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**KAWAMOTO PUMP**

**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)

Production equipment

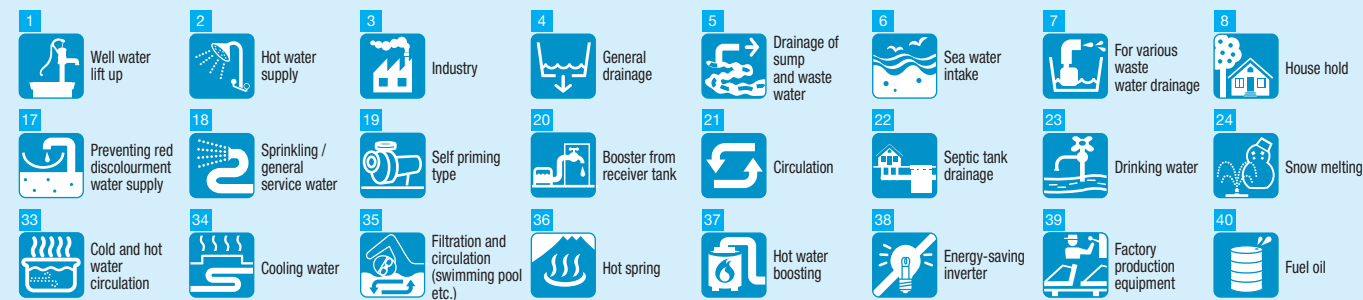
Ver. 1.2





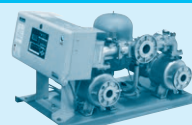

















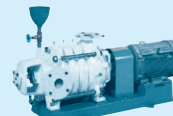
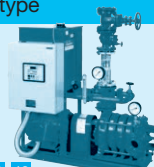

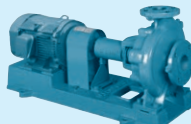






*Kawamoto*



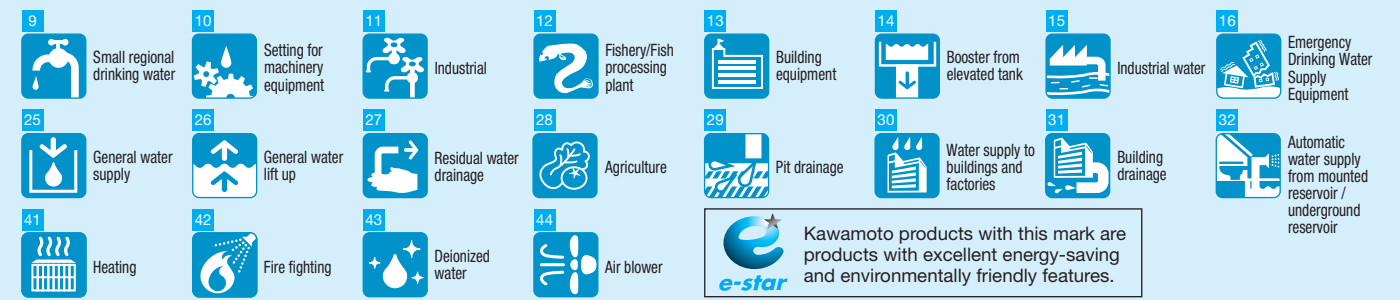















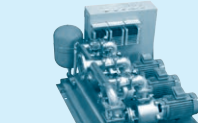






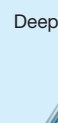


## List of model



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>1</sup> <sub>2</sub> -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 KF <sup>2</sup> <sub>2</sub> -A·P type  9 11 20 23 25 30 38 P14			
GSP <sup>1</sup> <sub>2</sub> 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> <sub>2</sub> type  3 9 23 25 30 P11	KF Series KF <sup>2</sup> <sub>2</sub> -T type  9 11 20 23 25 30 38 P14			
FS type  3 4 18 19 28 34 P4	GRM type Magnetic pump  3 10 38 39 P7	OCH type P9	USM(H) type P11	KF Series KF <sup>2</sup> <sub>2</sub> -R type  9 11 20 23 25 30 38 P14			
GSO <sup>2</sup> <sub>2</sub> -C type  3 18 19 24 26 28 34 P4	PE(2) type  3 10 33 34 P8	Fire fighting pump	Submersible Sump Pump	KF Series KF <sup>2</sup> <sub>2</sub> -H type  9 11 20 23 25 30 38 P14			
GE-C type  3 9 26 28 30 33 34 P5	PSS(2) type  2 3 10 25 33 34 P8	KTK-C type  3 13 42 P13	WUO(3)-G type  5 7 22 29 31 P12	KF Series KF <sup>2</sup> <sub>2</sub> -H type  9 11 20 23 25 30 38 P14			
KVS type  3 13 15 25 30 P5	T(N) type  3 26 30 34 P8	KTY type  3 13 42 P13	WUP3-G type P12	USFE type/LFE type  11 20 23 24 28 38 P15			
GE-2M type  3 26 28 33 34 P6	TVS type  3 19 26 28 34 P8	KTGF · KTGDF type P13	ZU <sup>1</sup> <sub>2</sub> type  5 7 22 29 31 P12	USF2 type/LF type  11 20 23 24 28 30 38 P15			
	KS type P8	KTU(2) type P13	BU4 type  5 7 22 29 31 P12	KUF type  11 20 23 30 38 P15			
		KTK-W · KTY-W type P13	BUW type  P12				
		KTY-ME2T type P13	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.



<b>Energy-saving inverter Household</b> <b>NF2-K type</b>  <p>1 8 14 19 20 25 38 P16</p> <b>UF(L)2 type</b>  <p>8 11 25 38 P16</p> <b>UFE type</b>  <p>8 11 25 39 P16</p> <b>JF type</b>  <p>1 8 14 20 25 38 P17</p> <b>Small booster pump unit</b> <b>NR · N3-N type</b>  <p>1 8 18 19 25 P18</p>	<b>Hot water auxiliary boosting equipment</b> <b>SFR(W) · SFRH(W) type</b>  <p>2 8 10 37 38 P18</p> <b>NFD(N)-K type</b>  <p>8 10 25 38 P18</p> <b>Hand pump</b> <b>HDS type</b>  <p>1 8 16 P19</p> <b>Equipment pump</b> <b>Pure water electrolysis water</b> <b>NFG · JFG type</b>  <p>10 38 39 43 Pic:NFG type P19</p> <b>Coolant Pump</b> <b>RC<sup>o</sup> type</b>  <p>10 39 P19</p> <b>Vortex Blower</b> <b>RA type</b>  <p>3 10 39 44 P19</p>	<b>Water supply equipment / Small regional drinking water unit</b> <b>Stainless steel &amp; Variable speed control booster unit</b> <b>KFE-A · P · T type</b> P20 <b>KF2-R type</b> P20 <b>KF2-A · P · T type</b> P20 <b>KF2-H type</b> P20 <b>KVF2 type</b> P20 <b>Direct connection with water main booster pump</b> <b>NDP2 type</b> P20 <b>KDP2 type</b> P20 <b>KDP2-<sub>W</sub> type</b> P20 <b>KDP2-R type</b>  <p>9 13 15 17 30 38 P20</p> <b>KF<sup>ED</sup><sub>D2</sub> type</b>  <p>9 13 15 17 30 38 P20</p> <b>KFED-R type</b>  <p>9 13 15 17 30 38 P20</p>	<b>Seawater / Special purpose</b> <b>GSZB2 type</b>  <p>6 11 12 18 19 P21</p> <b>Constant pressure automatic booster pump</b> <b>KZB type</b>  <p>6 11 12 18 P21</p> <b>Self-priming plastic pump</b> <b>GSP<sup>2</sup> type</b> P3,21 <b>Titanium submersible pump</b> <b>WUZ<sup>2</sup>-G type</b>  <p>6 11 12 18 P21</p> <b>Rubber Vane Pump</b> <b>DR type</b>  <p>10 12 39 P21</p> <b>Water seal vacuum pump unit</b> <b>DW type</b>  <p>6 12 15 26 P21</p> <b>Self-priming automatic booster pump</b>	<b>For hot water (hot spring) pump series</b> <b>Stainless steel submersible pump</b> <b>KURH<sup>2</sup> type</b> <b>USM(H) type</b>   <p>6 36 37 36 P21</p> <b>Stainless steel hot water booster unit</b> <b>KFEH type</b>  <p>6 36 37 38 P21</p> <b>Stainless steel household automatic water supply pump</b> <b>NFH-K type</b>  <p>36 37 38 P21</p>
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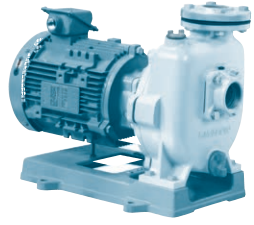


# Centrifugal / Multistage pump series



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

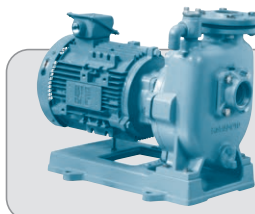
- Features**
- Preventing red discolorment of water by exclusively design as nylon coating
  - Adoption of low noise type TEFC motor
  - Self-priming pump construction does not require foot valve and makes priming works easier
  - Easy maintenance and inspection due to back pull out construction



**■ 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 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>3</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.

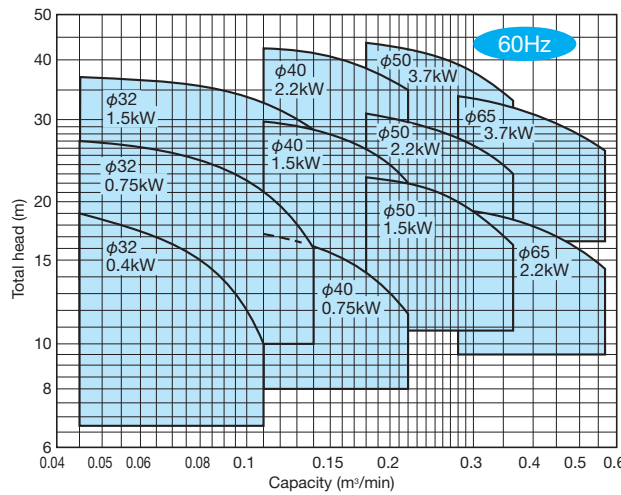
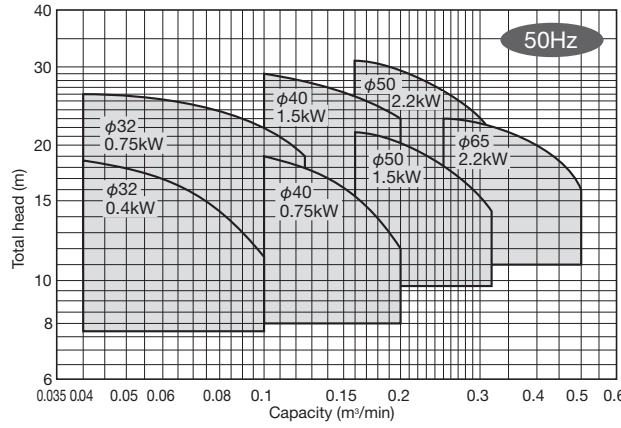


**■ Standard specifications**

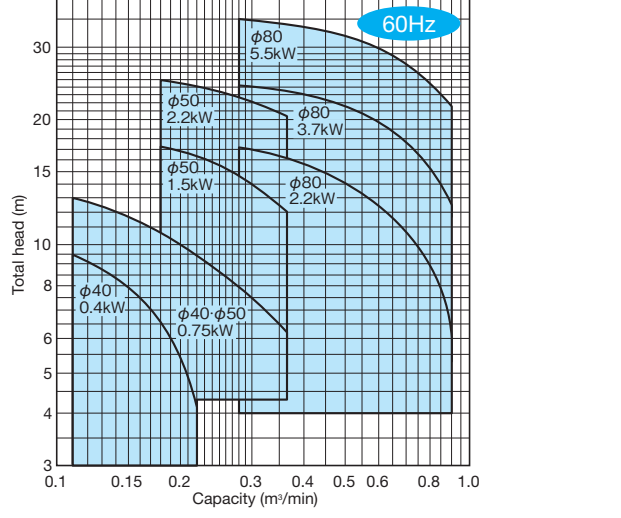
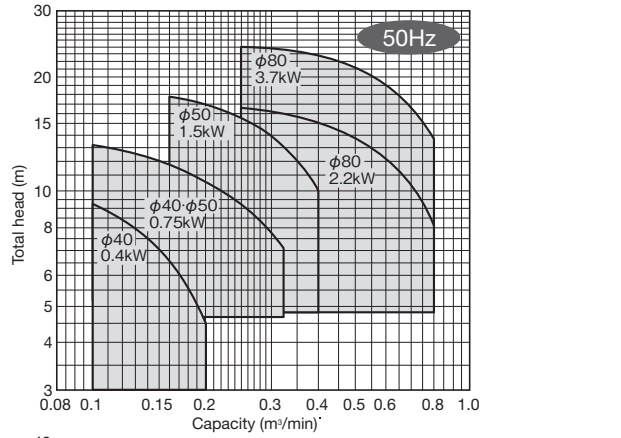
Liquid	Sea water / Clean water 0~60°C (no freezing) [Clean water] : pH5.8~8.6 chloride ion concentration 200mg/L or less [sea water] : pH7.8~8.2 chloride ion concentration 19000mg/L or less Sand content 1000mg/L or less
Suction total head (20°C)	-7m (0.4kW or Bore size 80mm model : -6m)
Materials	Impeller: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

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

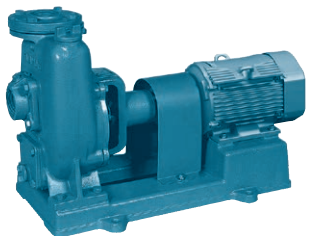
**■ Selection chart** (Value in the chart shows the suction bore and Motor output: kW of pump)



**■ 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)
Suction total head (20°C)	Bore size 25mm/-3m 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

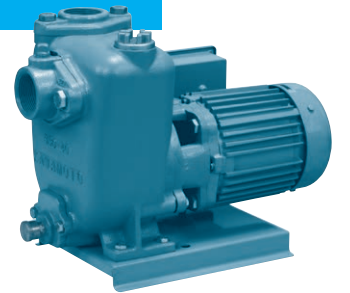
\*0.75kW or more is equipped with a Premium efficiency motor.



## 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.

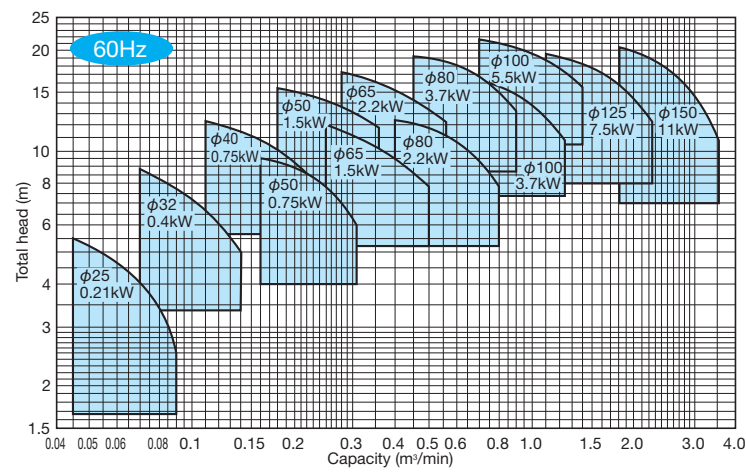
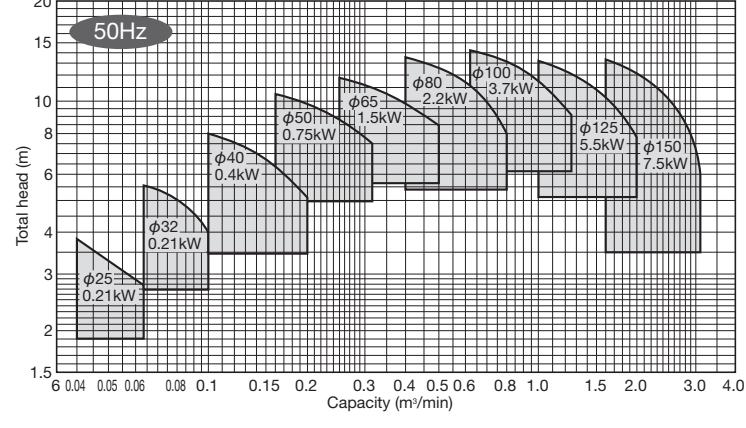


**■ Standard specifications**

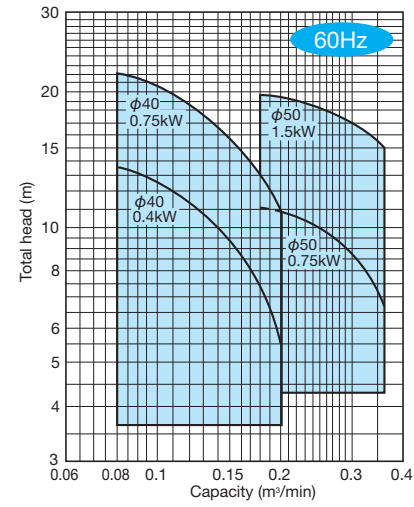
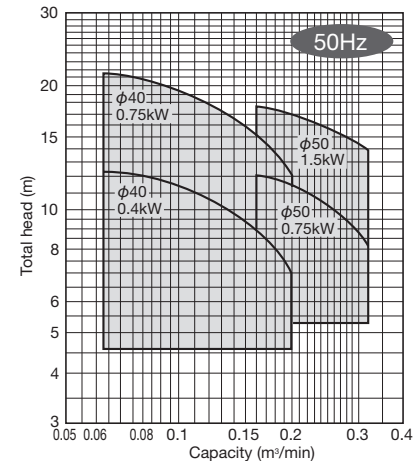
Liquid	Clean water 0~40°C (no freezing)
Suction total head <sup>(1)</sup> (20°C)	Bore size 40mm/0.4kW/-8.5m (Max. -9m) Bore size 40mm/0.75kW/-8m (Max. -9m) Bore size 50mm/0.75, 1.5kW/-8m (Max. -8.4m)
Materials	Impeller: Bronze or Stainless Cast Steel or Resin Shaft: SUS304 (portion contacting liquid) 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)

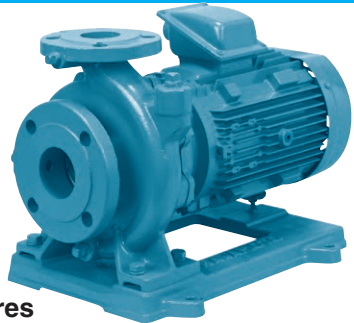




# Centrifugal / Multistage pump series



## 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

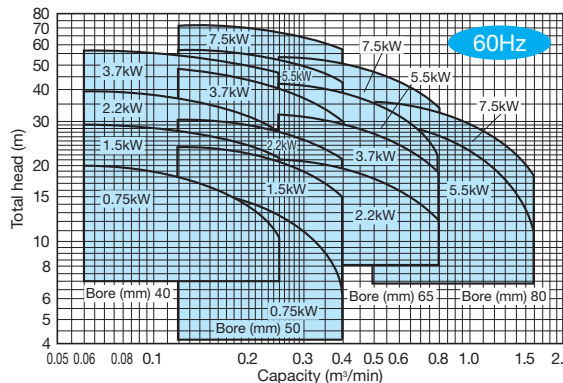
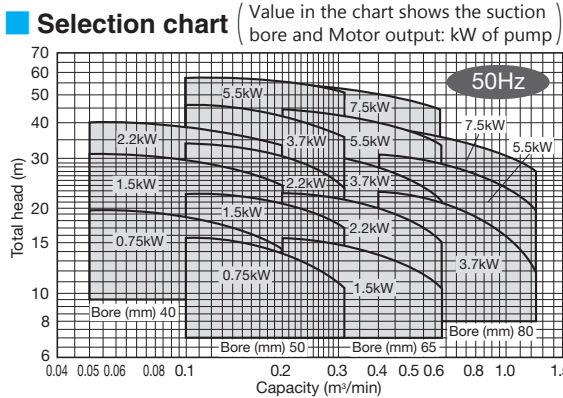
### Features

- 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)

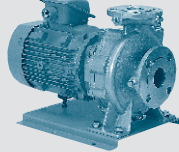
### Standard specifications

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 (7.5~22kW-50Hz) /-5m Bore 80mm-100mm (60Hz) /-3m
Materials	Impeller: SCS13 or SUS304 Shaft: SUS316 Casing: SCS13
Shaft sealing	Mechanical seal (SiC x Carbon)
Motor	Type: TEFC outdoor (11~37kW : indoor) 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)

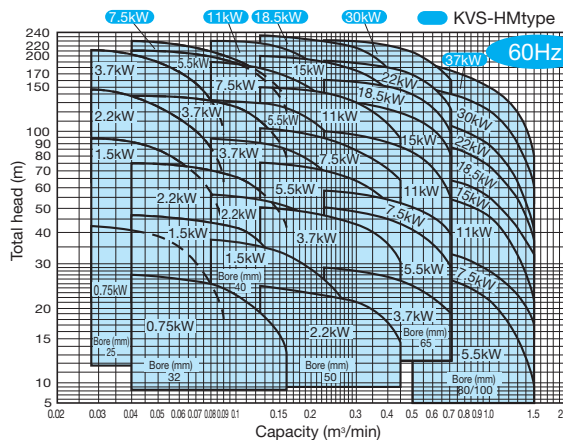
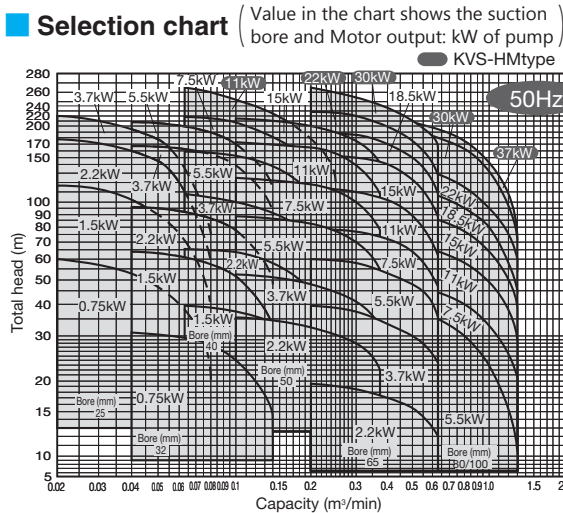
\* KVS-HM : for high pressure



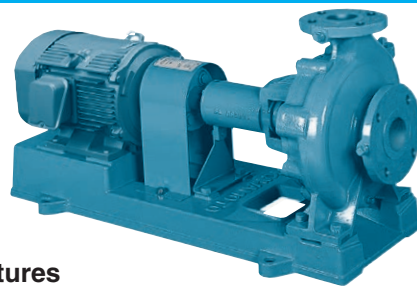
### Sister models



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



## 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 Type: TEFC indoor
Motor	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

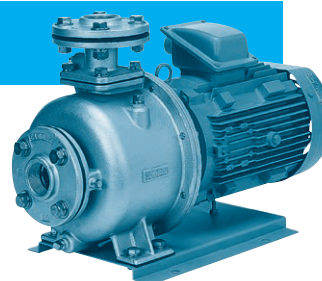
### Features

- 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

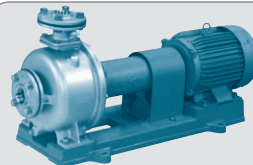
### Standard specifications

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 Shaft sealing: Mechanical seal (Ceramic x Carbon)
Motor	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.

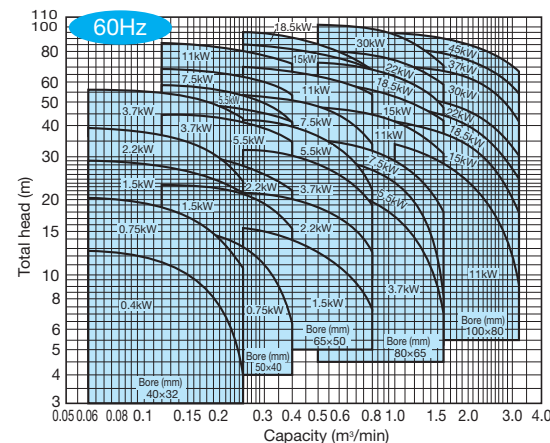
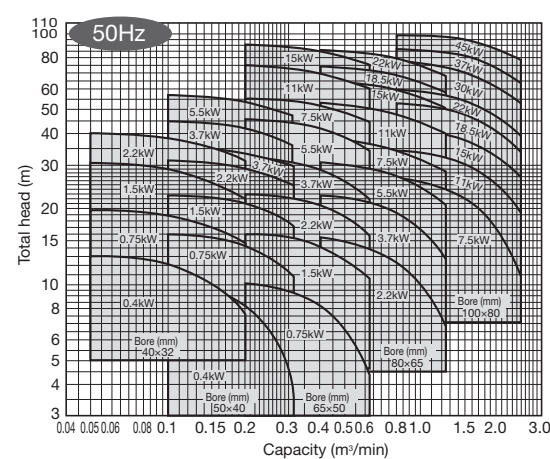


### Sister models

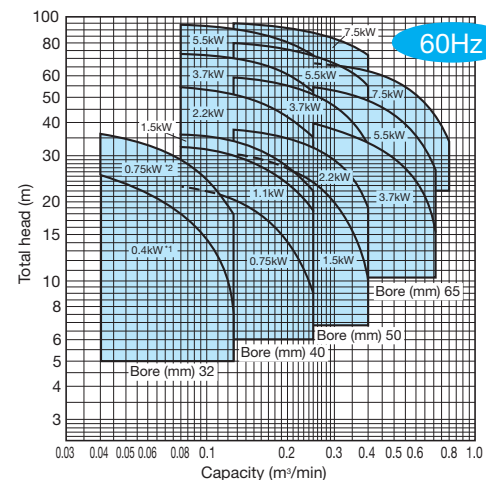
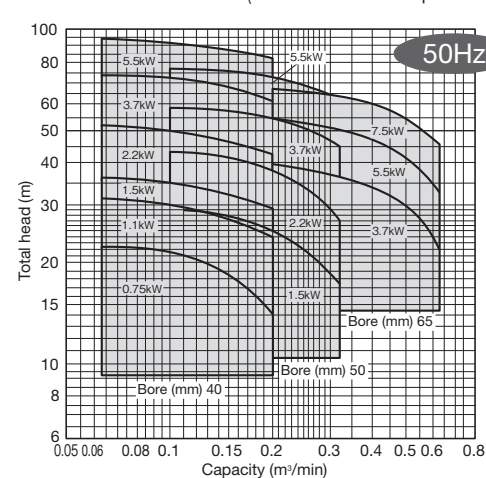


**Stainless steel  
KR5-M type**  
Bore : 40~65mm  
Motor : 1.5~7.5kW

### 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



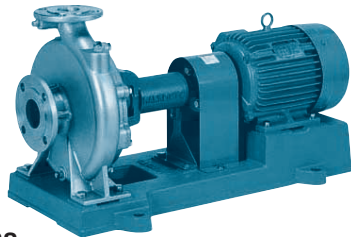
# Centrifugal / Multistage pump series



## 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.

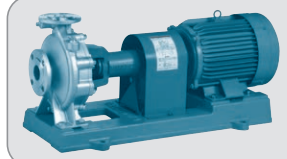


### Standard specifications

Liquid <sup>(*)</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>

(\*) Inquire for special kind liquid use.  
(2) 0.75kW or more is equipped with a Premium efficiency motor.

### Sister models



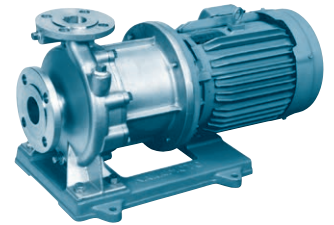
**Stainless steel  
GES-2M type**  
Bore : 40~65mm  
Motor : 0.75~7.5kW



## GRM type Magnetic pump

### Features

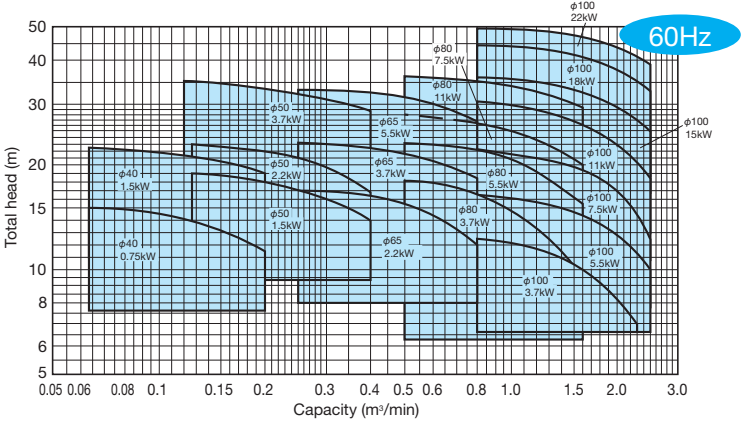
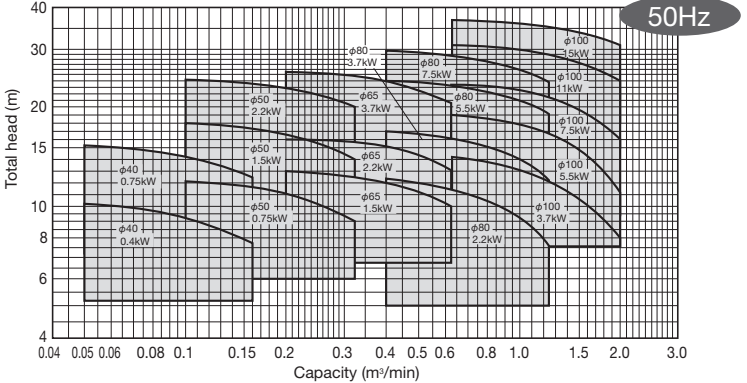
- Ideal for transfer use of chemical liquid with the seal less construction of magnet coupling
- Sealless facilitates maintenance.
- Excellent corrosion resistance and long life  
Material of pump major parts: SCS14, SUS316
- Back-Pull-Out structure enable disassembly/assembly of the pump without removing pipes, easy to maintenance, and the pump section is compact and light weight.



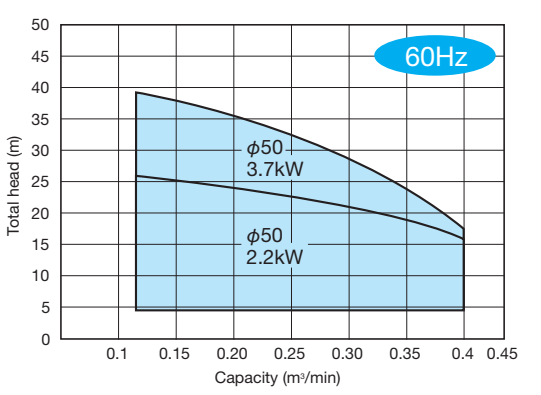
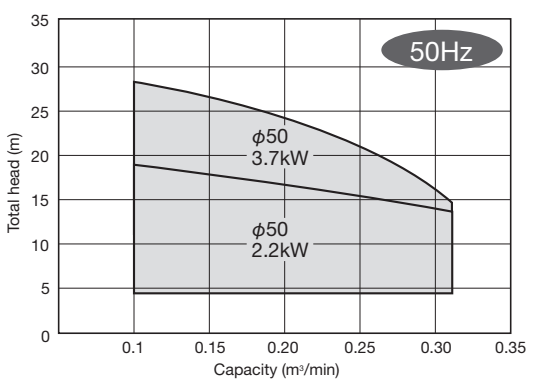
### Standard specifications

Liquid	Please inquire to us or our distributors about liquid available to be handled (liquid quality, liquid temperature and etc) by each application
Suction total head (20°C)	~6m
Materials	Impeller SCS14
	Shaft SUS316
	Casing SCS14
Construction	Magnet coupling seal-less construction Back-Pull-Out type.
Motor	Type TEFC indoor
	Phase Three phase
	Speed 50Hz : 3,000min <sup>-1</sup>
	60Hz : 3,600min <sup>-1</sup>
	Efficiency Premium efficiency (IE3)

### 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)



Note) Selection chart shows the data in case clean water.



## 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) (Maximum 100°C : Please inquire)
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
	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, GD brine 950 and Showbrine PP super  
• Density: 35~50%  
• Liquid temperature: 0~90°C

### Sister models

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



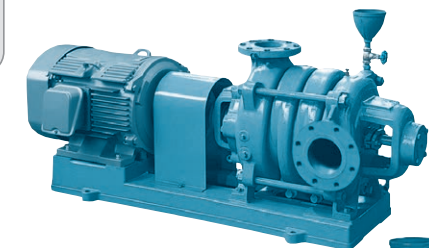
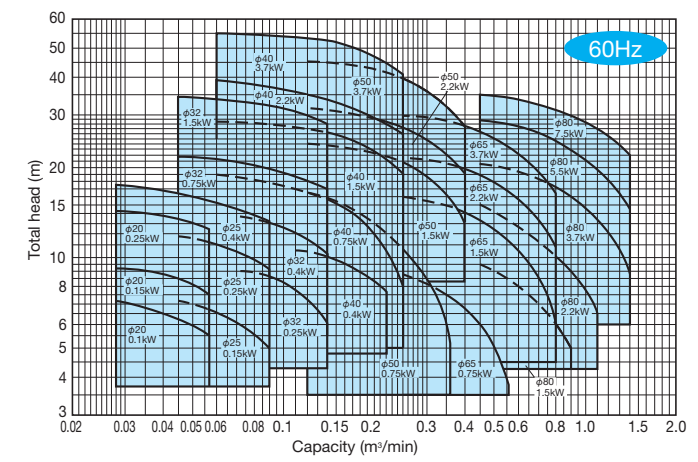
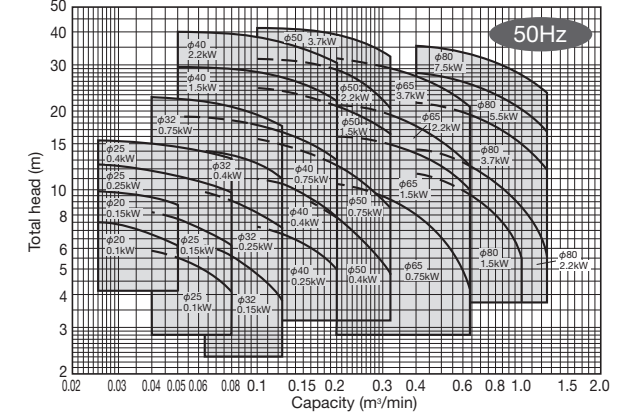
## T(N)·TK(N) type Turbine pump (Multi-stage pump)

## TVS type·KS type Self-priming turbine pump

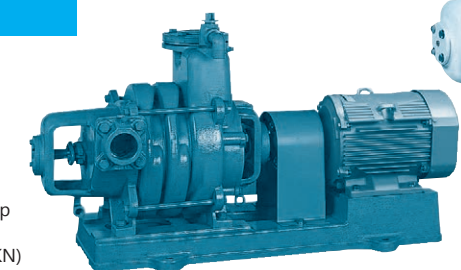
### Features

- 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

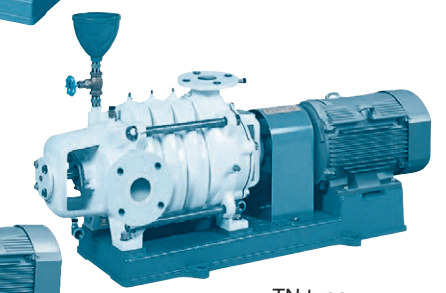
### Selection chart (Value in the chart shows the suction bore and Motor output: kW of pump)



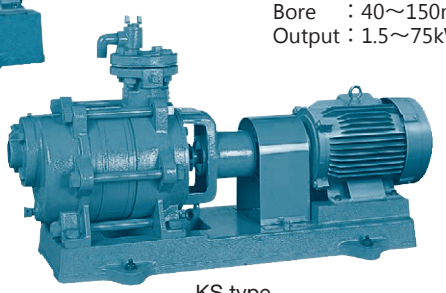
**T type**  
Bore : 40~200mm  
Output : 1.5~132kW



**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



# Cascade pump series



## CS-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 (Bore 20, 32 : ~8m)
Materials	Impeller: Bronze Shaft: SUS304 or SUS403 (portion contacting liquid) Casing: Cast iron Type: ODP or TEFC
Motor	Phase: Three phase Speed: 50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>

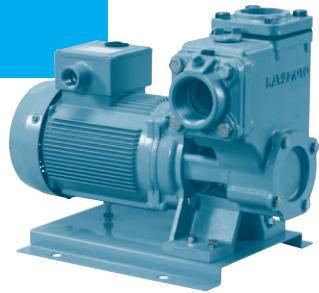
Do not use out of specified rage of lift. Could result burn damage in the motor.

**Sister models**

**CHS type**  
Bore : 25~40mm  
Motor : 1.5~5.5kW

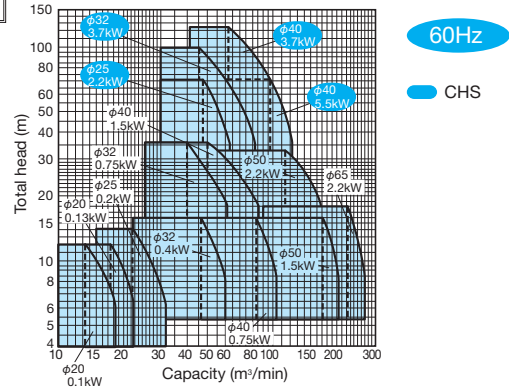
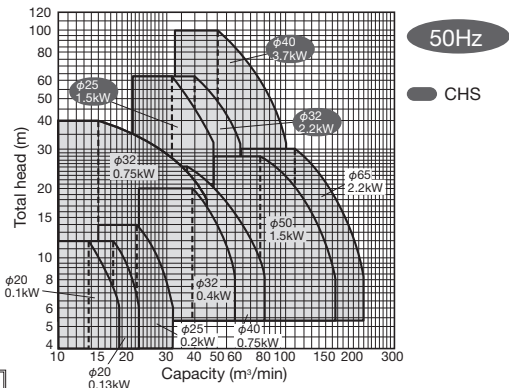
**CS2 type**  
Bore : 20~50mm  
Motor : 0.2~2.2kW

**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



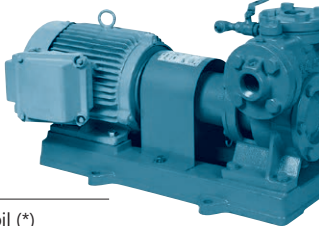
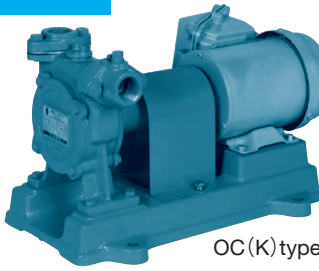
## OC(K)・OCH type

- 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.

**■ Standard specifications**

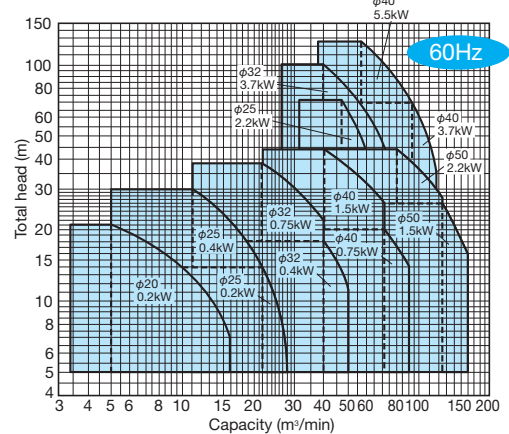
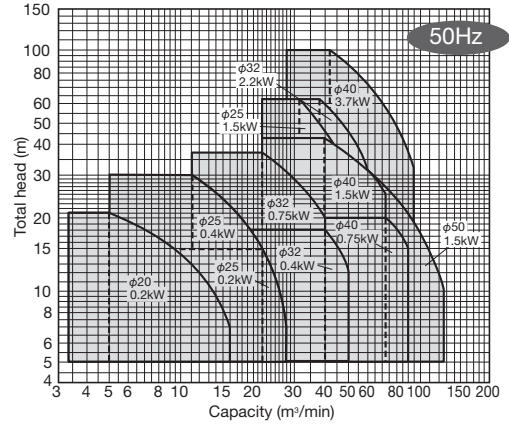
Liquid	Kerosene, light oil, A type heavy oil (*) Fuel oil of 45 centistokes or less 60°C or less
Materials	Impeller: Bronze Shaft: SUS403 Casing: Cast iron
Shaft sealing	Mechanical seal
Motor	Type: Increased safety explosion-proof type (Japan) Phase: Three phase Speed: 50Hz : 1,500min <sup>-1</sup> 60Hz : 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 out of specified rage of lift. Could result burn damage in the motor.



**■ Selection chart**

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



# Submersible clean water pump series



## US2 type

SANRONG

**■ Features**

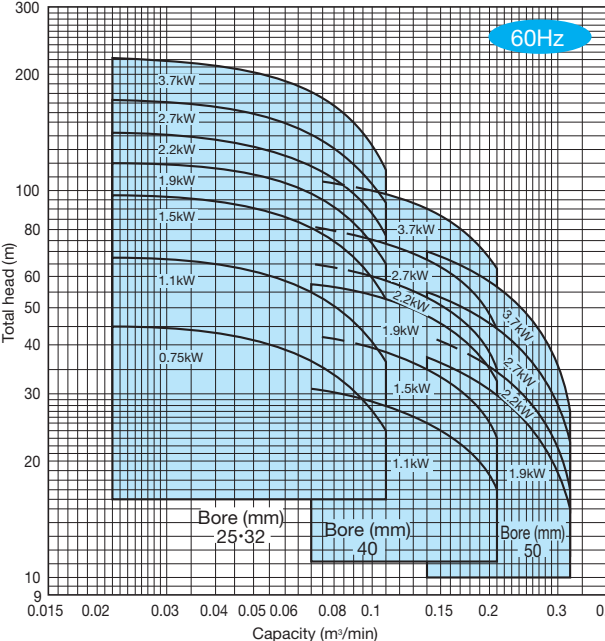
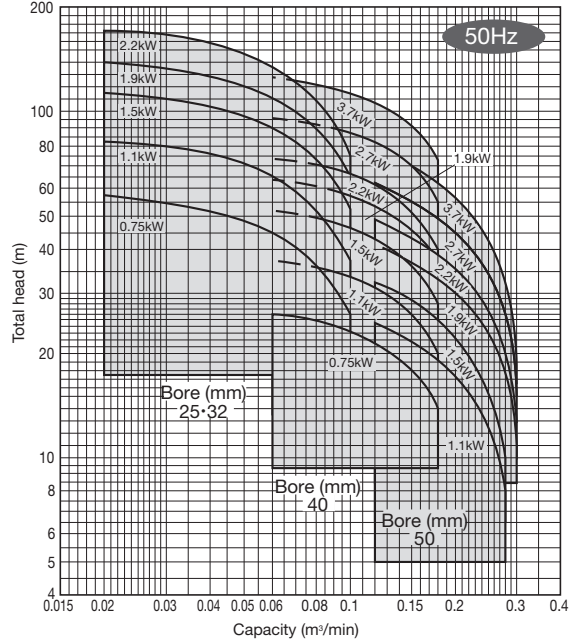
- The pump section is resistant to sand, and in addition a thick precision casting stainless steel is incorporated. More strong to sand and reliable by a new-type motor excellent in durability and bearing lubrication.
- The pump is stainless steel and resin. The motor section is made of stainless steel 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**

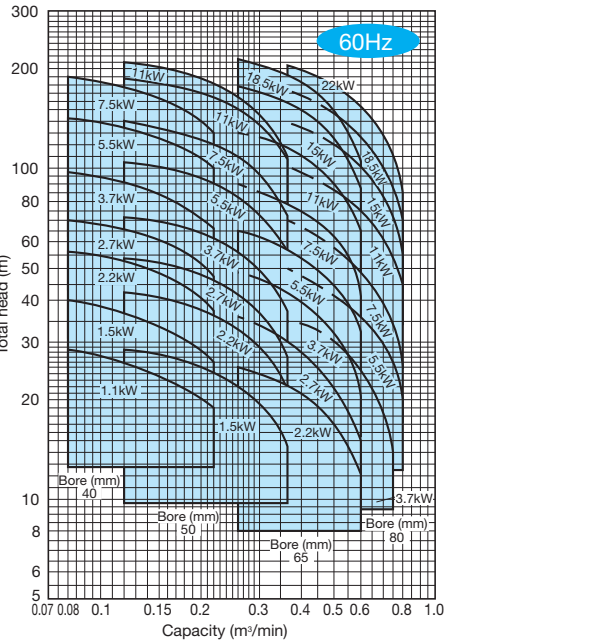
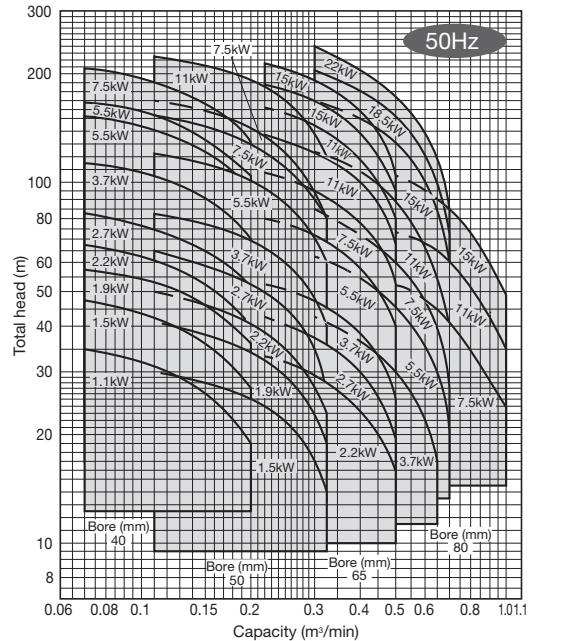
Liquid	Clean water 0~30°C (3.7kW or less: 0~35°C) (pH5.8~8.6,Chloride ion concentration 200mg/L or less, Sand content 50mg/L or less (fine sand dia. 0.1~0.25mm or less))
Materials	Impeller: SCS13 Shaft: SUS304 or SUS403 Casing: SCS13 (32 and 25mm bores are middle casing SUS304 + resin)
Bearing	SiC×SiC
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 velocity to be 0.1m/s or more.



# Submersible clean water pump series



## USM(H) type



### Features

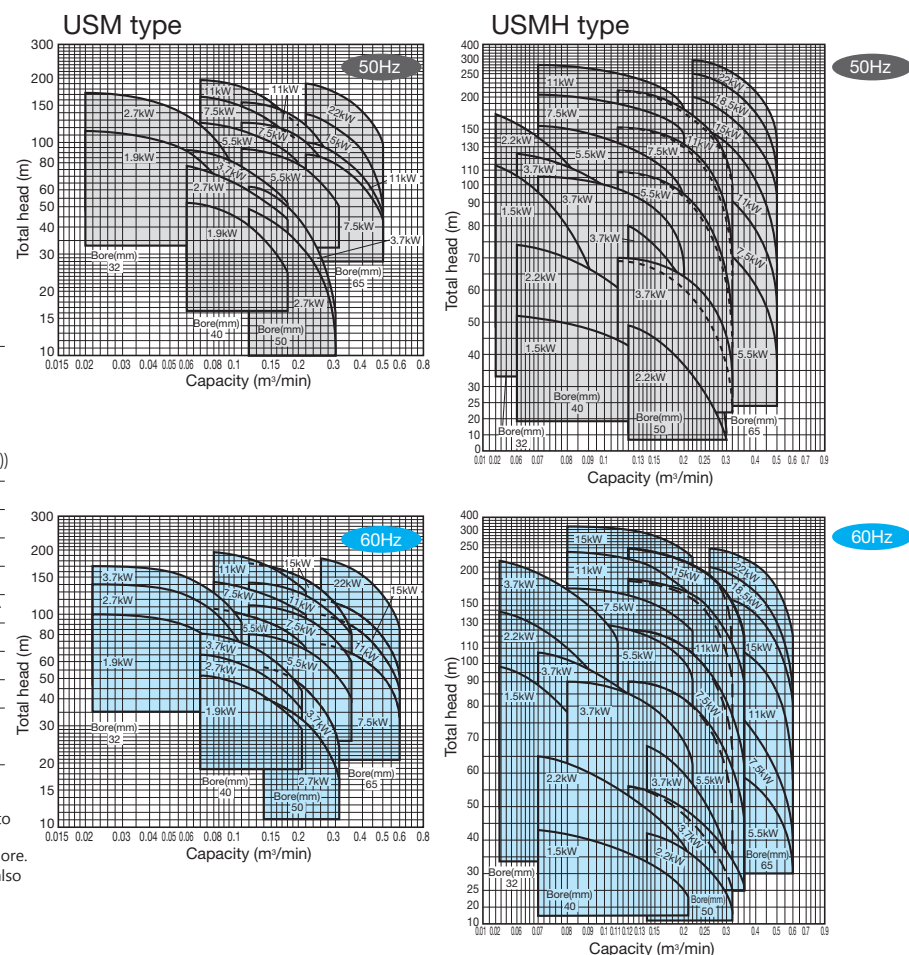
- This pump newly developed for spa use can be used with hot spa water up to 70°C for USM type, up to 90°C for USMH type (80°C for some models).
- The key components are made of precision cast stainless steel (SCS13) and have a long life.
- SiC is used for the bearings to enhance the sand resistant design.

### 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
Shaft sealing	Casing	SCS13
	Type	Canned submersible motor
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 0.1m/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<sup>2</sup><sub>3</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)	
	Type	Canned submersible motor
Motor	Phase	Three phase
	Speed	50Hz : 3,000min <sup>-1</sup> 60Hz : 3,600min <sup>-1</sup>
Max. submersing depth	10m	

### Sister models

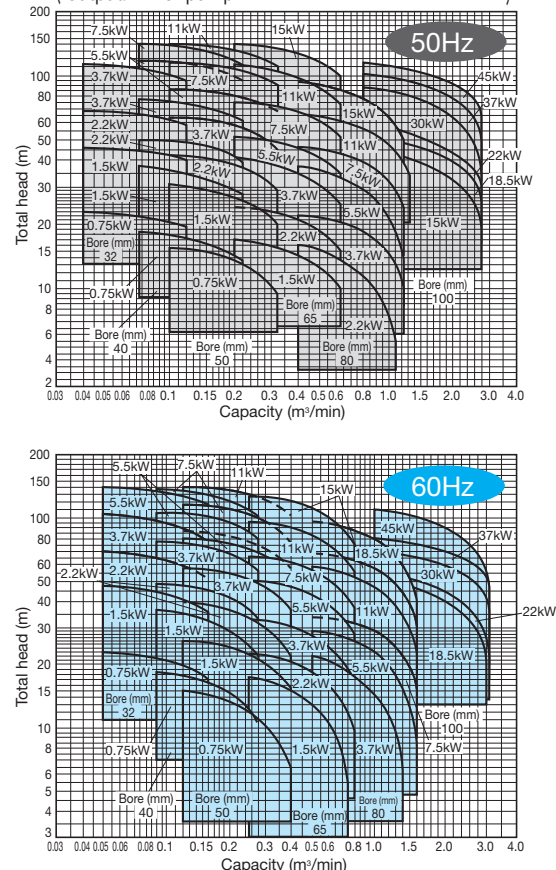
For hot water / hot spring submersible pump  
**KURH<sup>2</sup><sub>3</sub> type**  
Bore : 32~50mm  
Motor : 1.9~7.5kW  
Liquid temperature: clean water 60°C or less

### 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)



## WUO (3)-G 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	
	Type	Dry-sealed motor
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)	

### Sister models

For Wastewater  
**WUP3-G type KAWA PET**  
Bore : 32~50mm  
Motor : 0.15~0.75kW



Titanium seawater submersible pump  
**WUZ<sup>2</sup><sub>3</sub>-G type KAWA HOPE**  
Bore : 32~80mm  
Motor : 0.15~3.7kW



## BU4 type

### Sewage water submersible pump

## BUW type

### Stainless Non-clog impeller

## ZU<sup>3</sup><sub>3</sub> type

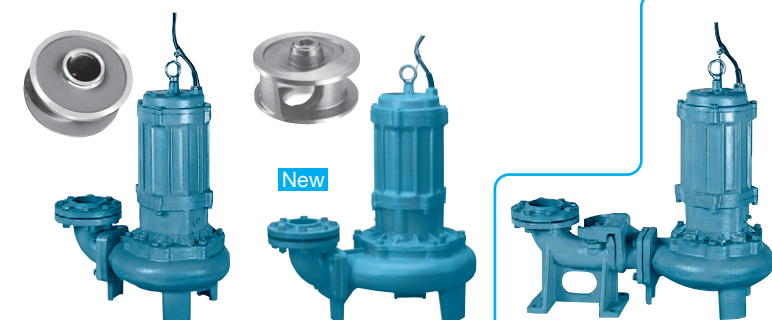
### Sewage water submersible pump

## VU4 type

### Sewage water submersible pump

## AU4 type CHAMPION

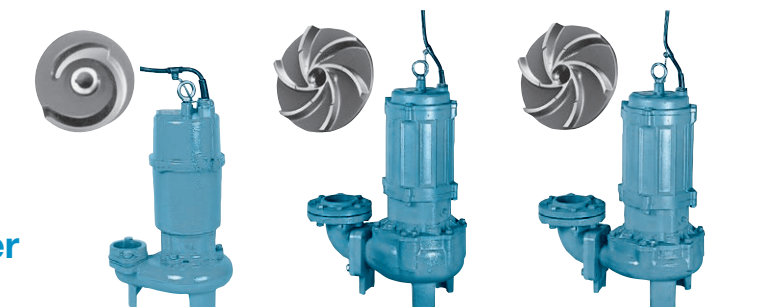
### Vortex with cutter



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

BUW type  
Bore : 65~80mm  
Output : 1.5~3.7kW

(pedestal support type)



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

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

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

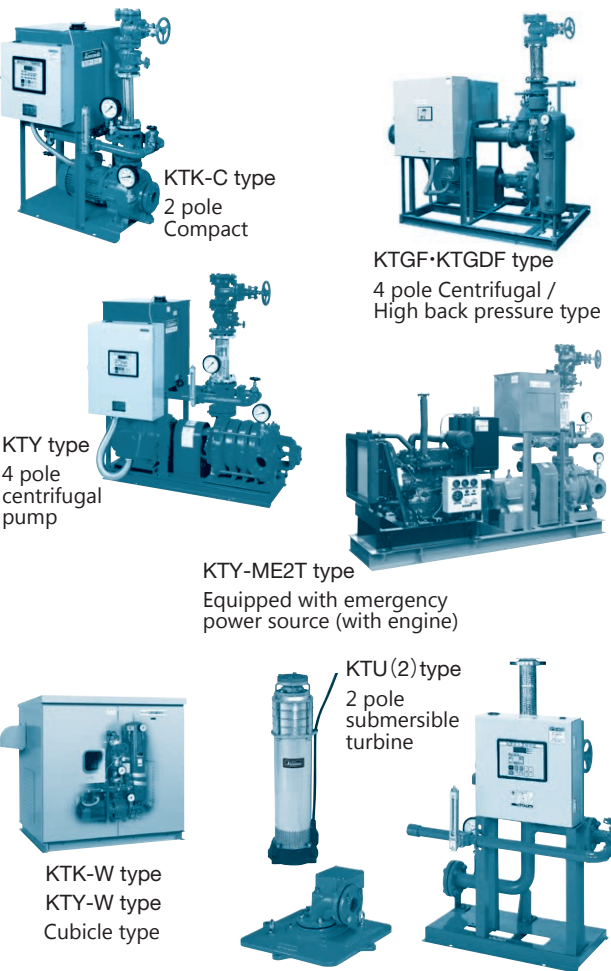


# Fire fighting pump series

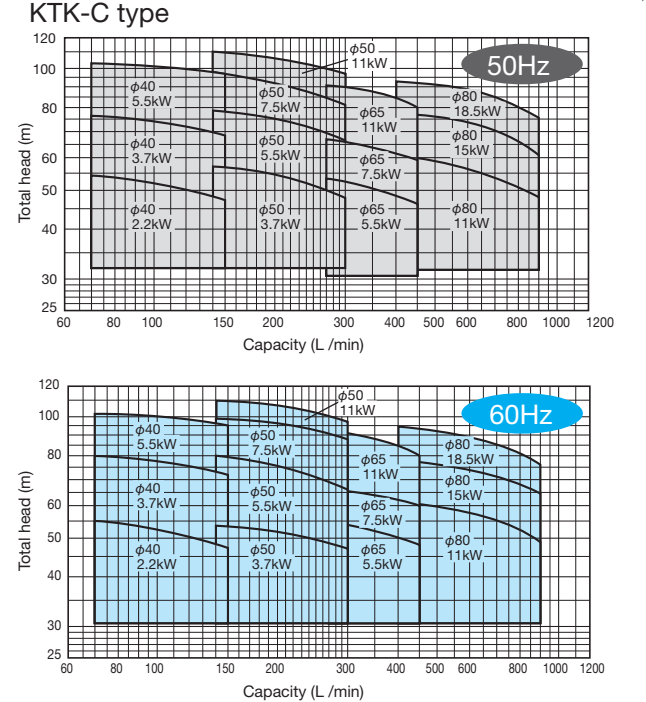


Products qualified by the Fire Equipment and Safety Center of Japan

## SAFETY ACE® Series



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



Note: Suction bore 80mm model is different form 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  $\phi 100$  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 SUS420J2Q
	Casing	Cast iron
Motor (continuous rating: S2)	Type	TEFC indoor (5.5, 7.5 kW model : outdoor)
	Phase/Poles	Three phase/2 pole

## KTGF·KTGDF type

### Standard specifications

Materials	Impeller	Bronze
	Shaft	SUS420J2 or SUS403
	Casing	Cast iron • Ductile cast iron (KTGDF)
Motor (continuous rating: S2)	Type	TEFC indoor (18.5 kW or less) ODP (22kW or more)
	Phase/Poles	Three phase/4 pole

## KTY type

### Standard specifications

Materials	Impeller	Bronze
	Shaft	SUS403
	Casing	Cast iron
Motor (continuous rating: S2)	Type	TEFC indoor (18.5 kW or less) ODP (22kW or more)
	Phase/Poles	Three phase 200V (90kW or more : 400V)/4 pole

## KTU(2) type Submersible type

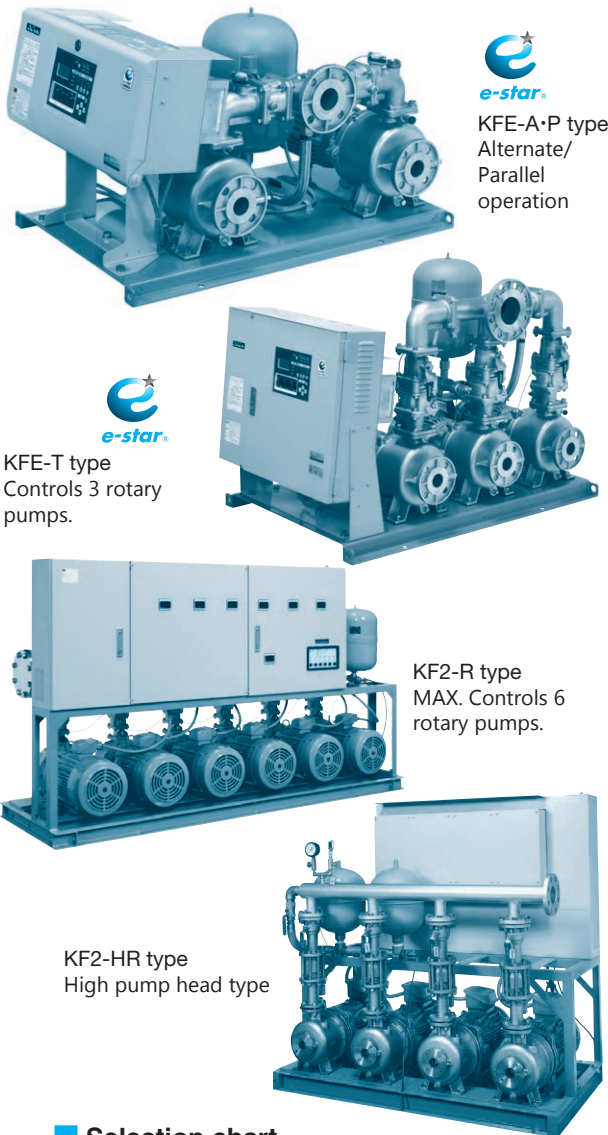
### Standard specifications

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

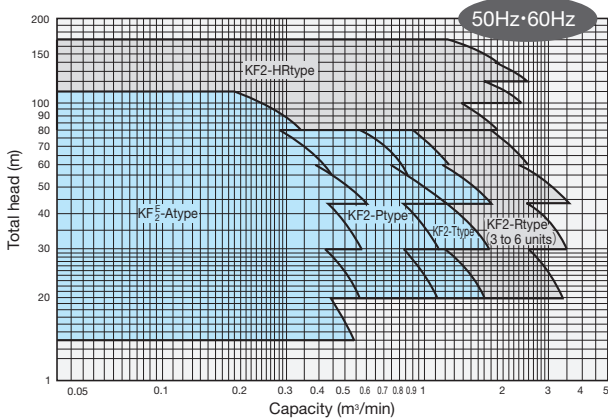
# Energy-saving inverter



## KF type

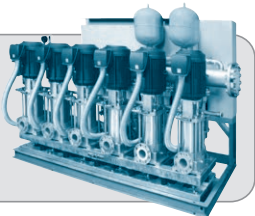


### Selection chart



### Sister models

Vertical high pump head units control rotary. KVF2 type



### Features

- By pump section's high efficiency design and 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, by that lowering electricity rate (\*) and controlling the generation of higher harmonics. Countermeasures against noise are also provided with a surge absorber and noise filter.

(\*) Excluding 0.4 and 0.75kW models

## 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 Stainless steel
	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 IE4)
Installation		Indoor (0~40°C / humidity : 90%RH or less / altitude : 1,000m or less)

## KF2-A·P·T·R type Unit control rotary.

### 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)

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

## KF2-HR type Unit control rotary.

### 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
	Phase	2 pole
	Efficiency	Three phase
Efficiency		premium efficiency (IE3)
Installation		Indoor (0~40°C / humidity : 90%RH or less / altitude : 1,000m or less)

(\*)1 Please consult in case back pressure exceed 5m or more.

(\*)2 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.



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

### For Surface pump

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

The chart displays the performance of 60Hz pumps. The y-axis represents Total head in meters (m) on a logarithmic scale from 10 to 200. The x-axis represents Capacity in cubic meters per minute (m³/min) on a logarithmic scale from 0.01 to 0.4. Several performance curves are shown for different pump models and power ratings:

- Model 632:**
  - 2.2kW (Total head ~150m at 0.02 m³/min)
  - 1.5kW (Total head ~100m at 0.02 m³/min)
  - 1.1kW (Total head ~70m at 0.02 m³/min)
- Model 640:**
  - 2.7kW (Total head ~150m at 0.1 m³/min)
  - 2.2kW (Total head ~100m at 0.1 m³/min)
  - 1.5kW (Total head ~70m at 0.1 m³/min)
  - 1.1kW (Total head ~40m at 0.1 m³/min)
- Model 650:**
  - 2.7kW (Total head ~150m at 0.2 m³/min)
  - 2.2kW (Total head ~100m at 0.2 m³/min)
  - 1.5kW (Total head ~70m at 0.2 m³/min)
  - 1.1kW (Total head ~40m at 0.2 m³/min)



## Submersible clean water pump



- 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.

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> type (P.12) for pump material.

- 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.

\*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) *US2/LF : Indoor

60Hz

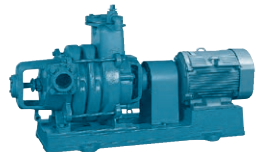
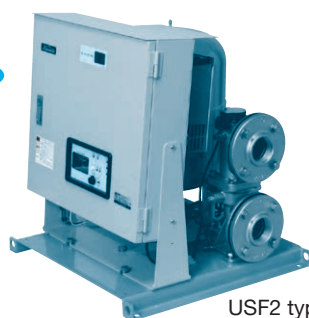
Total head (m)

Capacity (m<sup>3</sup>/min)

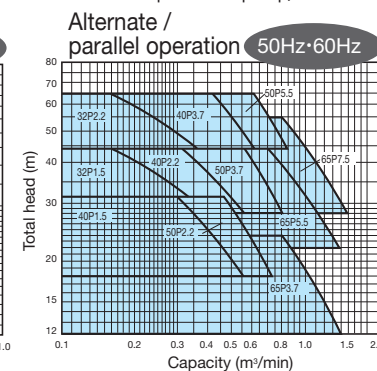
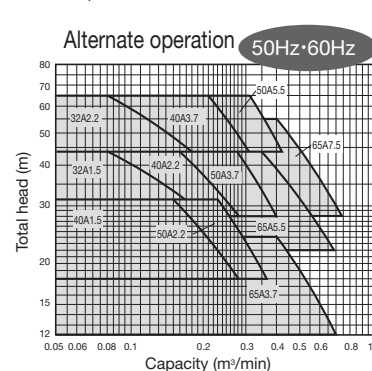
KS type

TVS type

GS<sub>N</sub>-C type



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



## Soft KAWA ACE

- Switch between E (ecological) mode and S (Strong) mode is possible by the operation mode switch. (Exclude NFK)
- 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 discolourment of water
- Noise and high frequency countermeasures are equipped as a standard with the noise filter and built-in reactor.

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)



## KAWA ACE DEEPER

- 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.

Control method		Water supply with constant discharge pressure
Liquid		Clean water 0~25℃ (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	Three phase
Installation		Indoor/Outdoor (pump : under water)



## KAWA ACE DEEPER

- 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)

With signal output  
**NFS(K)-K type**  
Hot water pressurization  
pump unit  
**NFH-K type**  
150~750W

● 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)

Legend:

- Alternate
- Alternate/Parallel



The graph illustrates the relationship between total head and capacity for different power ratings. The y-axis represents total head in meters, ranging from 10 to 90. The x-axis represents capacity in liters per minute, ranging from 0 to 90. Four curves are shown, corresponding to power ratings of 450W, 600W, 900W, and 1100W. The 1100W curve is the highest, followed by 900W, 600W, and 450W. All curves show a decrease in head as capacity increases, with the rate of decrease becoming more pronounced at higher capacities.

Capacity (L/min)	450W (m)	600W (m)	900W (m)	1100W (m)
0	45	55	65	75
10	45	55	65	75
20	45	55	65	75
30	43	52	62	73
40	40	48	58	70
50	35	42	50	65
60	28	35	42	55
70	20	25	32	45
80	15	18	25	35
90	12	15	20	30

The graph plots Total head (m) on the y-axis (5 to 70) against Capacity (L/min) on the x-axis (4 to 80). Two curves are shown: 450W (upper) and 300W (lower). Both curves show a decrease in head pressure as capacity increases.

Capacity (L/min)	450W Total head (m)	300W Total head (m)
4	55	50
10	52	48
20	50	45
30	45	38
40	30	22
45	15	10
50	5	5



Energy-saving inverter



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 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 or SUS304
	Shaft	SUS304 (portion contacting liquid)
	Casing	SCS13
Motor	Type	Kawamoto PM motor TEFC indoor (250W~750W)
	Phase/ Voltage	Single phase100V (250W · 400W)
		Single phase 200V, Three phase 200V (400W · 750W) (*)
Installation		Indoor/Outdoor (altitude : 1,000m or less)

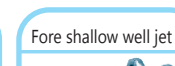
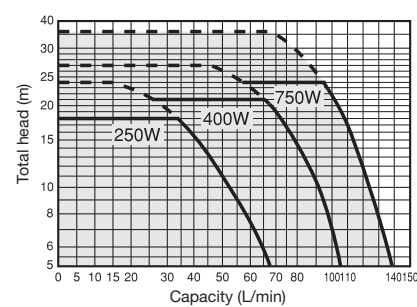
\*1100 / 1500W products are also available. Please inquire for detail.

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℃ (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
	Type	KPM Motor (TEFC indoor)
Motor	Phase/Voltage	Single phase100V (250W · 400W) Single phase200V · Three phase200V (400W · 750W)
	Installation	Indoor/Outdoor (altitude : 1,000m or less)

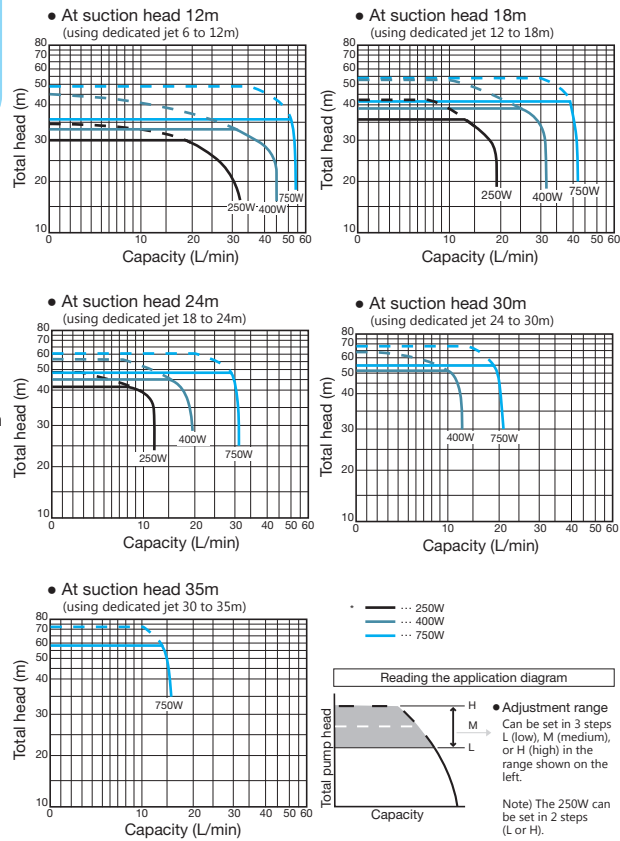
Selection chart (JF-A.P type)

- When operating alternately (suction head -1m)



Fore shallow well jet

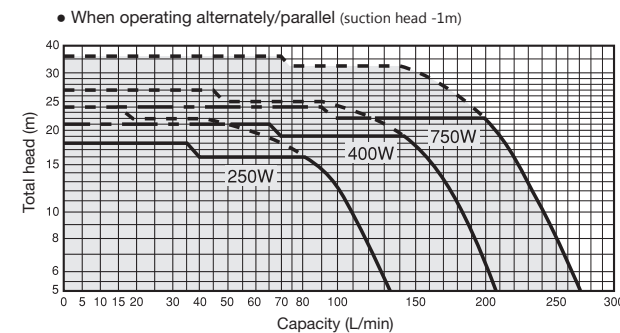
Selection chart (JF type)



\*For shallow well applications, please inquire.



JF-A.P type



Small booster pump unit



NR·N3-N type

KAWA ACE



Pic: NR type

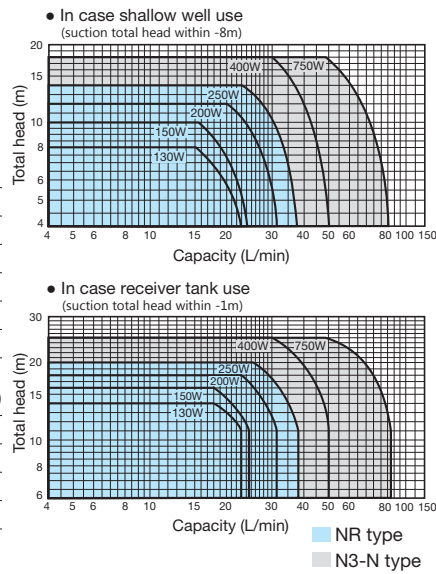
- Features**
- NR type is a clean stainless steel casing.
  - Long-life and reliability improved by incorporating totally-closed motor.
  - A stable water supply is anticipated with constant pressure water supply having both the pressure switch and the flow rate switch.
  - Long-life by making no contact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

Standard specifications

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

Control method		Constant pressure water supply
Liquid		Clean water 0~40℃
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) type



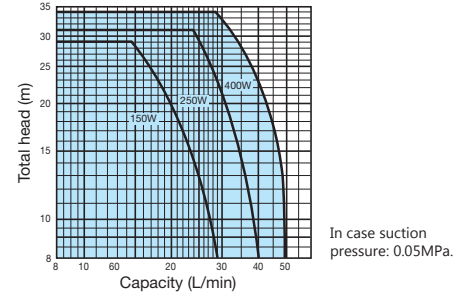
Features

- Direct installation to the pipes is possible by Japan water works association certification.
- NFD (N) 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 0~40°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)
		Three phase 200V (400W)
Installation		Indoor/Outdoor (altitude : 1,000m or less)

Selection chart



In case suction pressure: 0.05MPa.

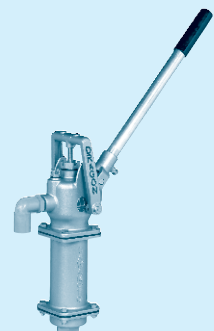


## Stainless steel hand pump

### ■ Features

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

HDS-25 type
380mL / Stroke
Lift up to 15m, suction -8m.



HDS40 (L) type
1400mL / Stroke
Lift up to 10m, suction -7m. (-3.5m)

\*Inside the ( ) are HDS40L type.



# Kawamoto's Pump Series for equipment

## Stainless steel compact booster pump unit

### NFG(-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 flour rubber

NFG type
Bore 20~32mm
Output 150~750W



### JFG type

Pure water  
Electrolysis water  
Production equipment, etc...

JFG type (Water volume type)
Bore 32mm
Output 250~750W



## Coolant Pump RC<sup>D</sup> type

### ■ Features

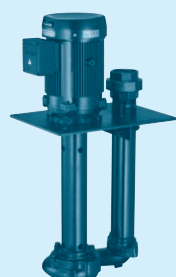
- Incorporating FCD500 for casing material realized a strong wear-resistant pump.
- Mechanical sealless structure prevents fluid from scattering by mechanical seal fracture.

RC type
Bore 40mm (65mm)
Output 0.75~3.0kW (1.5~2.2kW)

\* ( ) shows RCJ type



RCD type



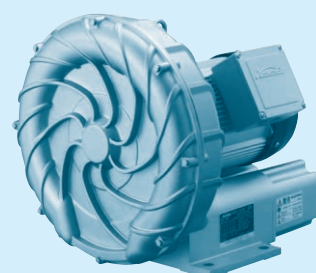
RCJ type

## 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



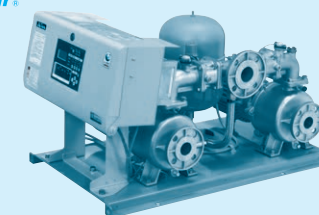
## Stainless steel & Variable speed control booster unit Refer to (P.15) Energy-saving inverter

### KFE-A-P type

#### ■ Features

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

Bore 32~65mm
Output 1.1~7.5kW

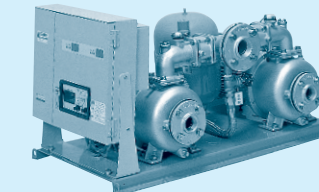


### KF2-A-P type

#### ■ Features

- Energy-saving and quiet operation. Clean, constant estimated terminal pressure high quality water supply

Bore 32mm
Output 0.4~0.75kW

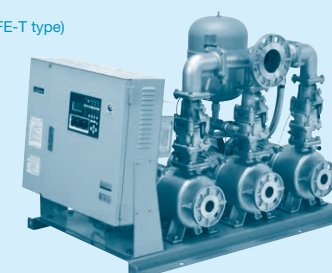


### KF<sub>2</sub><sup>E</sup>-T type (KFE-T type)

#### ■ Features

- Compact 3-unit multiple control rotary.

Bore 32~65mm
Output 0.75~7.5kW

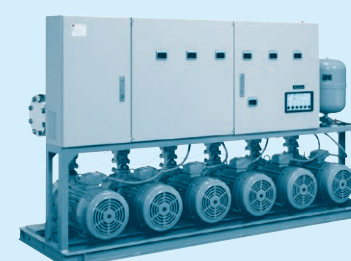


### KF2-R type

#### ■ Features

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

Bore 32~65mm
Output 0.75~7.5kW

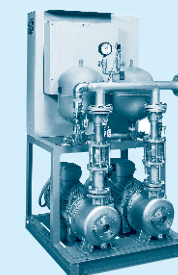


### KF2-H type

#### ■ 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

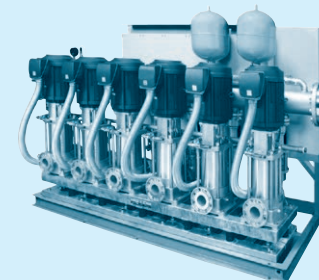


### KVF2 type

#### ■ 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 11~30kW



## Direct connection with water main booster pump Certificated products by Japan Water Works Association Energy-saving inverter

### NDP2 type

#### ■ Features

- Compact, light weight, and easy to install.

Bore 20~25mm
Output 0.4~1.1kW



### KDP2 type

#### ■ 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



### KDP2-<sup>D</sup><sub>W</sub> type 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



### KDP2-R type 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

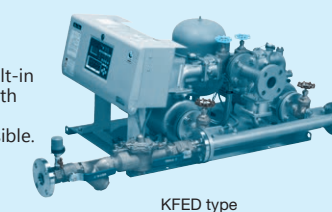


### KF<sup>ED</sup><sub>D2</sub> type (KFED type)

#### ■ 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



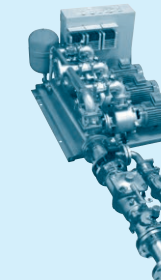
KFED type

### 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

Rubber Vane Pump

DR type

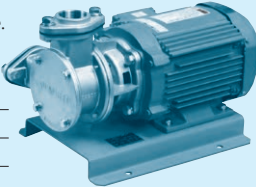
■ Features

- High corrosion resistance and easy to handle.
- For various use such as sea water, fishery, water treatment, food and drink, biotechnology industry.

Bore, Output 40mm-1.5kW, 65mm-5.5kW

Suction —4m (Bore 40mm)

—2m (Bore 65mm)



Water seal vacuum pump unit


DW 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 20, 25mm    Output 0.75kW

Reservoir Effective Capacity 60L



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

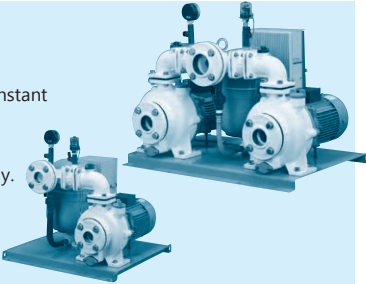
■ Features

- 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>3</sub>-G 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



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 

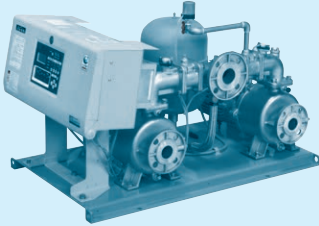
■ Features

- 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

NFH-K 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.12)

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
● Centrifugal / Multistage pump									
GSN(2)-C type	Indoor / Outdoor	TEFC outdoor	Clean water	0~45°C	M	1 or 3	Bronze	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
GS02-3-C type	Indoor	TEFC outdoor	Clean water river 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
GRM type	Indoor	TEFC indoor	ask		S	3	SCS14	SUS316	SCS14
PE(2) type	Indoor / Outdoor	TEFC outdoor	Clean water	0~90°C	M	1 or 3	SCS13	SUS304	Cast iron
PSS(2) type	Indoor / Outdoor	TEFC outdoor	Clean water	0~90°C	M	1 or 3	SCS13	SUS304	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
● Cascade / Oil pump									
CS-C type	Indoor	ODP or TEFC	Clean water	0~40°C	G	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
● Fire fighting pump									
KTK-C type	Indoor	TEFC indoor	Clean water	0~40°C	M	3	Bronze	SUS304 or SUS420J2Q	Cast iron
KTY type	Indoor	ODP or TEFC	Clean water	0~40°C	G	3	Bronze	SUS403	Cast iron
● Submersible clean water pump									
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
● Submersible Sump Pump									
WU0(3)-G type	Submerged	Dry-sealed	For Sewage	0~40°C	M	1 or 3	Resin	SUS403	Resin
ZU3 type	Submerged	Dry-sealed	For Sewage	0~40°C	M	1 or 3	Cast iron	SUS403	Cast iron
● Water supply equipment / Small regional drinking water unit									
KFE·KF2-A·P·T·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
KVF2 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			
● Energy-saving inverter House hold									
NF2-K type	Indoor / Outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13
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
● Small booster pump unit									
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
● Hot water auxiliary boosting equipment									
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)-K type	Indoor / Outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13
● Hand pump									
HDStype				5~40°C					SCS13
● Water supply equipment / Small regional drinking water unit									
NDP2 type	Indoor / Outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze	SUS304	SCS13
KDP2 type	Indoor / Outdoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	SCS13 or Bronze	SUS304	SCS13
KFED·KFD2 type	Indoor	TEFC indoor	Clean water	0~40°C	M	1 or 3	Bronze or SCS13 or Resin	SUS304	SCS13
● Sea water pump series									
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
WUZ2-3 type	Submerged	Dry-sealed	Sea water Sewage	0~40°C	M	1 or 3	Resin	Titanium	Resin
● For hot water (hot spring) pump series									
KURH2-3 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
NFH-K 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.

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Distributor

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For any question about pumps, please contact your nearest distributor

Name	Pump Series
No.	5302 i (E)