongly corrosive medium.
- Petrol, chemical, pesticide, acid cleaning, dying, paper making, galvanization, etc.

Operation conditions

- Thin medium not containing grain or fiber.
- Medium temperature: -20℃~120℃
- Medium density: Max 1.35 × 10^3kg/m^3
- Ambient temperature: Max+40℃
- Altitude: Max 1000m
- Pressure: Max 10bar

Motor

- TEFC motor, 2 pole
- Protection class: IP 55
- Insulation level: CLASS F
- Standard voltage: 50Hz, 3 × 380V

Curve conditions

- Curve tolerance in conformity to ISO9906:2012 Grade 3B.
- All curves are based on the measured value of constant motor speed 2900rpm, 50Hz, 3 × 380V.
- The measurements were made with airless water at temperature of 20℃. The curves apply to a kinematic viscosity of 1mm^2/s(1 cst).
- It is suggested to operate the pump in the scope of the bold curve, to prevent motor from overload.
- When pumping liquids with a density higher than that of the operation conditions, use motors with correspondingly higher outputs.

Performance curve

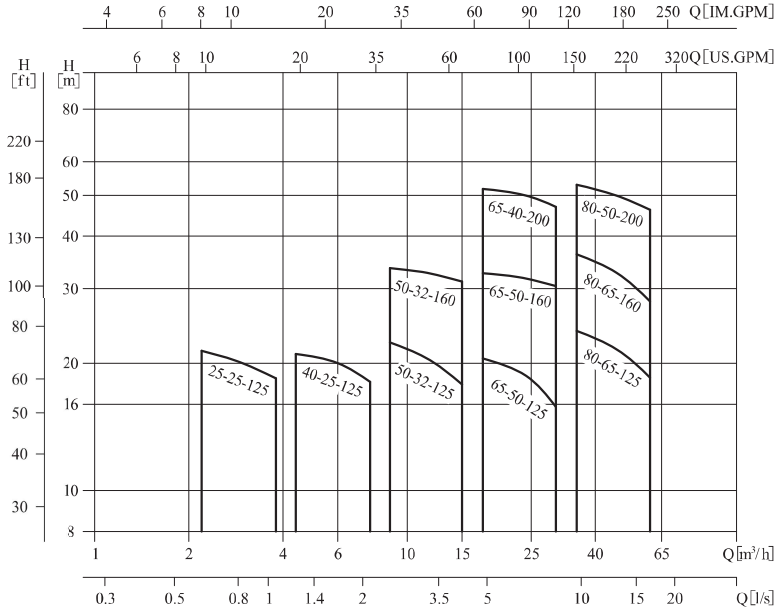
- Q/H: means the curve of the flow and head at the nominal rotating speed.
- Power curve: P2 means the pump input power, if the medium density is 1 × 10^3kg/m^3.
- Efficient curve: Eta means the pump efficient.

Installation conditions

- When installation, please make sure the pump would not be effected by the pipeline force when pump operation.
- The pump should be strongly fixed on the horizontal base.
- In order to make motor work well, pump should be installed on the frozen-free and ventilate place.
- The electric protection devices should protect pump from being damaged by phase lack, unstable voltage, electric leakage, overload.

Performance scope

SZ 50Hz 2900rpm

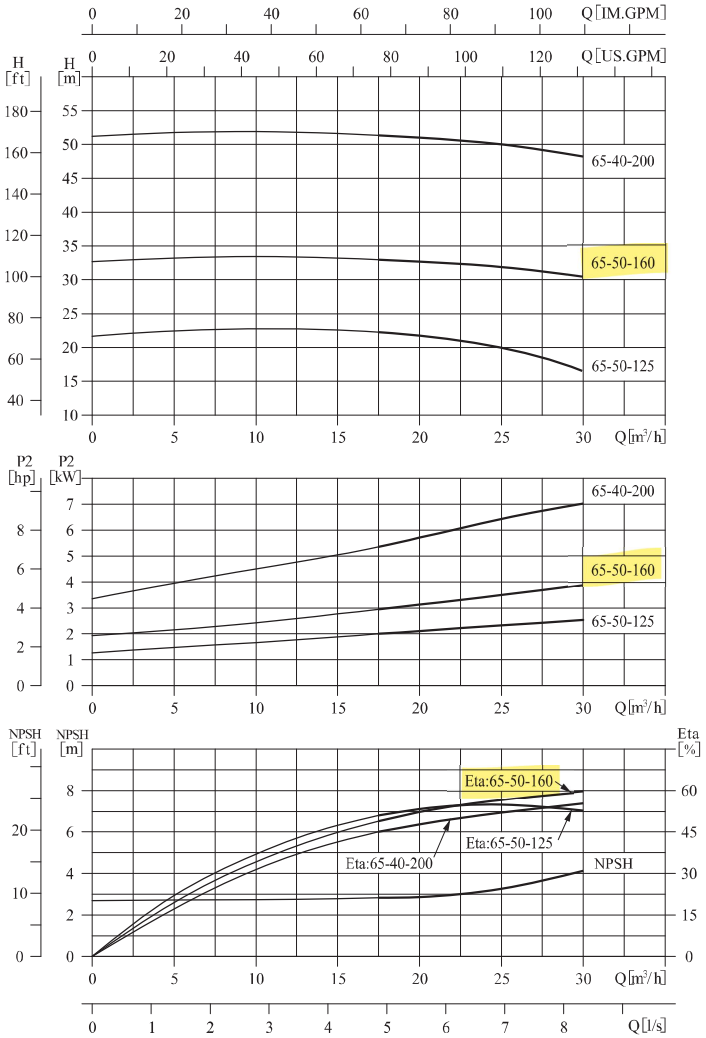


Performance table

Model	Nominal flow [m^3/h]	Nominal head [m]	Flow range [m^3/h]	Max bar [bar]	Power [kW]	Max efficiency [%]
SZ25-25-125	3.2	20	2.2~3.8	2.1	1.1	28
SZ40-25-125	6.3	20	4.4~7.6	2.1	1.5	41
SZ50-32-125	12.5	20	8.8~15	2.3	3	44
SZ50-32-160	12.5	32	8.8~15	3.3	4	51
SZ65-50-125	25	20	17.5~30	2	4	55
SZ65-50-160	25	32	17.5~30	3.3	5.5	60
SZ65-40-200	25	50	17.5~30	5.1	11	55
SZ80-65-125	50	20	35~60	2.6	7.5	62
SZ80-65-160	50	32	35~60	3.6	11	62
SZ80-50-200	50	50	35~60	5.4	18.5	63

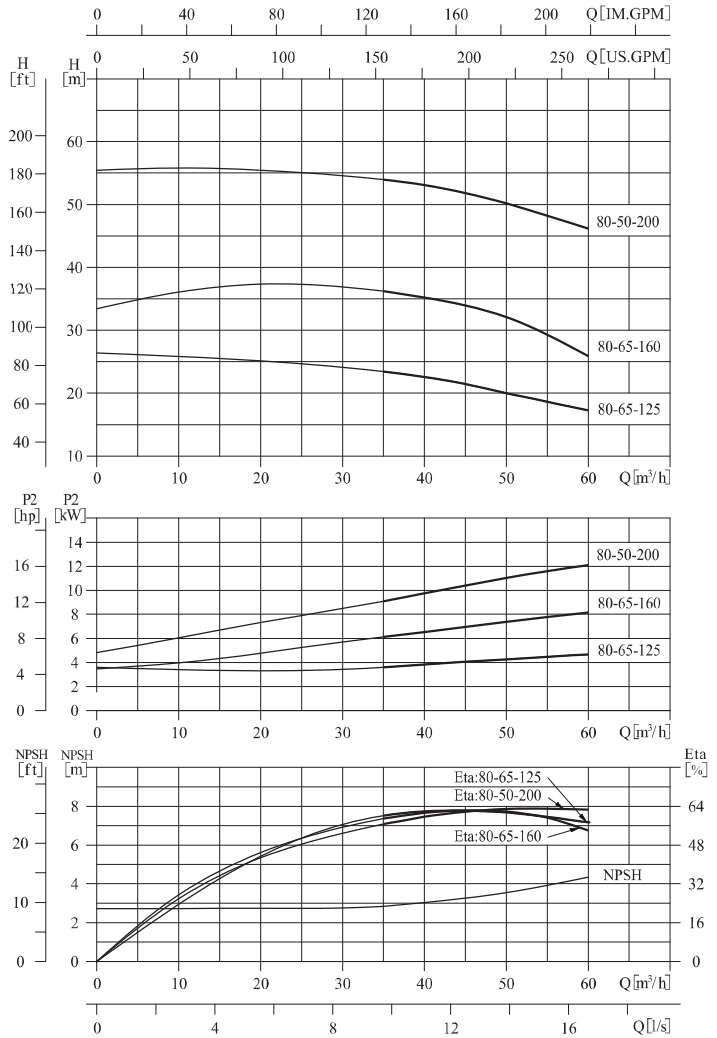
Performance curve SZ65

50Hz 2900rpm



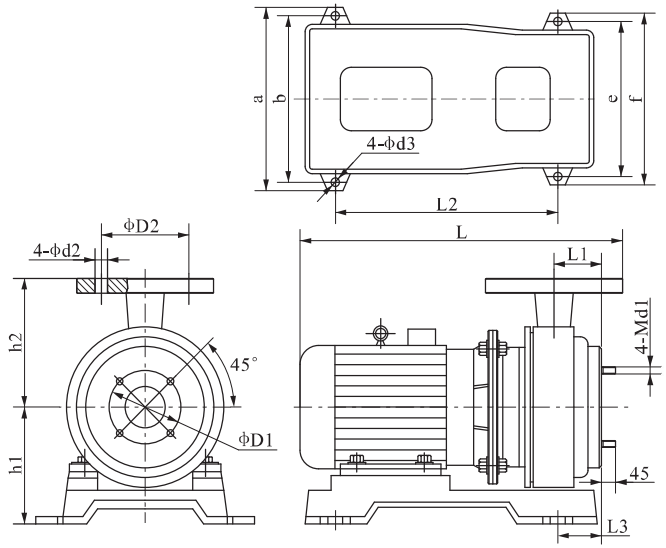
Performance curve SZ80

50Hz 2900rpm



Technical Data

Pump dimensions



Size and weight

Model	Size (mm)																	Weight (kg)
	L	L1	L2	L3	D1	Inlet flange	d1	h1	h2	D2	outlet flange	d2	a	b	d3	e	f	
SZ25-25-125	457	37	300	64	75	DN25/PN6	10	164	120	100	DN32/PN10	14	265	230	15	230	265	45
SZ40-25-125	461	37	300	72	100	DN40/PN6	10	165	120	100		14	265	230	15	230	265	48
SZ50-32-125	531	43	370	79	125	DN50/PN10	14	175	140	100		14	275	235	17	235	275	74
SZ50-32-160	553	53	370	103	125		14	191	159	100		14	315	270	17	270	315	78
SZ65-50-125	563	50	370	95	145	DN65/PN10	14	175	147	125	DN50/PN10	18	315	270	17	270	315	79
SZ65-50-160	618	51	400	88	145		14	219	165	125		18	370	330	17	290	335	113
SZ65-40-200	727	55	440	96	145		14	255	180	110	DN40/PN10	18	425	380	19	320	365	181
SZ80-65-125	631	52	400	88	160	DN80/PN10	14	219	165	145	DN65/PN10	18	370	330	17	290	335	123
SZ80-65-160	750	57	440	97	160		14	255	186	145		18	425	380	19	320	365	183
SZ80-50-200	797	57	440	110	160		14	255	195	125	DN50/PN10	18	425	380	19	320	365	205

F46,F26 Corrosion resistance table

Medium	F46	F26	Medium	F46	F26	Medium	F46	F26
Acetic acid; Benzene acid	√	√	Sulfuric Acid +20% Smoke sulfate	√/80℃	—	Titanium tetrachloride; zinc chloride	√	√
Arsenate; Boric acid	√	√	Smoke sulfate	√	×	Ferric Trichloride, carbon tetrachloride	√	√
Carbonate	√	√/20℃	sulfurous acid	√	√	Salt solution; seawater	√	√
Fluoride acid	√	—	Ammonium hydroxide, potassium hydroxide	√	√	Alum (slurry); black liquor (slurry)	×	—
Hypochlorite; Wet chlorine	√	√	Sodium hydroxide <20%	√	√	Blue alum; $NaHSO_3$	√	√
Chromic Acid	√	√/50℃	Sodium hydroxide <80%	√	×	Sodium bicarbonate; soda	√	√
citric acid	√	√/120℃	Calcium hydroxide	√	√	Sodium hypochlorite	√	√/20%
Toluene-acid	√	√/65℃	Acetic acid salt solution	√	√	Sodium chlorate; calcium chloride	√	√
Formic acid	√	√	Ammonium nitrate; barium nitrate	√	√	Chromium sodium	√	—
Glycolic acid	—	√/20℃	Sodium nitrate; copper nitrate	√	√	Al acetic	√	√
hydrochloric acid	√/65℃	√/37%	Iron nitrate	√	√	Bromine	√	√/20℃
hydrofluoric acid; Fluorosilicic acid	√	√	Nitrate lead; silver nitrate	√	—	Glycerol	√	√
Hydrogen Peroxide; lactic acid	√	√/20℃	Aluminum sulfate, ammonium sulfate	√	√	Pyridine	√	×
Maleic acid; malic acid	√	√	ammonium sulfate + Sulfuric Acid	√	√	acetic (acid) anhydride	√	√/20℃
Mixed acid	√	—	Barium sulfate; sodium sulfate	√	√	Aniline dye; hydrochloride aniline	√	—
Oleic acid	√	√	Copper sulfate	√	√	Methane, ethane, propane	√	√
Oxalate acid	√	√/50℃	Copper sulfate +10% Sulfuric Acid	√	—	Nitrobenzene	√	√/20℃
Picric acid, stearic acid	√	√/20℃	Ferrum sulfate +10% Sulfuric Acid	√	—	Tar and ammonia	√	—
Tartrate; Tannin	√	√	Magnesium sulfate; zinc sulfate	√	√	Toluene; SO_3	√	√
Nitrate 5% to 10%	√	√/50℃	Ammonium; sodium	√	√	Glycol; ethylene oxide	√	√
Nitric Acid <50%	√	√	Chloride; barium chloride	√	√	Two-acetone; dichloro-ethanol	√	√/20℃
Concentrated nitric acid	√	×	Calcium chloride	√	√	Diethylene dioxide; vinyl Trichloride	√	√
Nitric Acid +3.5% hydrofluoric acid	√	—	Aluminum Trichloride	√	√/20%	Formaldehyde	√	√/50℃
Phosphoric Acid	√	√	Potassium chloride	√	√/65℃	Freon	×	—
Phosphoric Acid +2% Sulfuric acid +1% hydrofluoric acid	√	—	Sodium chloride; tin chloride	√	√	CS_2	√	√/20℃
sulfuric acid <10%	√	√	Silver chloride, magnesium chloride	√	√	Molten sulfur	√	√
Sulfuric acid 10% to 75%	√	√/65℃	Nickel Chloride	√	√			
Sulfuric acid 75% to 98%	√/80℃	√/50℃	Sulphur dichloride	√	√/20℃			

Note: 1. √/20℃ means the material can be used in the medium that temperature is below 20℃. √ means workable, × means doesn't work. — means not known.

2. √/20% means the material can be used in the 20% medium.