



Stainless Steel Magnetic Drive Pump



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Brand Story

Environmental protection and user safety has been always the main focus of PTCXPUMP sealless magnetic drive pump product development. The design structure in form of sealless, is mainly to solve the problem of VOCs leakage from mechanical seal pumps.

PTCXPUMP is a professional manufacturer of sealless magnetic drive pump in Taiwan. Having had more than 40 years of experience in chemical transfer solutions, PTCXPUMP has completed research and development in 2014 and started its mass production. The product material provides stainless steel SUS316L as the standard material, and the corrosion resistance is better than general stainless steel 304 or 316 material.

PTCXPUMP sealless magnetic drive pumps exhibit no leakage feature and they have been produced with high quality materials. We have strict quality control over our products and we believe that quality is everything. Each single pump is manufactured following test procedures of quality inspections before shipping. PTCXPUMP products are widely used in petrochemical, chemical, energy, semiconductor, optoelectronic, environmental production and other industries.

Sealless Leakage Free Best Solution For Chemical Transfer

PTCXPUMP stainless steel sealless magnetic drive pumps provide SUS316L as standard pump material, which is better in corrosion resistance for handling chemical liquids. Sealless design with no leakage concerns is commonly used in transferring corrosive, toxic, flammable or explosive chemicals. Products are processed with high-standard and top material selections. Product inspection is followed by ISO 9001 standard to ensure product quality and reliability among customers.



PTCXPUMP stainless steel sealless magnetic drive pump has received Taiwan Excellence Award in 2021, in which products were assessed based on five aspects; R&D, design, quality, marketing and Taiwan manufacturing. Environmental protection and user safety have always been the main focus of PTCXPUMP product development in providing best chemical transfer solution and the most innovative products.



Why PTCXPUMP?



Sealless Design With Leakage Free

Fully sealless structure design resolves leakage problem and makes sealless magnetic drive the best choice for transferring hazardous or volatile chemicals.



Quick Installation And Easy Maintenance

The feature of simple structure requires no special tools to install or to disassemble. Having no complicated mechanical seal would save time on installation and disassembly and would eventually reduce the frequency for parts or equipments replacement and maintenance.



Cost Reduction And Efficiency Improvement

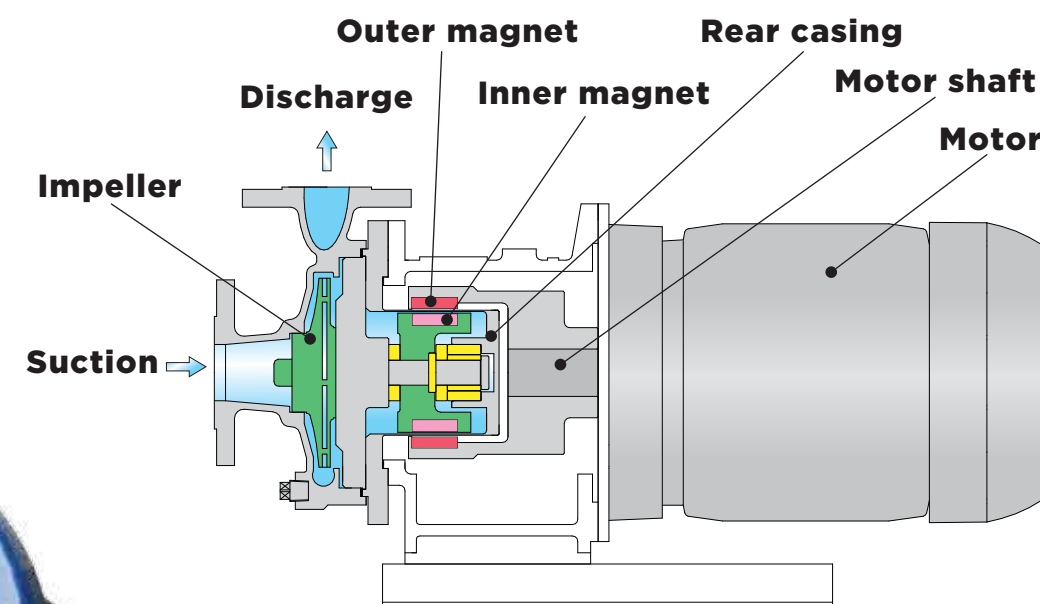
No requirements for the spare parts and less time spent on additional monitoring and maintenance would maximize efficiency and substantial savings over the use of the pumps.



Environmental Protection And User Safety

PTCXPUMP pumps effectively avoid the leakage and volatilization of high-risk chemicals which would cause environmental pollution, operator injury or loss of expensive chemical.

How Magnetic Drive Pumps Work?



A sealless magnetic drive pump is a conventional centrifugal pump of which function relies on the attracted inner and outer magnet. The outer magnet is connected with motor shaft and inner magnet is assembled with impeller. When the motor shaft rotates the magnetic attraction forces inner magnet to rotate and lead to the impeller to pump the chemical liquid.

Application for chemicals?

Acetaldehyde	Cyclohexane	Methanol
Acetic acid	Ethanol	Methyl ethyl ketone
Acetone	Ethyl alcohol	Nickel sulphate
Aluminium sulphate	Ethylene glycol	Nitric acid
Ammonia water	Formalin	Phenol
Ammonium oxalate	Freon	Pure water
Benzene	Gasoline	Styrene
Butadiene	Hot oil, Hot water	Acetaldehyde
Butyl alcohol	Isopropyl alcohol	Sulfuric acid
Caustic soda	Kerosene	Toluene
Chloroform	Maleic acid	Xylene

Stainless steel material commonly applies to transfer solvent chemicals which due to conditions such as temperature and concentration may require different degree of corrosion resistance. If not sure for the material compatibility, please feel free to contact with us.

Modular Design Interchangeable Parts Reduce Cost



Front Casing

Precision casting method is used to bring a **universal flange design** for three types of piping connections which are ANSI, JIS, and DIN.



Casing Cover

Special flow channel and easy disassembly design make easy maintenance.



Gasket

PTFE is used as gasket standard material which compatibility is used for most chemicals in the industry.



Shaft

High precision forging unit is used to improve balance during operation. Shaft reaming design helps inner flow channel for better cooling and improve durability.



Anti-Vortex

Anti-vortex design for rear casing is to prevent abrasion caused by impurity substances.



Outer Magnet

Outer magnet surface with **anti-corrosion coating** is to avoid corrosion caused by external environmental influences.



Main Material

SUS316L is provided for better corrosion resistance. Alloy20 and Hastelloy-C equivalent are also provided for optional selection.



Impeller

Precision casting method is used to bring **one-piece design** of structure without welding which improves durability and better corrosion resistance.



Bearing Thrust ring Sleeve

Parts are made with **SiC material** which provides low friction with minimum wear and excellent chemical corrosion resistance.



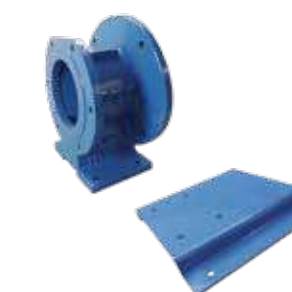
Inner Magnet

High-performance rear earth magnet is used to provide for the inner magnet, temperature use range from minus 80 degree to 280 degree Celsius.



Rear Casing

One-piece design of rear casing is of excellent pressure and corrosion resistance. Coupling type material provide SUS316L, additionally an optional Hastelloy-C equivalent material to reduce the magnetic loss and improve the operation efficiency.



Baseplate Adapter

Two-piece design for baseplate and adapter can be customized and adjusted according to the installation height on site. The installation of motor is designed for **standard IEC motor frames** and closed coupled design requires no special tools nor shaft alignment.

PM Series

For Equipment Or Laboratory Use

PM series is the smallest among stainless steel magnetic drive pumps and often used in equipment or small laboratories. Operating temperature can be handled from minus 80 degree to 280 degree Celsius. Simple design of internal component is to increase operating efficiency. SiC component bring durability and extend service span.

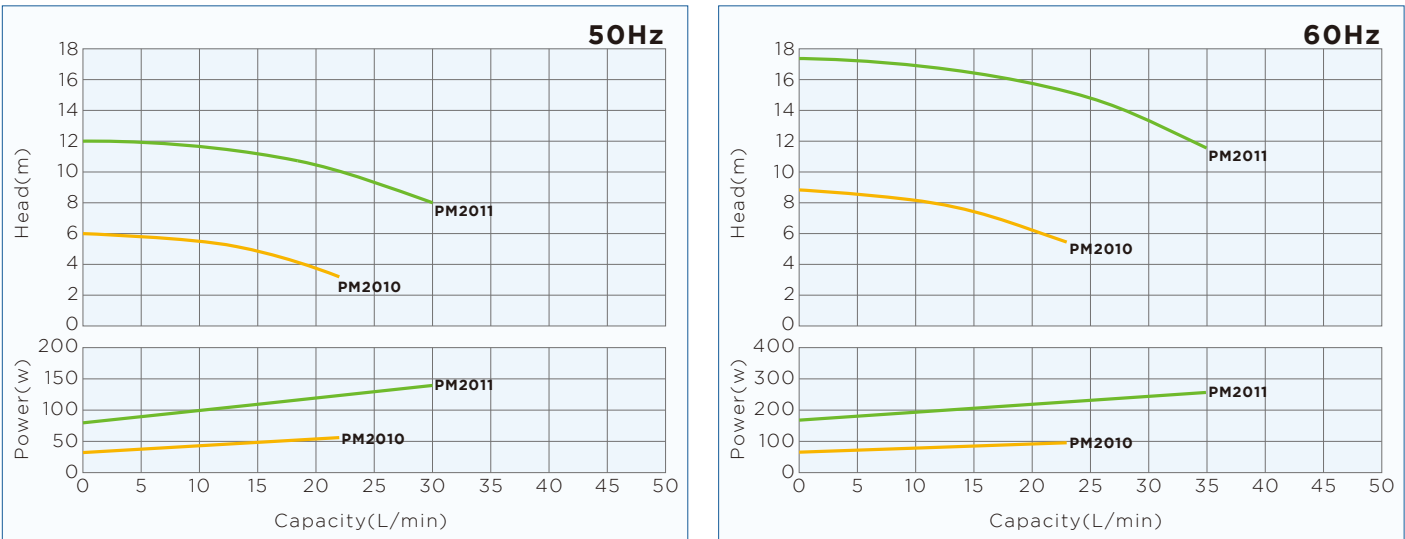


Specification

PM		
Frequency	50Hz	60Hz
Max. capacity	81L/m	81L/m
Max. total head	22m	30m
Suction & discharge	15x13 ~ 25x20	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<100mPa.s(cp)	
Design pressure	0.6MPaG (*PM201:1.0MPaG*)	
Flange standard	R Thread type	
Motor output	90W ~ 550W	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

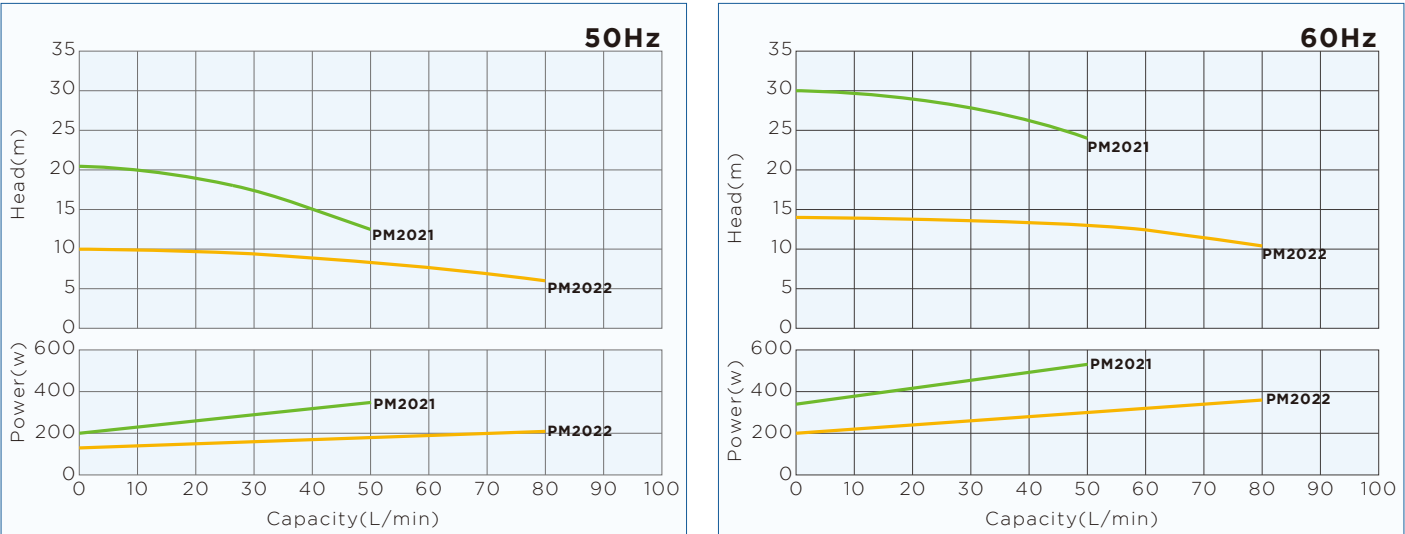
Performance Curve

PM2010 / 2011



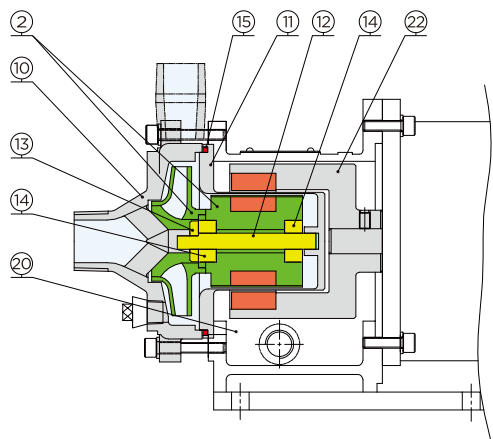
*The performance curve is for reference and preliminary selection only

PM2021 / 2022



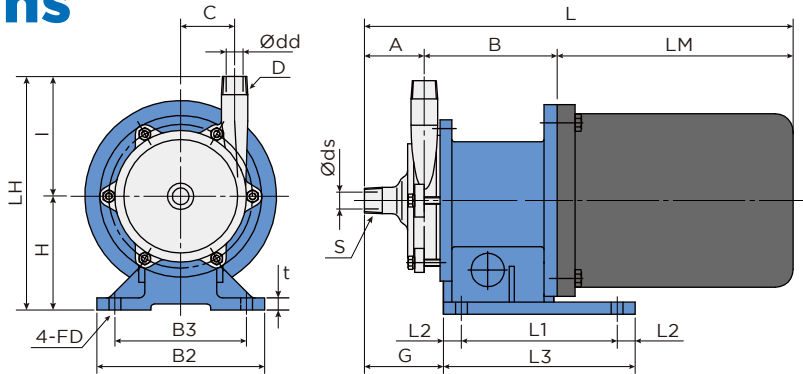
*The performance curve is for reference and preliminary selection only

Construction and Material



No.	Parts Name	Material
②	Impeller+Inner magnet	SUS316L+Rare earth
⑩	Front casing	SUS316L
⑪	Rear casing	SUS316L
⑫	Shaft	SiC
⑬	Thrust ring	SiC
⑭	Bushing	SiC
⑮	O-ring	PTFE
⑳	Frame adapter	FC25
㉑	Outer magnet	SS400+Rare earth

Dimensions



Unit:mm

Model	Motor		Bore				Pump size															
	Frame Size	Output (W)	Suct.		Disch.		A	B	C	H	I	LH	LM	L	G	L1	L2	L3	B2	B3	t	FD
			ds	S	dd	D																
PM2010	---	90/120	15	R1/2	13	R1/2	45	118	37	62	70	132	(141)	*Note1.	60	70	15	100	110	90	8	Ø10
PM2011	63M	200	15	R1/2	15	R1/2	45	104	45	95	100	195	(207)		61	130	15	160	140	110	10	Ø10
	71M	400						111				(225)	69		130	15	160	140	110	10	Ø10	
PM2021	71M/71S	400/550	20	R3/4	20	R3/4	50	111	50	95	120	215	(225)		78	130	15	160	140	110	10	Ø10
PM2022	71M/71S	400/550	25	R1	20	R3/4	60	113	45	95	100	195	(225)		78	130	15	160	140	110	10	Ø10

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

PS Series

Medium capacity

PS series is a medium capacity series which is commonly used for chemical fluid transfer in general process. The sealless design, reliability, practically maintenance free and durability of the series become the most widely used series of stainless steel sealless magnetic pumps. The simple structure design and interchangeable parts feature reduce the cost of purchase and inventory of the spare parts. SiC components increase the operation stability and durability.

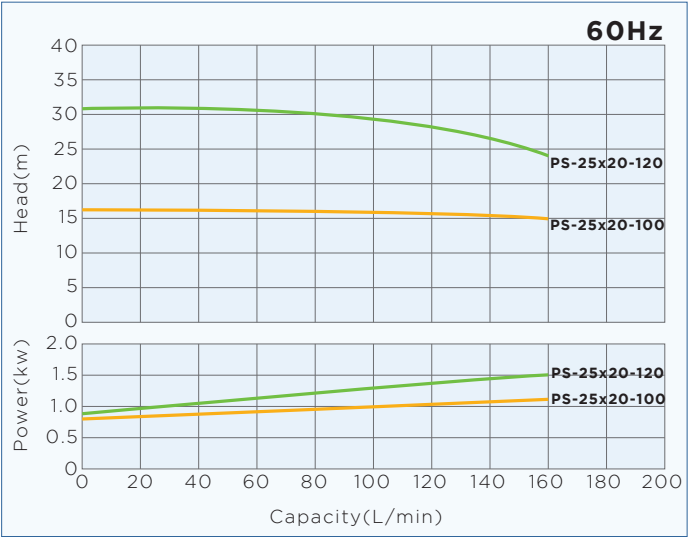
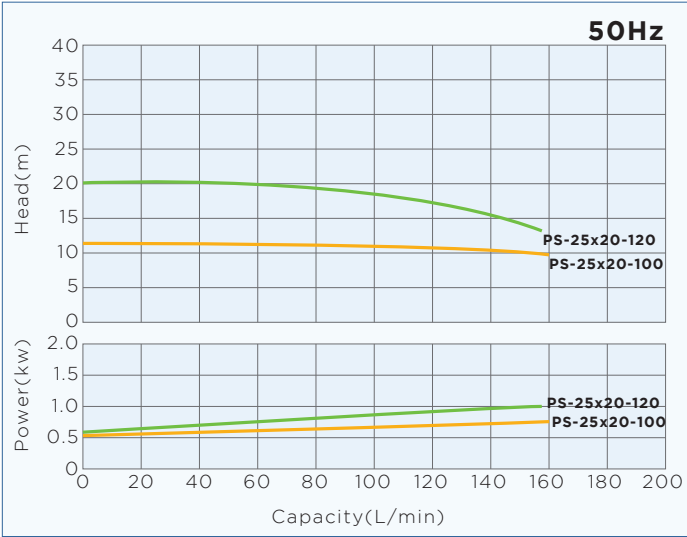


Specification

	PS	
Frequency	50Hz	60Hz
Max. capacity	850L/m	850L/m
Max. total head	55.7m	68m
Suction & discharge	25x20 ~ 80x40	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<300mPa.s(cp)	
Design pressure	1.0MPaG	
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16	
Motor output	0.75KW ~ 7.5KW	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

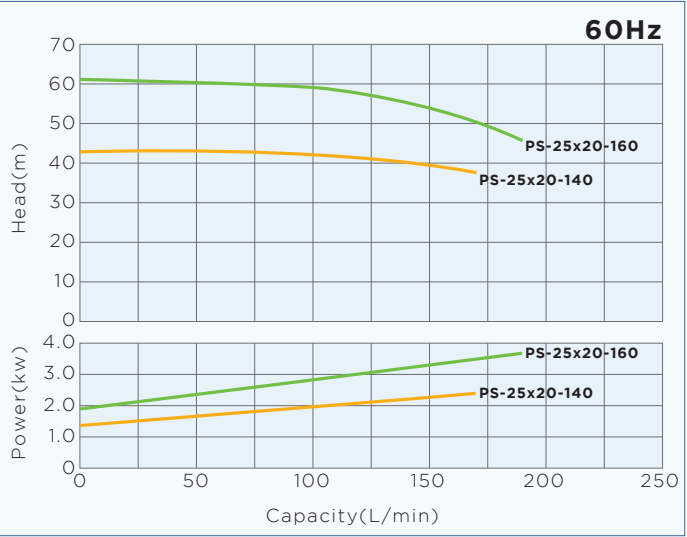
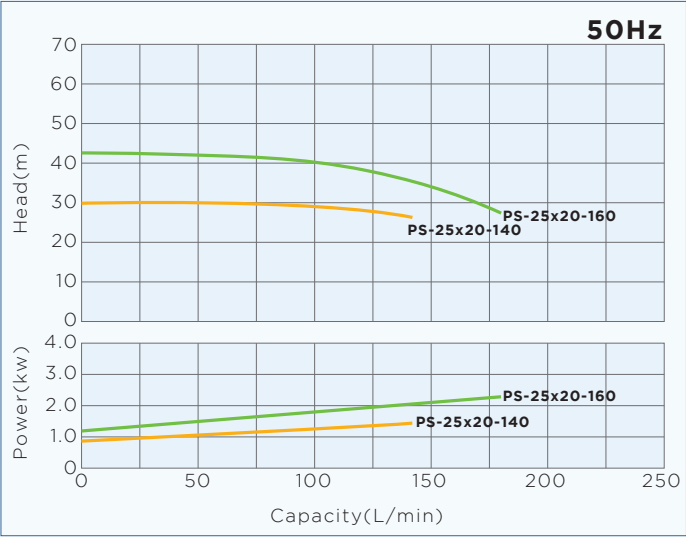
Performance Curve

PS-25x20-100 / 25x20-120

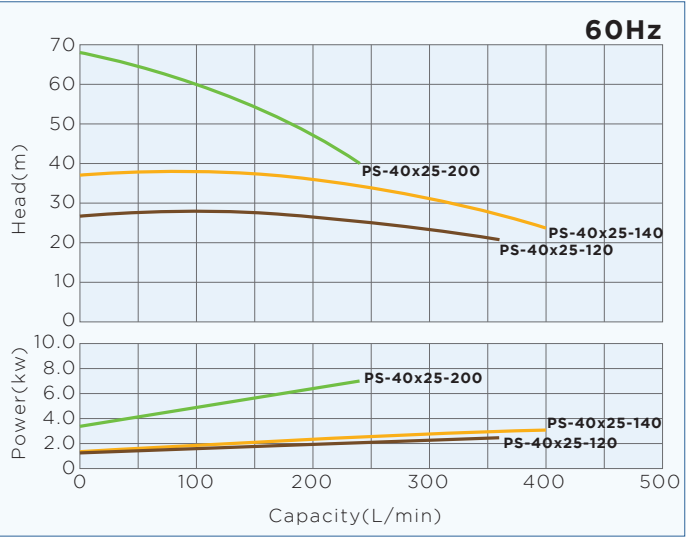
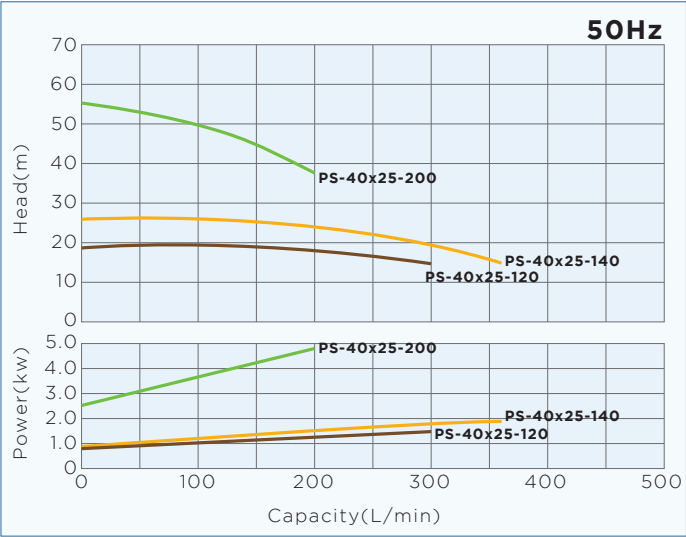


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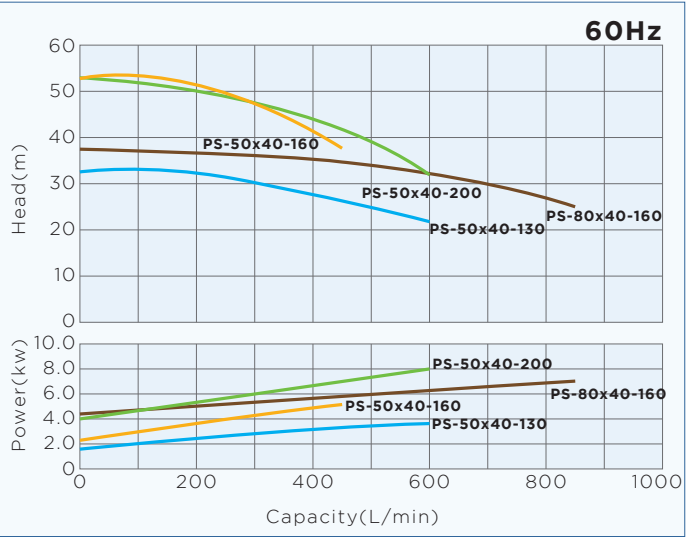
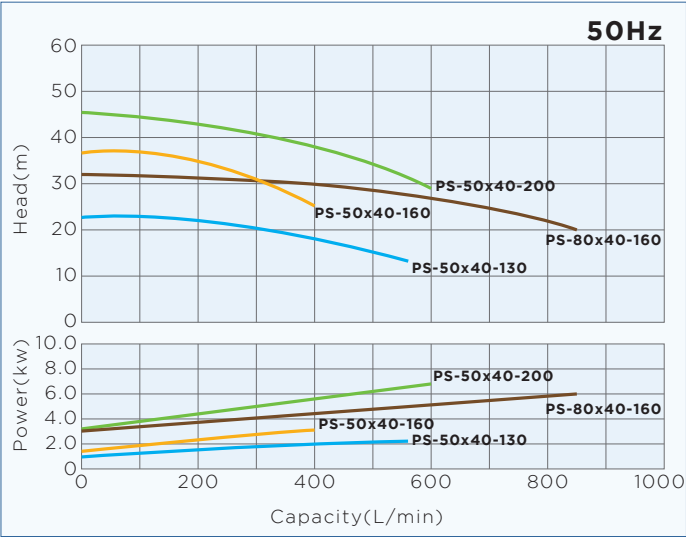
PS-25x20-140 / 25x20-160



PS-40x25-120 / 40x25-140 / 40x25-200



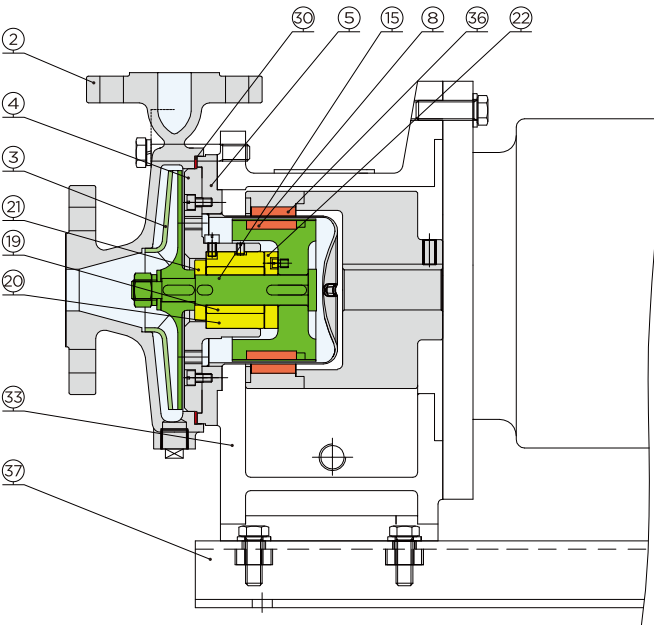
PS-50x40-130 / 50x40-160 / 50x40-200 / 80x40-160



*The performance curve is for reference and preliminary selection only

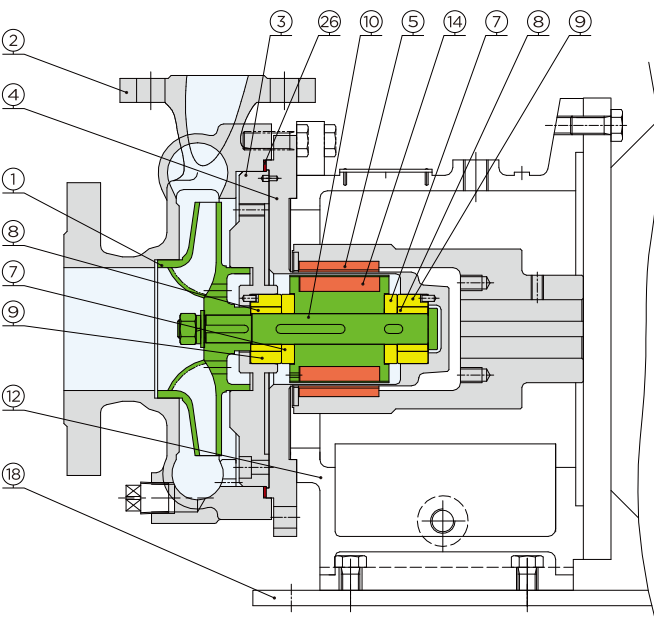
Construction and Material

PS-25x20-100 / 25x20-120 / 25x20-140 / 25x20-160 / 40x25-120 / 40x25-140 / 50x40-130 / 50x40-160



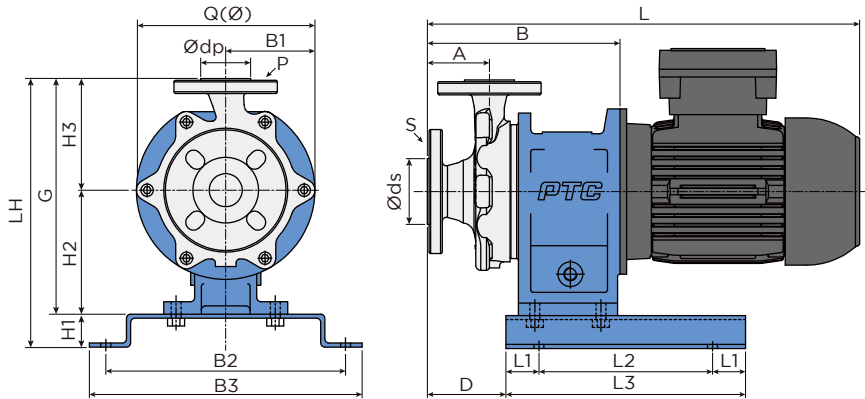
No.	Parts Name	Material
②	Front casing	SUS316L
③	Impeller	SUS316L
④	Casing cover	SUS316L
⑤	Rear casing	SUS316L
⑧	Inner magnet	SUS316L+Rare earth
⑮	Shaft	SUS316L
⑲	Sleeve	SiC
⑳	Bushing	SiC
㉑	Thrust ring(A)	SiC
㉒	Thrust ring(B)	SiC
㉔	Gasket	PTFE
㉖	Frame adapter	FC25
㉗	Outer magnet	SS400+Rare earth
㉙	Baseplate	SS400

PS-40x25-200 / 50x40-200 / 80x40-160



No.	Parts Name	Material
①	Impeller	SUS316L
②	Front casing	SUS316L
③	Casing cover	SUS316L
④	Rear casing	SUS316L
⑤	Outer magnet	SS400+Rare earth
⑦	Thrust ring	SiC
⑧	Sleeve	SiC
⑨	Bushing	SiC
⑩	Shaft	SUS316L
⑫	Frame adapter	FC25
⑭	Inner magnet	SUS316L+Rare earth
⑱	Baseplate	SS400
㉔	Gasket	PTFE

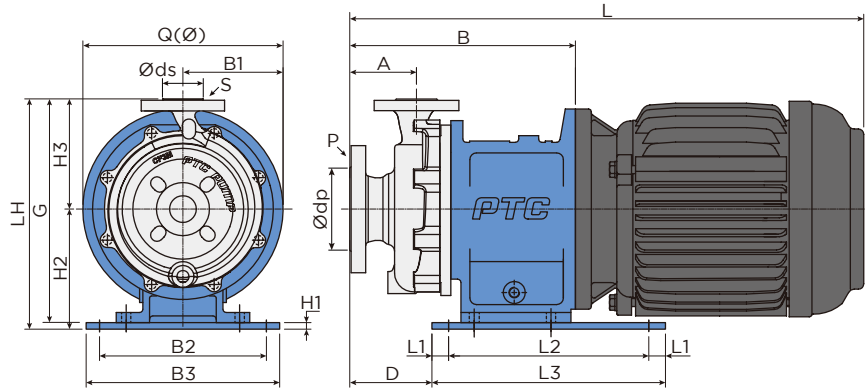
Dimensions



Unit:mm																						
Model	Motor		Bore				Pump size															
	Frame Size	Output (KW)	Suct.		Disch.		LH	G	H1	H2	H3	B1	B2	B3	Q (Ø)	A	B	L	D	L1	L2	L3
			ds	S	dp	P																
PS-25x20-100	80L	0.75	25	ANSI Class 150 / JIS 10K / DIN PN16	20	ANSI Class 150 / JIS 10K / DIN PN16	290	250	40	130	120	100	290	330	200	75	229	*Note1.	91	40	210	290
	90L	1.5/2.2	25		20		290	250	40	130	120	100	290	330	200	60	214.5		76.5	40	210	290
PS-25x20-120	80L	0.75	25		20		290	250	40	130	120	100	290	330	200	60	214.5		76.5	40	210	290
	90L	1.5/2.2	25		20		290	250	40	130	120	100	290	330	200	60	214.5		76.5	40	210	290
PS-25x20-140	90L	1.5/2.2	25		20		320	280	40	150	130	108	290	330	216	65	215.5		77.5	40	210	290
	112L	3.7	25		20		320	280	40	150	130	125	290	330	250	65	225.5		77.5	40	240	320
PS-25x20-160	90L	1.5/2.2	25		20		330	290	40	150	140	127.5	290	330	255	65	216.5		78.5	40	210	290
	112L	3.7	25		20		330	290	40	150	140	127.5	290	330	255	65	226.5		78.5	40	240	320
PS-40x25-120	90L	1.5/2.2	40		25		325	285	40	150	135	108	290	330	216	75	233		95	40	210	290
	112L	3.7	40		25		325	285	40	150	135	125	290	330	250	75	243		95	40	240	320
PS-40x25-140	90L	1.5/2.2	40		25		330	290	40	150	140	108	290	330	216	75	231		93	40	210	290
	112L	3.7	40		25		330	290	40	150	140	125	290	330	250	75	241		93	40	240	320
PS-50x40-130	90L	1.5/2.2	50		40		330	290	40	150	140	108	290	330	216	80	236.5		98.5	40	210	290
	112L	3.7	50		40		330	290	40	150	140	125	290	330	250	80	246.5		98.5	40	240	320
PS-50x40-160	90L	1.5/2.2	50		40		345	305	40	150	155	127.5	290	330	255	65	227		79	40	210	290
	112L	3.7	50		40		345	305	40	150	155	127.5	290	330	255	65	237		79	40	240	320

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

PS-40x25-200, 50x40-200, 80x40-160



Unit:mm

Model	Motor		Bore				Pump size															
	Frame Size	Output (KW)	Suct.		Disch.		LH	G	H1	H2	H3	B1	B2	B3	Q (Ø)	A	B	L	D	L1	L2	L3
			ds	S	dp	P																
PS-40x25-200	132L	5.5/7.5	40	ANSI Class 150 JIS 10K DIN PN16	25	ANSI Class 150 JIS 10K DIN PN16	345	335	10	180	165	150	250	290	300	100	338	*Note1.	123	25	300	350
PS-50x40-200	132L	5.5/7.5	50		40		345	335	10	180	165	150	250	290	300	100	338		123	25	300	350
PS-80x40-160	132L	5.5/7.5	80		40		345	335	10	180	165	150	250	290	300	100	338		123	25	300	350

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

PL Series

Large capacity

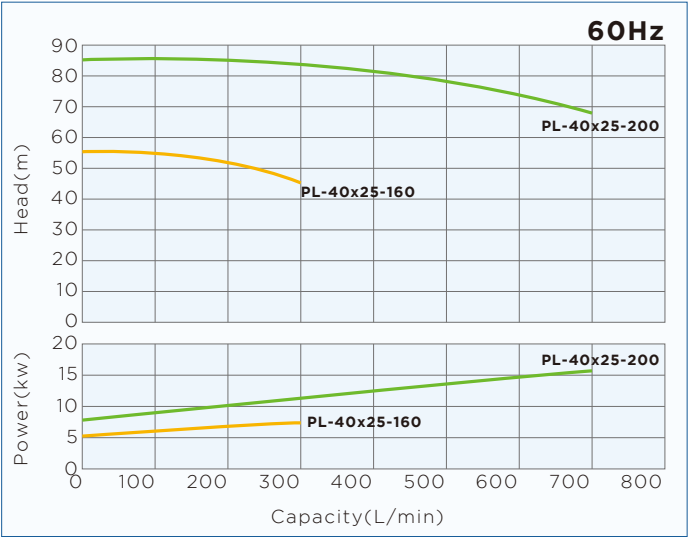
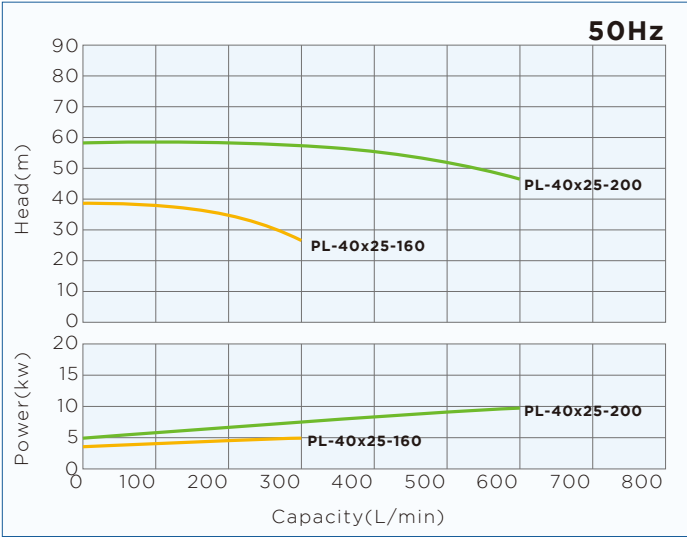
PL series is the largest capacity series with power up to 18.5KW (25HP), which can be used to process large flow and higher head. The series presents maintenance free, cost effective, advanced and more economical use. The sealless design protects the safety of the operators and avoids environmental pollution, making it the best choice for handling hazardous and toxic chemical liquids.

Specification

	PL	
Frequency	50Hz	60Hz
Max. capacity	1904L/m	2001L/m
Max. total head	91.3m	132m
Suction & discharge	40x25 ~ 100x80	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<300mPa.s(cp)	
Design pressure	1.2MPaG (*PL-50x25-250LF:1.6MPaG*)	
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16	
Motor output	5.5KW ~ 18.5W	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

Performance Curve

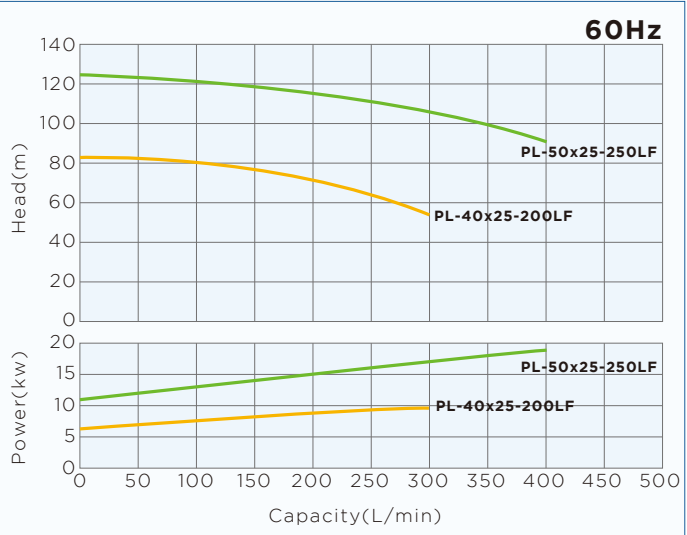
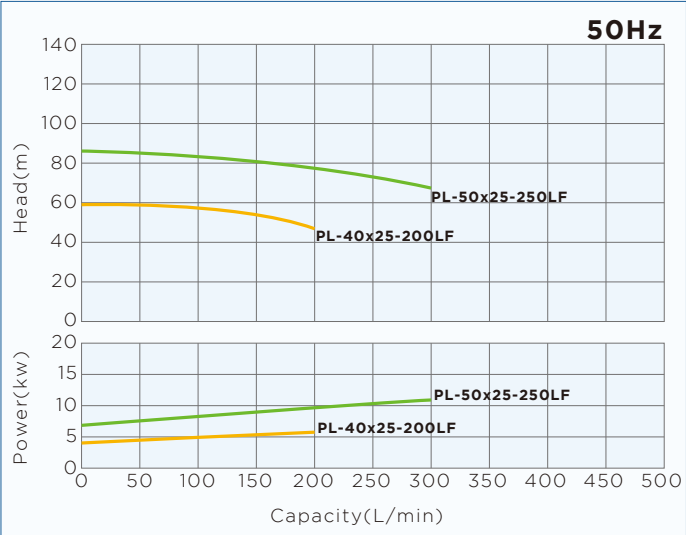
PL-40x25-160 / 40x25-200



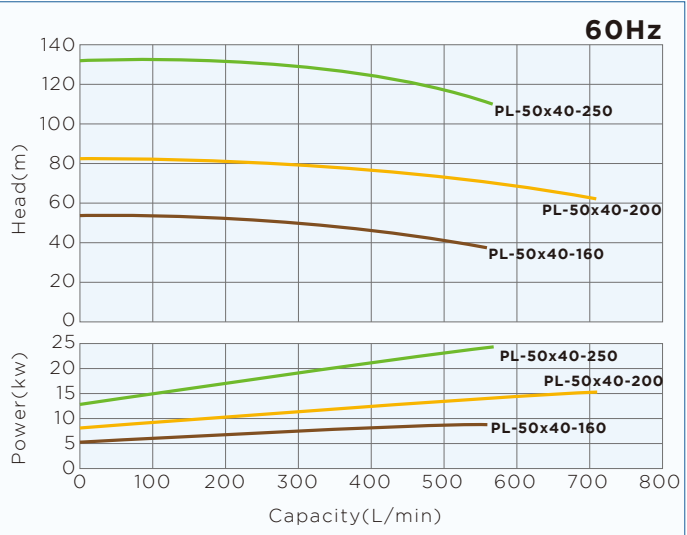
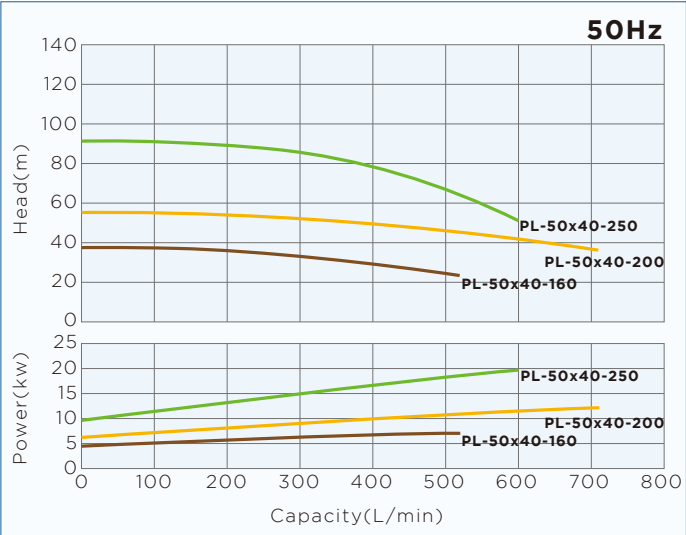
*The performance curve is for reference and preliminary selection only



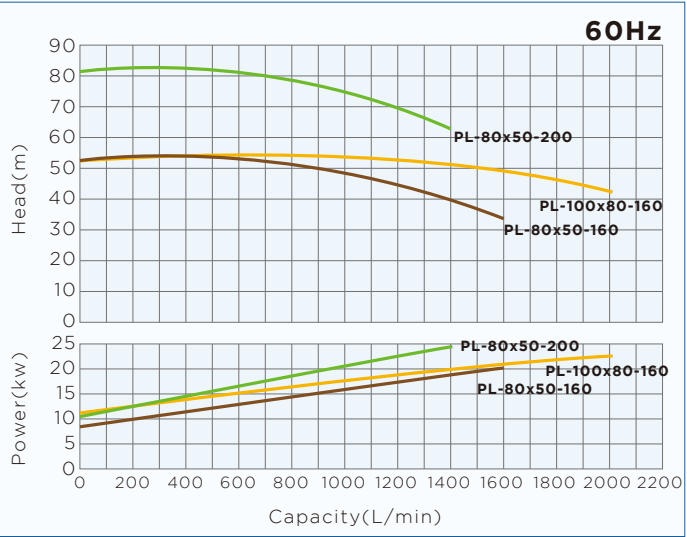
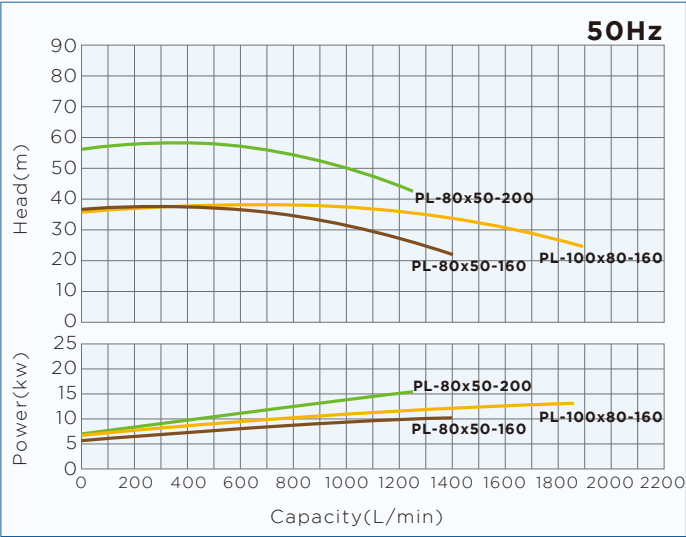
PL-40x25-200LF / 50x25-250LF



PL-50x40-160 / 50x40-200 / 50x40-250

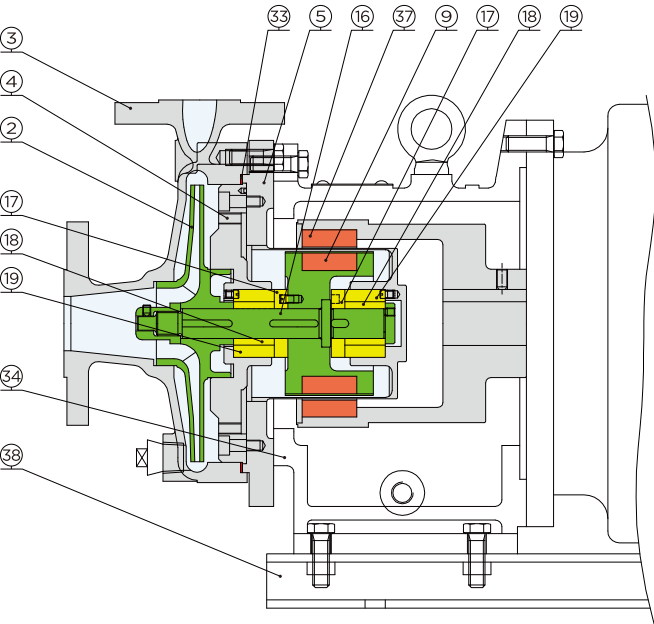


PL-80x50-160 / 80x50-200 / 100x80-160



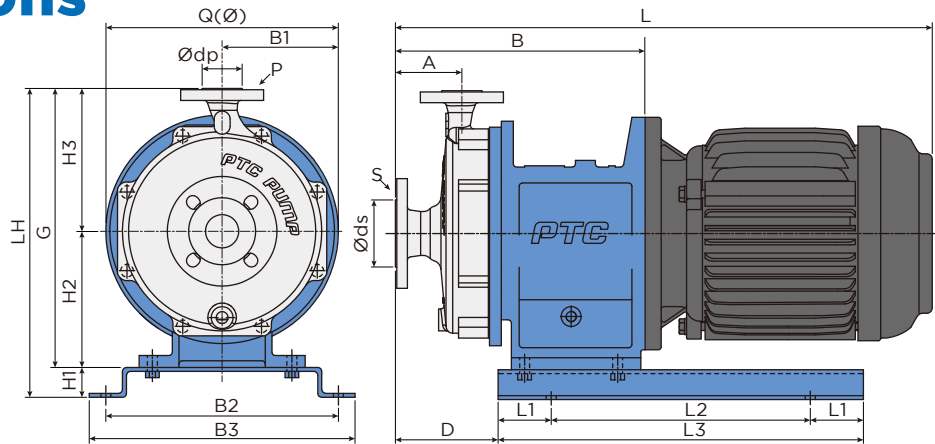
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Construction and Material



No.	Parts Name	Material
②	Impeller	SUS316L
③	Front casing	SUS316L
④	Casing cover	SUS316L
⑤	Rear casing	SUS316L
⑨	Inner magnet	SUS316L+Rare earth
⑯	Shaft	SUS316L
⑰	Thrust ring	SiC
⑱	Sleeve	SiC
⑲	Bearing	SiC
③③	Gasket	PTFE
③④	Frame adapter	SS400
③⑦	Outer magnet	SS400+Rare earth
③⑧	Baseplate	FC25

Dimensions



Unit:mm

Model	Motor		Bore				Pump size															
	Frame Size	Output (KW)	Suct.		Disch.		LH	G	H1	H2	H3	B1	B2	B3	Q (Ø)	A	B	L	D	L1	L2	L3
			ds	S	dp	P																
PL-40x25-160	132L	5.5/7.5	40	ANSI Class 150 / JIS 10K / DIN PN16	25	ANSI Class 150 / JIS 10K / DIN PN16	375	335	40	170	165	150	350	400	300	100	341	*Note1.	149.5	80	240	400
	160L	11/15/18.5					415	370	45	205		175		350	400		350				371	390
PL-40x25-200	132L	5.5/7.5	40		25		375	335	40	170	165	150	350	400	300	100	341		149.5	80	240	400
	160L	11/15/18.5					415	370	45	205		175		350	400		350				371	390
PL-40x25-200LF	132L	5.5/7.5	40		25		375	335	40	170	165	150	350	400	300	100	341		149.5	80	240	400
	160L	11/15/18.5					415	370	45	205		175		350	400		350				371	390
PL-50x25-250LF	132L	5.5/7.5	50		25		425	385	40	170	215	169	350	400	338	100	346		154.5	80	240	400
	160L	11/15/18.5					465	420	45	205		175		350	400		350				376	390
PL-50x40-160	132L	5.5/7.5	50		40		375	335	40	170	165	150	350	400	300	100	341		149.5	80	240	400
	160L	11/15/18.5					415	370	45	205		175		350	400		350				371	390
PL-50x40-200	132L	5.5/7.5	50		40		375	335	40	170	165	150	350	400	300	100	341		149.5	80	240	400
	160L	11/15/18.5					415	370	45	205		175		350	400		350				371	390
PL-50x40-250	132L	5.5/7.5	50	40	425	385	40	170	215	169	350	400	338	100	346	154.5	80	240	400			
	160L	11/15/18.5			465	420	45	205		175		350	400		350			376	390	550		
PL-80x50-160	132L	5.5/7.5	80	50	410	370	40	170	200	150	350	400	300	100	346	154.5	80	240	400			
	160L	11/15/18.5			450	405	45	205		175		350	400		350			376	390	550		
PL-80x50-200	132L	5.5/7.5	80	50	410	370	40	170	200	150	350	400	300	100	346	154.5	80	240	400			
	160L	11/15/18.5			450	405	45	205		175		350	400		350			376	390	550		
PL-100x80-160	132L	5.5/7.5	100	80	410	370	40	170	200	163.5	350	400	313.5	100	360	168.5	80	240	400			
	160L	11/15/18.5			450	405	45	205		175		350	400		350			390	390	550		

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

PW Series

Regenerative turbine type

PW series is for low flow and high head process. The structural design is quieter than conventional mechanical seal pumps. Low heat-up during minimum flow operation and can be used in reverse operation without any problem.



Cascade-bladed impeller

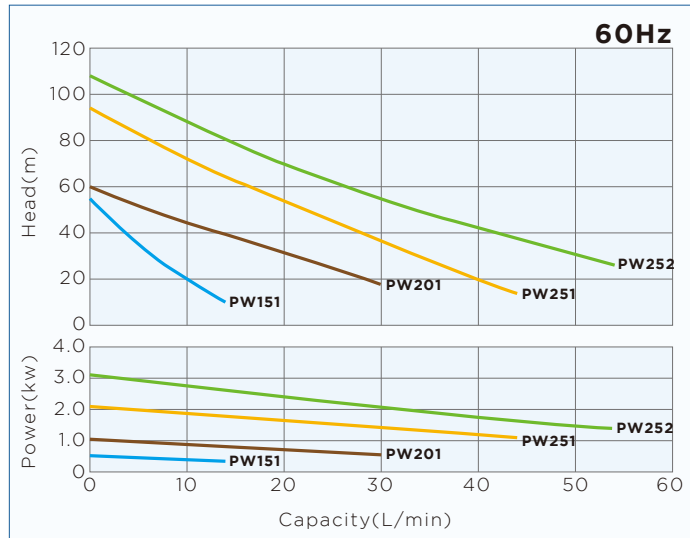
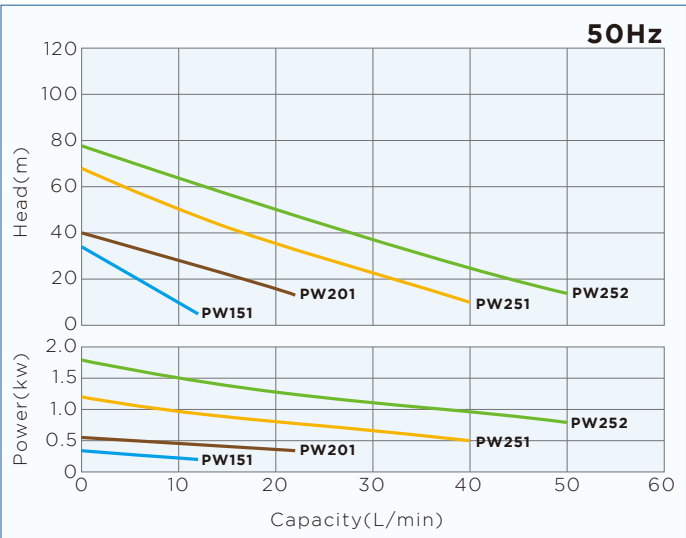


Specification

PW		
Frequency	50Hz	60Hz
Max. capacity	49L/m	53L/m
Max. total head	78m	108m
Suction & discharge	15x15 ~ 25x25	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<300mPa.s(cp)	
Design pressure	1.6MPaG	
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16	
Motor output	0.75KW ~ 3.7W	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

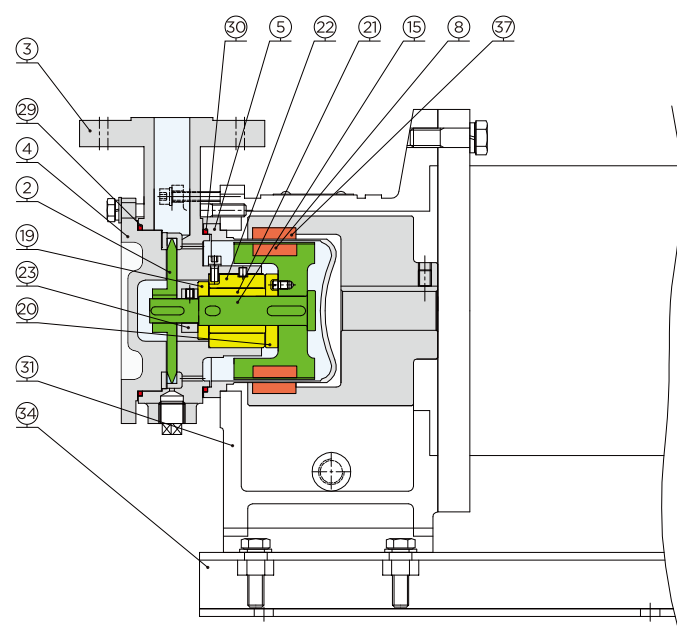
Performance Curve

PW151 / 201 / 251 / 252



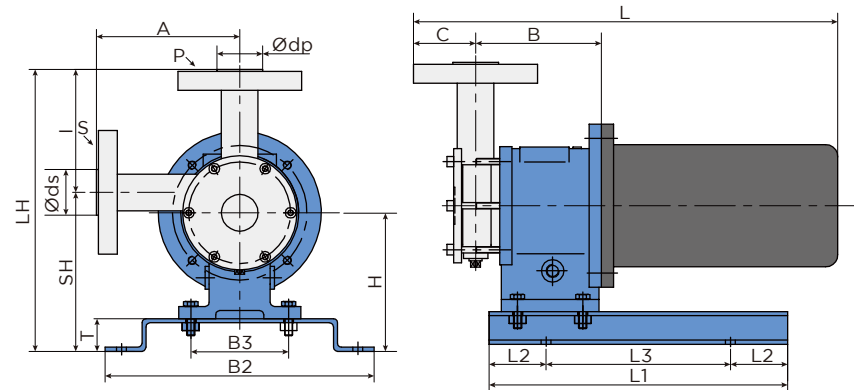
*The performance curve is for reference and preliminary selection only

Construction and Material



No.	Parts Name	Material
②	Impeller	SUS316L
③	Front casing	SUS316L
④	Casing cover	SUS316L
⑤	Rear casing	SUS316L
⑧	Inner magnet	SUS316L+Rare earth
⑮	Shaft	SUS316L
⑲	Thrust ring(A)	SiC
⑳	Thrust ring(B)	SiC
㉑	Sleeve	SiC
㉒	Bearing	SiC
㉓	Set ring	SUS316L
㉔	O-ring(1)	PTFE
㉕	O-ring(2)	PTFE
㉖	Frame adapter	FC25
㉗	Baseplate	SS400
㉘	Outer magnet	SS400+Rare earth

Dimensions



Unit:mm																				
Model	Motor		Bore				Pump size													
	Frame Size	Output (KW)	Suct.		Disch.		A	B	C	H	I	SH	LH	L	L1	L2	L3	B2	B3	T
			ds	S	dp	P														
PW151	80M	0.75	15	ANSI Class 150 / JIS 10K / DIN PN16	15	ANSI Class 150 / JIS 10K / DIN PN16	120	152	47.5	170	120	195	315	*Note1.	290	40	210	330	120	40
PW201	80M	0.75	20		20		120	155	52.5	170	120	195	315		290	40	210	330	120	40
	90	1.5					120	155	52.5	170	120	195	315		290	40	210	330	120	40
PW251	90	1.5/2.2	25		25		120	155	57.5	170	120	195	315		290	40	210	330	120	40
	100L	3		165		190		220		340		320	240		140					
PW252	90	2.2	25	25	120	155	57.5	170	120	195	315	290	40		210	330	120	40		
	(100L)/112M	(3)/4				165		190		220	340	320			240		140			

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

Unit:mm

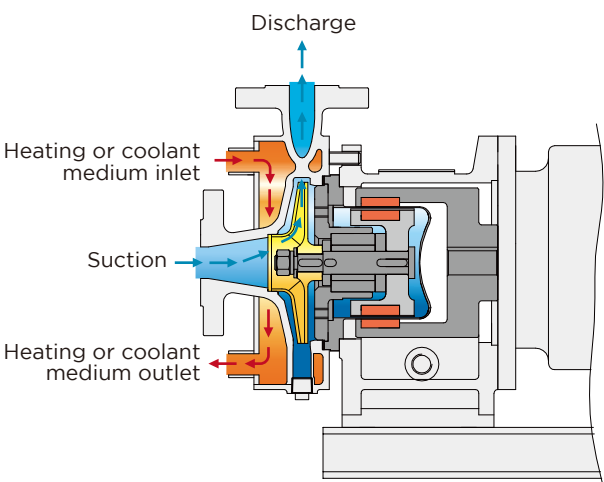
PSJ Series

Jacket type

PSJ series is in form of semi-jacketed type which is used to maintain process temperature and is high efficiency with cost effectiveness. The product is reliable and maintenance free feature to reduce the cost and expenditure.



Flow Channel

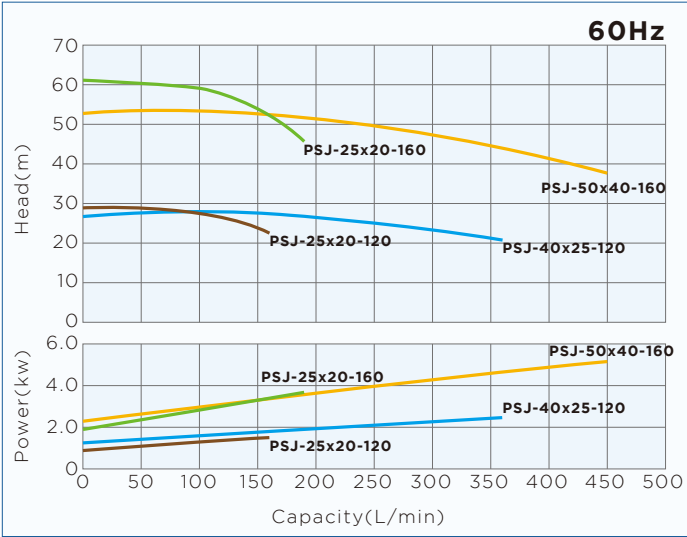
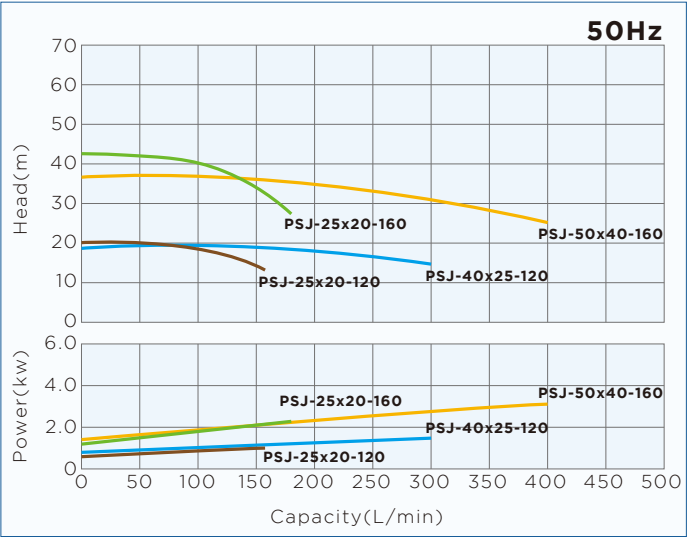


Specification

	PSJ	
Frequency	50Hz	60Hz
Max. capacity	400L/m	450L/m
Max. total head	36.8m	53.1m
Suction & discharge	25x20 ~ 50x40	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<300mPa.s(cp)	
Design pressure	1.0MPaG	
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16	
Motor output	0.75KW ~ 3.7W	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

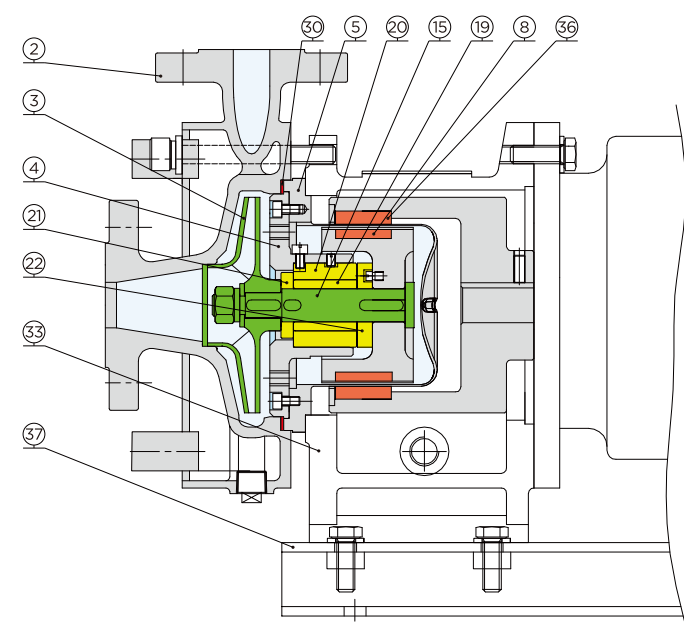
Performance Curve

PSJ-25x20-120, 25x20-160, 40x25-120, 50x40-160



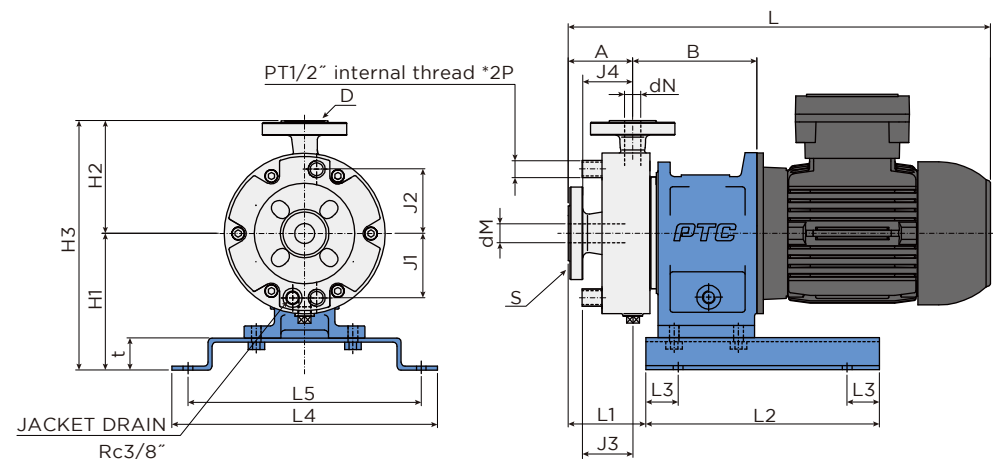
*The performance curve is for reference and preliminary selection only

Construction and Material



No.	Parts Name	Material
②	Front casing	SUS316L
③	Impeller	SUS316L
④	Casing cover	SUS316L
⑤	Rear casing	SUS316L
⑧	Inner magnet	SUS316L+Rare earth
⑮	Shaft	SUS316L
⑲	Sleeve	SiC
⑳	Bearing	SiC
㉑	Thrust ring(A)	SiC
㉒	Thrust ring(B)	SiC
㉔	Gasket	PTFE
㉓	Frame adapter	FC25
㉖	Outer magnet	SS400+Rare earth
㉗	Baseplate	SS400

Dimensions



Model	Motor		Bore				Pump size															
	Frame Size	Output (KW)	Suct.		Disch.		A	B	H1	H2	H3	L	L1	L2	L3	L4	L5	t	J1	J2	J3	J4
			dM	S	dN	D																
PSJ-25x20-120	80	0.75	25	ANSI Class 150 / JIS 10K / DIN PN16	20	ANSI Class 150 / JIS 10K / DIN PN16	80	154	170	140	310	*Note1.	81	290	40	330	140	40	80	80	63	63
	90S/90L	1.5/2.2																				
PSJ-40x25-120	90S/90L	1.5/2.2	40		25		95	158	190	150	340		97	290	40	330	140	40	90	90	63	63
	100L/112M	3/4						168								320	120					
PSJ-25x20-160	90S/90L	1.5/2.2	25		20		85	151	190	160	350		83	290	40	330	140	40	100	100	63	63
	100L/112M	3/4						161								320	120					
PSJ-50x40-160	90L	2.2	50		40		85	152	190	170	360		84	290	40	330	140	40	105	105	63	63
	100L/112M	3/4						162								320	120					

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

PSO Series

Handling sludge and slurries

PSO series of sealless magnetic drive pump is open impeller type, which is designed for chemical fluid transfer with sludge or slurries. The open impeller has low NPSH feature, sealless design with leakage free, simple structure easy maintenance.

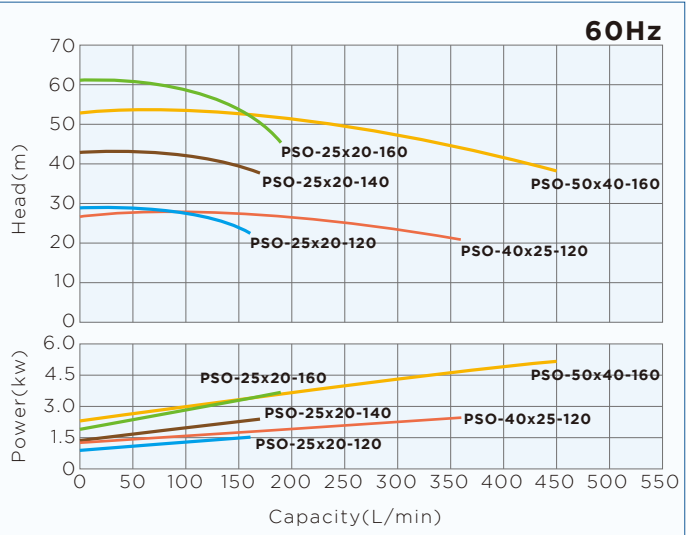
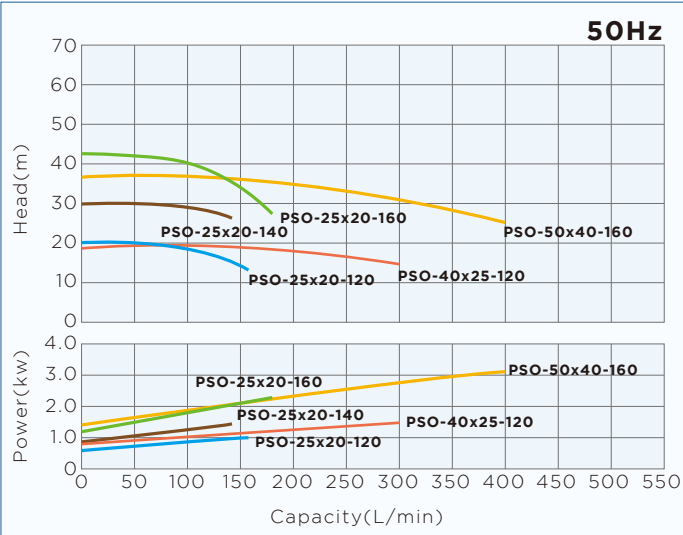


Specification

PSO		
Frequency	50Hz	60Hz
Max. capacity	400L/m	450L/m
Max. total head	42.7m	61.3m
Suction & discharge	25x20 ~ 50x40	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<300mPa.s(cp)	
Design pressure	1.0MPaG	
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16	
Motor output	0.75KW ~ 3.7W	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

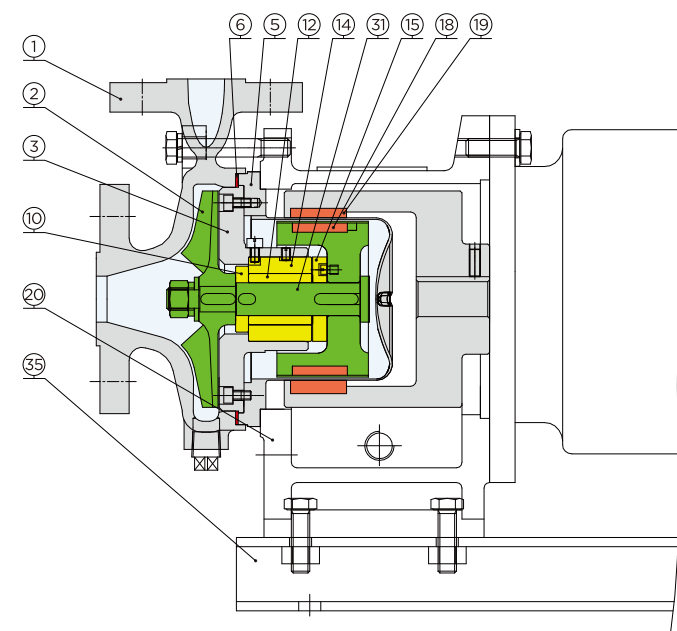
Performance Curve

PSO-25x20-120 / 25x20-140 / 25x20-160 / 40x25-120 / 50x40-160



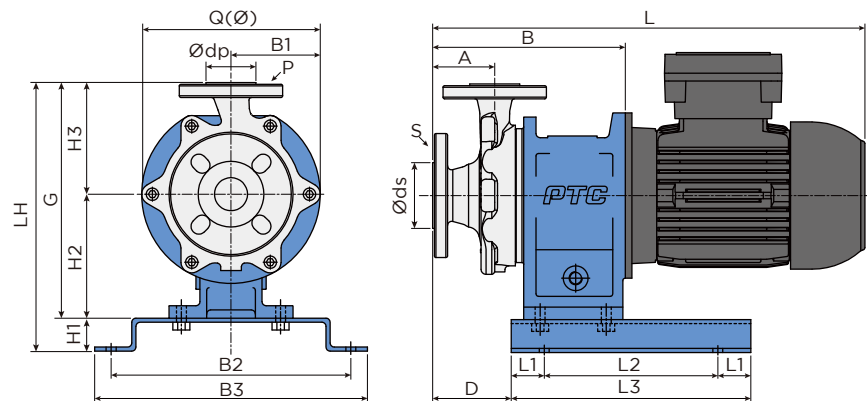
*The performance curve is for reference and preliminary selection only

Construction and Material



No.	Parts Name	Material
①	Front casing	SUS316L
②	Impeller	SUS316L
③	Casing cover	SUS316L
⑤	Rear casing	SUS316L
⑥	Gasket	PTFE
⑩	Thrust ring(A)	SiC
⑫	Sleeve	SiC
⑭	Bearing	SiC
⑮	Thrust ring(B)	SiC
⑱	Inner magnet	SUS316L+Rare earth
⑲	Outer magnet	SS400+Rare earth
⑳	Frame adapter	FC25
㉑	Shaft	SUS316L
㉓	Baseplate	SS400

Dimensions



Unit:mm																						
Model	Motor		Bore				Pump size															
	Frame Size	Output (KW)	Suct.		Disch.		LH	G	H1	H2	H3	B1	B2	B3	Q (Ø)	A	B	L	D	L1	L2	L3
			ds	S	dp	P																
PSO-25x20-120	80L	0.75	25	ANSI Class 150 / JIS 10K / DIN PN16	20	ANSI Class 150 / JIS 10K / DIN PN16	290	250	40	130	120	100	290	330	200	60	214.5	*Note1.	76.5	40	210	290
	90L	1.5/2.2					320	280	40	150	130	108/125	290	330	216/250	65	215.5/225.5		77.5	40	210/240	290/320
PSO-25x20-140	90L	1.5/2.2	25		20		320	280	40	150	130	108/125	290	330	216/250	65	215.5/225.5		77.5	40	210/240	290/320
	112L	3.7																				
PSO-25x20-160	90L	1.5/2.2	25		20		330	290	40	150	140	127.5	290	330	255	65	216.5/226.5		78.5	40	210/240	290/320
	112L	3.7																				
PSO-40x25-120	90L	1.5/2.2	40		25		325	285	40	150	135	108/125	290	330	216/250	75	233/243		95	40	210/240	290/320
	112L	3.7																				
PSO-50x40-160	90L	1.5/2.2	50		40		345	305	40	150	155	127.5	290	330	255	75	227/237		79	40	210/240	290/320
	112L	3.7																				

*Note1. Dimension of (L) will differ depending on the brand and installation of the motor

PL2 Series

Multi-stage

PL2 series is multi-stage type, which can be applied to high head and large flow conditions. The material provide SUS316L for better corrosion resistance. The sealless design effectively avoids leakage and SiC components improve the durability and extend the service life.

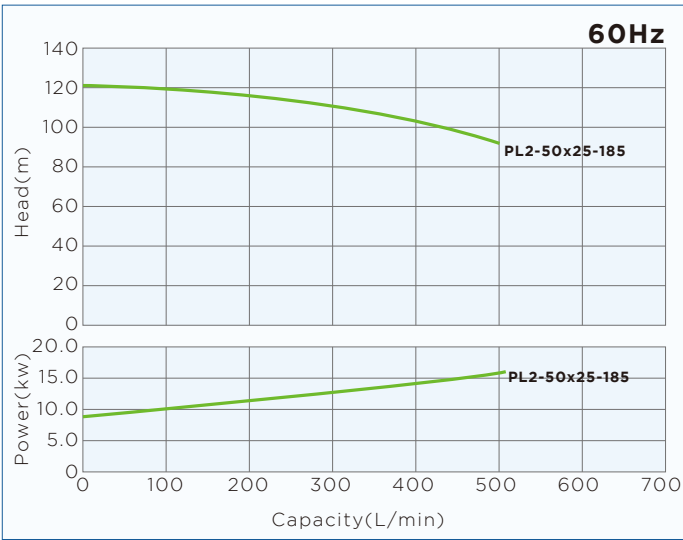
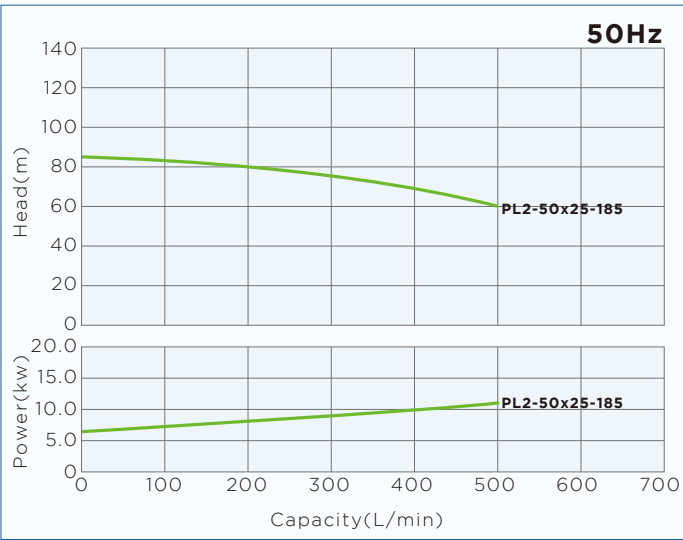


Specification

	PL2	
Frequency	50Hz	60Hz
Max. capacity	500L/m	500L/m
Max. total head	85m	121m
Suction & discharge	50x25	
Temperature range	-80°C ~ 280°C	
Specific gravity	<2	
Viscosity	<300mPa.s(cp)	
Design pressure	1.6mPaG	
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16	
Motor output	11KW ~ 18.5KW	
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)	

Performance Curve

PL2-50x25-185



*The performance curve is for reference and preliminary selection only

PM

PS

PL

PW

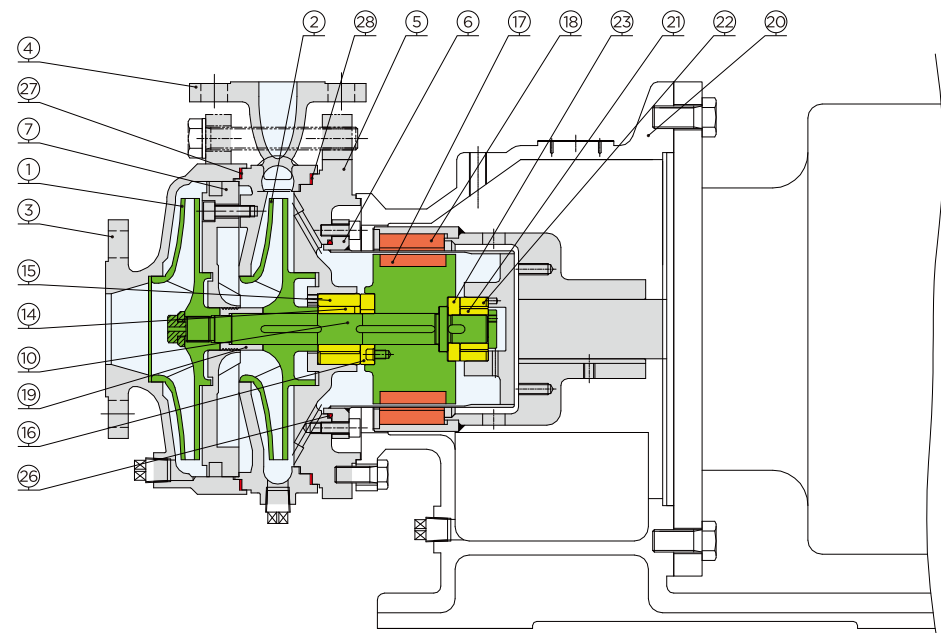
PSJ

PSO

PL2

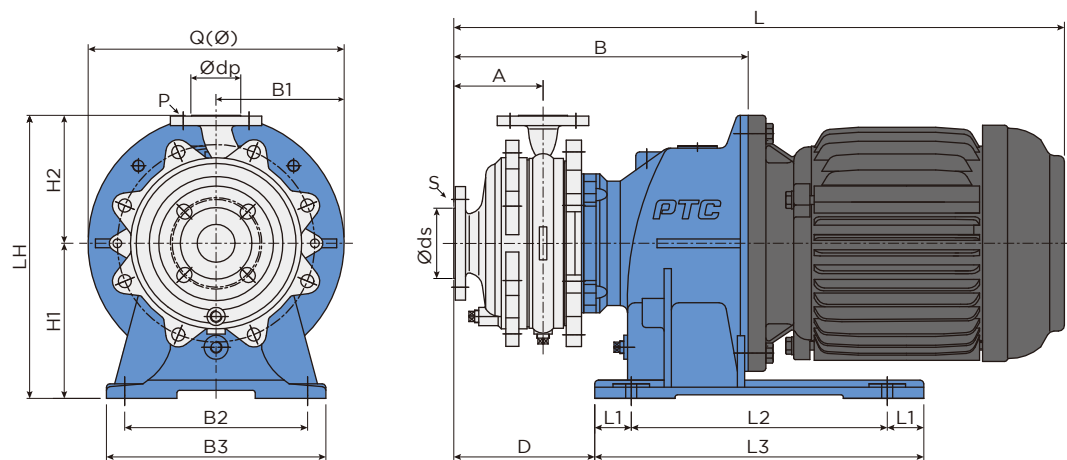
PC

Construction and Material



No.	Parts Name	Material	No.	Parts Name	Material	No.	Parts Name	Material
①	1st Impeller	SUS316L	⑩	Shaft	SUS316	⑳	Frame adapter	FC25
②	2nd Impeller	SUS316L	⑭	Sleeve	SiC	㉑	Sleeve	SiC
③	Suction casing	SUS316L	⑮	Bearing	SiC	㉒	Bearing	SiC
④	Discharge casing	SUS316L	⑯	Thrust ring	SiC	㉓	Thrust ring	SiC
⑤	Casing cover	SUS316L	⑰	Inner magnet	SUS316+Rare earth	㉔	O-ring	PTFE
⑥	Rear casing	SUS316L	⑱	Outer magnet	SS400+Rare earth	㉕	Gasket	PTFE
⑦	Diffuser	SUS316L	㉖	Distance Piece	SUS316L	㉗	Gasket	PTFE

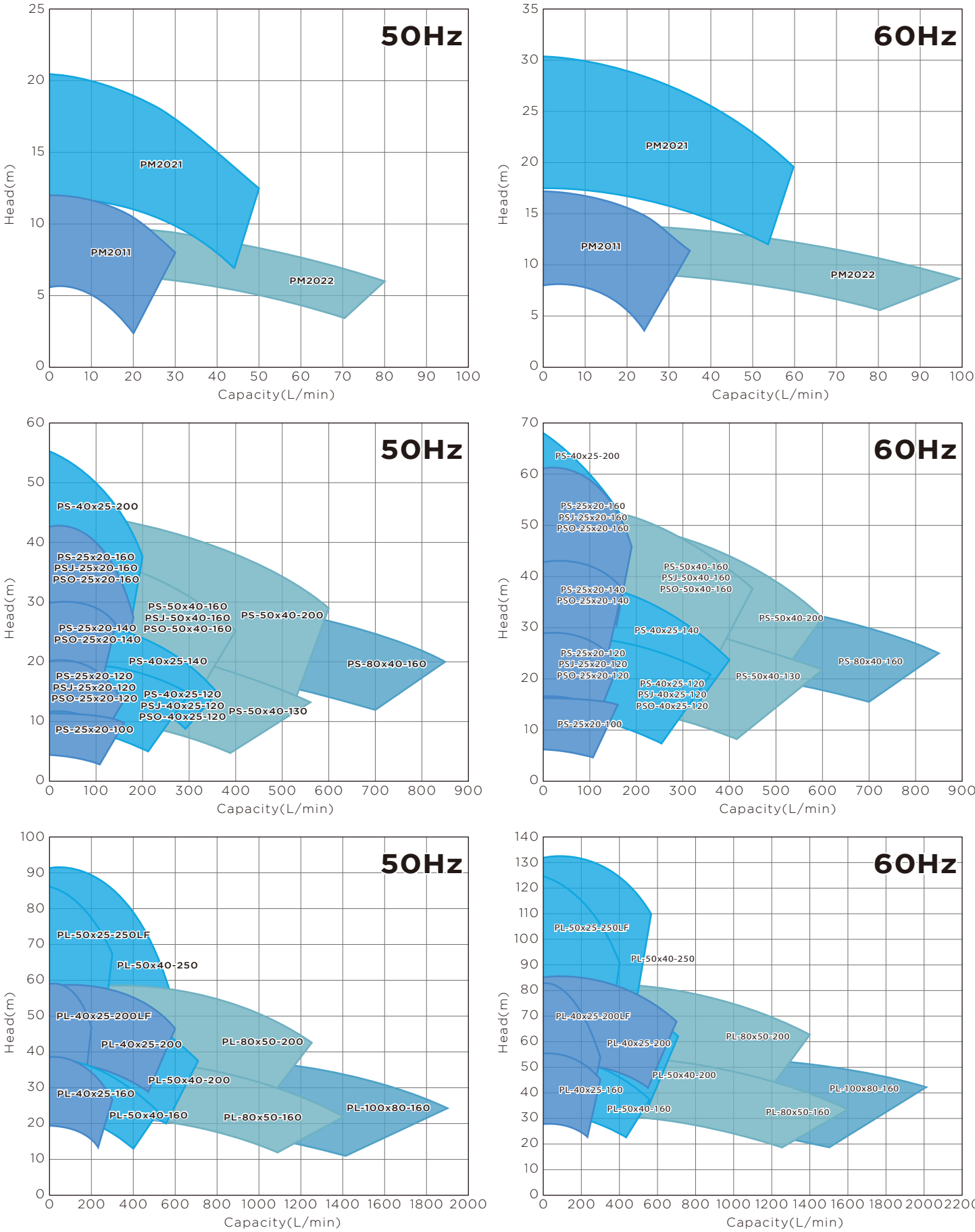
Dimensions



Model	Motor		Bore			Pump size												Unit:mm		
	Frame Size	Output (KW)	Suct. ds	Disch. S	dp	P	LH	H1	H2	B1	B2	B3	Q (Ø)	A	B	L	D	L1	L2	L3
PL2-50x25-185	160L	11/15/18.5	50	*Note1.	25	*Note2.	387	212	175	175	250	300	350	122	402.5	*Note3.	192.5	50	350	450

*Note1.&Note2. flange connection for ANSI Class 150 / JIS 10K / DIN PN16
*Note3. Dimension of (L) will differ depending on the brand and installation of the motor

Performance Family Curve



*The performance family curve is for reference and preliminary selection only

PC Series

ISO2858 Compliant (Coupling-Type)

PC series is the largest series in stainless steel magnetic drive pumps and the maximum capacity can reach up to 3200LPM and power up to 110KW. The standard material of SUS316L is used for better corrosion resistance. This series is in the form of coupling type, which is convenient for disassembly and assembly during pump maintenance.

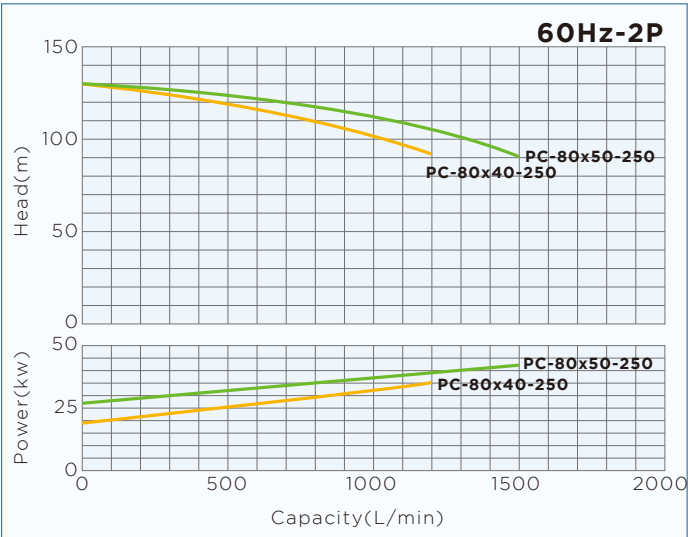
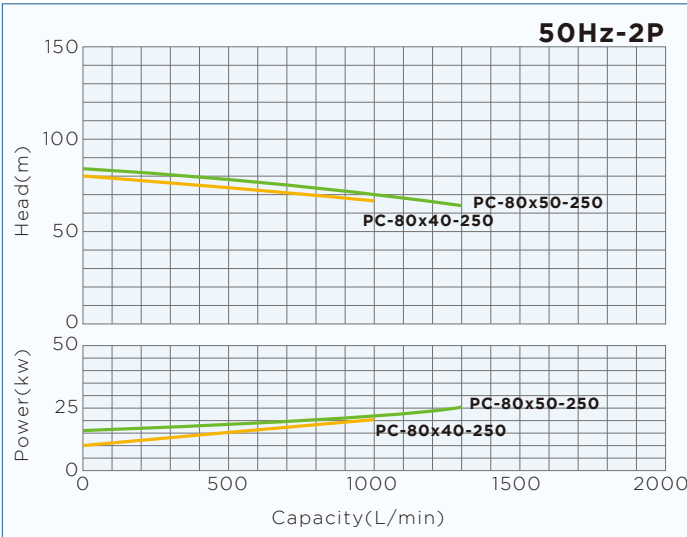


Specification

	PC			
Frequency	50Hz(2P)	50Hz(4P)	60Hz (2P)	60Hz (4P)
Max. capacity	2800L/m	1400L/m	3200L/m	1600L/m
Max. total head	87m	23m	220m	34m
Suction & discharge	80x40 ~ 100x80			
Temperature range	-80°C ~ 280°C			
Specific gravity	<2			
Viscosity	<300mPa.s(cp)			
Design pressure	1.6MPaG			
Flange standard	ANSI Class 150 / JIS 10K / DIN PN16			
Motor output	22KW ~ 75KW	3.7KW ~ 11KW	45KW ~ 110KW	5.5KW ~ 15KW
Pump material	SUS316L(Standard) / Alloy20(Optional) / Has-C equivalent(Optional)			

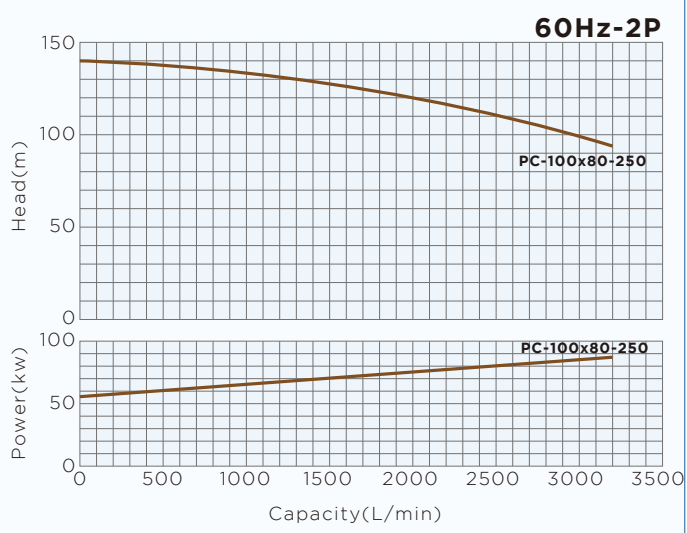
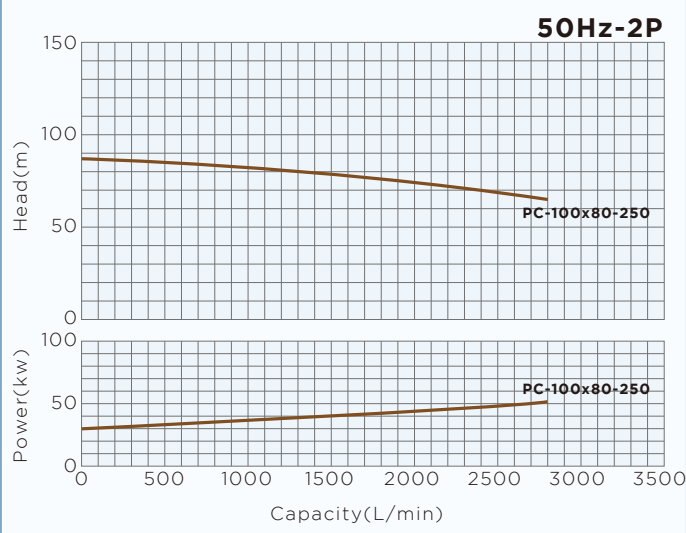
Performance Curve

PC-80x40-250 / 80x50-250

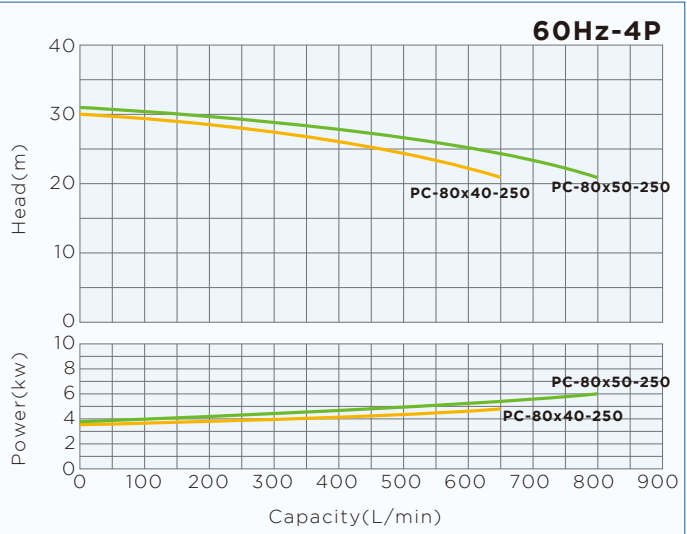
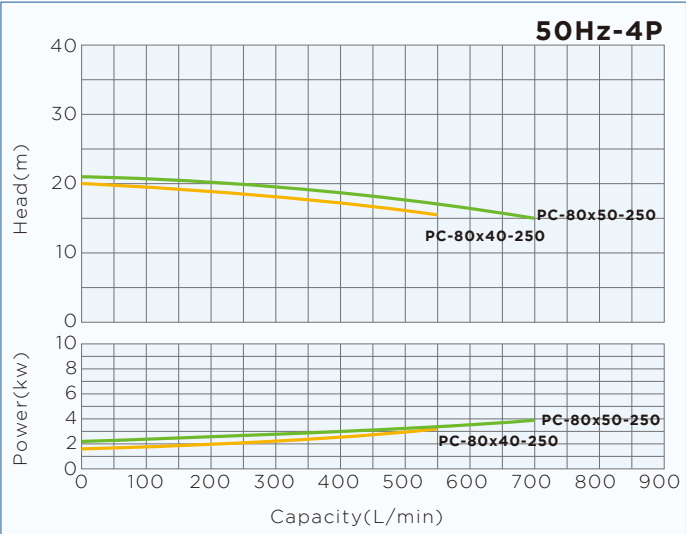


*The performance curve is for reference and preliminary selection only

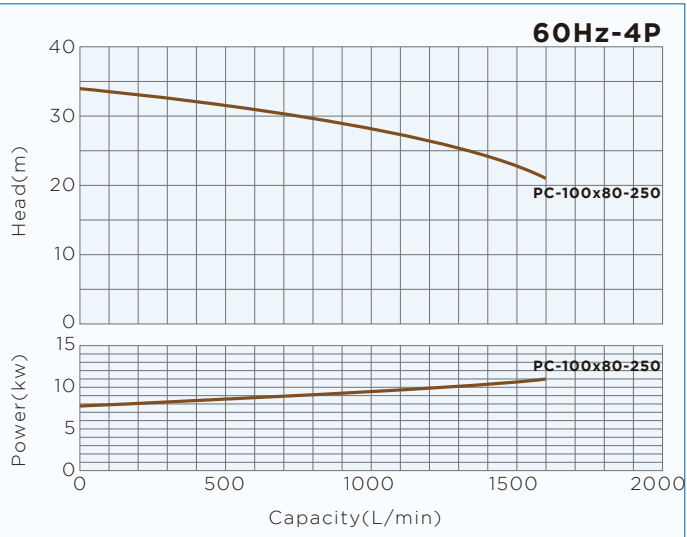
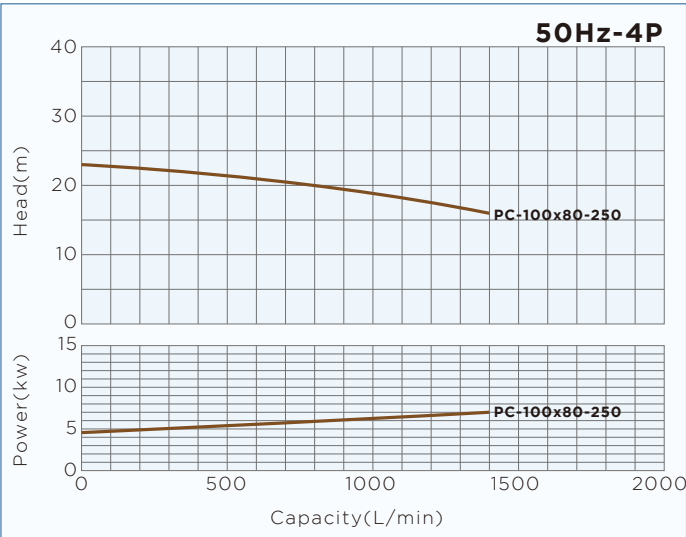
PC-100x80-250



PC-80x40-250 / 80x50-250

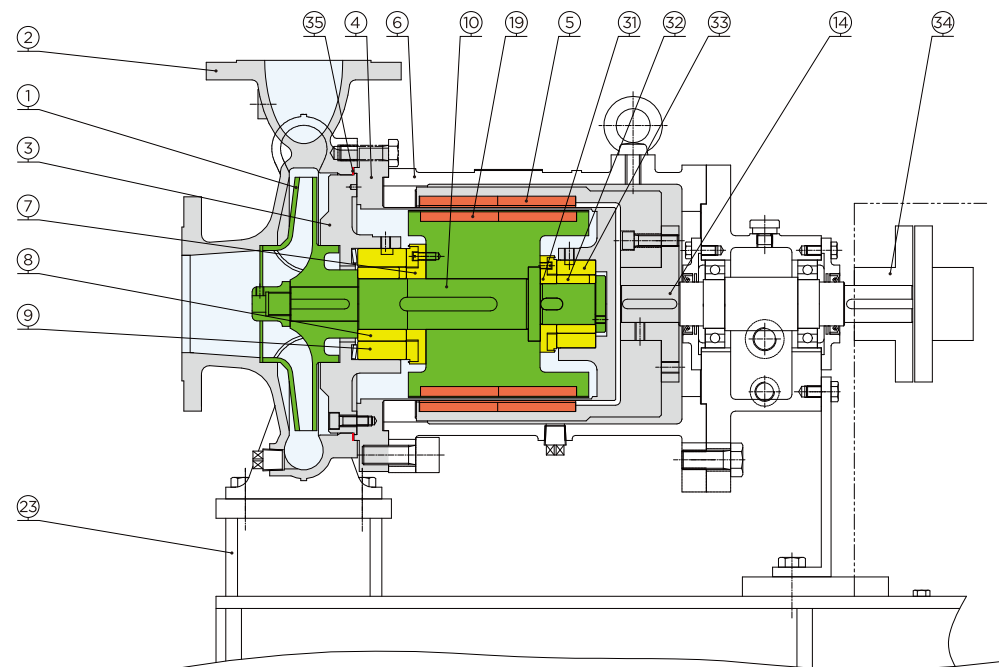


PC-100x80-250



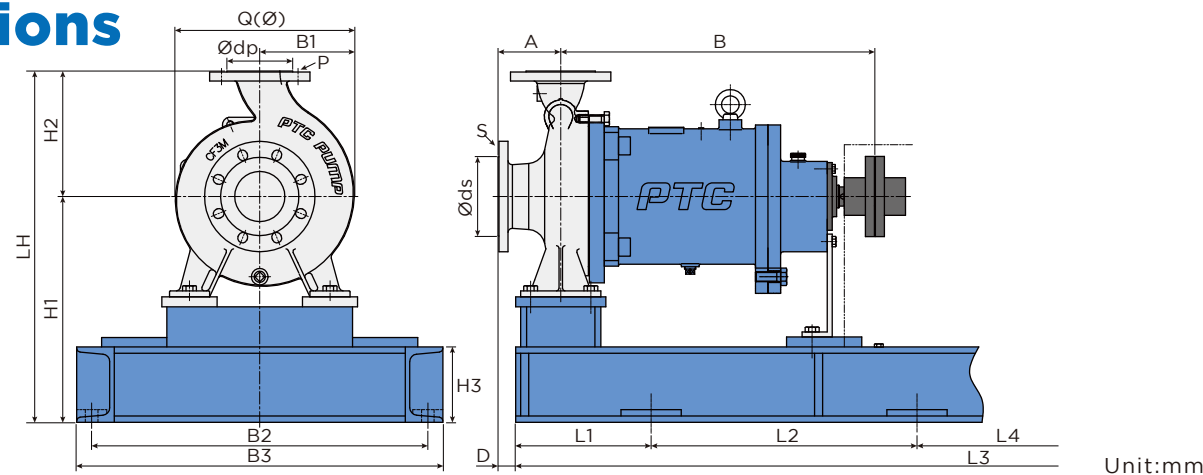
*The performance curve is for reference and preliminary selection only

Construction and Material



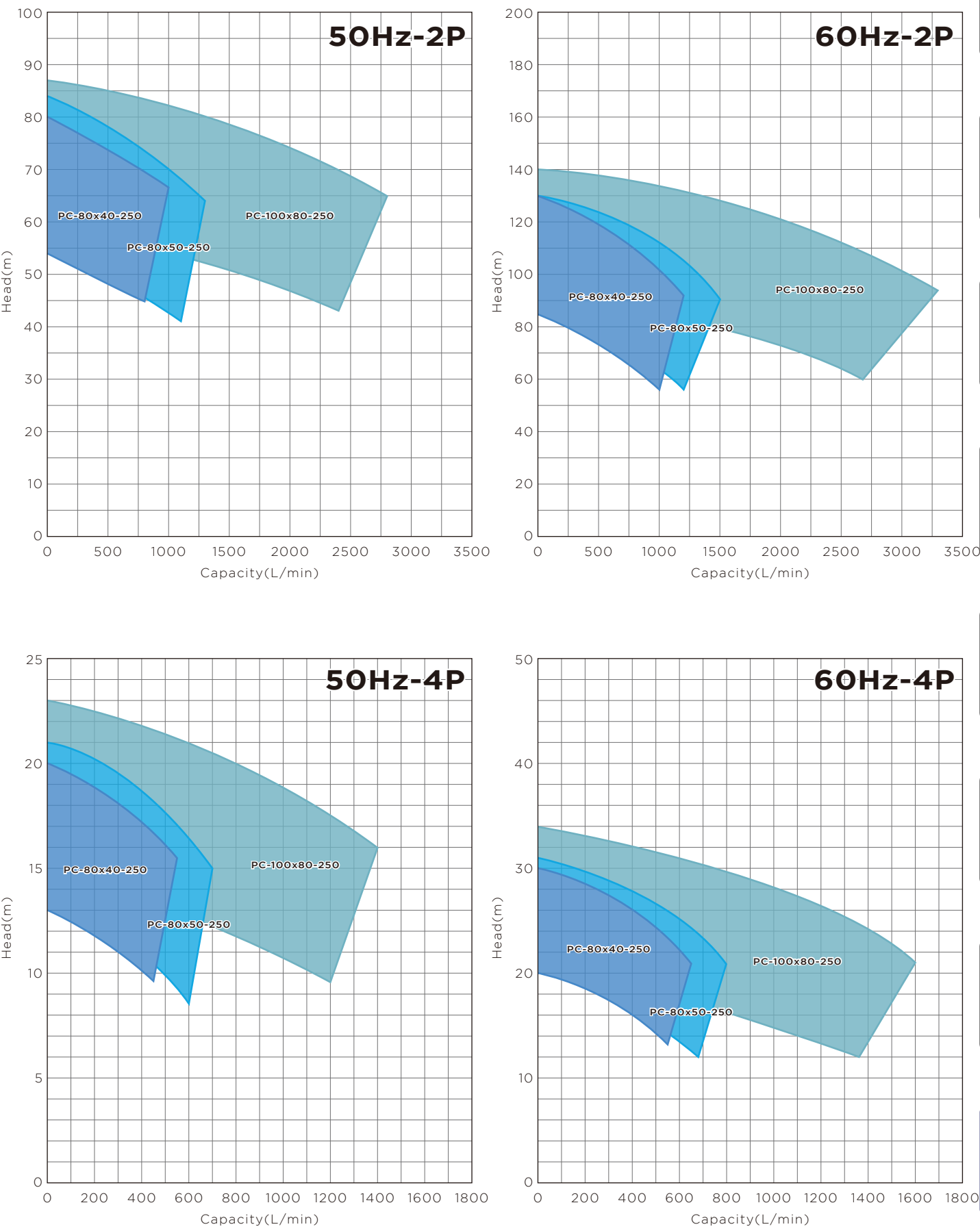
No.	Parts Name	Material	No.	Parts Name	Material
①	Impeller	SUS316L	⑩	Shaft	SUS316L
②	Front casing	SUS316L	⑭	Outer magnet shaft	S45C
③	Casing cover	SUS316L	⑰	Inner magnet	SUS316L+Rare earth
④	Rear casing	SUS316L	⑳	Baseplate	SS400
⑤	Outer magnet	SS400+Rare earth	㉑	Thrust ring(R)	SiC
⑥	Frame adapter	FC25	㉒	Sleeve(R)	SiC
⑦	Thrust ring(F)	SiC	㉓	Bearing(R)	SiC
⑧	Sleeve(F)	SiC	㉔	Coupling	S45C
⑨	Bearing(F)	SiC	㉕	Gasket	PTFE

Dimensions



Model	Motor		Bore				Pump size														
	Frame Size	Output (KW)	Suct.		Disch.		LH	H1	H2	H3	B1	B2	B3	Q (Ø)	A	B	D	L1	L2	L3	L4
			ds	S	dp	P															
PC-80x40-250	112M/132S	3.7/5.5	80	JIS 10K / DIN PN16	40	JIS 10K / DIN PN16	565	340	225	125	172	600	660	333	125	625	40	240	940	1450	-
	180M/200L	22/45			50		605	380	225	125	175	600	660	336.5	125	625	40	240	940	1450	-
PC-80x50-250	132S/132M	5.5/7.5	80		50		605	380	225	125	175	600	660	336.5	125	625	40	240	940	1450	-
	180L/225S	30/55			80		700	450	250	150	188	670	730	356	125	625	35	270	530	1750	530
PC-100x80-250	160M/160L	11/15	100	80	700	450	250	150	188	670	730	356	125	625	35	270	530	1750	530		
	225S/280S	75/110		80	700	450	250	150	188	670	730	356	125	625	35	270	530	1750	530		

PC Series Performance Family Curve



*The performance family curve is for reference and preliminary selection only

All Series Specification Table

Model	Standard type					
						
	PM	PS		PL		
Frequency (Hz)	50	60	50	60	50	60
Motor revolution (RPM)	2900	3500	2900	3500	2900	3500
Max. capacity (L/m)	81	81	850	850	1904	2001
Max. total head (m)	22	30	55.7	68	91.3	132
Suction & discharge (mm)	15x15~25x20		25x25~80x40		40x25~100x80	
Max. temperature applicable (°C)	280		280		280	
Min. temperature applicable (°C)	-80		-80		-80	
Max. Specific gravity (S.G.)	2		2		2	
Max. viscosity (mPa.s(cp))	100		300		300	
Design pressure (MPaG)	0.6 (*PM2021:1.0)		1.0		1.2 (*PL-50x25-250LF:1.6)	
Flange standard	R Thread type		ANSI Class 150		ANSI Class 150	
	-		JIS 10K		JIS 10K	
	-		DIN PN16		DIN PN16	
Impeller type	Closed type		Closed type		Closed type	
Pump material	SUS316L		SUS316L		SUS316L	
	Alloy20		Alloy20		Alloy20	
	Has-C equivalent		Has-C equivalent		Has-C equivalent	
Quantity of pump model	4		11		10	
Motor output (kw)	0.09-0.55		0.75~7.5		5.5-18.5	

High head low flow		Jacket type		Open impeller		Multi-stage		Coupling type	
									
PW		PSJ		PSO		PL2		PC	
50	60	50	60	50	60	50	60	50	60
2900	3500	2900	3500	2900	3500	2900	3500	2900	3500
49	53	400	450	400	450	500	500	2800	3200
78	108	36.8	53.1	42.7	61.3	85	121	87	220
15x15-25x25		25x20-50x40		25x20-50x40		50x25		80x40-100x80	
280		280		280		280		280	
-80		-80		-80		-80		-80	
2		2		2		2		2	
300		300		300		300		300	
1.6		1.0		1.0		1.6		1.6	
ANSI Class 150		ANSI Class 150		ANSI Class 150		ANSI Class 150		ANSI Class 150	
JIS 10K		JIS 10K		JIS 10K		JIS 10K		JIS 10K	
DIN PN16		DIN PN16		DIN PN16		DIN PN16		DIN PN16	
Cascade bladed type		Closed type		Open type		Closed type (Two stages)		Closed/Open type	
SUS316L		SUS316L		SUS316L		SUS316L		SUS316L	
Alloy20		Alloy20		Alloy20		Alloy20		Alloy20	
Has-C equivalent		Has-C equivalent		Has-C equivalent		Has-C equivalent		Has-C equivalent	
4		4		5		1		7	
0.75-3.7		0.75-3.7		0.75-3.7		11-18.5		2.2-110	

Pump Dry Run Protector

It is important to ensure pump run well and to avoid dry running. It is important to install a dry running protection device which main function is to monitor the current or power of the pump during operation. As soon as the operating current or use of electricity is beyond the setting range, the device will stop the pump immediately to prevent the motor from overload or dry running which is to avoid pump failure and costly production downtime.

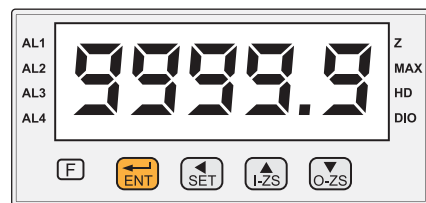


Features

- To provide current and power type for selection
 - To protect pumps during abnormal operation
 - To prevent motor from overloading or underloading
 - To prevent pump from dry running
 - Compact size for easy setup and install
- Power supply: AC/DC 100~240V DC12/24/30~90V
 - Sampling time: 16 cycles/sec
 - Display range: -19,999~99,999
 - Alarm delay time: (0~99)sec
 - Accuracy: Current type: $\pm 0.2\%$ F.S. ± 1 digi.
Power type: $\pm 0.25\%$ F.S. ± 1 digi.

Specification

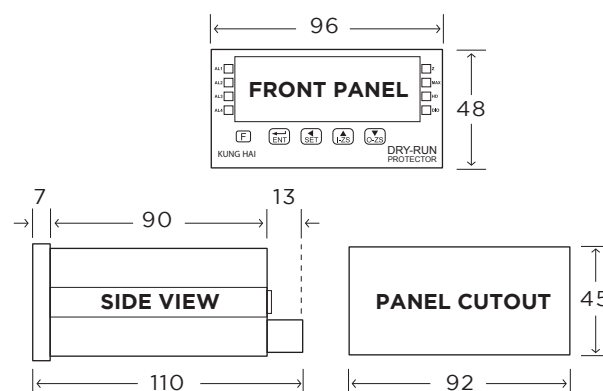
Key Function



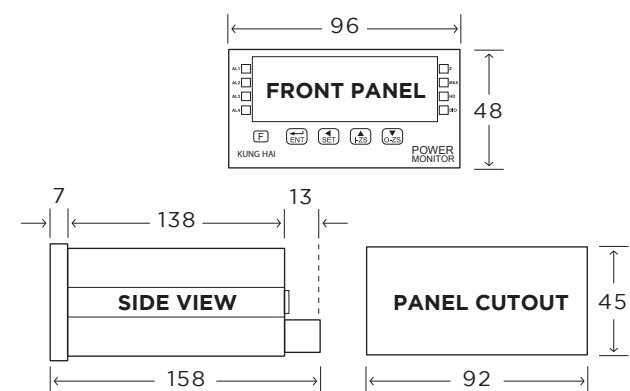
AL1	Alarm 1 indicator		Shift and alarm setting key
AL2	Alarm 2 indicator		Up adjusting key
	Reset key		Down adjusting key
	Enter and save key		

Dimensions

Current type



Power type



(Unit:mm)

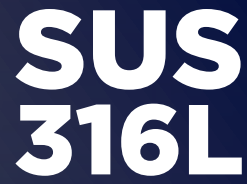
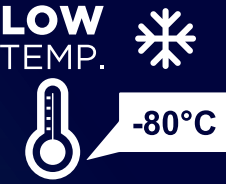
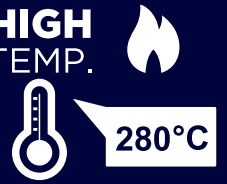
Pump Inquiry Request Data

Company Name	Contact Name
TEL ext.	FAX
E-mail	Company Website
Other Contact Source ☐ LINE ☐ WhatsApp ☐ WeChat ☐ KakaoTalk ☐ Skype ID _____	

OPERATING CONDITION		MOTOR SPECIFICATION	
Chemical Name		Frequency	Phases
		Hz	Ø
Capacity		Poles	Voltage
	L/minm³/h	P	V
Total Head		Explosion Proof	
	mkg/cm²	☐ Explosion Proof ☐ Non-Explosion Proof	
Concentration		Energy Efficiency Index	
%	Impurities	☐ IE 1 ☐ IE 3 ☐ IE 2 ☐ IE 4 ☐ Other	%
	%		
Specific Gravity		Protection	
	Temperature	☐ IP54 ☐ IP55 ☐ IP56 ☐ IP65 ☐ Other	°C
Viscosity		Insulation Class	
Cp	NPSHa	☐ A ☐ B ☐ E ☐ F ☐ H	m
Connection Type		Service Factor	Install Location
☐ Thread ☐ Flange ☐ Union			☐ Indoor ☐ Outdoor

Remark

*Sealless and Leak Free
for a Better Environment*

 SUS 316L MATERIAL SUS316L	 LOW TEMP. ❄️ -80°C MIN. TEMP APPLICABLE	 HIGH TEMP. 🔥 280°C MAX. TEMP APPLICABLE
 SEALLESS LEAKAGE-FREE	 EASY MAINTENANCE	 SUPERIOR PERFORMANCE
 QUICK DELIVERY	 CORROSION RESISTANCE Acid Alkali	 HIGHLY DURABLE