

*From Intake, Circulation, Booster, Drainage  
and Wastewater treatment to Production equipment*

# **Kawamoto's Pump Series**

Lift up, Booster, Circulation,  
and Drainage

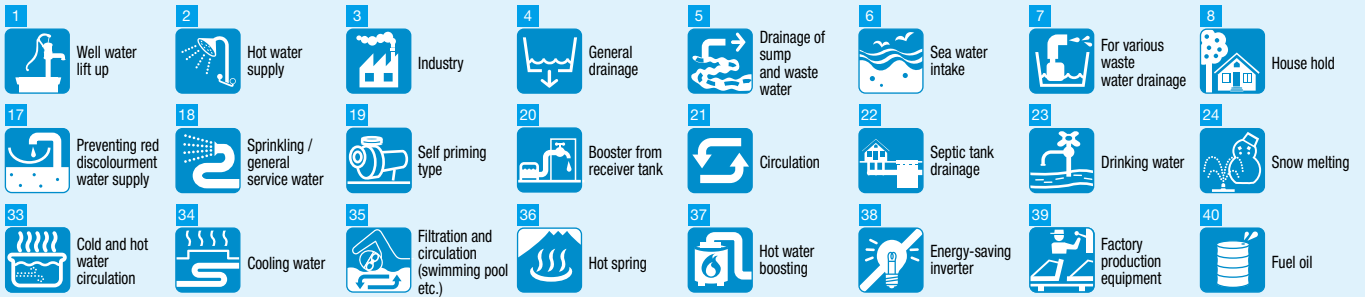
Water supply equipment / Small regional  
drinking water / Energy-saving inverter




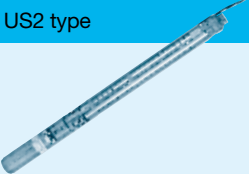



























Seawater /  
Hot water (Hot spring)

Machine tool  
Production equipment

Ver. 1.6

# List of model



Centrifugal / Multistage pump		Cascade / Oil pump		Submersible clean water pump		Energy-saving inverter			
GSN(2)-C type  3 19 25 30 34 35 P3		KR <sup>3</sup> -C type  9 23 25 30 34 P6		CS-C type  3 10 19 25 28 34 P9		US2 type  1 13 15 23 24 28 P10		KF Series KFE-A-P type  9 11 20 23 25 30 38 P14	
GSP <sup>3</sup> type  6 12 17 19 21 35 P3		GES-4M type  9 25 30 33 34 39 P7		OC(K) type  3 19 41 P9		KUR <sup>2</sup> type  3 9 23 25 30 P11		KF Series KFE-T type  9 11 20 23 25 30 38 P14	
FS type  3 4 18 19 28 34 P4		T(N) type  3 26 30 34 P7		OCH type P9		USM(H) type P11		KF Series KF2-R type  9 11 20 23 25 30 38 P14	
GSO <sup>3</sup> -C type  3 18 19 24 26 28 34 P4		TVS type  3 19 26 28 34 P7		Fire fighting pump		Submersible Sump Pump		KF Series KF2-H type  9 11 20 23 25 30 38 P14	
GE-C type  3 9 26 28 30 33 34 P5		KTS type P7		KTK-C type  3 13 42 P13		WUO(4) type  5 7 22 29 31 P12		USFE type/LFE type  11 20 23 24 28 38 P15	
KVS type  3 13 15 25 30 P5		PE(2) type  3 10 33 34 P8		KTY type  3 13 42 P13		WUP4 type P12		USF2 type/LF type  11 20 23 24 28 30 38 P15	
GE-2M type  3 26 28 33 34 P6		PSS(2) type  2 3 10 25 33 34 P8		KTGF · KTGDF type P13		WUZ <sup>2</sup> type P12		KUF type  11 20 23 30 38 P15	
		FV(D)- $\frac{3}{4}$ type  3 26 33 34 P8		KTU(2) type P13		ZU <sup>3</sup> · ZU4 type  5 7 22 29 31 P12			
				KTK-W · KTY-W type P13		BU4 type  5 7 22 29 31 P12			
				KTY-ET type P13		BUW type  P12			
						VU4 type P12			
						AU4 type P12			

The standard configuration for pump systems with that those with an output of 0.75 kW or more are equipped with a Premium efficiency motor (IE3 efficiency), and those with an output of 0.4 kW or less are equipped with a standard efficiency motor. Please consult your distributor for the motor specifications.

9 Small regional drinking water	10 Setting for machinery equipment	11 Industrial	12 Fishery/Fish processing plant	13 Building equipment	14 Booster from elevated tank	15 Industrial water	16 Emergency Drinking Water Supply Equipment
25 General water supply	26 General water lift up	27 Residual water drainage	28 Agriculture	29 Pit drainage	30 Water supply to buildings and factories	31 Building drainage	32 Automatic water supply from mounted reservoir / underground reservoir
41 Heating	42 Fire fighting	43 Deionized water	44 Air blower	Kawamoto products with this mark are products with excellent energy-saving and environmentally friendly features.			

<b>Energy-saving inverter Household</b>	<b>Hot water auxiliary boosting equipment</b>	<b>Water supply equipment / Small regional drinking water unit</b>		<b>Seawater / Special purpose</b>	<b>For hot water (hot spring) pump series</b>
<b>NF3 type</b>  1 8 14 19 20 25 38 P16	<b>SFR(W) · SFRH(W) type</b>  2 6 10 37 38 P18	<b>Stainless steel &amp; Variable speed control booster unit</b> KFE-A · P · T type  P20 KF2-R type  P20 KF2-H type  P20 KVF2 type  P20		<b>GSZB2 type</b>  6 11 12 18 19 P21	<b>Stainless steel submersible pump</b> KURH $\frac{3}{4}$ type Deep well 6 36 37  36 P21
<b>UF(L)2 type</b>  8 11 25 38 P16	<b>NFD(N)2 type</b>  8 10 25 38 P18	<b>Direct connection with water main booster pump</b> NDP2-G type  P20 KDP3 type  P20 KDP3- $\frac{0}{w}$ type  P20 SDP-R type		<b>Constant pressure automatic booster pump</b> KZB type  6 11 12 18 P21	<b>Stainless steel hot water booster unit</b> KFEH type  6 36 37 38 P21
<b>UFE type</b>  8 11 25 38 39 P16	<b>Hand pump</b>	<b>HDS type</b> 1 8 16  P19		<b>Self-priming plastic pump</b> GSP $\frac{3}{4}$ type  6 11 12 18 P3,21	<b>Stainless steel household automatic water supply pump</b> NFH2 type  36 37 38 P21
<b>JF type</b>  1 8 14 20 25 38 P17	<b>Equipment pump</b>	<b>KFED type</b>  9 13 15 17 30 38 P20		<b>Titanium submersible pump</b> WUZ $\frac{3}{4}$ type  6 11 12 18 P21	
<b>Small booster pump unit</b>	<b>Pure water electrolysis water</b>	<b>KFED-R type</b>  9 13 15 17 30 38 P20		<b>Water seal vacuum pump unit</b> DW type  6 12 15 26 P21	
<b>NR · N3-N type</b>  1 8 18 19 25 P18	<b>NFG2 · JFG type</b>  10 38 39 43 Pic:NFG type P19	<b>Coolant Pump</b> RC $\frac{0}{3}$ type  10 39 RCC type RCD type P19			
	<b>Vortex Blower</b>	<b>RA type</b>  3 10 39 44 P19			

# Centrifugal / Multistage pump series



## GSN(2)-C type Self-priming turbine pump

### Features

- Preventing red discolorment of water by exclusively design as nylon coating
- Adoption of low noise type TEFC motor
- Self-priming pump construction does not require foot valve and makes priming works easier
- Easy maintenance and inspection due to back pull out construction



### Standard specifications

Liquid	pH5.8~8.6 Clean water 0~45°C (no freezing)	
Suction total head (20°C)	-6m	
Materials	Impeller	Bronze
	Shaft	SUS403 or SUS304
	Casing	Cast iron + Nylon coating
Shaft sealing	Mechanical seal	
Motor	Type	TEFC outdoor
	Phase	Three phase 2 pole
	Speed	50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>
	Efficiency	Premium efficiency (IE3)*
	Installation	Outdoor installation available (expect 0.4kW single phase model)

\* 0.75kW or more is equipped with a Premium efficiency motor.



### Sister models

**Cast iron type  
Self-priming turbine pump  
GS<sub>3</sub>-C type**  
Bore : 25~100mm  
Motor : 0.25~7.5kW



## GSP<sub>4</sub> type KAWA HOPE

### Features

- Improved strength by using chemical resin material. Outdoor use allowed.
- Using stainless steel for metal material such as the shaft, which prevents corrosion and rust.
- Fast self priming and outstanding suction properties.
- Easy maintenance attributed by simple structure and semi-open impeller
- Flanged the discharging side connection part.

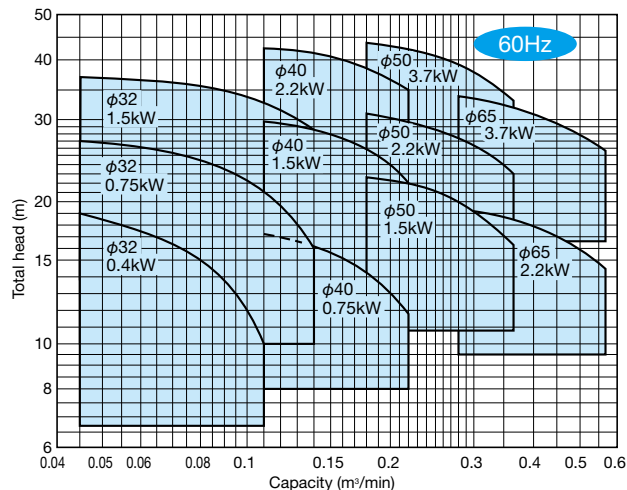
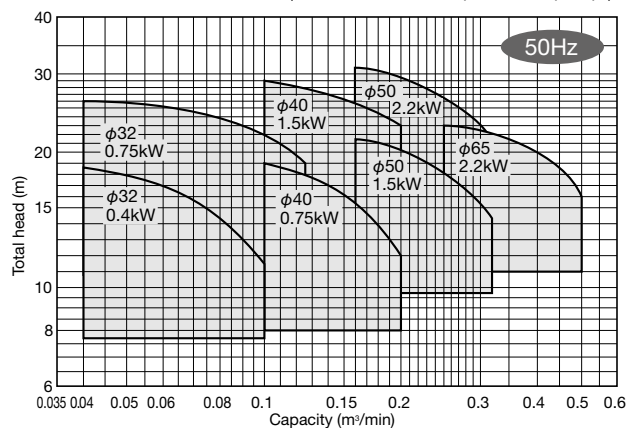


### Standard specifications

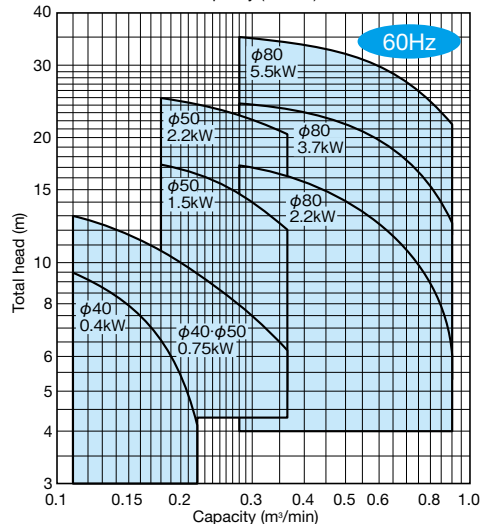
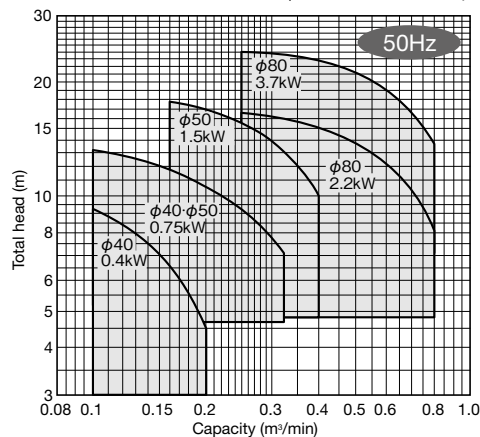
Liquid	Sea water / Clean water 0~60°C (no freezing) [Clean water] : pH5.8~8.6 chloride ion concentration 200mg/L or less [sea water] : pH7.8~8.2 chloride ion concentration 19000mg/L or less Sand content 1000mg/L or less	
Suction total head (20°C)	-7m (0.4kW or Bore size 80mm model : -6m)	
Materials	Impeller	Resin
	Shaft	SUS316
	Casing	Resin
Motor	Type	TEFC outdoor
	Phase	Three phase
	Efficiency	Premium efficiency (IE3)*
Installation	Indoor/Outdoor	

\* 0.75kW or more is equipped with a Premium efficiency motor.

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)

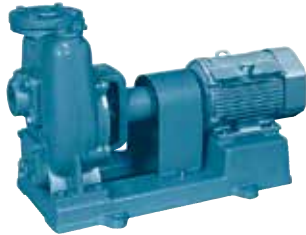


### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)





## FS(4) type Sel-super



### Features

- Over the years actual achievement as a self-priming
- Self-priming pump construction does not require foot valve and makes priming works easier
- Mechanical seal types are also available (bore size: 50~100mm)
- Easy maintenance and inspection due to back pull out construction

### Standard specifications

Liquid	Clean water 0~40°C (no freezing)
	Bore size 25mm/-3m
Suction total head (20°C)	Bore size 32mm/-3.5m (60Hz: -5m)
	Bore size 40~65mm/-5.5m (60Hz: -6m)
	Bore size 80~150mm/-6m
Materials	Impeller Cast iron
	Shaft SUS403 (portion contacting liquid)
	Casing Cast iron
Shaft sealing	Gland packing, Mechanical seal
Motor	Type TEFC outdoor (single phase 0.4kW or less has ODP motor)
	Phase Three phase
	Speed 50Hz : 1,500min <sup>-1</sup>
	60Hz : 1,800min <sup>-1</sup>
	Efficiency Premium efficiency (IE3)*
Installation	Indoor

\*0.75kW or more is equipped with a Premium efficiency motor.



## GSO<sub>3</sub>-C type

### Features

- Superior suction performance make it possible to pump up even from deep wells
- Strong and durable construction against sand by adopting special kind mechanical seal
- The protection switch (manual return) provides safety.
- A semi-open type impeller is resistant to foreign objects such as sand. A Back Pull Out structure is incorporated.



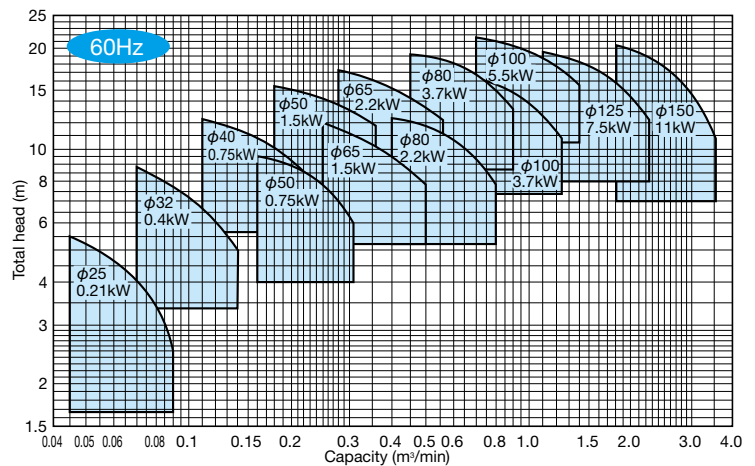
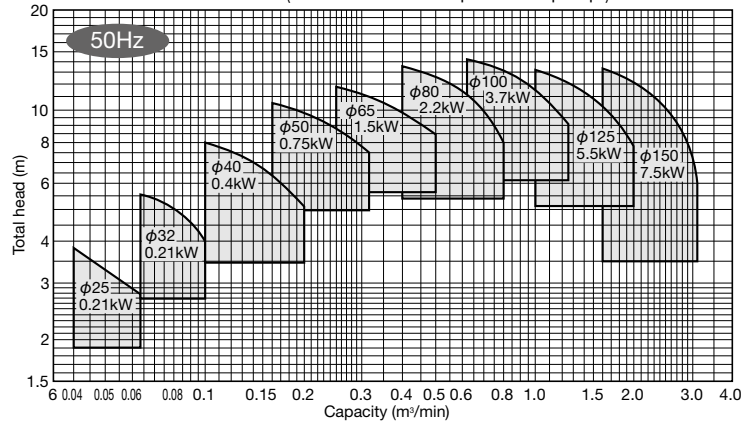
### Standard specifications

Liquid	Clean water 0~40°C (no freezing)
Suction total head <sup>(1)</sup> (20°C)	Bore size 40mm/0.4kW/-8.5m (Max. -9m)
	Bore size 40mm/0.75kW/-8m (Max. -9m)
	Bore size 50mm/0.75, 1.5kW/-8m (Max. -8.4m)
Materials	Impeller Bronze or Stainless Cast Steel or Resin
	Shaft SUS304 (portion contacting liquid)
	Casing Cast iron
Shaft sealing	Mechanical seal
Motor	Variation TEFC outdoor
	Phase Three phase
	Speed 50Hz : 3,000min <sup>-1</sup>
	60Hz : 3,600min <sup>-1</sup>
	Efficiency Premium efficiency (IE3) <sup>(2)</sup>
Installation	Indoor

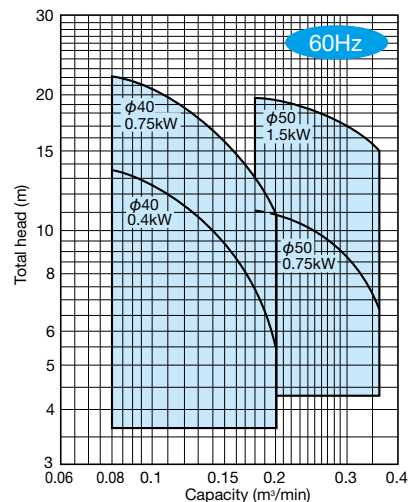
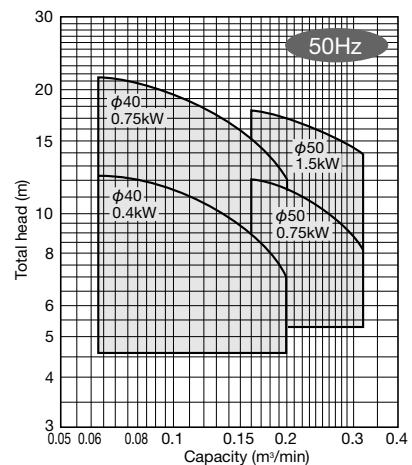
(<sup>(1)</sup>) Discharge performance may drop when pump operate under negative suction total head.

(<sup>(2)</sup>) 0.75kW or more is equipped with a Premium efficiency motor.

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)



### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)



# Centrifugal / Multistage pump series



## GE-C type



### Features

- Compact, light weight and less installation space by adoption of 2 pole electric motor
- Long life mechanical seal is adopted for shaft sealing
- Easy maintenance and inspection without dismantle of piping due to back pull out construction and simple structure
- Evaluated item of <Horizontal centrifugal pump> by (C) Public Buildings Association., Ltd. (Japan)

### Standard specifications

Liquid	Clean water 0~90°C (no freezing)	
Suction total head (20°C)	-6m (60Hz Bore size 50mm 0.75kW : -3.2m, bore size 80mm 5.5, 7.5kW : -5.5m)	
Materials	Impeller	Cast iron or Bronze
	Shaft	SUS304
	Casing	Cast iron
Motor	Type	TEFC outdoor
	Phase	Three phase
	Speed	50Hz : 3,000min <sup>-1</sup>
		60Hz : 3,600min <sup>-1</sup>
	Efficiency	Premium efficiency (IE3)
Installation	Indoor	



## KVS type

### Features

- Compact, light and space saving design
- Adoption of Stainless steel precision casting for Casing, stage casing, etc.
- Mechanical seal can be changed without removing electric motor due to outstanding construction feature (unit type mechanical seal cover with mechanical seal support and spacer shaft coupling) (5.5kW or more)

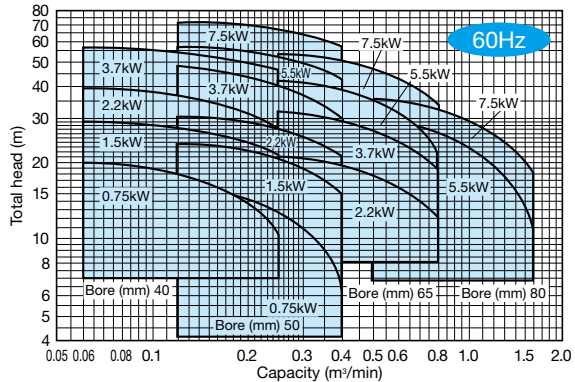
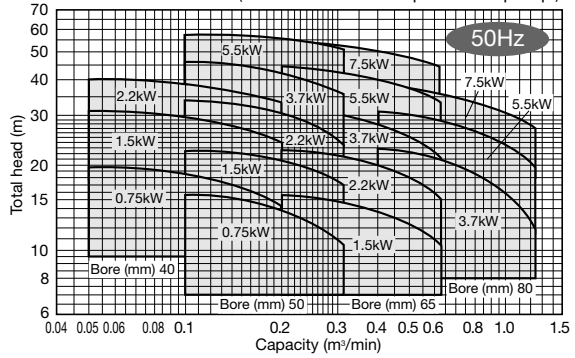


### Standard specifications

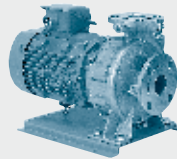
Liquid	Clean water 0~90°C (no freezing)	
Suction total head (20°C)	Bore 25~50mm/-6m	
	Bore 65mm/-5m	
	Bore 80mm-100mm (5.5kW-50Hz) /-4m	
	Bore 80mm-100mm (7.5~37kW-50Hz) /-5m Bore 80mm-100mm (60Hz) /-3m	
Materials	Impeller	SCS13 or SUS304
	Shaft	SUS316
	Casing	SCS13
Shaft sealing	Mechanical seal (SiC x Carbon)	
	Type	TEFC outdoor (11~37kW : indoor)
Motor	Phase	Three phase
	Speed	50Hz : 3,000min <sup>-1</sup>
		60Hz : 3,600min <sup>-1</sup>
Efficiency	Premium efficiency (IE3)	
Flange	JIS 20K equivalent	
Installation	Indoor/outdoor (11~37kW : indoor)	

\* KVS-HM : for high pressure

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)

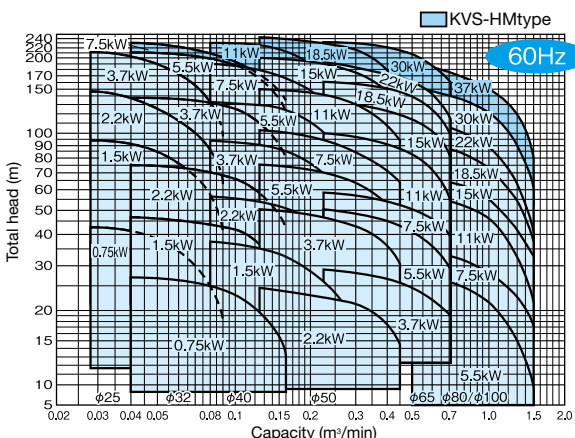
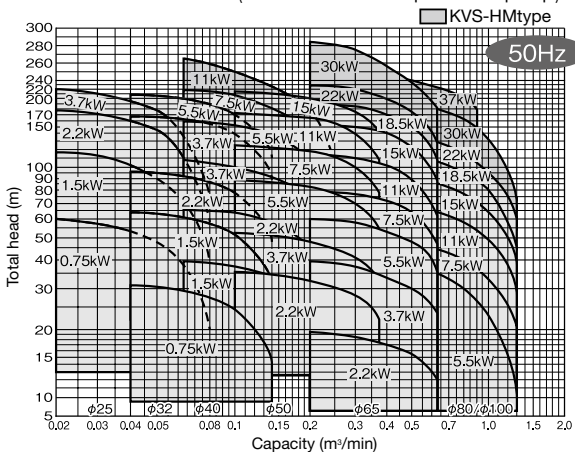


### Sister models



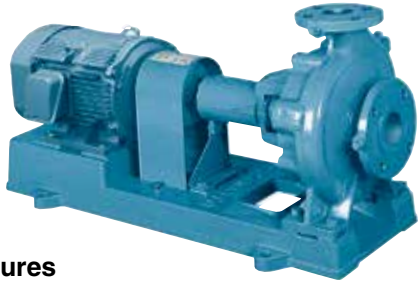
**Stainless steel  
GES-C type**  
Bore : 40~65mm  
Motor : 0.75~7.5kW (50Hz)  
1.5~7.5kW (60Hz)

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)





## GE-2M type



### Features

- Compact, light weight and less installation space by adoption of 2 pole electric motor
- Other than standard model (GE-2M type), Nylon coating type (GEN-2M type) is also available
- Long life mechanical seal is adopted for shaft sealing
- Easy maintenance and inspection without dismantle of piping due to back pull out construction and simple structure

### Standard specifications

Liquid	Clean water 0~90°C (no freezing)
Suction total head (20°C)	within -6m (it may differ depending of model inquire.)
Materials	Impeller Cast iron or Bronze
	Shaft SUS403 (portion contacting liquid)
	Casing Cast iron
Motor	Type TEFC indoor
	Phase Three phase
	Speed 50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>
	Efficiency Premium efficiency (IE3)*
Installation	Indoor

\* 0.75kW or more is equipped with a Premium efficiency motor.  
• GE-4M (4 poles motor) type are also available. Inquire for further information.



## KR<sub>5</sub>-C type

### Features

- Stainless steel precision casting
- Quiet sound design of pump and electric motor enable pump unit operation with lower noise
- Easy maintenance and inspection due to back pull out construction

### Standard specifications

Liquid	Clean water 0~40°C (no freezing)
Suction total head (20°C)	-6m
Materials	Impeller Resin or SCS13 or Bronze
	Shaft SUS304 (portion contacting liquid)
	Casing SCS13
Motor	Shaft sealing Mechanical seal (Ceramic x Carbon)
	Type TEFC indoor
	Phase Three phase
	Speed 50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>
Efficiency Premium efficiency (IE3)*	
Companion flanges	Special flange

\* Three phase 0.75kW or more is equipped with a Premium efficiency motor.

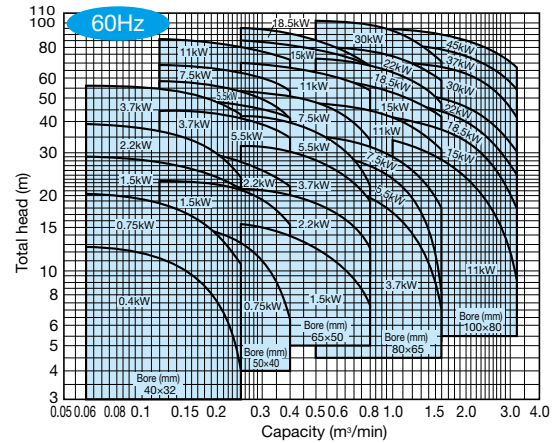
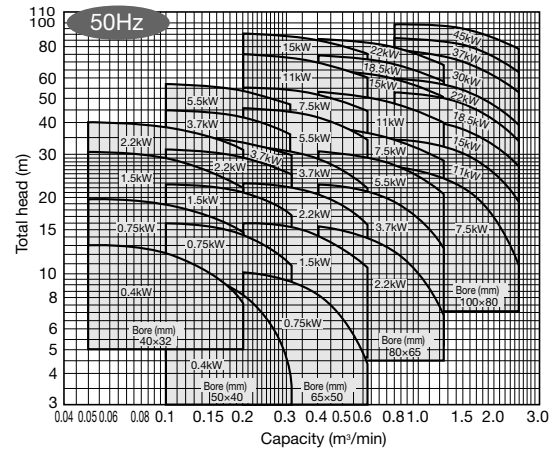


### Sister models

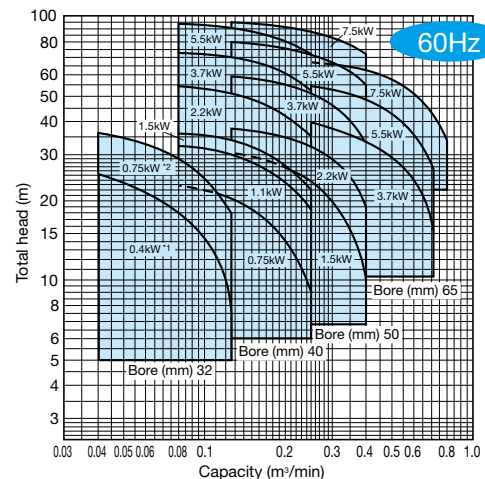
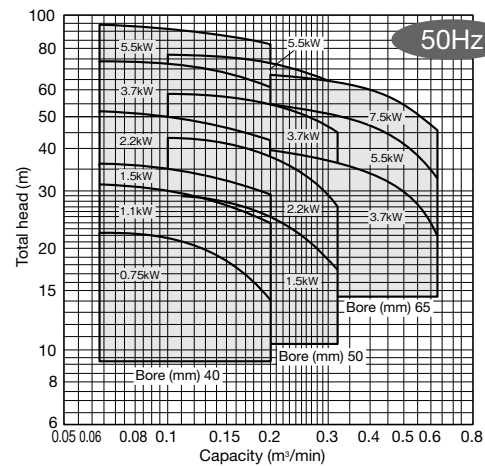
**Stainless steel**  
**KR5-M type**  
Bore : 40~65mm  
Motor : 1.5~7.5kW



### Selection chart ( Value in the chart shows the suction bore and Motor output: kW of pump )



### Selection chart ( Value in the chart shows the suction bore and Motor output: kW of pump )



\*1: Single phase100V  
\*2: Single phase200V

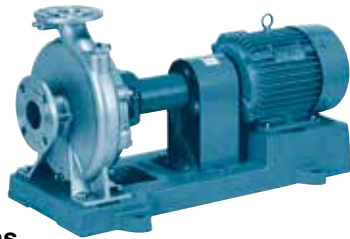
# Centrifugal / Multistage pump series



## GES-4M type

### Features

- Sanitary and clean due to stainless material are used for all portions contacting liquid
- Mechanical seal standard adopted.
- TEFC electric motor as standard
- High pump efficiency and water pumping characteristics.



### Standard specifications

Liquid <sup>1)</sup>	Clean water 0~90°C (no freezing)
Suction total head (20°C)	-6m
Materials	Impeller SCS14
	Shaft SUS316 (portion contacting liquid)
	Casing SCS13
Shaft sealing	Mechanical seal (SiC x Carbon)
Motor	Type TEFC inoor
	Phase Three phase
	Speed 50Hz : 1,500min <sup>-1</sup>
	60Hz : 1,800min <sup>-1</sup>
Efficiency	Premium efficiency (IE3) <sup>2)</sup>

(\*1) Inquire for special kind liquid use.

(\*2) 0.75kW or more is equipped with a Premium efficiency motor.

### Sister models



**Stainless steel**  
**GES-2M type**  
 Bore : 40~65mm  
 Motor : 0.75~7.5kW



## T(N)·TK(N) type

### Turbine pump (Multi-stage pump)

## TVS type·KS type

### Self-priming turbine pump

### Features

#### T(N) · TK(N) type

- Less installation space according to simple and compact pump construction with light weight
- Other than standard model (T/TK), Nylon coating type (TN/TKN) is also available
- Evaluated item of <Horizontal centrifugal pump> by (C) Public Buildings Association., Ltd. (Japan) (T/TK type)

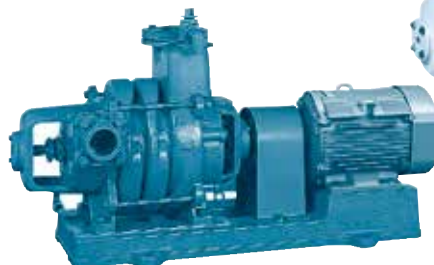
#### TVS type, KS type

- Self-priming pump construction does not require foot valve and makes priming works easier
- Various kind of models for small to large flow rate



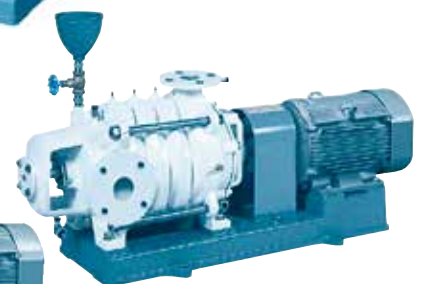
#### T type

Bore : 40~200mm  
 Output : 1.5~132kW



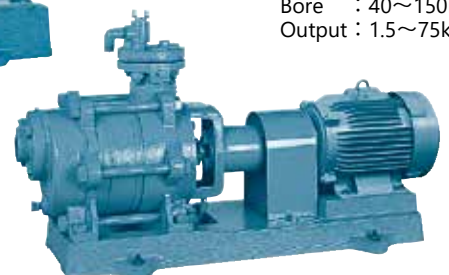
#### TVS type

Bore : 40~150mm  
 Output : 1.5~75kW



#### TN type

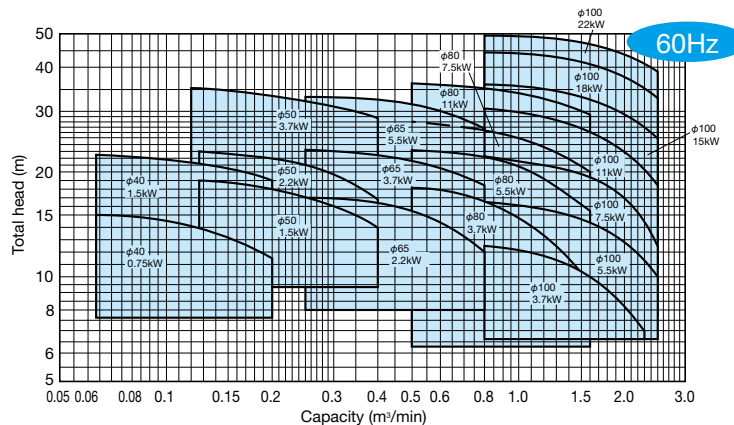
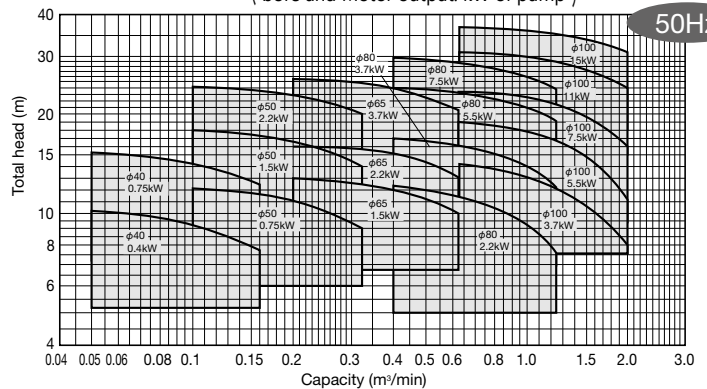
Bore : 40~150mm  
 Output : 1.5~75kW



#### KS type

Bore : 40~80mm  
 Output : 2.2~22kW

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)







## PE (2) type P in Line pump

### Features

- Single phase motor is equipped with a motor protective device which prevent motor burnout. (250W or less)
- All model adopts totally-closed motor. The quiet design enables a low level noise as an open motor.
- The newly-developed high class mechanical seal prevents mechanical chatter. This seal prevents leak and extends the products life.



### Standard specifications

Liquid	Clean water 0~90°C (no freezing)
Suction total head (20°C)	Bore 20~65mm -6m Bore 80mm -5.5 (-3m for 60Hz)
Materials	Impeller SCS13
	Shaft SUS304 (portion contacting liquid)
	Casing Cast iron
Shaft sealing	Mechanical seal
Motor	Type TEFC outdoor
	Phase Single phase
	Phase Three phase
	Speed 50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>
	Efficiency Premium efficiency (IE3)*
Installation	Indoor/Outdoor

\* Three phase 0.75kW or more is equipped with a Premium efficiency motor.

Note) Apply for anti-freezer within following specification.

- Kind: Nybrine Z-1 and Showbrine PP super
- Density: 35~50%
- Liquid temperature: 0~90°C



## FV(D)-C type Vertical type Centrifugal Pump

### Features

- By original casing\* design realized high efficiency and miniaturization. Furthermore, safe operating with low noise and vibration.
- Enable to install in the between pipe, saving space. (Installing space is almost half compare to our centrifugal pump)
- Superior maintenance. Easy removing air to prevent the mechanical seal dry operating.
- By original structure prevent to put fingers in the shaft part so, do not need protector, easy inspecting for leaking water from mechanical seal from outside.

\*JAST (Just Accorded Stream) structure  
Realizing harmonious water flow, contributing miniaturization of casing and high pump efficiency.

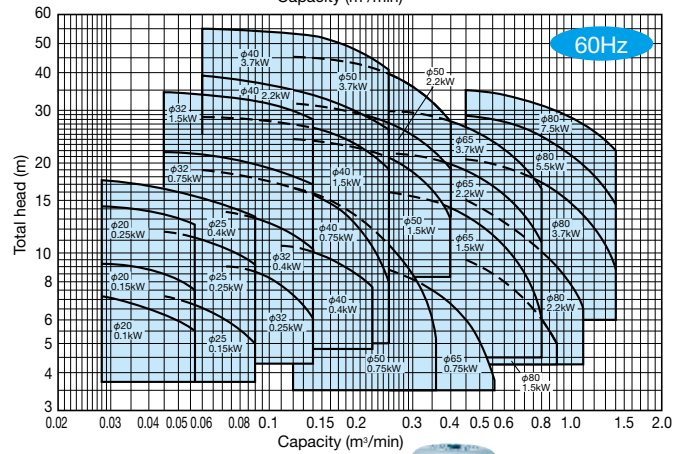
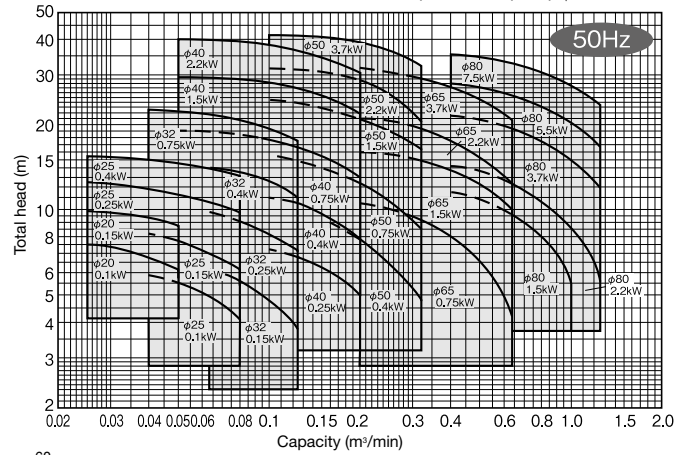


### Standard specifications

Liquid	Clean water 0~80°C (No freezing, pH 5.8~8.6)
Materials	Impeller Cast iron or Ductile cast iron
	Shaft SUS420J2Q
	Casing Cast iron or Ductile cast iron
Shaft sealing	Mechanical seal (SiC x Carbon)
Motor	Type TEFC outdoor 4 pole
	Phase Three phase
	Speed 50Hz : 1,500min <sup>-1</sup> 60Hz : 1,800min <sup>-1</sup>
	Efficiency Premium efficiency (IE3)
	Installation Indoor (temperature: 0~40°C, humidity: less than 90%RH)

• FV(D)-C type (2 pole motor) is also available.

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)

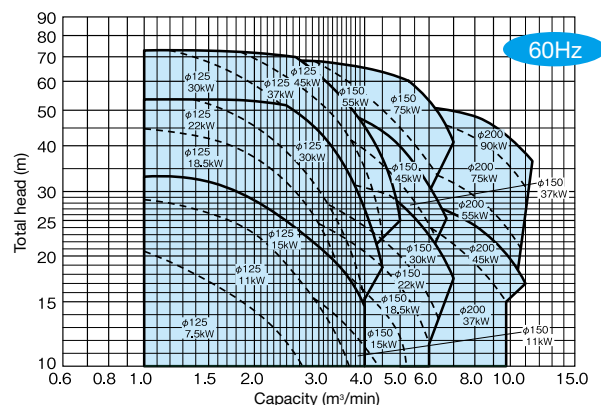
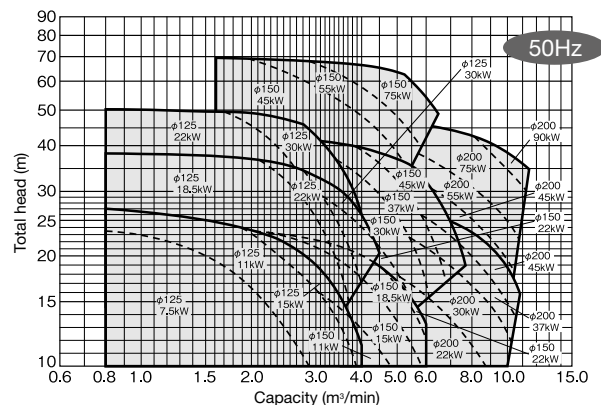


### Sister models

**Stainless steel PSS (2) type Petit Line**  
Bore : 20~80mm  
Motor : 0.06~7.5kW



### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)



# Cascade pump series



## CS(2)-C type

### Features

- Self-priming pump construction does not require foot valve and makes priming works easier
- Long-life product with high suction performance and durability
- Easy maintenance due to adoption of sealed ball bearings required no oiling.
- Equipped with a motor protective switch which prevent motor burnout.



### Standard specifications

Liquid	Clean water 0~40°C (no freezing)	
Suction total head (20°C)	~7m	
Materials	Impeller	Bronze
	Shaft	SUS304 or SUS403 (portion contacting liquid)
	Casing	Cast iron
Motor	Type	ODP or TEFC
	Phase	Three phase
	Speed	50Hz : 3,000min <sup>-1</sup>
		60Hz : 3,600min <sup>-1</sup>

Do not use with the head (m) out of specified point.  
Could cause the motor burn out.

### Sister models

#### CHS type

Bore : 25~40mm  
Motor : 1.5~5.5kW



#### CS2 type

Bore : 20~50mm  
Motor : 0.2~2.2kW



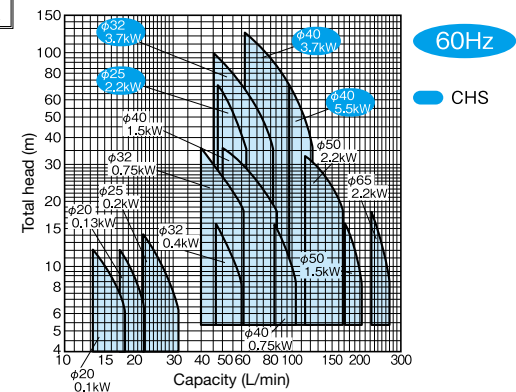
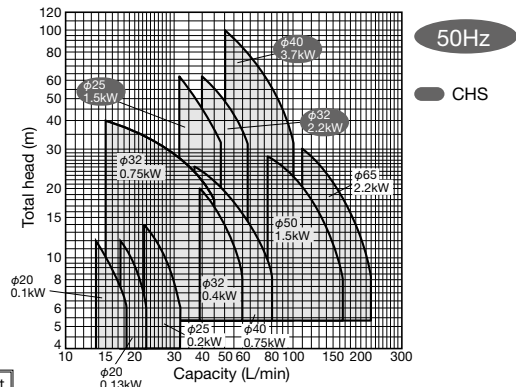
#### CS3 type (Only 60Hz)

Bore : 20~25mm  
Motor : 0.2~0.4kW



### Selection chart

( Value in the chart shows the suction bore and Motor )  
output: kW of pump



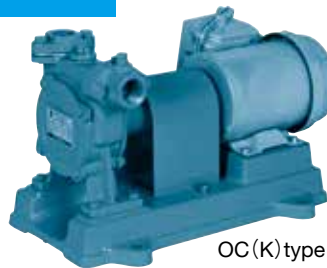
# Oil pump series



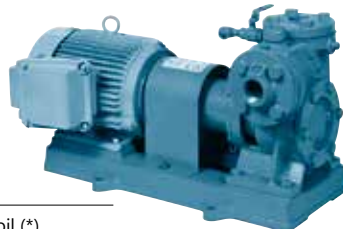
## OC(K)·OCH type

### Features

- The vortex pump enables quiet operation. (Unlike the gear pump, there is no gear contact section)
- Since it is a self priming type, it operates with priming the oil once, and easy to pump oil.
- Mechanical seal is used for the shaft sealing ,which prevents oil leak and keeps clean.
- Increased safety explosion-proof type is adopted as standard.
- Conformed to "Public building construction standard specification" by Public building association. (Japan)
- OC(K) type for A type heavy oil(high-calories special A type heavy oil) is also available.
- OC-TT type, a service tank installed unit, is also available.



OC(K) type



OCH type

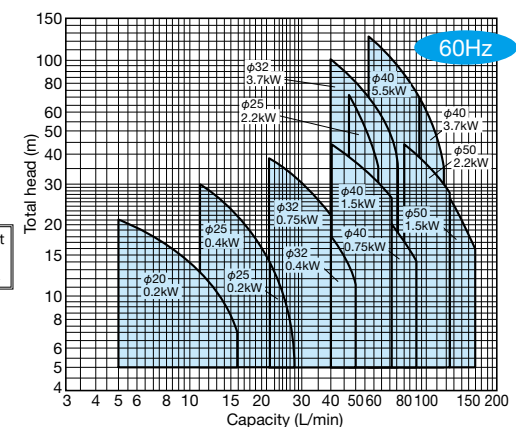
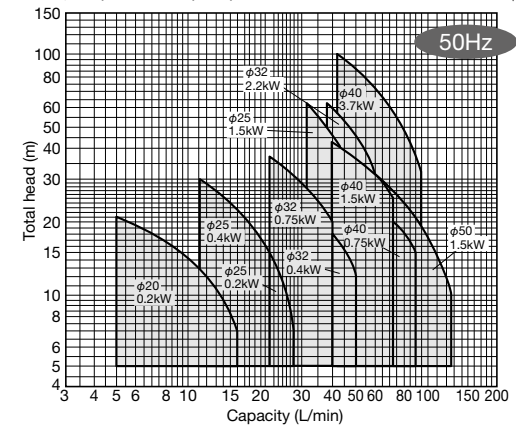
### Standard specifications

Liquid	Kerosene, light oil, A type heavy oil (*) Fuel oil of 45 centistokes or less 60°C or less	
Materials	Impeller	Bronze
	Shaft	SUS403
	Casing	Cast iron
Shaft sealing	Mechanical seal	
Motor	Type	Increased safety explosion-proof type (Japan)
	Phase	Three phase
	Speed	50Hz : 1,500min <sup>-1</sup> 60Hz : 1,800min <sup>-1</sup> (OC(K) type)
		50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup> (OCH type)

Do not use with the head (m) out of specified point.  
Could cause the motor burn out.

### Selection chart

( Value in the chart shows the suction bore and Motor )  
output: kW of pump



\* Use the OCK type for special A type heavy oil.

# Submersible clean water pump series



## US2 type

SANRONG

### Features

- The pump section is resistant to sand, and in addition a thick precision casting stainless steel is incorporated. More strong to sand and reliable by a new-type motor excellent in durability and bearing lubrication.
- The pump is stainless steel and resin. The motor section is made of stainless steel and prevents the formation of red water. The well lid is also made of stainless steel for sanitation purposes.
- The pump's flow passage is smooth and has little loss. High pump characteristics are realized, and the pump's entire length is downsized (compared to conventional products).
- The key components are made of precision cast stainless and steel, and are strong against rust and corrosion. When used in combination with the new stainless steel motor having outstanding sand resistance properties, water can be supplied stably for a long time.

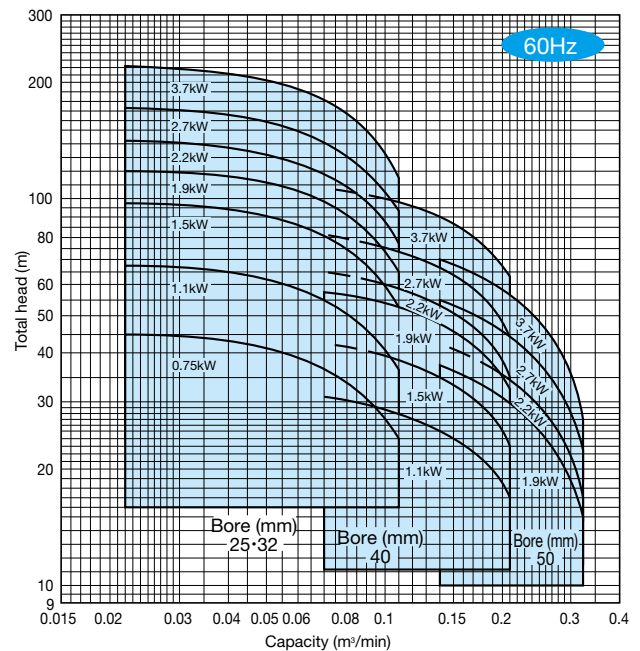
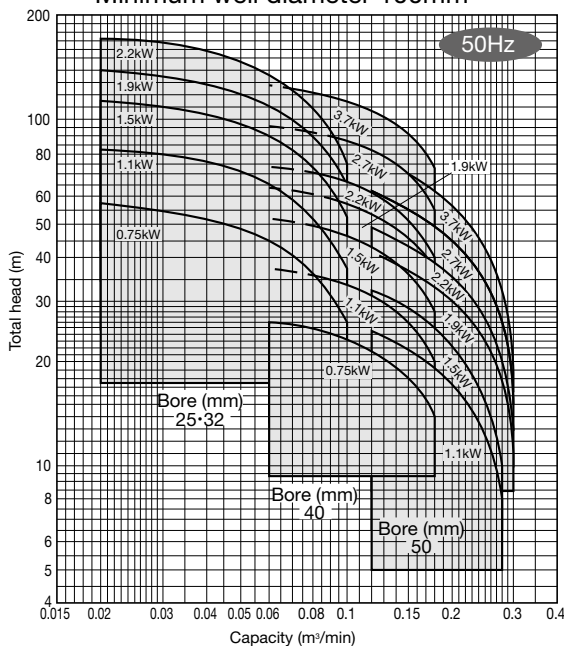
### Standard specifications

Liquid	Clean water 0~30°C (3.7kW or less: 0~35°C) (pH5.8~8.6, Chloride ion concentration 200mg/L or less, Sand content 50mg/L or less (fine sand dia. 0.1~0.25mm or less))	
Materials	Impeller	SCS13
	Shaft	SUS304 or SUS403
Casing	SCS13 (32 and 25mm bores are middle casing SUS304 + resin)	
	Bearing	
Motor	Type	Canned submersible motor
	Phase	Three phase (55kW : 400V)
	Speed	50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>

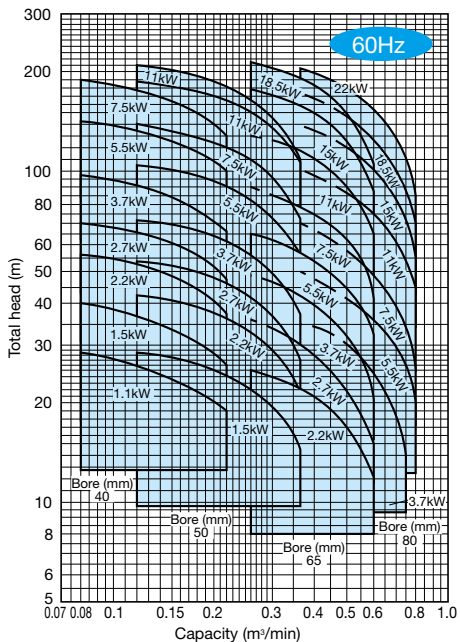
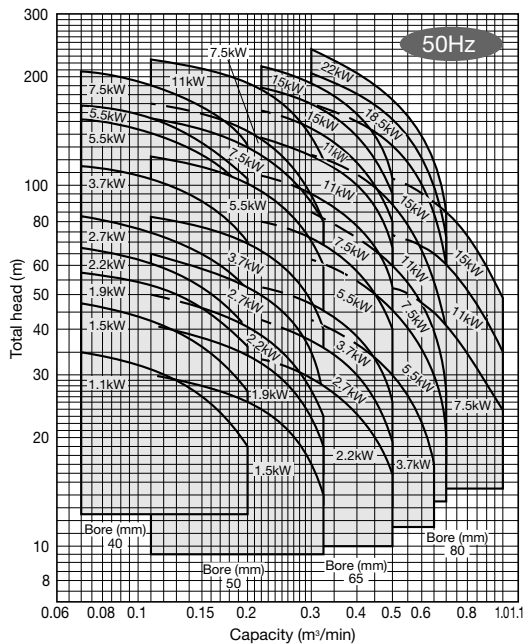
\*400V type is also available

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)

Minimum well diameter 100mm



Minimum well diameter 150mm



\* For 200/250/300mm well types are also available. Inquire for further information.

\* If installed to well with diameter larger than that described in the specification table, the submerged motor may cause burn damage due to an insufficient cooling of motor.

Install for the cooling flow rate to be as follows. Motor output 3.7kw or less: 0.075m/s. Motor output 5.5kw or more: 0.1m/s.



# Submersible clean water pump series



## USM(H) type



### Features

- This pump newly developed for spa use can be used with hot spa water up to 70°C for USM type, up to 90°C for USMH type (80°C for some models).
- The key components are made of precision cast stainless steel (SCS13) and have a long life.
- SiC is used for the bearings to enhance the sand resistant design.

### Standard specifications

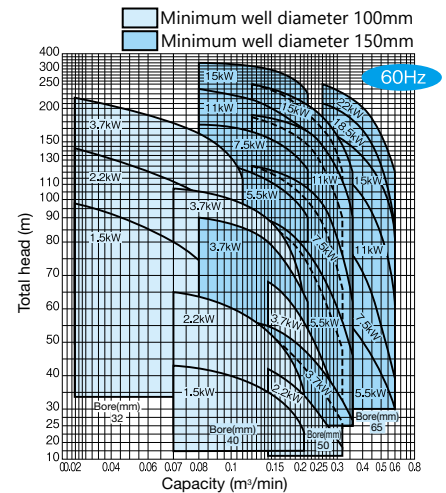
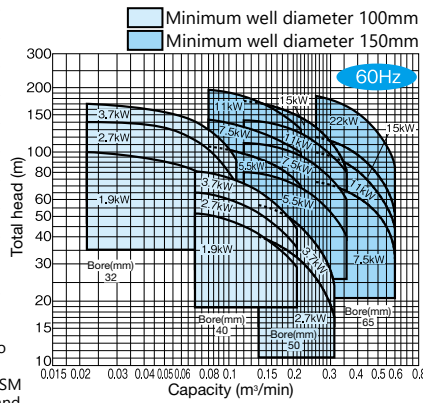
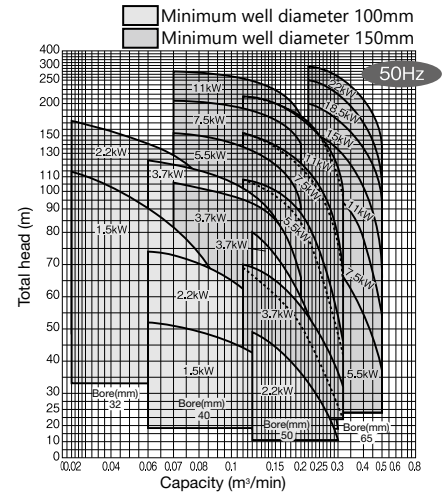
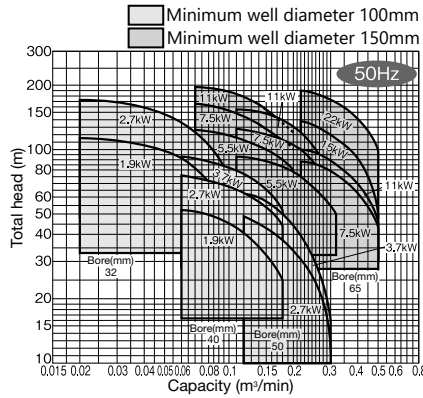
Liquid	Simple thermal, sodium-chloride thread, sodium-hydrogen carbonate pH6 to 9 (Sand content 50mg/L or less (fine sand dia. 0.1~0.25 mm or less))
Materials	Impeller SCS13
	Shaft SUS304 or SUS403
	Casing SCS13
Shaft sealing	SiC×SiC
Motor	Type Canned submersible motor
	Phase Three phase
Speed	50Hz : 3,000min <sup>-1</sup>
	60Hz : 3,600min <sup>-1</sup>
Max. submersing depth	USM : within 150 m USMH : within 350 m

\* If installed to well with diameter larger than that described in the specification table, the submerged motor may cause burn damage due to the cooling of motor.

Install for the cooling flow velocity to be as follows. USM type: 0.1m/s or more USMH type that bore size is 32 and USNMH type: 0.31m/s or more others: 0.15m/s or more.

\* Accessories to prevent the occurrence of gas lock is also available (USMH-G type). Please inquire for details.

### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)



## KUR<sub>2</sub> type



### Features

- Red water prevention structure mainly made of stainless steel, and resin and rubber.
- The pump casing and flanges are made from precision cast stainless steel to withstand heavy load and free from strain.
- Built in impact relief type check valve to protect the pump from water hammer thus long life is enjoyed.

### Standard specifications

Liquid	Clean water 0~30°C (0.75~2.2kW: 0~35°C) (chloride ion concentration : 200mg/L or less, sand content 50mg/L or less)
Materials	Impeller SCS13 or Bronze
	Shaft SUS403 or SUS303
	Casing SCS13 (Suction casing SUS304)
Motor	Type Canned submersible motor
	Phase Three phase
Speed	50Hz : 3,000min <sup>-1</sup>
	60Hz : 3,600min <sup>-1</sup>
Max. submersing depth	10m

### Sister models

For hot water / hot spring submersible pump

**KURH<sub>2</sub> type**

Bore : 32~50mm  
Motor : 1.9~7.5kW  
Liquid temperature:  
clean water 60°C or less

### Sister models

exclusive for horizontal installation

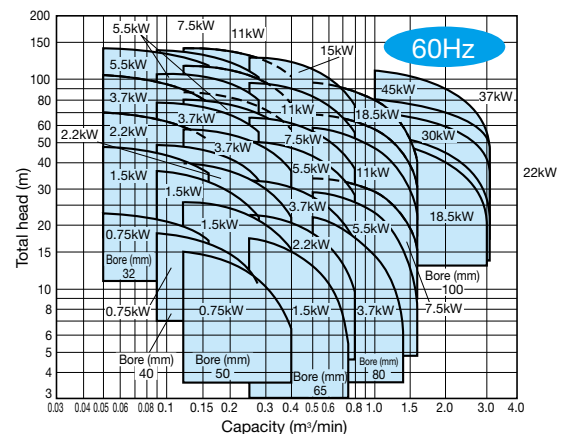
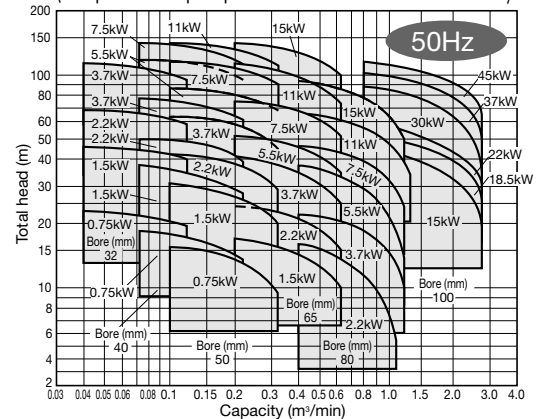
**KUR3-Y type**

Bore : 32~65mm  
Motor : 0.75~3.7kW



### Selection chart

(Value in the chart shows the suction bore and Motor output: kW of pump)



# Submersible Sump Pump Series



## WUO (4) type KAWA PET

### Features

- Vortex type and excellent performance to pass foreign objects.
- Light weight and easy-to-handle submersible sewage pump.
- Stainless steel made frame motor and plastic parts increase operating life.
- Uses glass fiber reinforced plastic for the impeller and casing, and equipped with a motor with built-in auto-cut having a large starting torque for stable operation.
- Can be paired with plastic pedestal support (special accessory).



### Ability to pass foreign objects

- Dia. of foreign object (sphere shape) : 35mm (2.2kW or more: 40mm)

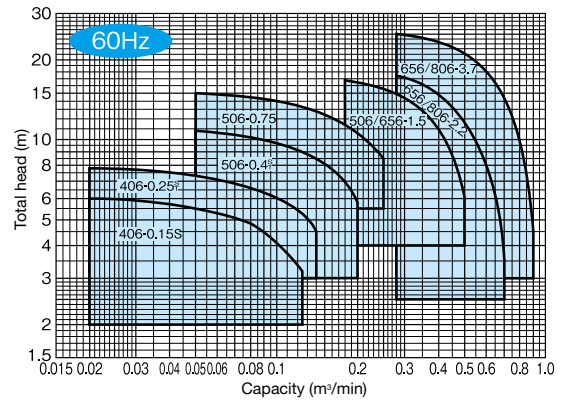
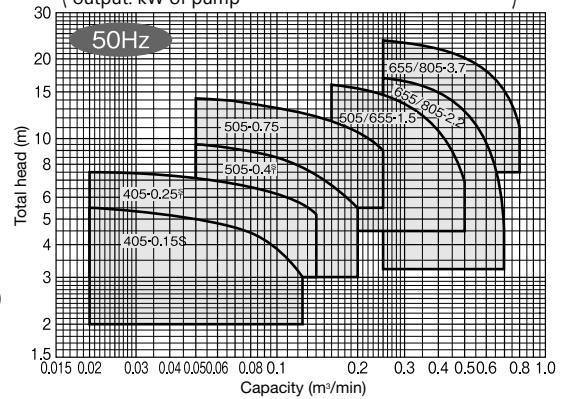
### Standard specifications

\* Foreign matter refers to free deforming soft matter excluding sand, etc. as defined in JISB8325.

Liquid	For Sewage (pH : 5~9) 0~40°C	
Materials	Impeller	Resin
	Shaft	SUS304 (portion contacting liquid)
	Casing	Resin
Motor	Type	Dry-sealed motor
	Phase	Single phase
	Speed	50Hz : 3,000min <sup>-1</sup>
		60Hz : 3,600min <sup>-1</sup>
Max. submersing depth	5m (1.5kW or more : 8m)	

### Selection chart

(Value in the chart shows the suction bore and Motor output: kW of pump)



### Sister models

For Wastewater

**WUP4 type KAWA PET**

Bore : 32~50mm

Motor : 0.15~0.75kW



Titanium seawater submersible pump

**WUZ<sup>2</sup> type KAWA HOPE**

Bore : 32~80mm

Motor : 0.15~3.7kW



## ZU<sup>3</sup> · ZU4 type

Sewage water submersible pump

## BU4 type

Sewage water submersible pump

## BUW type

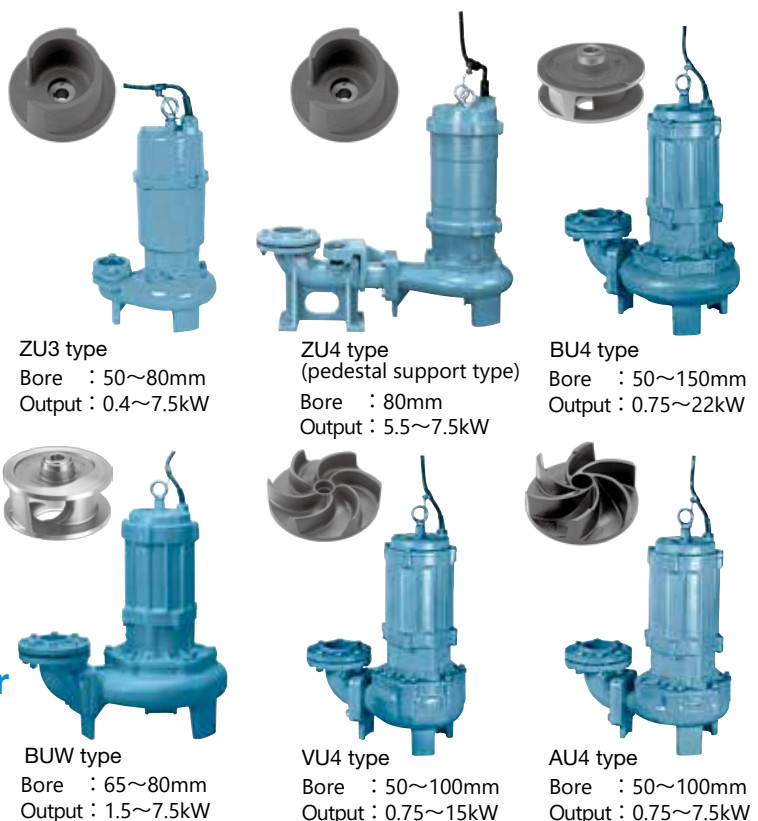
Stainless Non-clog impeller

## VU4 type

Sewage water submersible pump

## AU4 type CHAMPION

Vortex with cutter



ZU3 type  
Bore : 50~80mm  
Output : 0.4~7.5kW

ZU4 type  
(pedestal support type)  
Bore : 80mm  
Output : 5.5~7.5kW

BU4 type  
Bore : 50~150mm  
Output : 0.75~22kW

BUW type  
Bore : 65~80mm  
Output : 1.5~7.5kW

VU4 type  
Bore : 50~100mm  
Output : 0.75~15kW

AU4 type  
Bore : 50~100mm  
Output : 0.75~7.5kW

# Fire fighting pump series



Products qualified by the Fire Equipment and Safety Center of Japan

## SAFETY ACE® Series



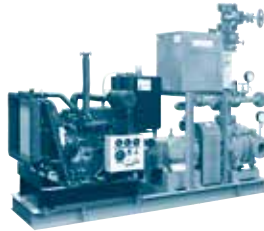
KTK-C type  
2 pole  
Compact



KTGF·KTGDF type  
4 pole Centrifugal /  
High back pressure type



KTY type  
4 pole  
centrifugal  
pump



KTU(2) type  
2 pole  
submersible  
turbine

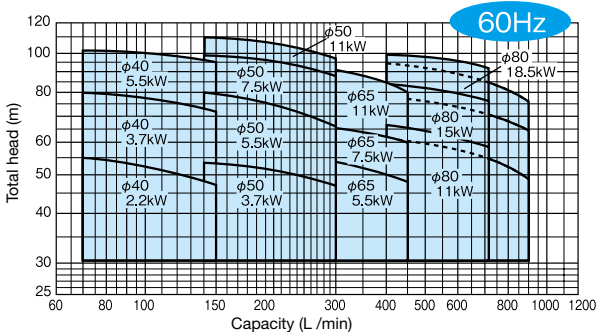
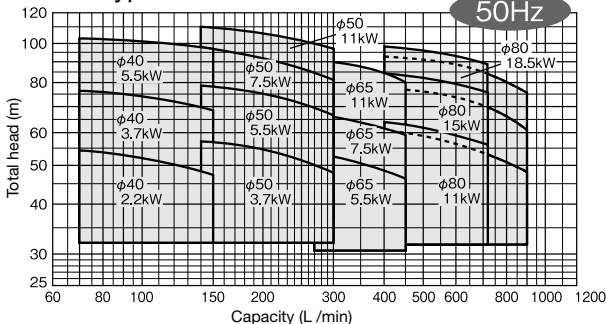


KTK-W type  
KTY-W type  
Cubicle type



### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)

#### KTK-C type



Note: Suction bore 80mm model is different from the pump bore because a reducer is attached.  
(Units without pump priming tanks are excluded)

### Features

- By adopting a 50L pump priming tank/ 50L pressure tank and control panel adopting high functional microcomputer compatible to the new technological standard, the installation area is minimized.
- Standardizing full water/decreased water circuit in the pump priming tank/ fire tank/ supply tank. (Two level relays (a special accessory) are required in order to detect full water/decreased water in supply tanks.) Additionally, automatic inspection of the fire pump can be performed by simply installing the separately sold automatic inspection accessory.
- A pump priming tank is highly resistant to rust and scratches due to high-quality powder coating applied, without problems of holes forming after long term use. (Stainless steel materials models are also available Inquire)
- The pump priming tank provides an electrode type fluid level detection, enabling detection of full water/decreased water in the pump priming tank as a standard feature.
- A easy-to-read digital type ammeter/voltmeter is adopted for the pump performance inspection. Pressure and compound gauges with a large diameter of φ100 are equipped as a standard feature.
- All of the instruments can be inspected from a single side (panel side).

## KTK-C type Compact type

### Standard specifications

Materials	Impeller	Bronze
	Shaft	SUS304 or SUS420J2
	Casing	Cast iron
Motor	Type	TEFC indoor
	Phase/Poles	Three phase/2 pole

## KTGF·KTGDF type

### Standard specifications

Materials	Impeller	Bronze
	Shaft	SUS420J2 or SUS403, SUS630
	Casing	Cast iron · Ductile cast iron (KTGDF)
Motor	Type	TEFC indoor
	Phase/Poles	Three phase/4 pole

## KTY type

### Standard specifications

Materials	Impeller	Bronze
	Shaft	SUS403 or SUS420J2
	Casing	Cast iron
Motor	Type	TEFC indoor
	Phase/Poles	Three phase/4 pole

## KTU(2) type Submersible type

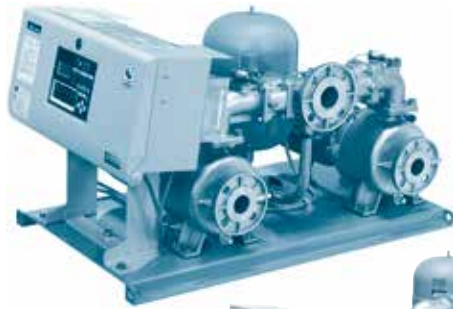
### Standard specifications

Materials	Impeller	SCS13 (80φ : Bronze)
	Shaft	SUS403
	Casing	Suction : SUS304 Discharge : SCS13
Motor	Type	Canned submersible motor
	Phase/Poles	Three phase/2 pole

# Energy-saving inverter



## KF type



KFE-A·P type  
Alternate/  
Parallel  
operation



KFE-T type  
3 pumps rotary  
operation



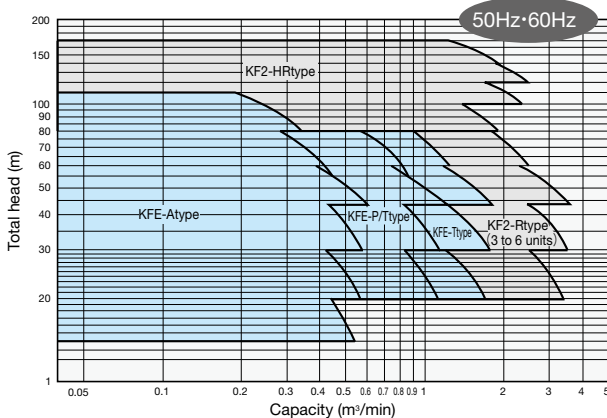
KF2-R type  
MAX. 6 pumps rotary  
operation



KF2-HR type  
High pump head type



### Selection chart



### Sister models

Vertical type for high head  
Rotary operation.  
KVF2 type



### Features

- By pump section's high efficiency design and IE5 or IE4 equivalent PM motor, the KFE type realized top class total efficiency in the industry.
- By optimally controlling the pump speed according to the changes in working water rate with the inverter, constant estimated terminal pressure water supply with little fluctuation at the water supply terminal is possible, and maximum of 40% energy saving operation. (Kawamoto reducing valve type constant discharge rate water supply comparison)
- The pump casing and flanges are made from precision cast stainless steel to withstand heavy load and free from strain. The connection section is mainly made of stainless steel, and resin, and the Bronze components prevents the formation of red water.
- All models are equipped with a low-noise totally-enclosed motor as a standard. Highly Resistant to insulation deterioration due to dust and moisture and has a long machine life.
- The soft stop method is adopted for the inverter, eliminating the sound of the magnet tripping, and enabling quiet water supply.
- Each pump has a high power factor device with standard DC reactor, which helps energy saving and controls the generation of high harmonics. Countermeasures against noise are also provided with a surge absorber and noise filter.

## KFE-A·P·T type Alternate, alternate/ parallel, 3-unit rotary

### Standard specifications

Control method	Constant estimated terminal pressure by frequency control (Discharge rate can also be controlled)	
Operation method	Alternate, alternate/parallel, 3-unit rotary	
Liquid	Clean water 0~40°C (no freezing)	
Suction condition	0 to 5m of flow or up to -6 of suction total head	
Materials	pump	Stainless steel multi-stage turbine pump
	Impeller	Resin or SCS13
	Shaft	SUS304 (portion contacting liquid)
	Casing	SCS13
Motor	Type	TEFC indoor Poles : 4 or 8 (max. speed: 4,500min <sup>-1</sup> )
	Phase	Three phase
	Efficiency	Super premium efficiency (rank as IE5 or IE4)
Installation	Indoor (0~40°C / humidity : 90%RH or less / altitude : 1,000m or less)	

## KF2-R type Rotary operation

### Standard specifications

Control method	Constant estimated terminal pressure by frequency control (Discharge rate can also be controlled)	
Operation method	Alternate, alternate/parallel, rotary unit (MAX. 6 units)	
Liquid	Clean water 0~40°C (no freezing)	
Suction condition	0 to 5 m of flow or within -6 m of suction total head	
Materials	pump	Stainless steel multi-stage turbine pump
	Impeller	Resin or SCS13 or Bronze
	Shaft	SUS304 (portion contacting liquid)
	Casing	SCS13
Motor	Type	TEFC indoor Poles : 2 (Max. frequency in case automatic operation : 60Hz)
	Phase	Three phase
	Efficiency	premium efficiency (IE3)
Installation	Indoor (0~40°C / humidity : 90%RH or less / altitude : 1,000m or less)	

## KF2-HR type Rotary operation

### Standard specifications

Control method	Constant estimated terminal pressure by frequency control (Discharge rate can also be controlled)	
Operation method	Alternate, alternate/parallel, rotary unit (MAX. 6 units)	
Liquid	Clean water 0~40°C (no freezing)	
Suction condition	0 to 5 m of flow <sup>(*)</sup> or within -6 m of suction total head <sup>(**)</sup>	
Materials	pump	Stainless steel multi-stage turbine pump
	Impeller	Bronze
	Shaft	SUS304 (portion contacting liquid)
	Casing	SCS13
Motor	Type	TEFC indoor 2 pole
	Phase	Three phase
	Efficiency	premium efficiency (IE3)
Installation	Indoor (0~40°C / humidity : 90%RH or less / altitude : 1,000m or less)	

(\*) Please consult in case back pressure exceed 5m or more.

(\*\*) Suction actual head within -4m, 11 or 15kW model : suction total head within -4m

Note) Please consult Kawamoto to use long-hours with small amount of water.

# Energy-saving inverter



## Pumper USF USFE type USF2 type

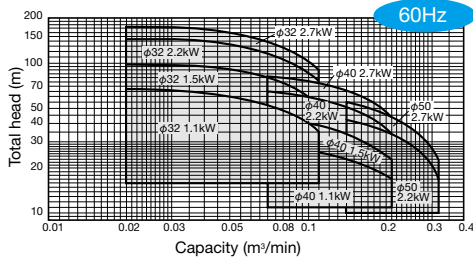
For Deep well Submersible / Clean water submerged Pump  
 ※Applicable Pump US(N)2 type · KUR<sub>3</sub><sup>2</sup> type

## Pumper LF LFE type LF type

For Surface pump  
 \*Applicable Pump GS3-C type · KH<sub>5</sub>-C type · GE-C type · TVS type · KS type, etc.

### USFE type Connection type pump selection chart

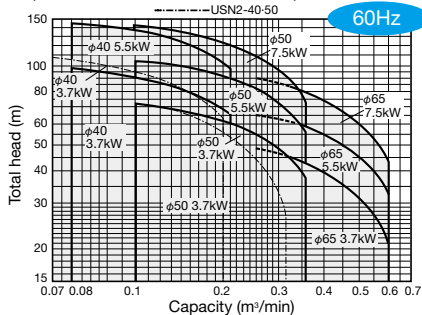
Example for US(N)2 type (well diameter 100mm)



USFE type

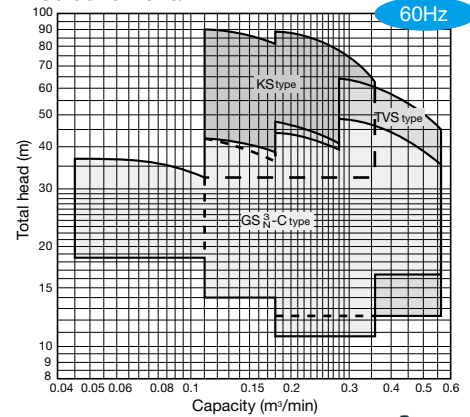
### USFE type Connection type pump selection chart

Example for US(N)2 type (well diameter 100mm / 150mm)



USF2 type · LF type

### LF/ LFE type Connection type pump selection chart



US2 type pump



LFE type



KR5-C type

GS3-C type pump



KS type



TVS type



## Pumper KUF type

Submersible clean water pump



### Features

- Constant estimated terminal pressure water supply is possible by combining the stainless steel submerged turbine pump and inverter automatic operation unit.
- Clean water supply is ensured with mainly stainless steel units.
- The installation space is small compared to the pressure tank method, and installation work is easy.

### Standard specifications

Control method	Constant estimated terminal pressure
Operation method	Alternate/Parallel
Liquid	Clean water 0~40°C
Phase	Three phase
Installation (unit part)	Indoor (0~40°C/humidity : 90%RH or less /altitude : 1,000m or less)

\*Please refer to KUR<sub>3</sub><sup>2</sup> type (P.11) for pump material.

### Features

- By optimally controlling the pump speed according to the changes in working water rate with the inverter, constant estimated terminal pressure water supply with little fluctuation at the water supply terminal is possible regardless of fluctuation in the well water level.
- The pump section and over ground automatic operation unit are both made mainly of stainless steel and resin and rubber. This enables clean water supply.
- The automatic operation unit has a compact design, smaller and lighter than the conventional pressure tank type enabling easy installation.

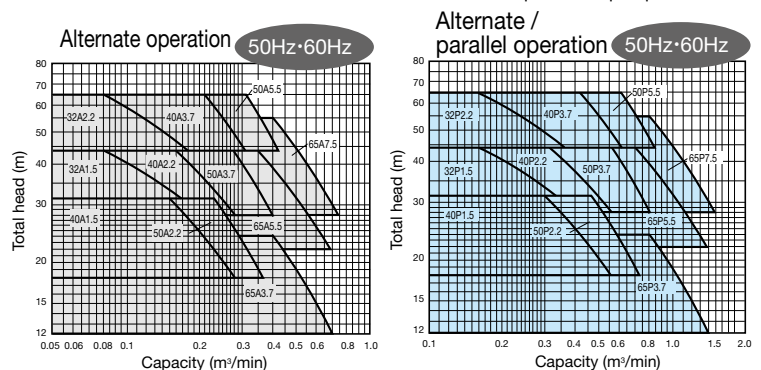
### Standard specifications

\*Use 60Hz products for pumps to connect to.

Control method	Constant estimated terminal pressure
Operation method	Individual
Liquid	USFE, 2 type 0~35°C, LF/LFE 0~40°C (Refer to the fluid temperature of the connecting pump)
Phase	Three phase
Installation (unit part)	Indoor/Outdoor (0~40°C/humidity: 90% RH or less/altitude : 1,000m or less) *USF2/LF : Indoor

### Selection chart

(Value in the chart shows the suction bore and Motor output: kW of pump)





# Energy-saving inverter



## NF3 type



### Sister models

With signal output  
**NFS2 type**  
 Hot water pressurization  
 pump unit  
**NFH2 type**  
 150~750W

### Soft KAWA ACE

#### Features

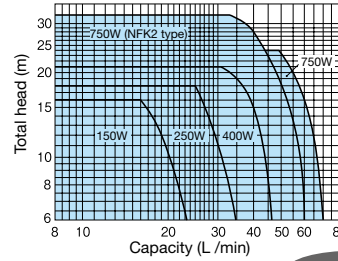
- Switch between E (ecological) mode and S (Strong) mode is possible by the operation mode switch.
- Quiet, highly energy-saving operation is possible with the constant discharge rate pressure control by the inverter.
- Stainless steel and bronze materials are adopted for portion contacting water, thus preventing pump from rusting and red discolorment of water
- Noise and high frequency countermeasures are equipped as a standard with the noise filter and built-in reactor.

#### Standard specifications

Control method	Constant discharge rate pressure water supply (constant estimated terminal pressure is possible with alternate, parallel/alternate models)	
Operation method	Single, Alternate, Alternate/Parallel	
Liquid	Clean water 0~40°C (no freezing)	
Suction total head	-8m (up to -6 in alternate, alternate/parallel models) to 5m flow in.	
Materials	Pump	Cascade pump
	Impeller	Bronze
	Shaft	SUS304 (portion contacting liquid)
	Casing	SCS13
Motor	Type	Kawamoto PM motor (TEFC indoor) 4 poles
Installation	Indoor/Outdoor (altitude : 1,000m or less)	

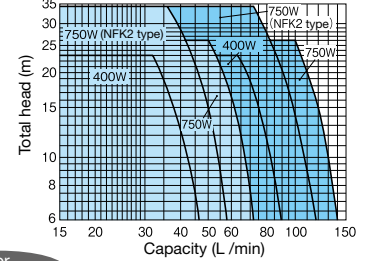
#### Selection chart

- When operating as a single unit (-8 m of suction head)

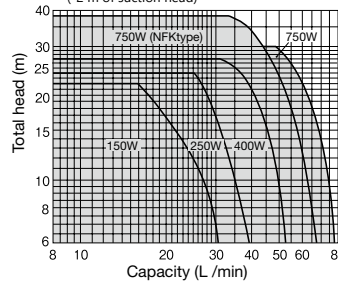


Shallow well

- When operating alternately/in parallel (-6 m of suction head)

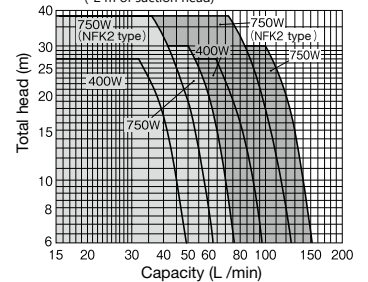


- When operating as a single unit (-2 m of suction head)



For receiver tank

- When operating alternately/in parallel (-2 m of suction head)



Alternate Alternate/Parallel



## UF(L) 2type

### KAWA ACE DEEPER

#### Features

- Highly energy-saving water supply is possible with inverter control.
- Surge resistance and noise resistance are improved by modifying the electric parts assembly section and using a 4-core submerged cable.
- Sanitary and clean due to stainless material are used for main parts of pump and automatic operation unit.
- The pump section is resistant to sand and has a long life by incorporating Sic bearings, and rubber seal liner ring, etc.
- Constant discharge rate water supply is possible without being affected by fluctuations in the well water level. When installed in a shallow well, a regulator is not required.

#### Standard specifications

Control method	Water supply with constant discharge pressure	
Liquid	Clean water 0~25°C (no freezing, sand content 50mg/L or less)	
Materials	Impeller	Resin+SUS304 (UFL2 type : SCS13)
	Shaft	SUS304
	Casing	Suction casing : SCS13, Discharge casing : SCS13, Stage casing : SUS304+Resin
Motor	Type	Canned submersible motor
	Phase	Single phase or three phase
Installation	Indoor/Outdoor (pump : under water)	



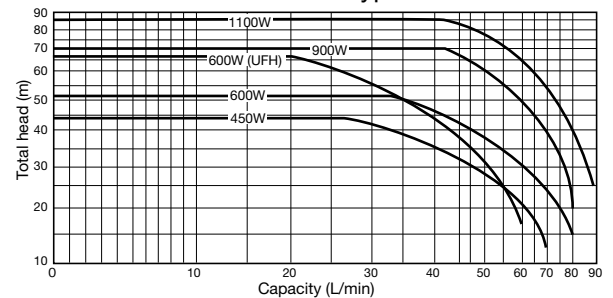
## UFE type

### KAWA ACE DEEPER

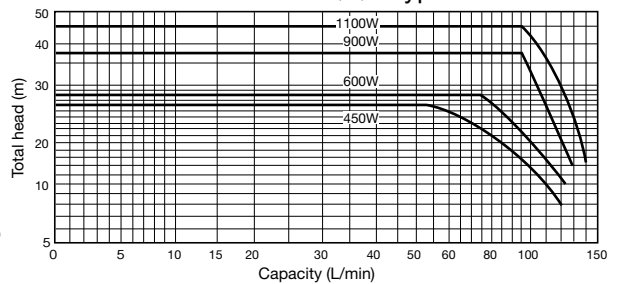
#### Features

- This economical pump has a capacity approximately double the capacity of a jet pump.
- The wet sections of the pump and automatic operation unit are made of rust resistant stainless steel.
- Precision cast stainless steel, thick stainless steel, wear resistance resin, rubber and Sic bearings are incorporated in the pump which is strong against sand.
- The water pressure is maintained at a constant level by inverter control. 42 to 69% energy saving can be anticipated compared to the non-inverter jet pump. (Kawamoto comparison)

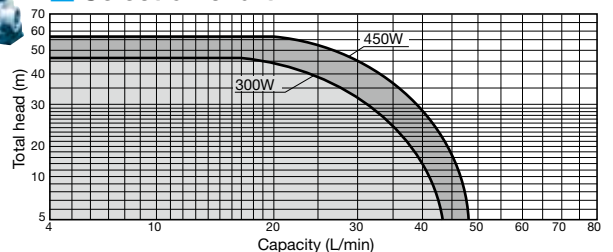
#### Selection chart UF2 type



#### Selection chart UF(L) 2 type



#### Selection chart



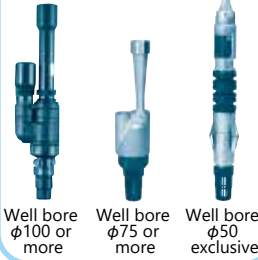
# Energy-saving inverter



Stainless steel

For deep well jet

3 types of jet set supporting a wide range of well size.



Well bore φ100 or more    Well bore φ75 or more    Well bore φ50 exclusive

For shallow well jet



JF type

## JF type



### KAWA-ACE Jet

#### Features

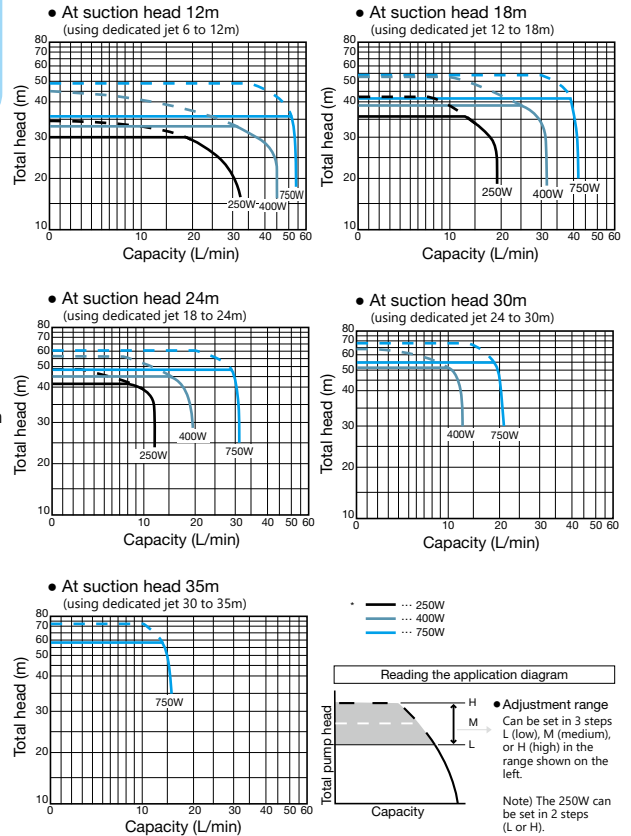
- By optimally controlling the pump speed according to the changes in working water rate with the inverter, constant estimated terminal pressure water supply with little fluctuation at the water supply terminal is possible regardless of fluctuation in the well water level.
- The wet sections of the pump and over ground automatic operation unit are both made mainly of stainless steel and resin and rubber. This enables clean water supply.
- The automatic operation unit has a compact design, smaller and lighter than the conventional pressure tank type enabling easy installation.

#### JF type Standard specifications

Control method	Water supply with constant discharge pressure with inverter.
Operation method	Single
Liquid	Clean water 0~40°C (no freezing)
Suction condition	Deep well    Suction total head : (single operation) -12m · -18m · -24m · -30m · -35m
	Shallow well    Suction total head : -7m (single operation)
	For receiver tank    Suction total head : -1m~In flow pressure within 5m
Materials	Impeller    SCS13
	Shaft    SUS304 (portion contacting liquid)
	Casing    SCS13
Motor	Type    Kawamoto PM motor TEFC indoor (250W~750W)
	Phase/Voltage    Single phase 100V (250W · 400W) Single phase 200V, Three phase 200V (400W · 750W) (*)
Installation	Indoor/Outdoor (altitude : 1,000m or less)

\*1100 / 1500W products are also available. Please inquire for detail.

#### Selection chart (JF type)



\*For shallow well applications, please inquire.

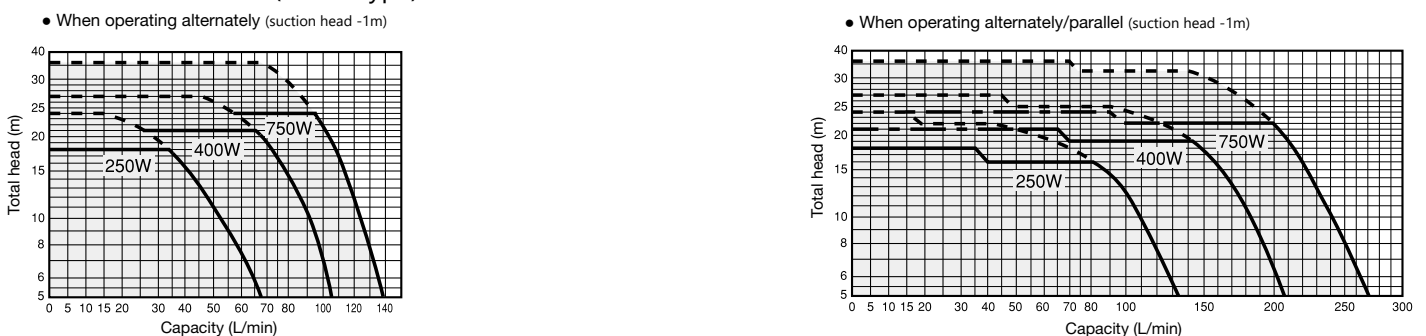
#### JF-A.P type Standard specifications

Control method	Water supply with constant discharge pressure with inverter.
Operation method	Alternate/Parallel
Liquid	Clean water 0~40°C (no freezing)
Suction condition	Shallow well    Suction total head : -7 of suction total head
	For receiver tank    Suction total head : -1m~In flow pressure within 5m
Materials	Impeller    SCS13
	Shaft    SUS304 (portion contacting liquid)
	Casing    SCS13
Motor	Type    Kawamoto PM motor TEFC indoor
	Phase/Voltage    Single phase 100V (250W · 400W) Single phase 200V · Three phase 200V (400W · 750W)
Installation	Indoor/Outdoor (altitude : 1,000m or less)



JF-A.P type

#### Selection chart (JF-A.P type)



# Small booster pump unit



## NR·N3-N type

### KAWA ACE



Pic: NR type

#### Features

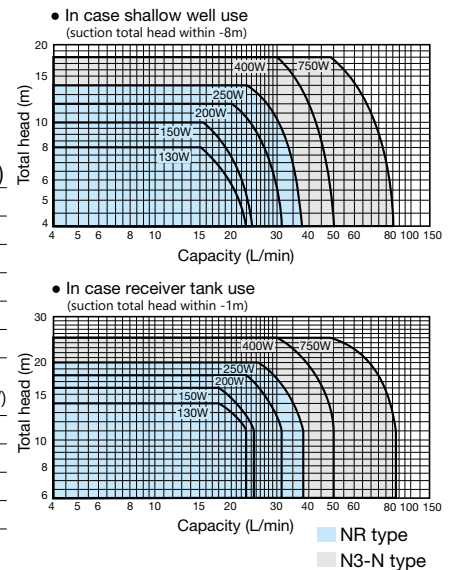
- NR type is a clean stainless steel casing.
- Long-life and reliability improved by incorporating totally-closed motor.
- A stable water supply is anticipated with constant pressure water supply having both the pressure switch and the flow rate switch.
- Long-life by making no contact parts of electric components.

#### Standard specifications

(NR model: 250W or less, N3-N model: 400W or more)

Control method	Constant pressure water supply	
Liquid	Clean water 0~40°C	
Materials	Impeller	Bronze
	Shaft	SUS304 (portion contacting liquid)
	Casing	NR type : SCS13 N3-N type : Cast iron
Motor	Type	TEFC indoor
	Phase/Voltage	Single phase 100V (130, 150, 200, 250, 400W) Single phase 220V (250, 400, 750W) Three phase 200V (200~750W)
Speed	50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>	
Installation	Indoor/Outdoor	

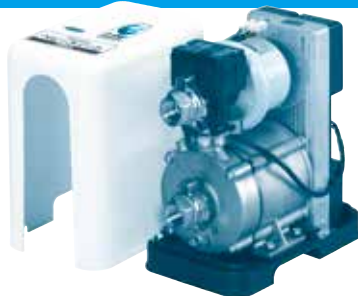
#### Selection chart



# Hot water auxiliary boosting equipment



## SFR(W)·SFRH(W) type



#### Features

- Direct installation to the pipes is possible by Japan water works association certification.
- Possible to install in desired places, compact and light weight, super slim pump unit.
- Optimally controls with inverter and high efficient motor, which reduces power consumption.
- First in industry to realize constant discharge rate control in inverter be sealless pump.
- Rust free by using high quality stainless steel and PPS, and sealless enables no leak and sanitary purposes. A sealless structure without a mechanical seal facilitates maintenance.



## NFD(N)2 type



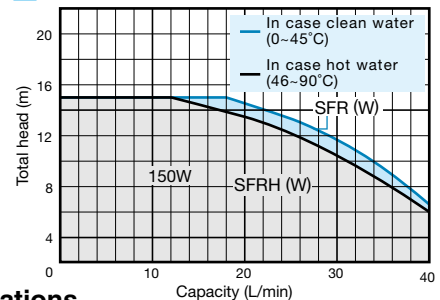
#### Features

- Direct installation to the pipes is possible by Japan water works association certification.
- NFD(N)2 type (bore 13mm) are compatible with the common retracting pipe of bore 13mm. It can also be a junction from retracting pipe of bore 20mm
- Reservoir is not required and fresh water supply is possible.
- Water supply from the main pipe is possible through check valve for by-pass in the case when suction pressure being higher than the pump's startup pressure or unexpected shutdown. <By-pass system>
- Noise and high frequency countermeasures are equipped as a standard with the noise filter and built-in reactor.
- In addition to overload/restraint protection, a freezing prevention function that forcibly operates the pump by temperature detection sensor is equipped. This does not require a heater.

#### Standard specifications

Control method	Water supply with constant discharge pressure with inverter.	
Liquid	Clean water 0~45°C (SFR (W)), Clean water 0~90°C (SFRH (W)) [Clean water] : pH5.8~8.6 chloride ion concentration 200mg/L or less	
Materials	Impeller	Resin
	Shaft	Aluminum Ceramics
	Casing	SCS13
Motor	Type	Kawamoto PM motor (TEFC indoor)
	Phase/Voltage	Single phase 100V (50Hz/60Hz)
Installation	Indoor/Outdoor (Ambient temperature : -10~40°C · Humidity : 90%RH or less)	

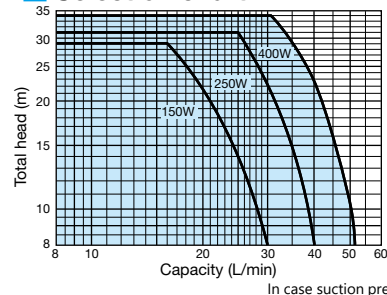
#### Selection chart



#### Standard specifications

Control method	Water supply with constant discharge pressure with inverter.	
Liquid	Clean water 0~40°C (no freezing)	
Materials	Impeller	Bronze
	Shaft	SUS304 (portion contacting liquid)
	Casing	SCS13
Motor	Type	Kawamoto PM motor (TEFC indoor) 4 poles
	Phase/Voltage	Single phase 100V (150W~400W)
		Single phase 200V (400W)
Installation	Indoor/Outdoor (altitude : 1,000m or less)	

#### Selection chart



# Hand Pump

## Stainless steel hand pump

### ■ Features

- For artesian/driven well water supply and emergency use.

HDS-25 type

380mL/Stroke

Lift up to 15m, suction -8m.



HDS40 type

1400mL/Stroke

Lift up to 10m, suction -7m.



GOOD DESIGN  
AWARD 2014

# Kawamoto's Pump Series for equipment

## Stainless steel compact booster pump unit



### NFG2(-A·P) type

#### ■ Features

- First in industry Automatic water supply unit for "Demineralized water"
- The wet sections are made of material such as stainless steel, resin, and four rubber

NFG2 type

Bore 20~32mm

Output 150~750W



### JFG type

Pure water      Production  
Electrolysis water      equipment, etc...

JFG type (Water volume type)

Bore 32mm

Output 250~750W



## Coolant Pump RC<sup>Ⓢ</sup> type

### ■ Features

#### • Tough

Product concept of our Coolant pump is "Maintenance Free" Our Coolant Pump reduce time and cost of maintenance.

#### • A wide range of motor variation.

KAWAMOTO Coolant pump can apply various motor respond to customers needs.

Compatible with national standards and high efficiency regulation **with our own in-house motors.**

RCC type (High pressure model)

Bore 32mm

Output 0.75~5.5kW

RCD type (for dirty liquid)

Bore 40mm

Output 0.75~3.0kW



RCC type



RCD type

## Vortex Blower RA type

### ■ Features

- Fine curved impeller equipped as a standard. Compared to straight impeller, the air volume rises 5%.
- Designed in special rib form, which enables low noise.

RA type

Output 0.75~3.7kW



# Water supply equipment / Small regional drinking water unit

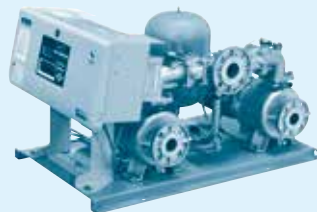
## Stainless steel & Variable speed control booster unit Refer to (P.14) Energy-saving inverter

### KFE-A·P·T type

#### ■ Features

- High energy-saving, PM motor equivalent to IE5 or IE4 is equipped.

Bore 32~65mm  
Output 0.4~7.5kW



- Compact 3-unit multiple control rotary.



### KF2-R type

#### ■ Features

- Up to 6 rotary pumps can be controlled to handle large water volumes.

Bore 32~65mm  
Output 0.75~7.5kW



### KF2-H type

#### ■ Features

- This is the KF series high pressure type. Water can be supplied in high-rise buildings with a total head of 170m.

Bore 40~50mm  
Output 7.5~15kW



### KVF2 type

#### ■ Features

- This is the high pump head type. Water can be supplied to high-rise buildings with total head of 250m. Up to 6 rotary pumps can be controlled.

Bore 50~65mm  
Output 11~22kW



## Direct water supply booster pump unit Certificated products by Japan Water Works Association Energy-saving inverter

### NDP2-G type

#### ■ Features

- Compact, light weight, and easy to install.

Bore 20~25mm  
Output 0.4~1.1kW



### KDP3 type ALL STAINLESS

#### ■ Features

- The pressure from the main water supply pipe is used for easy and waste-less direct-coupled water supply.

Bore 32~50mm  
Output 0.75~7.5kW



### KDP3-W type ALL STAINLESS

W counter flow prevention type

#### ■ Features

- Inspection of back flow prevention device is possible without suspending the water supply.

Bore 32~50mm  
Output 0.75~7.5kW



### SDP-R type ALL STAINLESS

For 80mm intensified water supply equipment

#### ■ Features

- Less output operation by 3 rotary controls realized further energy-saving operation.

Bore 80mm  
Output 2.2~7.5kW



### KFED type

#### ■ Features

- With the 2 inverter control with built-in microcomputer, quiet operation with low pressure fluctuation and high energy-saving water supply is possible.

Bore 25~50mm  
Output 0.75~7.5kW

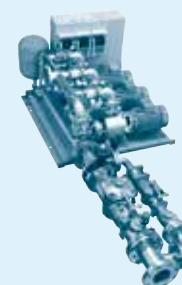


### KFED-R type

#### ■ Features

- For 80mm Intensified water supply equipment.
- Back-flow prevention device is attached for maintenance.
- 3 rotary controls.

Bore 80mm  
Output 2.2~3.7kW



# Special purpose / Sea water pump series

## Self-priming automatic booster pump

### GSZB2 type

#### ■ Features

- The industry's first self priming type sea water supply unit which reduces the equipment costs and use the space effectively.  
For processing plant's cleaning and various sea water supply

Bore 40mm

Output 1.5kW, 2.2kW

Suction -6m



## Constant pressure automatic booster pump

### KZB type

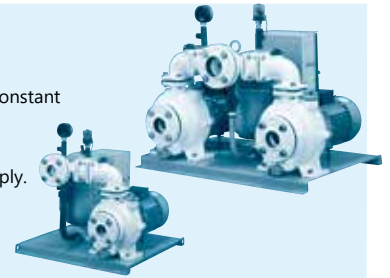
#### ■ Features

- Automatic water supply unit for constant pressure sea water supply.  
Use this for fishing ports and fish market processing plants for washing water and sea water supply.

Bore 40~50mm

Output 0.75~2.2kW

Flow 0~5m



## Self-priming plastic pump Refer to (P.4)

### GSP<sup>3</sup>/<sub>4</sub> type

#### ■ Features

- Self-priming pump construction does not require foot valve and makes priming works easier.
- High lifting performance is realized with high efficiency design.

Bore 40, 50×40, 80×65mm

Output 0.4~3.7kW



## Titanium submersible pump

### WUZ<sup>2</sup>/<sub>4</sub> type

#### ■ Features

- Titanium is used for the metal section Resin is used for the pump sections of this corrosion resistant, light weight drain pump.

Bore 32~80mm

Output 0.15~3.7kW



## Water seal vacuum pump unit

### DW2 type

#### ■ Features

- Auto running vacuum pump with pump, control panel, reservoir, and water level gauge.
- The material is resistant to rust and best for sea water pump's water intake assist.

Bore 25mm    Output 0.75kW

Reservoir Effective Capacity 60L



# For hot water (hot spring) pump series

## Stainless steel submersible clean water pump

### KURH<sup>2</sup>/<sub>3</sub> type

#### ■ Features

- In water tank installation pump

Temperature 0~60°C

Bore 32~50mm

Output 1.9~7.5kW



## Stainless steel hot water booster unit

## Energy-saving inverter

### KFEH type

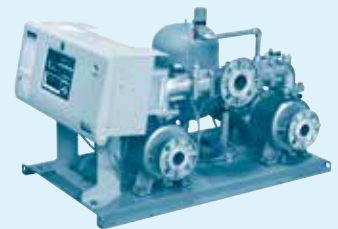
#### ■ Features

- Super energy-saving.  
Hot water booster unit.

Temperature Clean water 0~85°C

Bore 40~50mm

Output 1.5~3.7kW



## Stainless steel household automatic water supply pump Energy-saving inverter

### NFH2 type

#### ■ Features

- For hot water pressurizing. User to pressurize hot water from boilers or solar-powered water heaters, etc.

Temperature hot water 85°C (alternate / parallel type: 70°C)

Bore 20~32mm

Output 150~750W



## Stainless steel submersible hot spring pump Refer to (P.11)

### USM(H) type

#### ■ Features

- Adoption of hot water motor exclusive for hot spring.  
Available for a maximum water depth of 350 m and a maximum pump head height of 340 m

Hot water temperature 90°C or less (80°C in some models) (70°C in USM type)

Bore 32~65mm

Output 1.5~22kW



## List of model

Model	Installation	Motor	Liquid quality	Temperature	Shaft sealing *1	Phase	Impeller *2	Shaft *2	Casing *2
<b>Centrifugal / Multistage pump</b>									
GSN(2)-C type	Indoor / outdoor	TEFC outdoor	Clean water	0~45°C	M	1 or 3	Bronze or Resin	SUS304 or SUS403	Cast iron with Nylon coating
FS type	Indoor	TEFC indoor	Clean water agricultural water	0~40°C	G or M	1 or 3	Cast iron	SUS403	Cast iron
GSO2-3-C type	Indoor	TEFC outdoor	Clean water agricultural water	0~40°C	M	1 or 3	Bronze or SCS13 or Resin	SUS304	Cast iron
GE-C type	Indoor	TEFC outdoor	Clean water	0~90°C	M	3	Bronze or Cast iron	SUS304	Cast iron
KVS type	Indoor / outdoor	TEFC indoor or TEFC outdoor	Clean water	0~90°C	M	3	SCS13 or SUS304	SUS316	SCS13
GE-2M type	Indoor	TEFC indoor	Clean water	0~90°C	G or M	3	Cast iron or Bronze	SUS403	Cast iron
KR4-5-C type	Indoor	TEFC indoor	Clean water	0~40°C	M	3	Bronze or SCS13 or Resin	SUS304	SCS13
GES-4M type	Indoor	TEFC indoor	Clean water	0~90°C	G or M	3	SCS14	SUS316	SCS13
T(N) type	Indoor	TEFC indoor	Clean water	0~40°C	G	3	Bronze	SUS403	Cast iron
TVS type	Indoor	TEFC indoor	Clean water	0~40°C	G	3	Cast iron	SUS403	Cast iron
KS type	Indoor	TEFC indoor	Clean water	0~40°C	G	3	Cast iron	SUS403	Cast iron
PE(2) type	Indoor / outdoor	TEFC outdoor	Clean water	0~90°C	M	1	SCS13	SUS304	Cast iron
PSS(2) type	Indoor / outdoor	TEFC outdoor	Clean water	0~90°C	M	1 or 3	SCS13	SUS304	SCS13
FV (D)-C-4C type	Indoor	TEFC indoor	Clean water	0~80°C	M	3	Cast iron or FCD	SUS420J2 or SUS420J20	Cast iron or FCD
<b>Cascade / Oil pump</b>									
CS(2)-C type	Indoor	ODP or TEFC	Clean water	0~40°C	M	1 or 3	Bronze	SUS304 or SUS403	Cast iron
OC(K) type	Indoor	TEFC indoor	Kerosene, light oil, A type heavy oil	0~60°C	M	3	Bronze	SUS403	Cast iron
<b>Fire fighting pump</b>									
KTK-C type	Indoor	TEFC indoor	Clean water	0~40°C	M	3	Bronze	SUS304 or SUS420J2	Cast iron
KTY type	Indoor	TEFC indoor	Clean water	0~40°C	G	3	Bronze	SUS403 or SUS420J2	Cast iron
<b>Submersible clean water pump</b>									
US2 type	Submerged	Canned	Clean water	0~30°C		3	SCS13	SUS304 or SUS403	SCS13
KUR2-3 type	Submerged	Canned	Clean water	0~30°C	O	3	SCS13 or Bronze	SUS303 or SUS403	SCS13
<b>Submersible Sump Pump</b>									
WUO(4) type	Submerged	Dry-sealed	For Sewage	0~40°C	M	1 or 3	Resin	SUS403	Resin
ZU3-ZU4 type	Submerged	Dry-sealed	For Sewage	0~40°C	M	1 or 3	Cast iron	SUS403	Cast iron
<b>Water supply equipment / Small regional drinking water unit</b>									
KFE-A-P-T-KF2-R type	Indoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze or SCS13 or Resin	SUS304	SCS13
KF2-HR type	Indoor	TEFC indoor	Clean water	0~40°C	M	3	Bronze	SUS304	SCS13
KVF-2 type	Indoor	TEFC indoor	Clean water	0~40°C	M	3	SCS13	SUS316	SCS13
USFE-USF2 type	Indoor / outdoor	Canned	Clean water	0~35°C		3			
LFE-LF2 type	Indoor / outdoor		Clean water	0~40°C		3			
KUF type	Indoor	Canned	Clean water	0~30°C		3			
<b>Energy-saving inverter House hold</b>									
NF3 type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13+ Resin
UF(L)2 type	Indoor / outdoor	Canned	Clean water	0~25°C		1 or 3	Resin with SUS304 or SCS13	SUS304	SCS13 and SUS304 + Resin
UFE type	Indoor / outdoor	Canned	Clean water	0~25°C		1	Resin with SUS304	SUS304	SCS13 and SUS304 + Resin
JF type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	SCS13	SUS304	SCS13
<b>Small booster pump unit</b>									
NR type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13+ Resin
N3-N type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	Cast iron
<b>Hot water auxiliary boosting equipment</b>									
SFRH(W) /SFR(W) type	Indoor / outdoor	TEFC indoor	Clean water	0~90°C / 0~45°C	S	1	Resin	Alumina Ceramics	SCS13
NFD(N)2 type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13
<b>Hand pump</b>									
HDS type				0~40°C					SCS13
<b>Water supply equipment / Small regional drinking water unit</b>									
NDP2-G type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13
KDP3 type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	SCS13	SUS304	SCS13
KFED type	Indoor / outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	SCS13 or Resin	SUS304	SCS13
<b>Sea water pump series</b>									
GSZB2-KZB type	Indoor	TEFC outdoor	Sea water	0~40°C	M	3	SCS14 (KZB: Resin)	SUS316	Cast iron with Nylon coating
GSP3-4 type	Indoor / outdoor	TEFC outdoor	Sea water	0~60°C	M	3	METTON® Resin	SUS316	METTON® Resin
WUZ2-4 type	Submerged	Dry-sealed	Sea water Sewage	0~40°C	M	1 or 3	Resin	Titanium	Resin
<b>For hot water (hot spring) pump series</b>									
KURH2-4 type	Submerged	Canned	Hot water Simple thermal	0~60°C	O	3	SCS13	SUS403	SCS13
KFEH type	Indoor	TEFC indoor	Hot water	0~85°C	M	3	Resin	SUS304	SCS13
NFH2 type	Indoor/Outdoor	TEFC indoor	Hot water	0~70°C (ask)	M	1 or 3	Bronze	SUS304	SCS13
USM(H) type	Submerged	Canned	ask	0~70°C (ask)		3	SCS13	SUS304 or SUS403	SCS13

\*1 In shaft sealing column, symbols show following meanings. M: Mechanical seal, G: Gland packing, S: Seal-less, O: Oil seal with filter

\*2 In material column, symbols show following meanings. SCS: Stainless Cast Steel, SCS13: equivalent to 304 stainless, SCS14 equivalent to 316 stainless.



Comfort Earth®

To reduce the environmental burden and protect the environment, we at KAWAMOTO PUMP will keep on carrying out activities as a united force under our slogan "Comfort Earth", as a company involved with the valuable resource that is "water".



Kawamoto products with this mark are products with excellent energy-saving and environmentally friendly features.



### Important Safety Precautions

Always read the manual thoroughly and fully comprehend the contents for safe operation before starting use. Precautions for using products safely and for preventing personal injuries or physical damage are given in the manual. \*We bear no responsibility when the above listed precautions are not observed.

- Matters falling under the following may not be covered by the warranty: uses which go beyond the specified scope of application, failure to comply with precautions, improper repairs and alterations, matters arising from natural disasters, matters arising from the installation environment (power source, foreign objects, sand etc.), non-compliance with laws and regulations or standards pertaining thereto, persons who suffer accidental or intentional damage or injury, replacement of consumable parts, defects due to resale, etc.
- Close attention is needed when rusting and corrosion/elution of metals are not permissible owing to the application or liquid. Take into account both the pump and the rest of the equipment when considering and selecting.
- Apply repair coating at an institute which supports your operating environment. Depending on the operating environment, rust may form on screw parts, processed parts with anti-rust coating, anti-rust coated parts etc. due to high humidity, condensation, getting wet etc., which may lead to unexpected damage.
- Close attention is needed in the case of circulation uses where rusting and corrosion/elution of metals are not permissible. Take into account both the pump and the rest of the equipment when considering and selecting. Unexpected damage may arise from condensation of circulating water.
- Select a product which is appropriate for your application. Inappropriate use of products may cause accidents.
- Always use this pump within the specified product specifications. Failure to do so could result in electric shock, fire, water leakage, etc.
- When using this pump for living things (fishery, fish tank, aquarium, etc.) or important equipment, always prepare a spare unit. If the pump fails, an oxygen deficiency or degradation of water quality, etc., could occur and affect the creature's life.
- If used to transport food-related items, give due consideration to the materials used. Contamination by foreign objects may occur.
- Avoid using this product with living things that are susceptible to copper alloys. The life of the creature could be affected.
- Do not connect the pump directly to water main pipes. Depending on the country it may be prohibited under the Water Supply Act. Also, water backflow may contaminate tap water.
- Carry out installation in accordance with applicable legal requirements (electrical equipment guideline, interior wiring regulations, building codes, etc.) Failure to observe this may not only violate legal requirements, but could also result in fire or electric shock, or injury caused by falls or topples.
- Observe the service life of the pump, install it in a well ventilated place free from corrosive or explosive gases, salt, moisture, water vapor, condensation etc., and avoid exposing it to wind, rain and direct sunlight. In a harsh environment, electric leakage, electric shock or fire may result from deterioration of insulation in the motor or control panel, etc.
- Do not use in places where people are assumed to get in contact with the product (baths, pools, lakes, etc.). Electric leak may occur and cause electric shock.
- Do not install in places with no drainage or places which have not been waterproofed. Water leaks may cause serious damage. \* We bear no responsibility for any damage arising from lack of drainage or waterproofing.
- Depending on the equipment, attach a filter etc. appropriate for your application on the discharge side before use, perform thorough flushing and check that there is no contamination. Cutting oil, rubber mold releasing agent, foreign objects etc. from the manufacturing line and cutting oil, foreign objects etc. from the pipeline may contaminate the liquid which is to be handled.
- Install buzzers, etc., as an alarm to alert failure to be noticed. Failing to do so may result in serious accidents without noticing a failure.
- Do not attach phase-advancing capacitors to inverter equipped models. Doing so may cause fracture, abnormal heat, etc.
- When using generators in inverter equipped model, please consult our nearest sales office. Control panels (electrical component box) and generators may cause failure or fracture.
- Do not operate pumps with a specification of 50 Hz at 60 Hz. Damage may arise as a result of excess pressure or burnout of the motor etc. due to overload. Do not operate pumps with a specification of 60Hz at 50Hz. Pump performance may be reduced.
- Do not put the flammable items on the pump surroundings or inside the pump cover or control panel, or cover the pump, cable or control panel with the flammable items. Failure to observe this could overheat and result in burning.
- The Pump should never be disassembled, repaired, or modified, or the power cable should never be replaced by anyone other than a qualified repair technician. Improper repairs could result in electric shocks, fires, faults or break
- It is recommended that both periodic and daily inspections be performed in order to ensure that the pump will operate reliably for as long as possible. Failure to perform inspections may lead to pump failure, accidents etc. For periodic inspections, please consult your distributor or our nearest sales offices.

Specifications/configurations may be altered as a result of improvements and such. Unauthorized reproduction of this document is prohibited.

Distributor

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For any question about pumps, please contact your nearest distributor

Name	Pump Series
No.	5302 Y (E)