SANSO ELECTRIC CO.,LTD.

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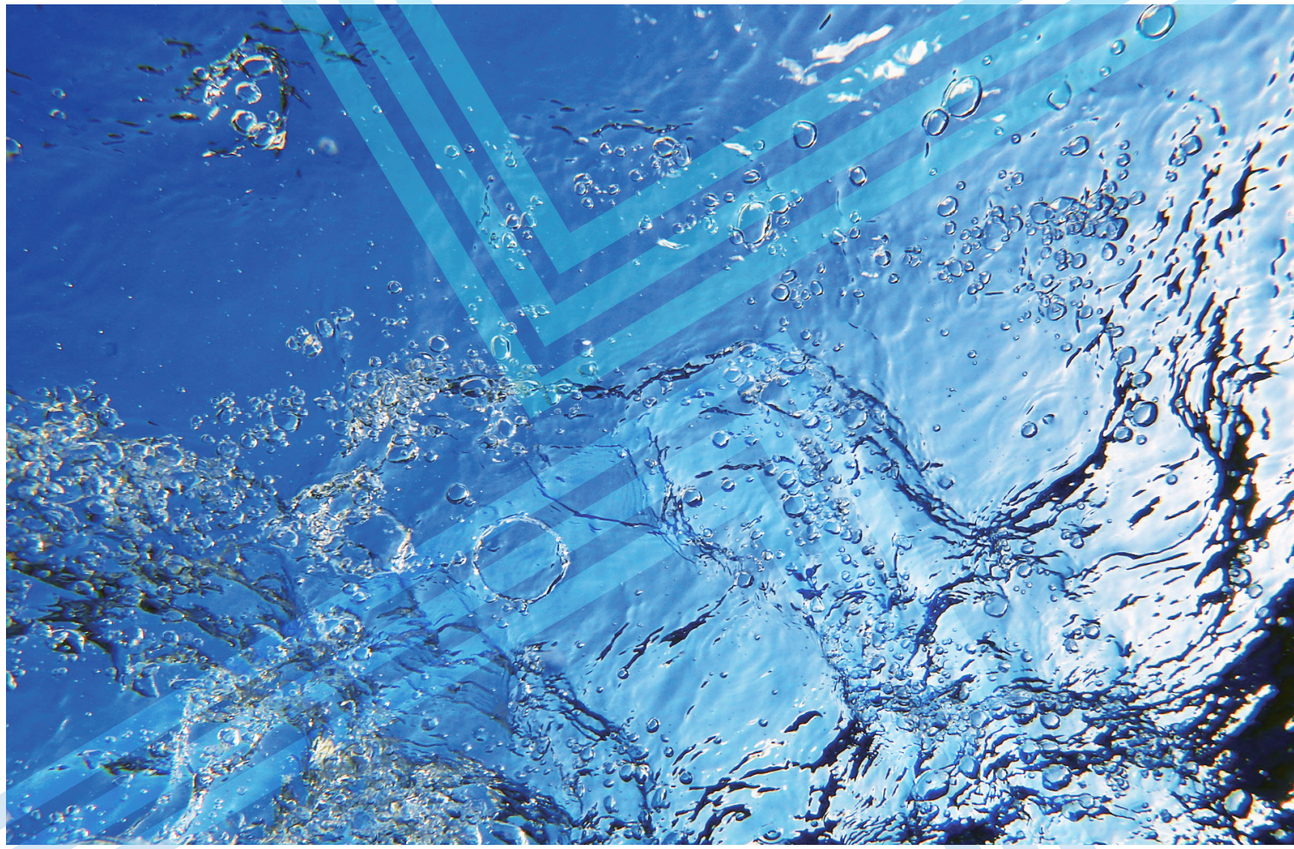
Advance Technology for Human Beings & Earth.



SANSO

PUMP de ECO 2018

SANSO ELECTRIC CO.,LTD.

Pumps and motors
by SANSO ELECTRIC are full of ecological technologies.

SANSO

PUMP de ECO 2018

The 21st Century and onward...
We will continue to challenge for future advanced technology,
world to be the only one global enterprise.

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SANSO
SANSO ELECTRIC CO.,LTD.

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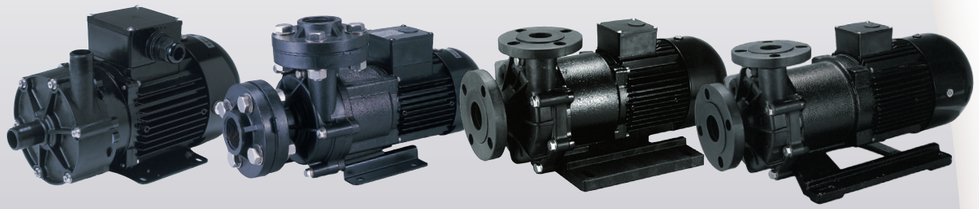
Magnetic Drive Pumps (for chemical and seawater)

PMD-371 PMD-421 PMD-0531 PMD-641



PMD-2571 PMD-7533 PMD-15013A-E3 PMD-37013A-E3

Characteristics

•High performance and energy saving

Compared to the conventional products, the pump efficiency increased by 35%. This type became smaller, lighter, 5-dB quieter and 50% reduction in vibration.

•Long-life and no liquid leakage

There is no liquid leakage due to no shaft seal part, As made of resin, this type is appropriate for transporting highly-corrosive special liquid.

•Complete no liquid leakage

This type is seal-less pumps based on the magnet coupling system. The pump section will never have liquid leakage, corrosion, dirt around the pump and troublesome mechanical seal replacement.

Application

•Circulation of sea water, culture tank and water tank, etc.

•Drain chemical liquid, transfer of chemical liquid, etc.

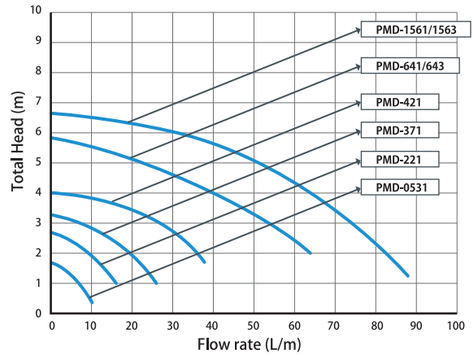
•Waste water treatment equipment, Aquarium equipment, PCB equipment, Solar heating system, Filter, Bubble bath, Etching equipment, Printing equipment, Chillers, Cooling of NC machine, Ice maker, etc.

Caution

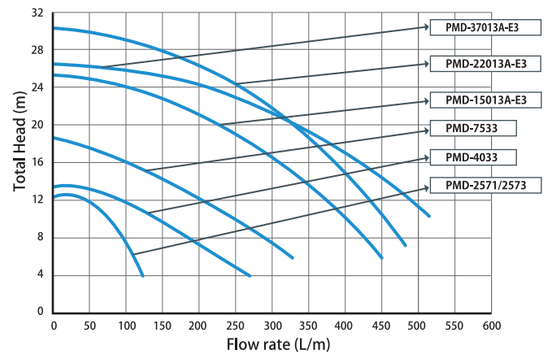
- Chemical resistance must be verified before using the products by checking whether an intended purpose can be achieved with a preliminary test, etc.
- In order to use cold water, apply lagging materilas and/or heat-insulating materials as measusre againts dew condensation if necessary.

Performance Curve

Performance curve (50Hz)



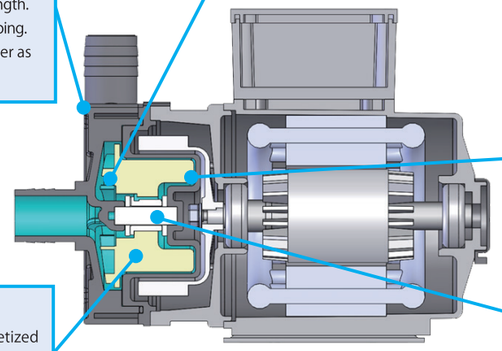
Performance curve (50Hz)



Excellent charactistics

Front-casing
- Hose-connection and screw-connection type.
- Integral molding by polypropylene mixed with filler to increase mechanical strength.
- Simple and compact connection to piping.
- Straight screw according to diameter as standard.

Impeller
- Material is PP and permanent magnet is contained inside.
- PTFE bearing is inserted between impeller is open or closed or semi-closed type, depending on performance characteristics.



Back casing
- Integral molding by polypropylene or PPE as well as front-casing.

Drive magnet
- Made of permanent magnet magnetized from 6 poles to 10 poles. Impeller is rotated by magnet form outside of back casing.

Bearing

Corrosion resistance Table

Fluid	Criterion
Sodium hypochlorite	Up to 5 ppm of concentration
Caustic soda	Up to 5 % of concentration
Hydrochloric acid	Up to 30 % of concentration
Sulfuric acid	Up to 10 % of concentration
Citric acid	Up to 15 % of concentration

■ The above corrosion resistance table shows the standards when a fluid temperature is normal (0~40℃).

Part name and material

Material of water contact part

Part name \ Classification	2
Casing	PP(with glass)
Impeller	PP(with glass)
Pump shaft	Alumina ceramics
Thrust block	Alumina ceramics
Pump bearing	PTFE
O-ring	FKM

PMD

Magnetic Drive Pumps (for chemical and seawater)

Specification

TYPE Ⅰ

Model	Motor				Diameter		50Hz		60Hz	
	Rated output	Phase	Rated voltage	Frequency	Hose	Screw	Total head	Rated flow rate	Total head	Rated flow rate
	W(50Hz/60Hz)	Φ	V	Hz	mm	inch	m	L/min	m – L/min	
PMD-0531	18	Single	220	50	14	–	1 ・ 0.7	6 ・ 8	–	–
PMD-221	10/15	Single	220, 220–240	50/60	14	–	2 ・ 1	6 ・ 13	3 ・ 2	6 ・ 13
	10/15	Single	220, 220–240	50/60	–	G3/4	2 ・ 1	6 ・ 13	3 ・ 2	6 ・ 13
	10/15	Single	110	50/60	14	–	2 ・ 1	6 ・ 13	3 ・ 2	6 ・ 13
PMD-371	15/20	Single	220, 220–240	50/60	17	–	2 ・ 1.5	18 ・ 22	3 ・ 2	19 ・ 26
	15/20	Single	220, 220–240	50/60	–	G3/4	2 ・ 1.5	18 ・ 22	3 ・ 2	19 ・ 26
	15/20	Single	110	50/60	17	–	2 ・ 1.5	18 ・ 22	3 ・ 2	19 ・ 26
	15/20	Single	110	50/60	–	G3/4	2 ・ 1.5	18 ・ 22	3 ・ 2	19 ・ 26
PMD-421	35/45	Single	220, 220–240	50/60	20	–	3 ・ 2	21 ・ 30	4 ・ 3	26 ・ 35
	35/45	Single	220, 220–240	50/60	–	G3/4	3 ・ 2	21 ・ 30	4 ・ 3	26 ・ 35
	35/45	Single	110	50/60	–	G3/4	3 ・ 2	21 ・ 30	4 ・ 3	26 ・ 35
PMD-581	40/60	Single	220, 220–240	50/60	20	–	4 ・ 3	23 ・ 35	6 ・ 5	23 ・ 35
	40/60	Single	220, 220–240	50/60	–	G3/4	4 ・ 3	23 ・ 35	6 ・ 5	23 ・ 35
PMD-641	65/100	Single	110(220)	50/60	26	–	5 ・ 3	23 ・ 50	7 ・ 5	25 ・ 50
	65/100	Single	110(220)	50/60	–	G1	5 ・ 3	23 ・ 50	7 ・ 5	25 ・ 50
	65/100	Single	220, 220–240	50/60	26.5	–	5 ・ 3	23 ・ 50	7 ・ 5	25 ・ 50
	65/100	Single	220–240	50/60	–	G1	5 ・ 3	23 ・ 50	7 ・ 5	25 ・ 50
PMD-643	65/100	Three	380・400・415	50/60	–	G1	4 ・ 3	34 ・ 46	6 ・ 5	35 ・ 48
	65/100	Three	220(380)	50/60	26	–	5 ・ 3	23 ・ 50	7 ・ 5	25 ・ 50
	65/100	Three	220(380)	50/60	–	G1	5 ・ 3	23 ・ 50	7 ・ 5	25 ・ 50
PMD-1561	120/160	Single	110(220)	50/60	26	–	5.5 ・ 4	40 ・ 60	8 ・ 6	40 ・ 63
	120/160	Single	110(220)	50/60	–	G1	5.5 ・ 4	40 ・ 60	8 ・ 6	40 ・ 63
	120/160	Single	220, 220–240	50/60	26.5	–	5.5 ・ 4	40 ・ 60	8 ・ 6	40 ・ 63
	120/160	Single	220–240	50/60	–	G1	5.5 ・ 4	40 ・ 60	8 ・ 6	40 ・ 63
PMD-1563	120/160	Three	380・400・415	50/60	–	G1	5 ・ 4	42 ・ 56	7 ・ 5	50 ・ 72
	120/160	Three	220(380)	50/60	26	–	5.5 ・ 4	45 ・ 64	8 ・ 6	45 ・ 70
	120/160	Three	220(380)	50/60	–	G1	5.5 ・ 4	45 ・ 64	8 ・ 6	45 ・ 70
PMD-2571	250	Single	220, 220–240	50	26.5	–	10 ・ 8	50 ・ 75	–	–
	250	Single	220–240	50	–	G1	10 ・ 8	50 ・ 75	–	–
	250	Single	110(220)	60	26.5	–	–	–	10 ・ 8	55 ・ 80
	250	Single	110(220)	60	–	G1	–	–	10 ・ 8	55 ・ 80
	250	Single	220	60	26.5	–	–	–	10 ・ 8	45 ・ 70
PMD-2573	250	Three	380・400・415	50	26.5	–	10 ・ 8	70 ・ 95	–	–
	250	Three	380・400・415	50	–	G1	10 ・ 8	70 ・ 95	–	–
	250	Three	220(380)	50	26.5	–	10 ・ 8	70 ・ 95	–	–
	250	Three	220(380)	50	–	G1	10 ・ 8	70 ・ 95	–	–
PMD-4033	400	Three	380, 380–415	50	–	G1 1/2	10 ・ 6	130 ・ 230	–	–
	400	Three	380	50	–	G1 1/2	10 ・ 6	120 ・ 200	–	–
	400	Three	380–415	60	–	G1 1/2	–	–	10 ・ 6	140 ・ 240
PMD-7533	750	Three	380, 380–415	50	–	G1 1/2	15 ・ 12	130 ・ 210	–	–
	750	Three	380	50	–	G1 1/2	14 ・ 10	135 ・ 230	–	–
	750	Three	380–415	60	–	G1 1/2	–	–	15 ・ 12	155 ・ 225

TYPE Ⅱ

Model	Motor				Diameter※	50Hz		60Hz	
	Rated output	Phase	Rated voltage	Frequency		Total head	Rated flow rate	Total head	Rated flow rate
	W(50Hz/60Hz)	Φ	V	Hz		m	L/min	m – L/min	
PMD-15013A-E3	1500	Three	380・400・415	50	JIS 10K・Flange 50A × 40A	20.5 ・ 9.5	120 ・ 355	–	–
PMD-22013A-E3	2200	Three	380・400・415	50	JIS 10K・Flange 50A × 40A	25 ・ 13.5	120 ・ 360	–	–
PMD-37013A-E3	3700	Three	380・400・415	50	JIS 10K・Flange 50A × 40A	19.2 ・ 14.8	250 ・ 360	–	–

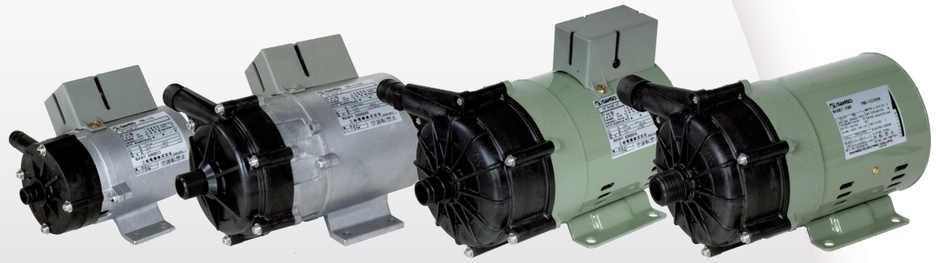
■ Conditions of liquids : ambient Temp : 0~60℃ ■ Viscosity : below 30㎟/s ■ Specific gravity : below 1.1
■ (1) Slurry liquids reduce life of pump. (2) Allowable primary side pressure : Less than 100kpa. (3) Indoor use. (4) Shock pressure and abnomal pressure etc will damage the pump part. (5) Voltage can be adjusted to customer's requirement.
※ A phase flange, flange packing, and the mounting bolt doesn't come with the products.
■ Please purchase the optional flange sets (sell separately), or, please find commercially avail able product (JIS 10K product).
■ Please contact Sanso for any custom spec. power supply needed.

PMD

Magnetic Drive Pumps (for hot water)

Magnetic coupling type
RoHS

PMD-111
PMD-121
PMD-521
PMD-1521
PMD-1523



PMD-111 PMD-521 PMD-1521 PMD-1523

Characteristics

•No shaft seal part, no leakage

Since this type is small-sized but with high head water (high pressure), this pump economically generates sufficient discharge rate even against higher pipe resistance.

Caution

- In order to use cold water, apply lagging materilas and/or heat-insulating materials as measusre againts dew condensation if necessary.
- [Deteriorated unfrozen-liquid] and [unfrozen liquid of viscosity increase at the low temperature] might damage the pump.

Part name and material

(Note 1) Material of water contact part

Part name \ Classification	2
Casing	PPE (with glass)
Impeller	PPE (with glass)
Pump shaft	Alumina ceramics
Thrust block	Alumina ceramics
Pump bearing	Carbon
O-ring	EPDM

Specification

PMD - Hot water

Model	Motor				Diameter		50Hz		60Hz	
	Rated output	Phase	Rated voltage	Frequency	Hose	Screw	Total head	Rated flow rate	Total head	Rated flow rate
	W(50Hz/60Hz)	Φ	V	Hz	mm	inch	m	L/min	m – L/min	
PMD-111	10/15	Single	220	50/60	14	–	2.5(MAX)	16(MAX)	3.5(MAX)	19(MAX)
	10	Single	240	50	14	–	2.5(MAX)	16(MAX)	–	–
PMD-121	10/15	Single	220	50/60	14	–	4.2	13	5.5	15
PMD-521	40/50	Single	110, 220	50/60	–	G1/2	8.5	14	11	15
PMD-1521	85/150	Single	110/220, 220	50/60	20	G3/4	14.5	34.5	19.8	38
PMD-1523	100/150	Three	220/380	50/60	20	G3/4	14.5	34.5	19.8	38

■ Ambient Temp : 0~40℃
■ Liquid Temp : 0~90℃
■ Some models con be used at -20℃.
■ Contact us, In case of possible condensation, take measures.
■ Slurry solutions will harm the life of pump. Max viscosity : 30㎟/s
■ Specific gravity : Less than 1.1
■ Allowable primary side pressure : Less than 100kpa.
■ Site : For indoor use
■ Abnormal pressure and shock might damage the pump.
■ Please contact Sanso for any custom spec. power supply needed.

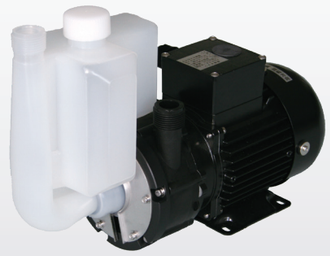
PMDS

Self-priming type
Magnet coupling type
RoHS

PMDS-421
PMDS-581
PMDS-641, 641B
PMDS-643, 643B
PMDS-1561, 1561B
PMDS-1563, 1563B
PMDS-2571
PMDS-2573
PMHS-1511B2M
PMHS-1513B2M

Self-priming magnetic dive pumps (For chemical and seawater)

PMDS-581



PMDS-2573

PMHS-1511B2M

Characteristics

•High performance and energy saving

Compared to the conventional products, the pump efficiency increased by 35%. This type became smaller, lighter, 5-dB quieter and 50% reduction in vibration.

•Long-life and no liquid leakage

There is no liquid leakage due to no shaft seal part, As made of resin, this type is appropriate for transporting highly-corro- sive special liquid.

•Freely detachable self-priming tank

A freely detachable self-priming tank design. Self-priming and non-self-priming can be selected according to applica- tion. Though it is easy to switch between a self-priming pump (PMDS type) and a non-self-priming pump (PMD type}, contact us before switching.

•No reduction in max. self-priming height due to liquid temperature

Its innovative self-priming design does not cause the maximum self-priming height to be reduced by liquid temperature.

Application

- Seawater circulation and chemical solution circulation (some excluded)
- Coolant circulation, fish preserves and seawater plants
- Hydroponic culture and plant factories

Caution

- Chemical resistance must be verified before using the products by checking whether an intended purpose can be achieved with a preliminary test, etc.
- In order to use cold water, apply lagging materilas and/or heat-insulating materials as measusre againts dew condensation if necessary.

Corrosion resistance Table

Fluid	Criterion
Sodium hypochlorite	Up to 5 ppm of concentration
Caustic soda	Up to 5 % of concentration
Hydrochloric acid	Up to 30 % of concentration
Sulfuric acid	Up to 10 % of concentration
Citric acid	Up to 10 % of concentration

*The above corrosion resistance table shows the standards when a fluid temperature is normal(0 to 40℃).

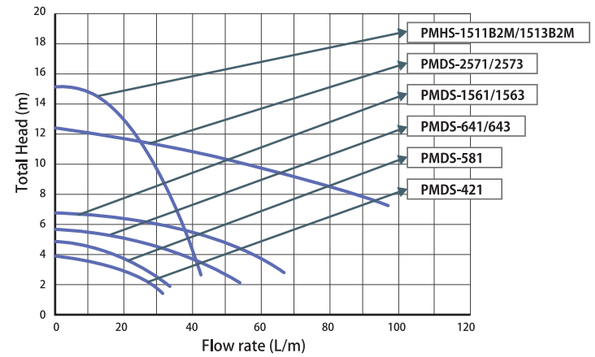
Part name and material

(Note 1) Material of water-contact part

Part name \ Classification	2
Casing	PP (with glass)
Impeller	PP (with glass)
Pump shaft	Alumina ceramics
Thrust block	Alumina ceramics
Pump bearing	PTFE
O-ring	FKM

Performance Curve

Performance curve (50Hz)



Specification

Model	Motor				Diameter	Priming height	50Hz		60Hz	
	Rated output	Phase	Rated voltage	Frequency	Screw		Total head	Rated flow rate	Total head	Rated flow rate
	W(50Hz/60Hz)	Φ	V	Hz	inch	m	m	L/min	m – L/min	
PMDS-421	35/45	Single	220–240	50/60	G1 · G3/4	0.8	3 · 2	17 · 25	4 · 3	22 · 29
PMDS-581	40/60	Single	220, 220–240	50/60	G1 · G3/4	0.8	4 · 3	14 · 24	6 · 5	10 · 22
PMDS-641B	65/100	Single	110(220)	50/60	G1	1.3	5 · 3	20 · 47	7 · 5	24 · 48
PMDS-641	65/100	Single	220–240	50/60	G1	1.3	5 · 3	10 · 36	7 · 5	10 · 38
PMDS-643B	65/100	Three	220(380)	50/60	G1	1.3	5 · 3	21 · 47	7 · 5	24 · 48
PMDS-643	65/100	Three	380·400·415	50/60	G1	1.3	5 · 3	13 · 37	7 · 5	16 · 38
PMDS-1561B	120/160	Single	110(220)	50/60	G1	1.3	5.5 · 4	38 · 58	8 · 6	39 · 62
PMDS-1561	120/160	Single	220–240	50/60	G1	1.3	5.5 · 4	38 · 58	8 · 6	39 · 64
PMDS-1563B	120/160	Three	220(380)	50/60	G1	1.3	5.5 · 4	39 · 59	8 · 6	43 · 66
PMDS-1563	120/160	Three	380·400·415	50/60	G1	1.3	5.5 · 7	39 · 59	8 · 6	43 · 66
PMDS-2571	250	Single	220–240	50	G1	1.3	10 · 8	50 · 75	–	–
PMDS-2573	250	Three	380·400·415	50	G1	1.3	10 · 8	70 · 95	–	–
PMHS-1511B2M	165/235	Single	220–240	50/60	G3/4	1.3	12 · 8	22 · 32	16 · 10	27 · 39
PMHS-1513B2M	170/265	Three	380–415	50/60	G3/4	1.3	12 · 8	22 · 32	16 · 10	27 · 39

■ Conditions of liquids : ambient Temp : 0~60℃ Viscosity : below 30㎟/s
■ Specific gravity : below 1.1
■ (1) Slurry liquids reduce life of pump. (2) Pressure shall be less than 100kpa. (3) Indoor use.
(4) Shock pressure and abnomal pressure etc will damage the pump part. (5) Voltage can be adjusted to customer's requirement.
■ Please contact Sanso for any custom spec. power supply needed.

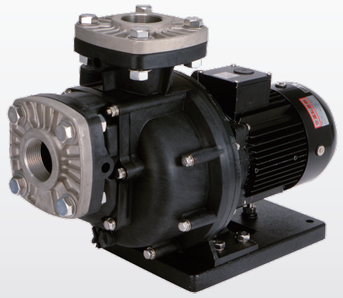
PSPZ

Mechanical seal type RoHS

Self-priming centrifugal pumps. Resin type for seawater.

25PSPZ-2031A·B
25PSPZ-2033A
40PSPZ-4031A·B
40PSPZ-4033A·B
40PSPZ-7533A-E3
50PSPZ-15033A-E3
80PSPZ-15023A-E3
80PSPZ-22023A-E3

40PSPZ-7533A-E3



50PSPZ-15033A-E3

Characteristics

•Super low noise
By the improved structure in pump, super low noise can be available.
About 15dB less than our conventional model.

•High efficiency and energy conservation
The one-piece optimized design of the motor and the pump realized high efficiency and energy conservation.
Compared with our conventional model, max 47% improved in efficiency and max 56% in energy consumption.

•Long life and high reliability
Materials of excellent corrosion resistance are used in the liquid contact part and mechanical seal has been improved, eliminating the liquid leakage.

•High maintainability
Its maintainability was improved by employing a design for easy shaft fixing when the impeller is removed/installed for mechanical seal replacement.
TEFC motor is used for all models.

Application

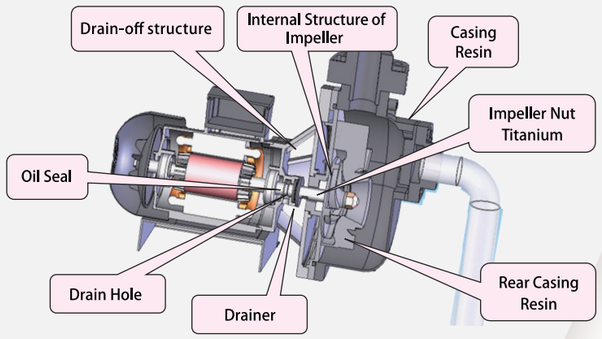
•Coolant circulation, seawater circulation

•Various machine sets, ship, fish preseres and seawater plant Ship

Excellent charactistics

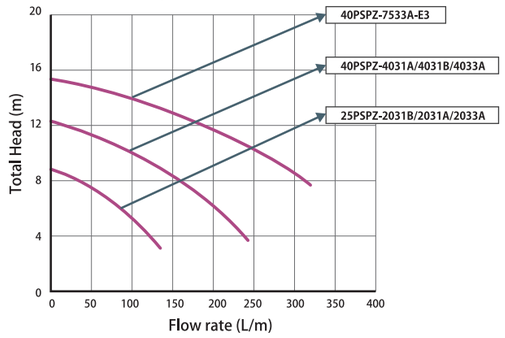
Long Life and High Reliability (structure)

●Wetted Part is made of Corrosion-proof material
●Provide Greater Reliability to Leakage of Water
●Easy Maintenance without dismantle Motor

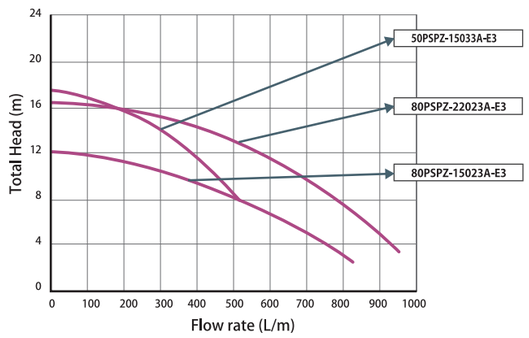


Performance Curve

PSPZ Resin Type 250W - 750W



PSPZ Resin Type 1500W - 2200W



Specification

Type Ⅰ Resin Type

Model	Rated output	Phase	Rated voltage	Frequency	Diameter	Priming height (Pure water 20℃)	Total head	Flow rate	Rated current	Motor protector
	W	Φ	V	Hz	inch	m	m	L / min	A	
25PSPZ-2031B	250	Single	110	60	Rc1	6	5 ・ 6.4	111 ・ 89	4.8	Manual
25PSPZ-2031A	250	Single	220–240	50	Rc1	6	5 ・ 7	89 ・ 59	2.8	Manual
25PSPZ-2033A	250	Three	380・400・415	50	Rc1	6	5 ・ 7	84 ・ 54	0.7	Manual
40PSPZ-4031B	400	Single	110	60	Rc1 1/2	6.5	7 ・ 8.1	171 ・ 139	7.4	Manual
40PSPZ-4031A	400	Single	220–240	50	Rc1 1/2	6.5	8 ・ 9.5	139 ・ 90	3.4	Manual
40PSPZ-4033B	400	Single	220–240	60	Rc1 1/2	6.5	8 ・ 9.5	145 ・ 90	3.6	Manual
40PSPZ-4033A	400	Three	380–415	50	Rc1 1/2	6.5	7 ・ 9	157 ・ 118	1.4	Manual
40PSPZ-7533A-E3	750	Three	380・400・415	50	Rc1 1/2	6.5	7.5 ・ 12.5	250 ・ 80	2.1	Manual

Type Ⅱ Resin Type

Model	Rated output	Phase	Rated voltage	Frequency	Diameter	Priming height (Pure water 20℃)	Total head	Flow rate	Rated current	Motor protector
	W	Φ	V	Hz	inch	m	m	L / min	A	
50PSPZ-15033A-E3	1500	Three	380・400・415	50	Rc2	6.5	10 ・ 14.5	400 ・ 120	3.4	Manual
80PSPZ-15023A-E3	1500	Three	380・400・415	50	Rc3	5	5.5 ・ 10	600 ・ 250	3.5	Manual
80PSPZ-22023A-E3	2200	Three	380・400・415	50	Rc3	5	10 ・ 14	600 ・ 250	5.3	Manual

■ Ambient Temp : 0~40℃
■ Type of liquid Seawater, Clean water (0~60℃)
■ Priming height is different upon liquid temperature.
■ Site : Can be set outdoors
■ Permissible insert pressure : Less than 100kpa.
■ Please contact Sanso for any custom spec. power supply needed.

PSPZ

Mechanical seal type RoHS

50PSPZ-22033A-E3
65PSPZ-37033A-E3
80PSPZ-37033A-E3

Awards for profession who create the world's leading edges.

Self-priming centrifugal pumps (Cast-iron and resin (hybrid), for seawater)

65PSPZ-37033A-E3

■ Characteristics

•Super low noise
Its hybrid design (resin casing with cast-iron coating on the utside surface) allows the sound absorbing performance of cast-iron to take effect, resulting in super low noise.

•High efficiency and energy conservation
The one-piece optimized design of motor and the pump realized high efficiencyand energy conservation.

•Long life and high reliability
Materials of excellent corrosion resistance are used in the liquid contact part.
The pump casing has the hybrid design in which the cast-iron outer shell and the resin inner liquid-contact part are integrated for high pressure resistance.
The design of the shaft seal part was established in ther conventional product. These factors improvd its reliability.

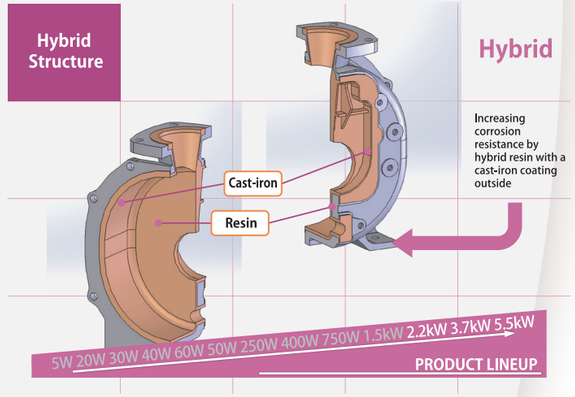
•High maintainability
Its maintainaility was improved by employing a design for easy shat fixing when the impelleris removed / installed for mechanical seal replacement.

Caution

- Separatly install overload protection devices (circuit breakers) as these models (except 50PSPZ-22033A-E3) do not have motor protector. Adjust the current setting values of overload protec-tion devices to the rated current values shown on the pump name plates.

■ Application

- Coolant circulation, seawater circulation
- Various machine sets, ship, fish preseres and seawater plants
- It fits in a small size ship without any con-ditions of setting place because of small and light size



■ Specification

Type III Cast-iron + Resin (Hybrid)

Model	Rated output	Phase	Rated voltage	Frequency	Diameter	Priming height (Pure water 20℃)	Total head	Flow rate	Rated current	Motor protector
	W	Φ	V	Hz	inch	m	m	L / min	A	
50PSPZ-22033A-E3	2200	Three	380・400・415	50	Rc2	6.5	16.5 ・ 21.5	400 ・ 120	5.9	Manual
65PSPZ-37033A-E3	3700	Three	380・400・415	50	Rc2 1/2	6.5	22 ・ 28.5	600 ・ 250	9.8	Manual
80PSPZ-37033A-E3	3700	Three	380・400・415	50	Rc3	6.5	22 ・ 28.5	600 ・ 250	9.8	–

■ Liquid Temp : 0~60℃ (For seawater and clean water) Priming heght is different and dependent on the liquid temperature.
■ Set the protector against overcurrent for model doesn't have protector. ■ Site : Can be set outdoor ■ Permissible insert pressure : Less than 100kpa.
■ Please contact Sanso for any custom spec. power supply needed.

PBZ

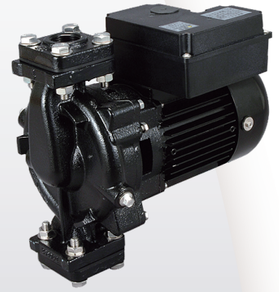
Mechanical seal type RoHS

20PBUZ-331A
25PBZ-531A
25PBZ-1031A
25PBZ-1033A
32PBZ-2021A
32PBZ-2023A
25PBZ-4031A
40PBZ-4021A
40PBZ-4023A
50PBZ-7523A-E3
50PBZ-15023A-E3
65PBZ-22023A-E3

Magnetic Drive Pumps (for hot water)

65PBZ-22023A-E3

32PBZ-2023A



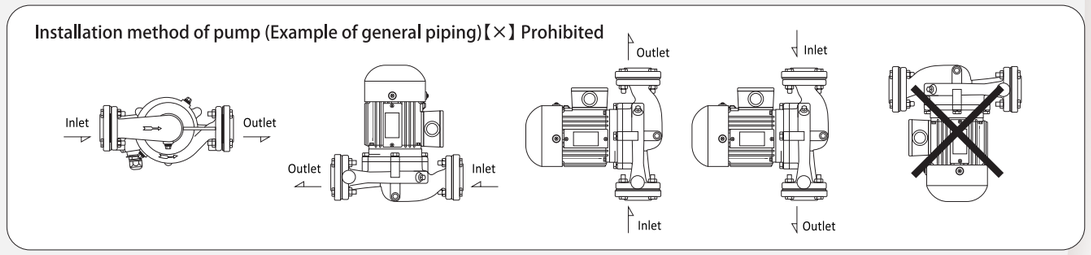
25PBZ-4031A

■ Characteristics

•Light and strong due to aluminum case for frame motors
•Long life due to Air Pump Shut-off bearing part
•Less noise base on new design fan
•High reliability with totally enclosed motor

Caution

- [Deteriorated unfrozen-liquid] and [unfrozen liquid of which viscosity increase at the low temperature] might damage the pump.



■ Application

- Water supply for building, water circulation in various machines,etc.

■ Specification

Model	Rated output	Phase	Rated voltage	Frequency	Diameter	Flow rate	Total head	Rated current	Motor Protector
	W	Φ	V	Hz	inch	L / min	m	A	
20PBUZ-331A	50	Single	220–240	50	Rc3/4	15 ・ 30	3.9 ・ 2.0	0.41	Automatic
25PBZ-531A	50	Single	220–240	50	Rp1	20 ・ 40	5.7 ・ 3.6	0.6	Automatic
25PBZ-1031A	100	Single	220–240	50	Rp1	30 ・ 70	7.5 ・ 5.7	1.2	Automatic
25PBZ-1033A	100	Three	380–415	50	Rp1	30 ・ 70	7.6 ・ 5.8	0.4	Automatic
32PBZ-2021A	200	Single	220–240	50	Rp11/4	50 ・ 150	7.8 ・ 4.6	2	Manual
32PBZ-2023A	200	Three	380–415	50	Rp11/4	50 ・ 125	8.5 ・ 5.0	0.6	Manual
25PBZ-4031A	400	Single	220–240	50	Rc1	80 ・ 162	13 ・ 9	3.6	Manual
40PBZ-4021A	400	Single	220–240	50	Rp11/2	80 ・ 224	10.6 ・ 6	3.9	Manual
40PBZ-4023A	400	Three	380・400・415	50	Rp11/2	80 ・ 220	10.8 ・ 7	1.3	Manual
50PBZ-7523A-E3	750	Three	380・400・415	50	Rp2	120 ・ 360	12.6 ・ 7.3	1.9	Manual
50PBZ-15023A-E3	1500	Three	380・400・415	50	Rp2	120 ・ 360	19.8 ・ 11.5	3.5	Manual
65PBZ-22023A-E3	2200	Three	380・400・415	50	Rp2 1/2	250 ・ 560	19.7 ・ 16	5.4	Manual

■ Liquid Temp : 0~90℃(Clean water) ■ Site : Can be set outdoors ■ Allowable primary side pressure : Less than 100kpa.
■ Please contact Sanso for any custom spec. power supply needed.

PAZ

Mechanical seal type RoHS

PAZ-1531
PAZ-2531
PAZ-4031
PAZ-4033

Automatic shallow-well pump (Cast-iron, totally-enclosed motor)

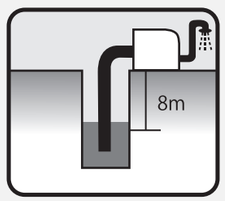
PAZ-4031

Characteristics

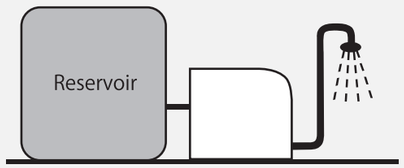
- **Totally-enclosed fan-cooling motor**
  The employment of a totally-enclosed fan-cooled indoor motor improved durability and reliability in humid / saline environment.
- **Selectable discharge ports**
  Discharge ports are ready for three directions, which can be selected according to an installation site.
- **Empty-operation protection relay included**

Application

- Wells up to 8 m of suction height



- Water-supply pressurization (combination with a water tank) (4 m or less of water-tank height)



Specification

Model	Rated output	Phase	Rated voltage	Frequency	Diameter	Capacity at total 12m head	For shallow well				For Receiving tank			
							Suction head	Discharge head	Pressure switch	Stop flow	Suction head	Discharge head	Pressure switch	Stop flow
	W	Φ	V	Hz	inch	L / min	m	m	kPa	L/min	m	m	kPa	L/min
PAZ-1531	150	Single	220–240	50	Rc3/4	24	8	9	100–130	2.5	1	14	150–190	2.5
	150	Single	110	60	Rc3/4	24	8	9	100–130	2.5	1	14	150–190	2.5
PAZ-2531	250	Single	220–240	50	Rc1	30	8	12	130–170	2.5	1	19	200–240	2.5
	250	Single	110	60	Rc1	30	8	12	130–170	2.5	1	19	200–240	2.5
PAZ-4031	400	Single	220–240	50	Rc1 1/4	44	8	13	140–180	2.5	1	20	210–250	2.5
	400	Single	110	60	Rc1 1/4	44	8	13	140–180	2.5	1	20	210–250	2.5
PAZ-4033	400	Three	220–240	50	Rc1 1/4	44	8	13	140–180	2.5	1	20	210–250	2.5

■ Operating liquid temperature : normal temperature (clear water)
■ Allowable suction pressure : 40kpa or less (If pressurized from a water tank)
■ Installation location : outside Installation capable
■ Please contact Sanso for any custom spec. power supply needed.

PX

Mechanical seal type

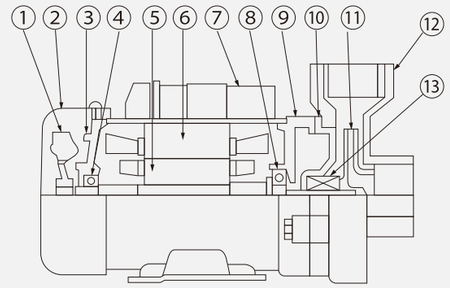
PX-400
PX-750
PX-1100

Centrifugal pump

PX-750

Characteristics

- Simple construction
- Big capacity type pump
- Impeller of bronze
- Induction motor and condenser running type
- Various application and easy installation



Application

- Home well water supply
- Irrigation for farms
- Apartments, hotels and cottages
- Tank fitting, etc.

① Fan
② Fan cover
③ Bracket B
④ Ball bearing
⑤ Rotor assy.
⑥ Stator assy.
⑦ Condenser
⑧ Ball bearing
⑨ Bracket A
⑩ O-Ring
⑪ Impeller
⑫ Casing
⑬ Mechanical seal

Specification

Model	Rated output	Phase	Rated voltage	Frequency	Diameter	Revolution	Max. capacity	Max. Total head
	W	Φ	V	Hz	inch	rpm	L / min	m
PX-400	400	Single	220	50	Rp1 1/2	2850	250	15
	400	Single	220	60	Rp1 1/2	3350	250	15
PX-750	750	Single	220	60	Rp2	3350	450	18
	750	Single	220	50	Rp2	2820	450	18
PX-1100	1100	Single	220	50	Rp2	2820	550	23
	1100	Single	240	50	Rp2	2820	550	23
	1100	Single	220	60	Rp2	3380	550	23

■ Please contact Sanso for any custom spec. power supply needed.