



Bringing valuable "water" to you

Comfort Earth®



KAWAMOTO PUMP

Submersible Sump Pump Series

For drainage of wastewater, sewage, facilities and construction equipment.

High-efficiency non-clog impeller

Reinforced plastic

Stainless steel

Vortex with cutter

Patent pending

Ver.2.9



VUS



ZU3



WUP3-G



BUW



DU4



BUM



Kawamoto

Kawamoto's Submersible Sump Pump Series

Specification table by model (liquid temperature: 0 to 40°C, pH 5 to 9)

High durability

High efficiency
e-star Product

Rust resistant



For Wastewater, 2 poles

WUP3-G type

Vortex



Adjustable float position



- Reinforced plastic
- Motor
- Stainless steel frame
- 2-pole drysealed motor
- Materials
- Casing: Plastic
- Impeller: Plastic
- Shaft: SUS304
- Bore: 32, 40, 50mm
- Output: 0.15 - 0.75kW

-P3-

WUZ2/3-G type

Vortex



Adjustable float position



- Titanium
- Motor
- Titanium frame
- 2-pole drysealed motor
- Materials
- Casing: Plastic
- Impeller: Plastic
- Shaft: Titanium
- Bore: 32 - 80mm
- Output: 0.15 - 3.7kW

-P3-

YUK2 type

Semi-open



- Motor
- 2-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: SCS13
- Shaft: SUS403
- Bore: 40, 50mm
- Output: 0.25 - 0.75kW

-P4-

For Sewage, 4 poles

AU4 type

Vortex with cutter



- Motor
- 4-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: Ductile iron
- Shaft: SUS420J2
- Cutter: Alloy tool steel (Ceramic coated)
- Bore: 50 - 100mm
- Output: 0.75 - 7.5kW

-P7-

VU4 type

Vortex



- Motor
- 4-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: Cast iron
- Shaft: SUS420J2
- Bore: 50 - 100mm
- Output: 0.75 - 15kW

-P7-

VUS type

Vortex



- Motor
- 4-pole drysealed motor
- Materials
- Casing: SCS13
- Impeller: SCS13
- Shaft: SUS304
- Bore: 50 - 100mm
- Output: 0.4 - 7.5kW

-P8-

For Wastewater, 2 poles

SU4 type

Closed



- Motor
- 2-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: Bronze
- Shaft: SUS403
- Bore: 50mm
- Output: 0.75 - 7.5kW

-P4-

For Sewage, 2 poles

WUO(3)-G type

Vortex



- Reinforced plastic
- Motor
- Stainless steel frame
- 2-pole drysealed motor
- Materials
- Casing: Plastic
- Impeller: Plastic
- Shaft: SUS304
- Bore: 40 - 80mm
- Output: 0.15 - 3.7kW

-P5-

ZU₃ type

Semi-open Non-clog



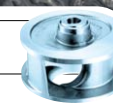
- Motor
- 2-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: Cast iron
- Shaft: SUS403
- Bore: 50 - 80mm
- Output: 0.4 - 7.5kW

-P5-

For Manholes, 4 poles

BUM type

High efficiency non-clog type



- Motor
- 4-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: SCS13
- Shaft: SUS420J2
- Bore: 65, 80mm
- Output: 0.75 - 7.5kW

-P8-

VUM type

Vortex



- Stainless steel
- Motor
- 4-pole drysealed motor
- Materials
- Casing: SCS13
- Impeller: SCS13
- Shaft: SUS304
- Motor cover: SCS13
- Bell mouth: SCS13
- Bore: 50 - 100mm
- Output: 0.4 - 7.5kW

-P9-

For Sewage, 4 poles

BUW type

High-efficiency non-clog



- Motor
- 4-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: SCS13
- Shaft: SUS420J2
- Bore: 65, 80mm
- Output: 0.75 - 7.5kW

-P6-

BU4 type

Non-clog



- Motor
- 4-pole drysealed motor
- Materials
- Casing: Cast iron
- Impeller: Cast iron
- Shaft: SUS420J2
- Bore: 50 - 150mm
- Output: 0.75 - 22kW

-P6-

For Construction works / For Residual water drainage

DUG2/DU4/DUM2 type

Vortex



- Motor
- 2-pole drysealed motor
- Materials
- Casing: Cast iron (DUG2)
- Synthetic rubber (DU4)
- Synthetic rubber + SUS304 (DUM2)
- Impeller: Plastic (DUG2)
- Urethane rubber (DU4, DUM2)
- Shaft: SUS403
- Bore: 40, 50mm
- Output: 0.25 - 2.2kW

-P11-

LU2 type

Semi-open



- Motor
- 2-pole drysealed motor
- Materials
- Casing: Synthetic rubber
- Impeller: Plastic
- Shaft: SUS403
- Bore: 50mm
- Output: 0.4kW

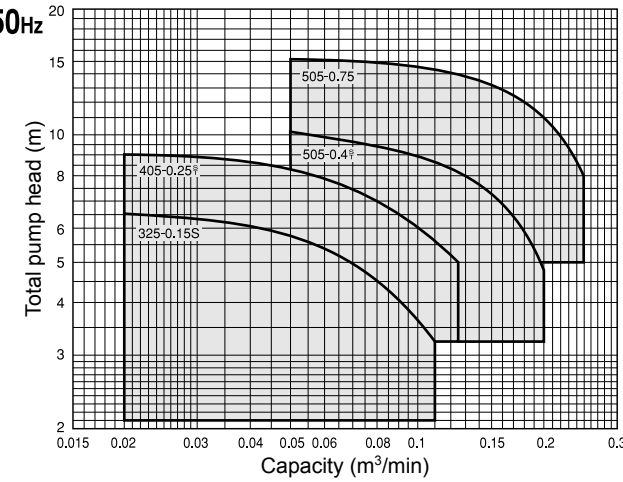
-P11-

Reinforced plastic WUP3-G type

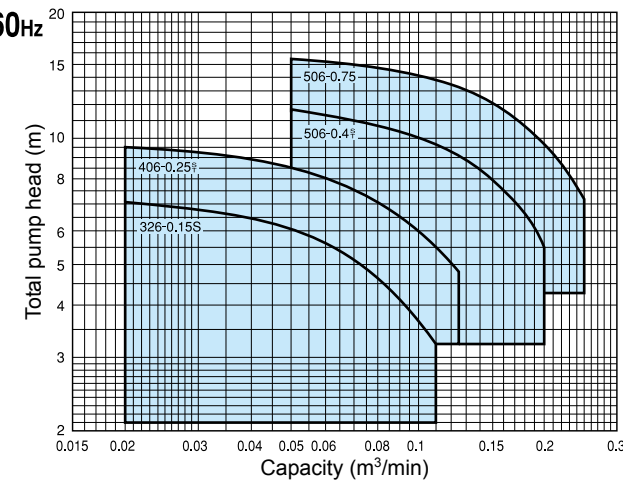
For Wastewater, 2 poles

Selection

50Hz



60Hz



Application For drainage of wastewater, septic tank sump, dirty sump and spring water

- Features**
- Light and easy to handle, due to resinified pump parts and motor with stainless steel frame.
 - Corrosion proof and long-life.
 - Equipped with a small special motor with built-in auto-cut of a large starting torque to ensure safety.
 - Vortex type and excellent performance to pass foreign objects.
 - Strainer is quick detachable type for easy cleaning and maintenance.
 - Can be paired with plastic pedestal support (special accessory).
 - Japan Public Buildings Association compliant. (50mm-bore products)
 - Starting/stopping water levels are adjustable in L and LN types.
 - Improved strainer strength. (compared to our conventional models)

Types

Types		Ability to pass foreign objects	
Operation method	Model	Bore (mm)	Diameter of foreign objects (sphere) (mm)
Non-automatic	WUP3-G type	32	14
Automatic	WUP3-LG type	40	14
Auto alternate	WUP3-LNG type	50	20



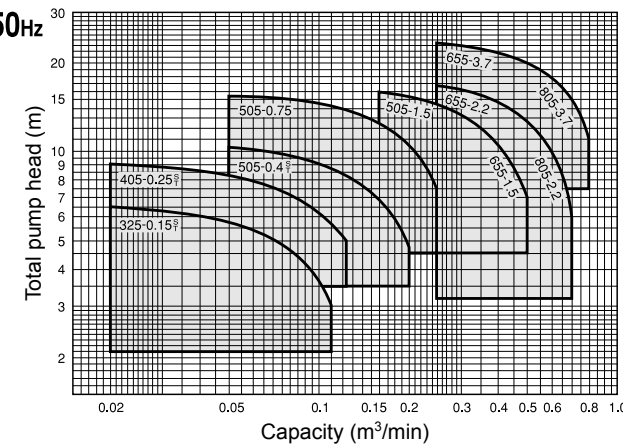
WUP3-G type WUP3-LG type WUP3-LNG type

Titanium WUZ2/3-G type

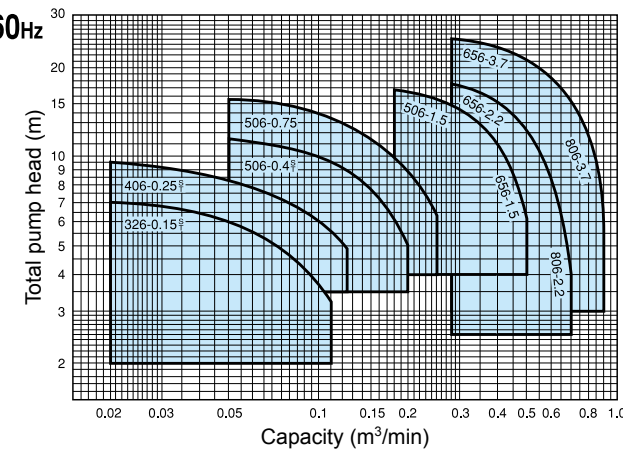
For Seawater and Wastewater, 2 poles

Selection

50Hz



60Hz



Application For seawater intake, circulation, fish and shellfish breeding farms, processing plant, various wastewater

- Features**
- Uses titanium for the metal part which contacts water and plastic in the pump to achieve corrosion proof, light weight and easy-to-handle features.
 - Glass fiber reinforced plastic is used in plastic parts which require strength, such as the impeller and casing.
 - Vortex type and excellent in the ability to pass foreign objects.
 - Equipped with a motor with built-in auto-cut having a large torque to prevent burn damage.
 - Strainers with output of 0.75kW or less are quick detachable type for easy maintenance.
 - Japan Public Buildings Association compliant. (50mm-bore products)
 - Starting/stopping water levels are adjustable in L and LN types.
 - Improved strainer strength. (compared to our conventional models)

Types

Types		Ability to pass foreign objects	
Operation method	Model	Output	Diameter of foreign objects (sphere) (mm)
Non-automatic	WUZ2/3-G type	0.25kW or less	14
Automatic	WUZ2/3-LG type	0.4, 0.75kW	20
Auto alternate	WUZ2/3-LNG type	1.5kW	35
		2.2kW or above	40



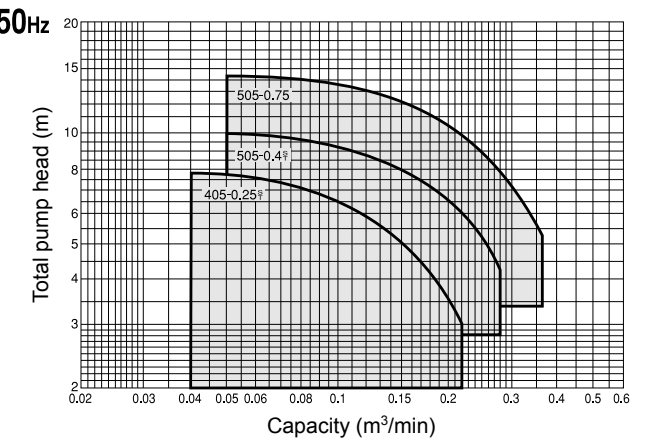
WUZ2/3-(G) type WUZ2/3-LG type WUZ2/3-LNG type

YUK2 type

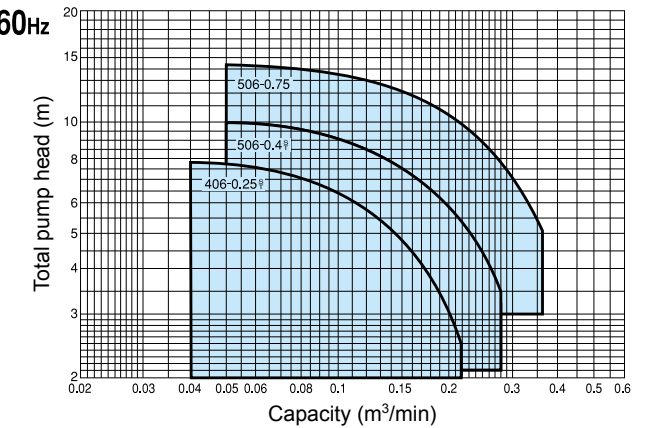
For Wastewater, 2 poles

Selection

50Hz



60Hz



Application For drainage of wastewater, septic tank sump, dirty sump and spring water

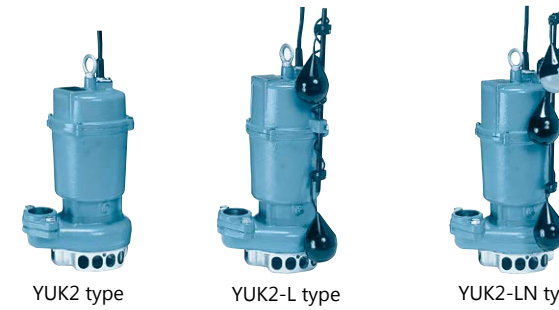
- Features**
- Semi-open stainless steel impeller prevents foreign objects from clogging.
 - Significantly improved ability to pass foreign objects.
 - Safety device (auto-cut) activates at overload and during restraint operation and prevents motor burnout.
 - Can be combined with a plastic pedestal support (special accessory).

Types

Operation method	Model
Non-automatic	YUK2 type
Automatic	YUK2-L type
Auto alternate	YUK2-LN type

Ability to pass foreign objects

Bore (mm)	Diameter of foreign objects (sphere) (mm)
40	20
50	20



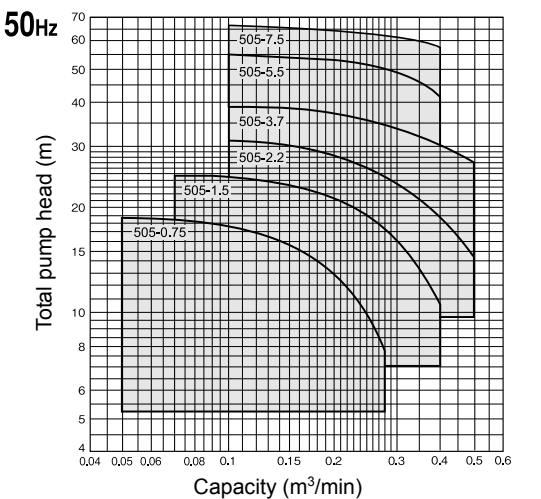
YUK2 type YUK2-L type YUK2-LN type

SU4 type

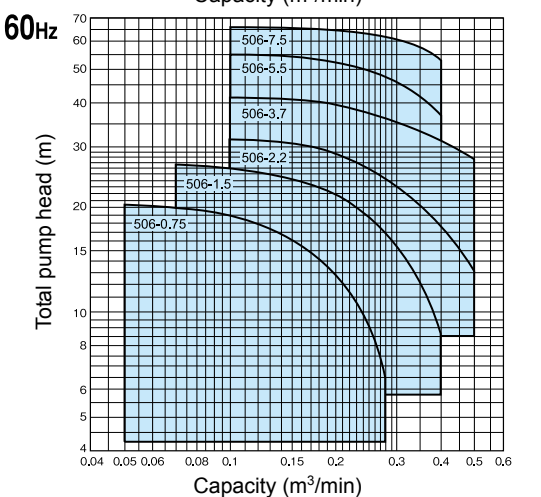
For Wastewater, 2 poles

Selection

50Hz



60Hz



Application For drainage of wastewater, septic tank sump, rain water and spring water sump

- Features**
- Closed impeller made of Bronze* provides excellent pumping performance without startup failures due to rusted impellers.
 - Equipped with a motor with built-in auto-cut to prevent motor burnout.
 - Attached with a special strainer to prevent suction of foreign objects.
 - The flange is attached with a pedestal support to avoid excess load to be applied to the pump.
 - Two types available: flange type and pedestal support type for easy maintenance and inspection.
 - Some models with output of 3.7kW or less are available with a float switch (automatic, auto alternate built-in).

* 5.5kW and 7.5kW model adopt Stainless cast steel (304)

Types

Operation method	Model
Non-automatic	SU4 type
Automatic	SU4-L type
Auto alternate	SU4-LN type



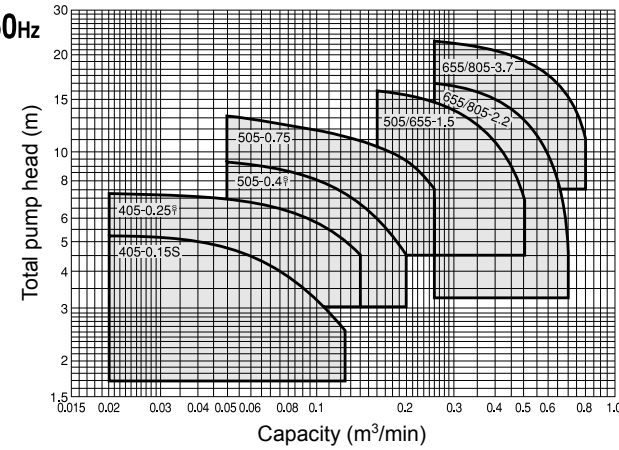
SU4 type SU4-L type SU4-LN type SU4 type (pedestal support type)

Reinforced plastic WUO(3)-G type

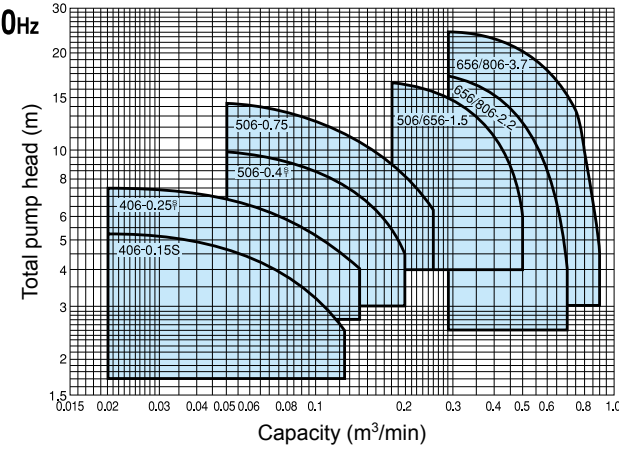
For Sewage, 2 poles

Selection

50Hz



60Hz



Application For drainage of sewage and wastewater, and for drainage of septic tank sump

- Features**
- 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.
 - Vortex type and excellent performance to pass foreign objects.
 - Can be combined with a plastic pedestal support (special accessory).
 - Starting/stopping water levels are adjustable in L and LN types.

Types

Operation method	Model
Non-automatic	WUO(3)-G type
Automatic	WUO(3)-LG type
Auto alternate	WUO(3)-LNG type

Ability to pass foreign objects

Bore (mm)	Diameter of foreign objects (sphere) (mm)
40	35
50	35
65	35 (40 for 2.2kW or above)
80	40



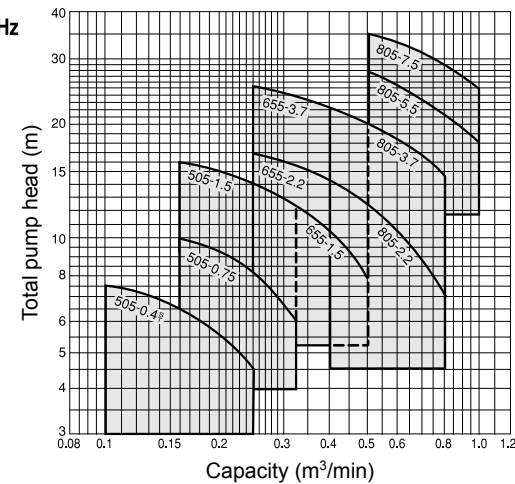
WUO(3)-G type WUO(3)-LG type WUO(3)-LNG type

ZU³ type

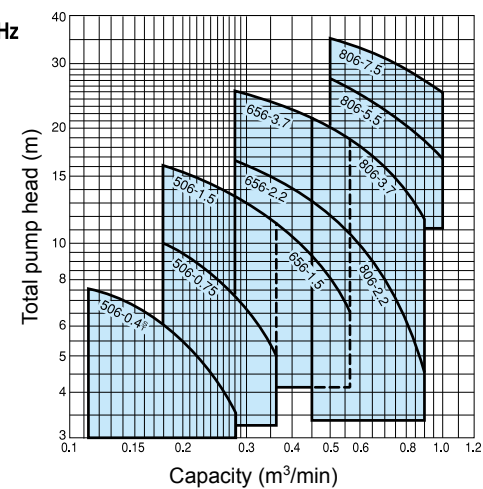
For Sewage, 2 poles

Selection

50Hz



60Hz



Application Sewage and wastewater with solids

- Features**
- The S-shaped impellers provides excellent ability to pass foreign objects.
 - The pump is free from forming air pocket behind impeller.
 - Equipped with a motor with built-in auto-cut to prevent motor burnout.
 - ZUJ type is equipped with a pedestal support for easy maintenance and inspection.
 - Some models with output of 3.7kW or less are available with a float switch (automatic, auto alternate built-in).

Types

Operation method	Model
Non-automatic	ZU3 type, ZUJ type (with pedestal support)
Automatic	ZU3-L type, ZUJ-L type (with pedestal support)
Auto alternate	ZU3-LN type, ZUJ-LN type (with pedestal support)

Ability to pass foreign objects

Bore (mm)	Diameter of foreign objects (sphere) (mm)	Size of cloth (mm)
50	35	200×200
65	35	300×300
80	40	300×450



ZU3 type ZU3-L type ZU3-LN type ZUJ type*

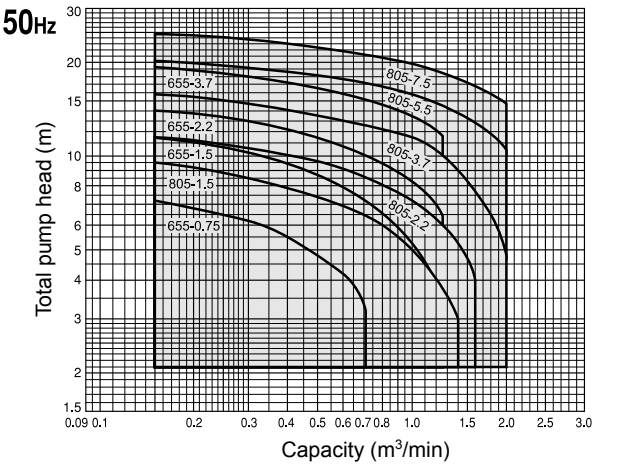
*-L and -LN types are also available with a float switch.

High-efficiency non-clog impeller BUW type

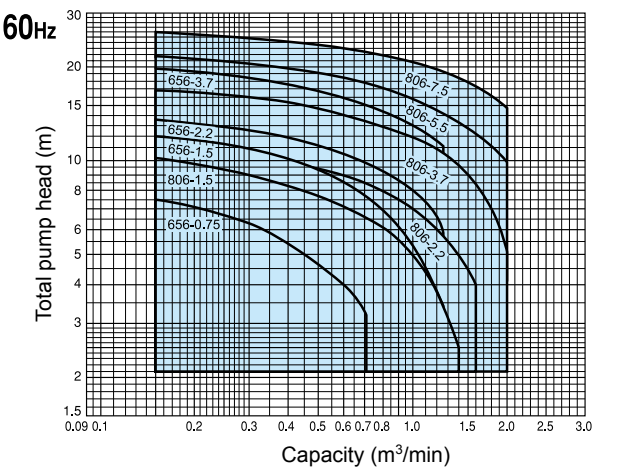
For Sewage, 4 poles

Selection

50Hz



60Hz



Application For drainage of sewage and wastewater, discharge of sump from buildings, factories, hospitals, apartments, etc.

- Features**
- The ability to pass foreign objects is 100% of the bore size (can discharge spherical solids with a diameter which equals to the bore size).
 - The closed-type, high-efficiency, non-clog impeller (patent pending) and our original casing structure provide high pumping performance with high efficiency.
 - Uses highly corrosion proof stainless steel for the impeller.
 - Equipped with a motor with built-in auto-cut to prevent motor burnout.
 - Two types available: flange type and pedestal support type for easy maintenance and inspection.

Types

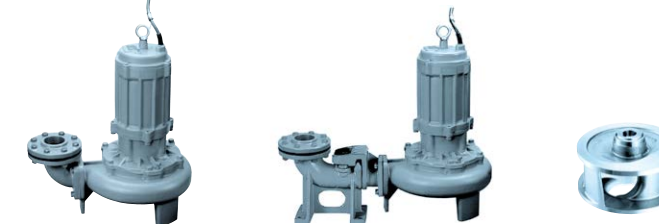
Non-automatic

Ability to pass foreign object

Bore (mm)	Diameter of foreign objects (sphere) (mm)
65	65
80	80



High efficiency & 100% size of the bore object passage



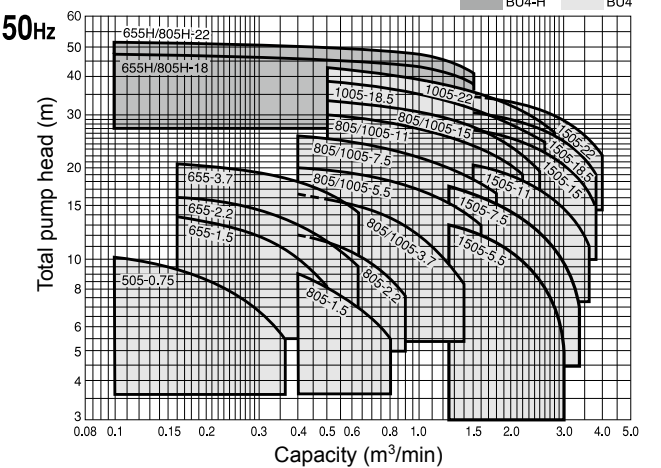
Flange type Pedestal support type Impeller

BU4 type

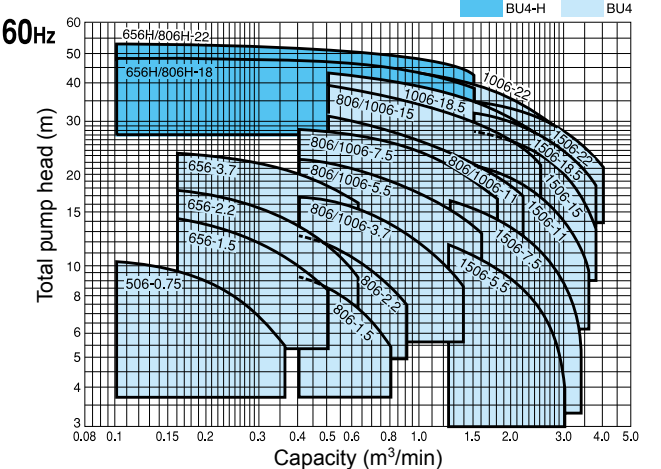
For Sewage, 4 poles

Selection

50Hz



60Hz



Application For discharge of sewage and wastewater

- Features**
- The closed-type non-clog impeller and our original casing structure (patented) provide high pumping performance.
 - Equipped with a motor with built-in auto-cut (7.5kW or less) to prevent motor burnout. Motor with output of 11kW or above can detect abnormal temperature rise of the motor coil as an external signal.
 - Two types available: flange type and pedestal support type for easy maintenance and inspection.
 - Some models with output of 3.7kW or less are available with a float switch (automatic, auto alternate built-in).
 - High pressure model BU4-H type is also available.

Types

Operation method	Model
Non-automatic	BU4 type
Automatic	BU4-L type
Auto alternate	BU4-LN type

Ability to pass foreign object

Bore (mm)	Diameter of foreign objects (sphere) (mm)	Size of cloth (mm)
50	35	300×300
65	35	300×450
80	53	1.5kW: 300×450 2.2-3.7kW: 300×900 5.5-22kW: 200×300*
150	53	

* With restart



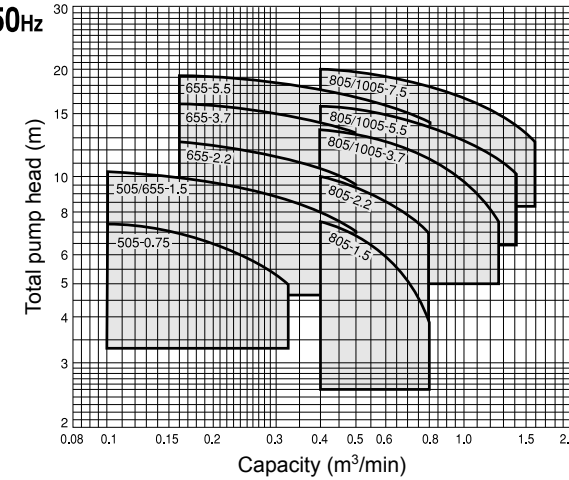
BU4 type BU4-L type BU4-LN type BU4 type (pedestal support type)

Vortex with cutter AU4 type

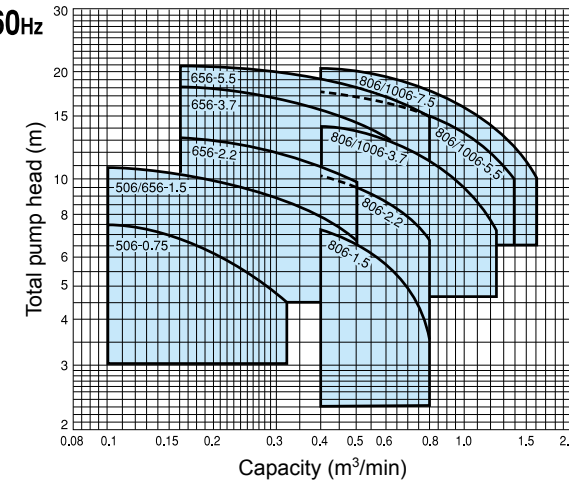
For Sewage, 4 poles

Selection

50Hz



60Hz



Application For drainage from sewage tanks, kitchens, and drainage of other sewage and wastewater

- Features**
- ① The ceramic-coated cutter piece help maintain long service life with excellent performance.
 - ② Original suction configuration (patented) and casing structure.
 - ③ Equipped with a motor with built-in auto-cut to prevent motor burnout.
 - ④ Two types available: flange type and pedestal support type for easy maintenance and inspection.
 - ⑤ Some models with output of 3.7kW or less are available with a float switch (automatic, auto alternate built-in).

Types

Operation method	Model
Non-automatic	AU4 type
Automatic	AU4-L type
Auto alternate	AU4-LN type

Ability to pass foreign objects

Bore (mm)	Solid object (sphere diameter (mm))	Cutttable cloth
50	17	0.75kW: Panty hose 1.5kW: Towel (300x450mm) 2.2kW and above: Towel (300x900mm)
65	17	
80	24 (2.2kW or less)	In addition to the above, cotton gloves, packaging tapes, plastic bags, etc. can also be cut.
	26 (3.7kW or above)	
100	26	

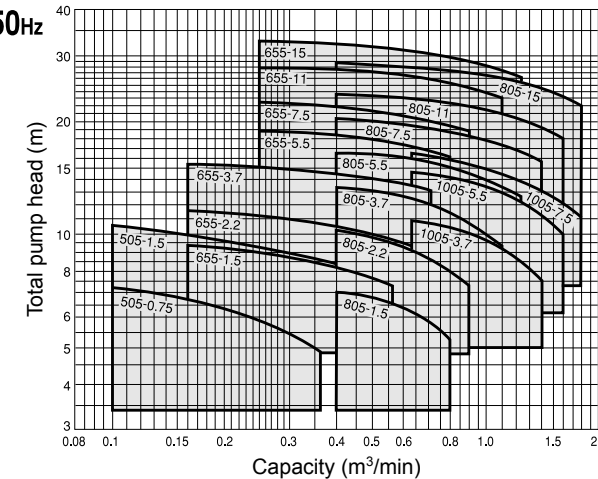


Vortex type VU4 type

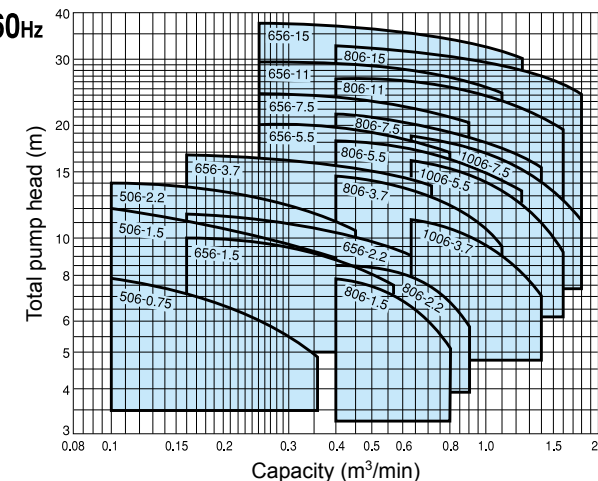
For Sewage, 4 poles

Selection

50Hz



60Hz



Application For discharge of sewage and wastewater

- Features**
- ① Excellent ability to pass foreign objects without entangling. (Can discharge spherical solids with a diameter which equals to the bore size.)
 - ② Our original casing structure (patented) provides excellent pumping performance.
 - ③ Equipped with a motor with built-in auto-cut (7.5kW or less) to prevent motor burnout.
 - ④ Motor with output of 11kW or above can detect abnormal temperature rise of the motor coil as an external signal.
 - ⑤ Two types available: flange type and pedestal support type for easy maintenance and inspection. Some models with output of 3.7kW or less are available with a float switch (automatic, auto alternate built-in).

Types

Operation method	Model
Non-automatic	VU4 type
Automatic	VU4-L type
Auto alternate	VU4-LN type

Ability to pass foreign objects

Bore (mm)	Solid Sphere diameter (mm)	Packaging tape	Cotton gloves	Panty hose
50	50	400mm or smaller (OK with restart for 0.75kW and 50Hz, 1.5kW)	○	○
65	65			
80	80	OK with restart for 1.5kW or less	○	○
100	100			



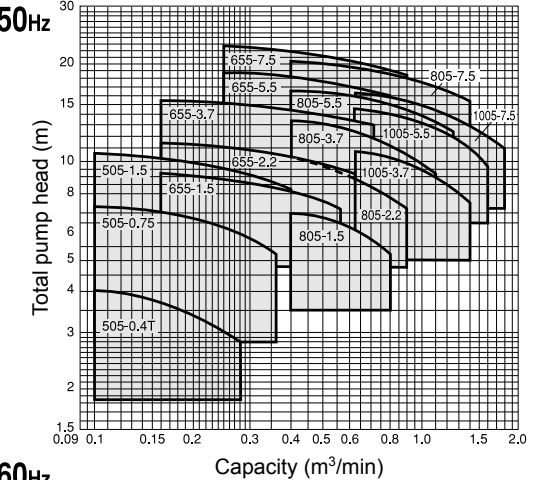
Special specification Stainless steel impeller

Stainless Steel, Vortex type VUS type

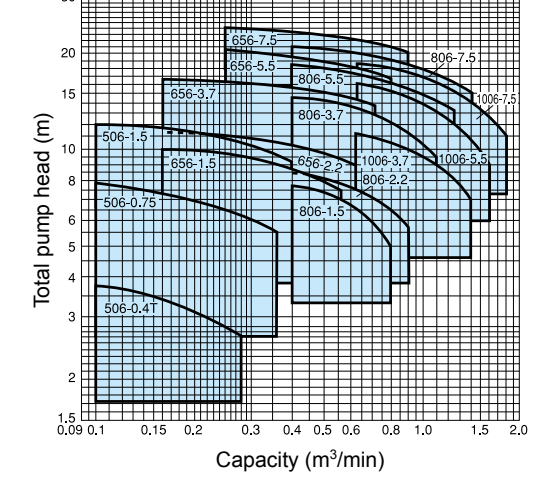
For Sewage, 4 poles

Selection

50Hz



60Hz



Application For discharge of sewage and wastewater from buildings, factories, hospitals, apartments, etc.

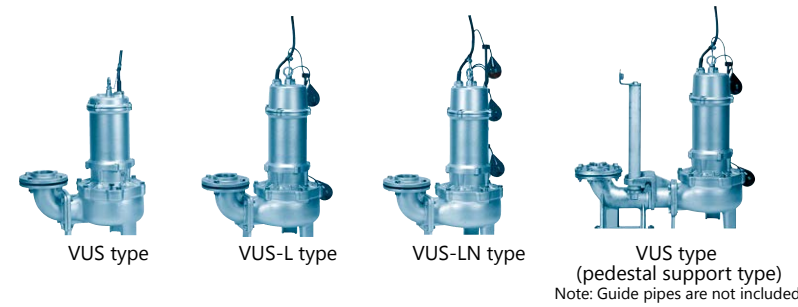
- Features**
- ① All stainless steel structure (pump, motor, pedestal support) provides corrosion proof and long life.
 - ② Excellent ability to pass foreign objects (can discharge spherical solids with a diameter which equals to the bore size) and superior pumping performance.
 - ③ Vortex type increases resistant against wearing due to sand etc., and reverts startup failure due to rusted impellers.
 - ④ Equipped with a motor with built-in auto-cut to prevent motor burnout.
 - ⑤ Two types available: flange type and pedestal support type for easy maintenance and inspection.

Types

Operation method	Model
Non-automatic	VUS type
Automatic	VUS-L type
Auto alternate	VUS-LN type

Ability to pass foreign objects

Bore (mm)	Solid Sphere diameter (mm)	Packaging tape	Cotton gloves	Panty hose
50	50	400mm or smaller (OK with restart for 0.75kW and 50Hz, 1.5kW)	○	○
65	65			
80	80	OK with restart for 1.5kW or less	○	○
100	100			



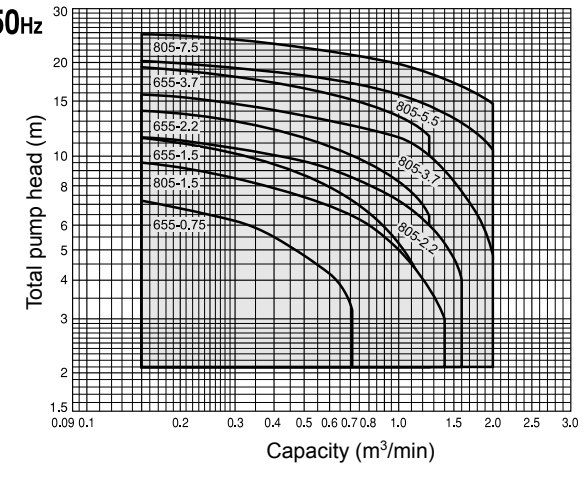
Special specification With flood detector Please inquire for details.

High-efficiency non-clog impeller BUM type

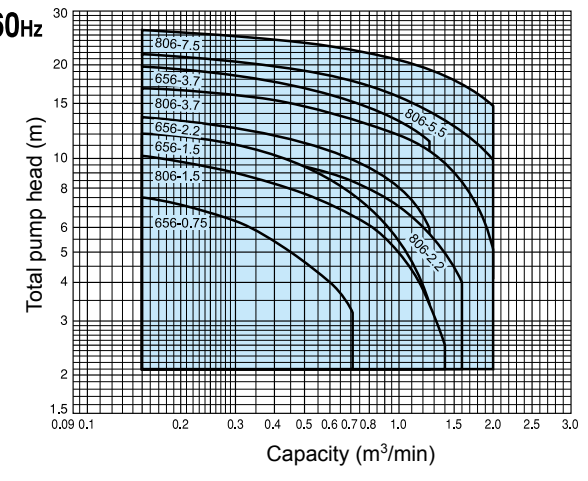
For Manholes, 4 poles

Selection

50Hz



60Hz



Application Submersible sump pumps for manholes installed as relay pumps for sewage main piping and sewage treatment facilities such as for sewage relay and drainage of sump from agricultural communities.

- Features**
- ① The ability to pass foreign objects is 100% of the bore size (can discharge spherical solids with a diameter which equals to the bore size).
 - ② The closed-type, high-efficiency, non-clog impeller (patent pending) and our original casing structure provide high pumping performance with high efficiency.
 - ③ Combination of a prewhirl tank and a pump with bell mouth allows operation up to low residual water level, while discharging suspended particles and suppressing scum and bad smell.
 - ④ Control panel for manhole pumps and necessary parts are also available as special accessories.

Ability to pass foreign objects

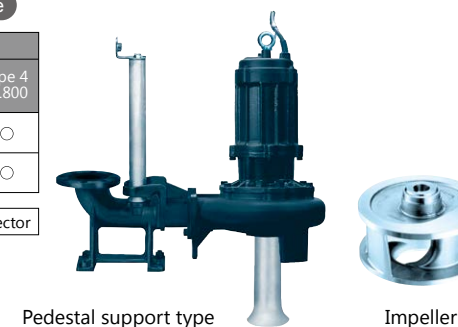
100% of the bore (sphere diameter in mm)



Pump/manhole combination table

Pump Bore (mm)	Manhole (size)			
	Type 1 φ900	Type 2 φ1200	Type 3 φ1500	Type 4 φ1800
65	○	○	○	○
80	○	○	○	○

Special specification With flood detector



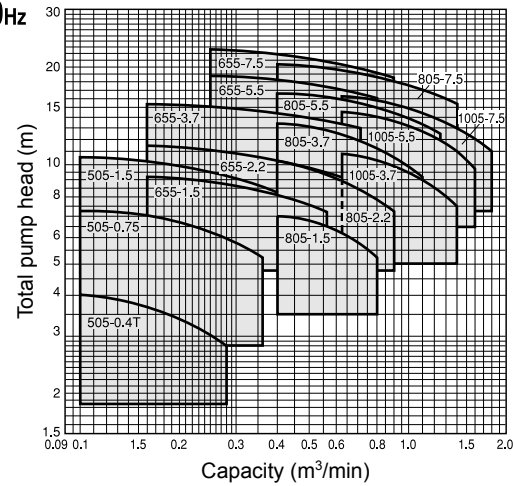
Note: Guide pipes are not included.

Stainless steel made vortex type

VUM type

For Manhole, 4 poles

Selection 50Hz



Application Submersible sump pumps for manholes installed as relay pumps for sewage main piping and sewage treatment facilities such as for sewage relay and drainage of sump from agricultural communities.

- Features**
- ① Stainless steel made precision casting (SCS) is used in the pump and pedestal support, which gives features of high corrosion proof and durable with long service life.
 - ② The sump pump is a vortex type with non-blocking feature, with a 4-pole motor with a large starting torque. (Can discharge spherical solids with a diameter which equals to the bore size.)
 - ③ Combination of a prewhirl tank and a pump with bell mouth allows operation up to low residual water level, while discharging suspended particles and suppressing scum and bad smell.

Standard accessories Stainless steel sump pump, stainless steel bell mouth, stainless steel pedestal support, stainless steel direct coupling straight pipe, stainless steel chain

Ability to pass foreign objects

100% of the bore (sphere diameter in mm)

Pump/manhole combination table

Pump Bore (mm)	Manhole (size)			
	Type 1 φ900	Type 2 φ1200	Type 3 φ1500	Type 4 φ1800
50	○	○	○	
65		○	○	○ (3.7kW or above)
80		○	○	○
100			○	○



Note: Guide pipes are not included.

Separately sold parts

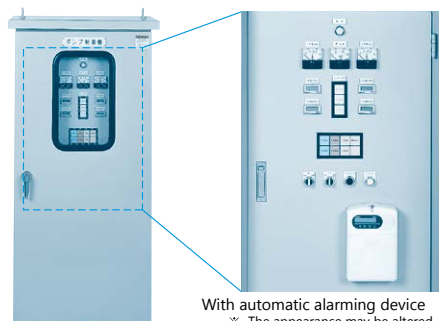
Control panel for ECM2 type manhole pump

Features

- Easy installation of pole mounting. (Outdoor specification with lock)
- Supports throw-in water level gauges and float switches in standard models.
- Standard models also support voltmeters, ammeters and earth leakage circuit breakers as well as support of accumulated operation time and number, and phase advance capacitor.
- Equipped with an abnormal water level detector function.
- Equipped with a connection terminal for in-house power generation in case of power outage.
- Control panels with automatic alarming device are available as a variation. (Standard models have an installation space.)

Specifications

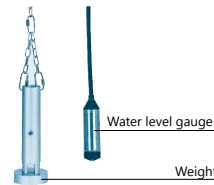
Model	ECM-2-A type	ECM-2-P type
Operation method	Alternate	Alternate/Parallel
Rated capacity	0.4 - 7.5kW	0.4 - 7.5kW×2
Panel display	Instruments	Voltmeter, ammeter, operation counter, operation timer (instruments other than the voltmeter are separate)
	Indicator light	Operation, stop, fault (separate) Manhole water level (HH, H, L level), abnormal high water level
External dimensions (max.)	1400×700×350mm (length × width × depth)	
Applicable pole for installation	φ170 - 400mm (Installation metal fitting for φ170 - 230mm) (Installation metal fitting for φ230 - 300mm) (Installation metal fitting for φ300 - 400mm)	



With automatic alarming device
※ The appearance may be altered.

Water level gauge (throw-in)

With weight (6m SUS chain)



Sump check valve

Nylon coated valve
(Please inquire for stainless steel valves.)



Check valve

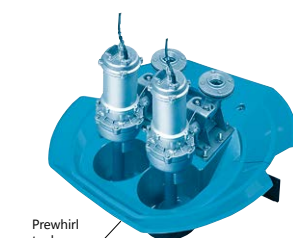
Float switch (EHF5-S type)

For backup



Inflow baffle (stainless steel)

Prewirl tank



Prewirl tank

Ball valve (stainless steel)

· Please inquire for details.

Special accessories

Hose Coupling (bamboo shoot shaped) Plastic

● For WUP3 type



Bore mm	Name
32	32A Hose coupling
40	40A Hose coupling
50	50A Hose coupling

Pedestal Support Plastic

● For WUP3-G, WUO(3)-G, YUK2 type



Bore mm	Model	Note
40	UJP-40-5K	—
50	UJP-50-5K	0.75kW or less
	UJP-50-7K	1.5kW
65	UJP-65-7K	1.5kW
	UJP-65B-7K	2.2, 3.7kW
80	UJP-80-7K	—

Includes a rope for hanging the pump.

Float Switch



EHF5-4 type



EHF5-1 type
(For seawater model is also available)



Attachable to 2 poles manual type wastewater pump 0.75kW or less

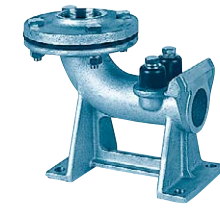
EHFR type [Low water level control space saving model]
(Example of combination with WUP type)

Sump Check valve



- Nylon coated
- Install on a vertical pipeline.
- JIS IOK thin flange
- Operation pressure: 0.29MPa (3kgf/cm²) or less

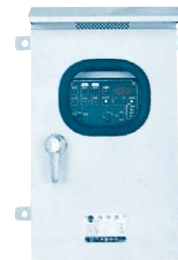
Stainless Steel Pedestal Support



Control Panel



ECD3-P type



ECDW3-P type

- Control panel with a microcomputer for submersible sump pumps ensures control and protection.
- Control panels for indoor and outdoor are available for individual operation, and control panels for indoor and outdoor (with a pole) are available for auto alternate/parallel operation.
- Control panel specifications include standard specifications and also special specifications are available.
- Alternate/parallel type equips ELB as standard

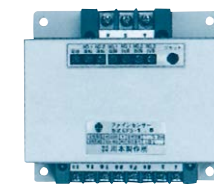
Full water alarm panel



EBA-1/2 type

- Sends out an alarm with a buzzer and lamp and also outputs a signal of no external voltage at abnormal water level (full water).

Sump Pump Defect Detector



EFS type

- Float switch fault, lock due to foreign objects, no power transmission due to tripped earth leakage breaker, and pump fault are identified and displayed by LED.
- Applicable pump
Submersible sump pump with a float switch for three phase 200V

Type	ECD2 type (indoor)	ECDW type (outdoor)	ECD3-P type (indoor)	ECDW3-P type (outdoor)	ECD3-P type (outdoor with a pole)
Control method	ON-OFF control by input from the float switch				
Operation method	Individual		Alternate/Parallel		
Rated capacity	0.15kW ~ 7.5kW		0.15kW ~ 7.5kW × 2		
Rated voltage	Singlephase 100V : 0.15kW ~ 0.4kW Three phase 200V : 0.25kW ~ 7.5kW				
Protection function (※1)	Overcurrent protection, magnet switch fault detection		Phase failure, reverse phase, overcurrent protection, magnet switch fault detection		
Display	Power indicator light	○ (White)	○ (White)		
	Operation indicator light	○ (Red)	○ (Red) : No1, No2 Individual indication		
	Fault indicator light	○ (Orange)	○ (Orange) : No1, No2 Individual indication		
	Reverse phase indicator light	—	○ (Orange) : For three phase 200V only		
	Abnormal water pressure indicator light	○ (Orange)	○ (Orange)		
External signal (no voltage)	Pump selection indicator light	—	○ (Red) : No1, No2		
	Ammeter	○ (Analog)	○ (Digital, with 3-digit display)		
	Operation	○ (※2)	○ (Collective)		
	Fault	○ (※3)	○ (Collective)		
Water level	○ (※3)				
Alarm buzzer	○		○		

(※1) Detected by the microcomputer in the control panel. Phase failure and reverse phase are for three phase 200V only.
(※2) Auxiliary contact output of the magnet switch. (※3) Output collectively as an alarm output.

DUG2/DU₄²/DUM2 type

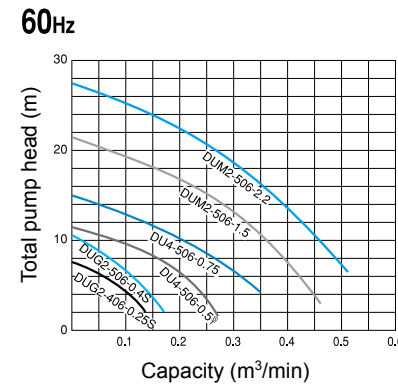
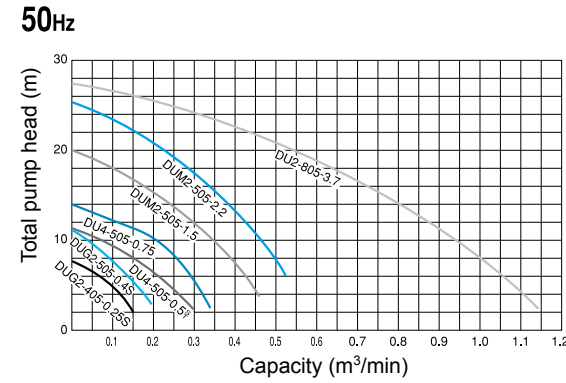
For Construction

Application For general civil engineering and construction works, and drainage from pits, manholes, etc.

- Features**
- ① Uses semi-open impeller to avoid clogging by foreign objects.
 - ② Small size and light weight enable easy handling, maintenance and inspection.
 - ③ Equipped with a motor with built-in auto-cut to prevent motor burnout.



Selection



LU2 type

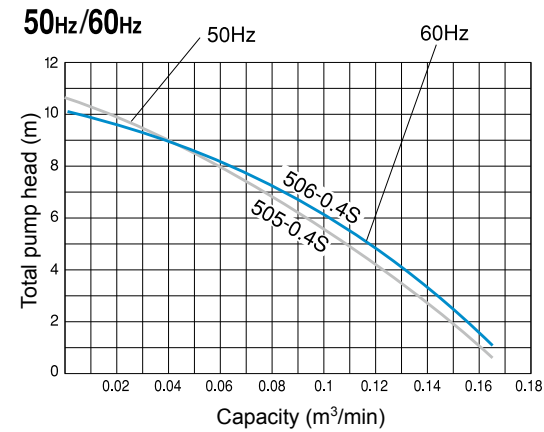
For Residual water

Application For drainage of bottom water from water receiving tank cleaning and residual water of various pits, pools, etc.

- Features**
- ① Residual water sump pump with excellent drainage performance, with the minimum pumping water level in millimeter order. (The minimum pumping water level varies depending on the bottom surface conditions. 1 - 3mm)
 - ② In-pump air separation mechanism prevents air lock and improves re-pumping performance.
 - ③ Uses aluminum frame motor to realize a light and compact design which is easy to carry. (Mass: 8.0kg)
 - ④ Equipped with a small powerful motor with built-in auto-cut to prevent motor burnout.



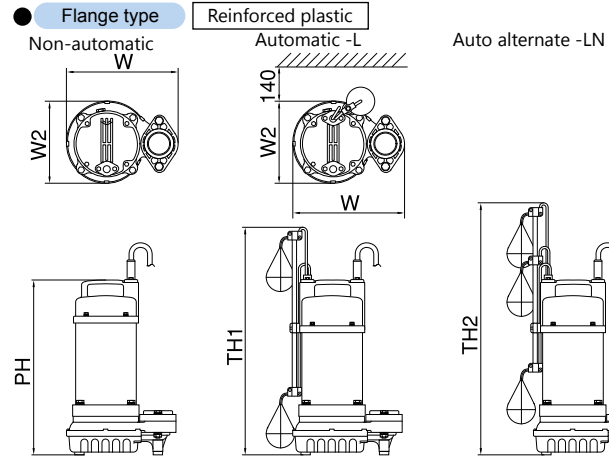
Selection



Submersible Sump Pump Outline Dimension (The diagrams are for reference only) Please request a delivery specification when planning installation.

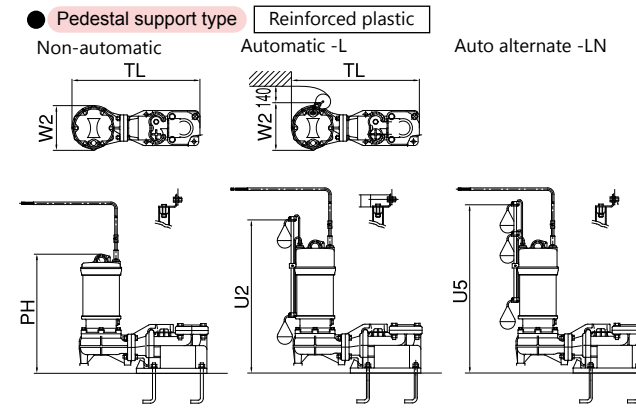
Model description(Example)
WUP3-405-0.25SL

- ① Pump model
- ② Bore (mm)
- ③ Frequency (5:50Hz 6:60Hz)
- ④ Motor output (kW)
- ⑤ Power (S : Single phase supply T or no letter : Three phase)
- ⑥ Operation method (No letter : Non-automatic L : Automatic L N : Auto alternate built-in)

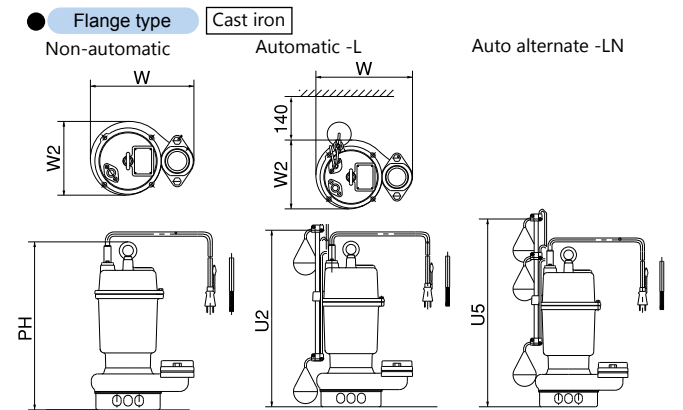


	Bore	Model	PH	TH1	TH2	W	W2
WUP3 type M	32	WUP3-325/6-0.15SG	320	—	—	210	143
	40	WUP3-405/6-0.25SG	330	—	—	210	143
	50	WUP3-505/6-0.4SG	355	—	—	234	170
WUP3-L(N) type A	32	WUP3-325/6-0.15SL(N)G	374	510	545	210	143
	40	WUP3-405/6-0.25SL(N)G	374	494	529	210	143
	50	WUP3-505/6-0.4SL(N)G	375	505	540	234	170
WUZ2-3 type M	32	WUZ3-325/6-0.15SG	345	—	—	210	143
	40	WUZ3-405/6-0.25TG	345	—	—	210	143
	50	WUZ3-505/6-0.4TG	370	—	—	234	170
WUZ2-3-L(N) type A	32	WUZ3-325/6-0.15SL(N)G	399	535	570	210	143
	40	WUZ3-405/6-0.25SL(N)G	399	519	554	210	143
	50	WUZ3-505/6-0.4SL(N)G	390	515	550	234	170
WUO3(3) type M	40	WUO3-405/6-0.25S	370	—	—	208	138
	50	WUO3-505/6-0.4SG	385	—	—	228	158
	65	WUO3-655/6-3.7	551	—	—	372	216
WUO3-L(N) type A	40	WUO3-405/6-0.25TL(N)G	414	550	585	208	138
	50	WUO3-505/6-0.4TL(N)G	410	535	570	228	158
	65	WUO3-655/6-3.7TL(N)G	549	750	810	372	216

M : Manual operation
A : Automatic (Alternate) operation



	Bore	Model	PH	TH1	TH2	TL	W2
WUO(3) type M	50	WUO-505/6-1.5	473	—	—	512	179
	65	WUO-655/6-2.2	540	—	—	552	216
	80	WUO-805/6-3.7	577	—	—	552	216
WUO3-L(N) type A	50	WUO-505/6-1.5L(N)G	528	630	690	512	191
	65	WUO-655/6-2.2L(N)G	575	776	836	552	216
	80	WUO-805/6-3.7L(N)G	612	776	836	552	216

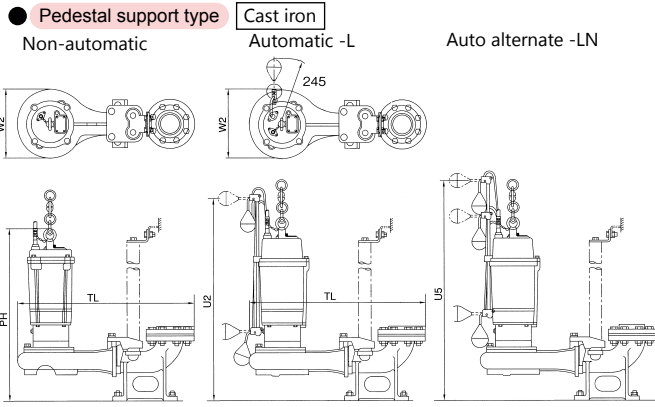


	Bore	Model	PH	U2	U5	W	W2
YUK2 type M	40	YUK2-405/6-0.25S	387	—	—	216	158
	50	YUK2-505/6-0.4S	422	—	—	242	172
	65	YUK2-655/6-3.7	592	—	—	352	268
YUK2-L(N) type A	40	YUK2-405/6-0.25SL(N)G	422	435	485	216	158
	50	YUK2-505/6-0.4SL(N)G	434	450	500	242	172
	65	YUK2-655/6-3.7SL(N)G	592	605	680	372	234
SU4 type M	40	SU4-505/6-0.75	375	—	—	255	162
	50	SU4-505/6-1.5	420	—	—	270	200
	65	SU4-655/6-3.7	550	—	—	372	234
SU4-L(N) type A	40	SU4-505/6-0.75L(N)G	420	500	560	255	162
	50	SU4-505/6-1.5L(N)G	480	515	575	270	200
	65	SU4-655/6-3.7L(N)G	605	680	750	372	234
ZU3 type M	40	ZU3-505/6-0.4S	456	—	—	249	181
	50	ZU3-505/6-0.75	492	—	—	274	190
	65	ZU3-655/6-3.7	592	—	—	352	268
ZU3-L(N) type A	40	ZU3-505/6-0.4SL(N)G	456	510	570	249	181
	50	ZU3-505/6-0.75L(N)G	442	510	570	254	190
	65	ZU3-655/6-3.7L(N)G	647	720	790	352	268

M : Manual operation
A : Automatic (Alternate) operation

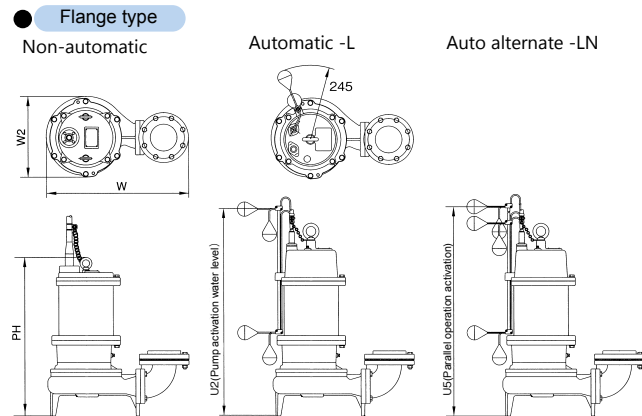
* DUG2/DU₄²/DUM2 type and LU2 type are portable submersible sump pump for construction and submersible sump pump for residual water. Do not use them in long continuous operation or under an installation condition where the pump is completely under water at all times. The pump may break in short time.

Submersible Sump Pump Outline Dimension (The diagrams are for reference only) Please request a delivery specification when planning installation.



Type	Bore	Dimensions					
		Model	PH	U2	U5	TL	W2
SU4 type M	50	SU4-505/6-0.75	403	—	—	477	162
		SU4-505/6-1.5	443	—	—	489	200
		SU4-505/6-2.2	585	—	—	585	234
SU4-L(N) type A	50	SU4-505/6-3.7	585	—	—	585	234
		SU4-505/6-0.75L(N)	448	528	588	477	162
		SU4-505/6-1.5L(N)	503	528	599	489	200
ZUJ type M	50	ZUJ-505/6-2.2L(N)	640	715	785	585	234
		ZUJ-505/6-3.7L(N)	640	715	785	585	234
		ZUJ-505/6-0.4S	496	—	—	493	181
ZUJ-L(N) type A	50	ZUJ-505/6-0.4T	434	—	—	493	181
		ZUJ-505/6-0.75	437	—	—	518	190
		ZUJ-505/6-1.5	497	—	—	624	222
ZUJ type M	65	ZUJ-655/6-1.5	497	—	—	624	222
		ZUJ-655/6-2.2	660	—	—	722	268
		ZUJ-655/6-3.7	660	—	—	722	268
ZUJ-L(N) type A	65	ZUJ-655/6-5.5	693	—	—	751	317
		ZUJ-655/6-7.5	693	—	—	751	317
		ZUJ-655/6-0.4SL(N)	496	550	610	493	181
ZUJ-L(N) type A	50	ZUJ-505/6-0.4TL(N)	496	550	610	493	181
		ZUJ-505/6-0.75L(N)	482	550	610	518	190
		ZUJ-505/6-1.5L(N)	557	590	650	624	222
ZUJ-L(N) type A	65	ZUJ-655/6-1.5L(N)	557	590	650	624	222
		ZUJ-655/6-2.2L(N)	715	790	860	722	268
		ZUJ-655/6-3.7L(N)	715	790	860	722	268
ZUJ-L(N) type A	80	ZUJ-805/6-2.2L(N)	715	790	860	722	268
		ZUJ-805/6-3.7L(N)	715	790	860	722	268
		ZUJ-805/6-5.5	715	790	860	722	268

M : Manual operation U2 : (Pump activation water level)
A : Automatic (Alternate) operation U5 : (Parallel operation activation)



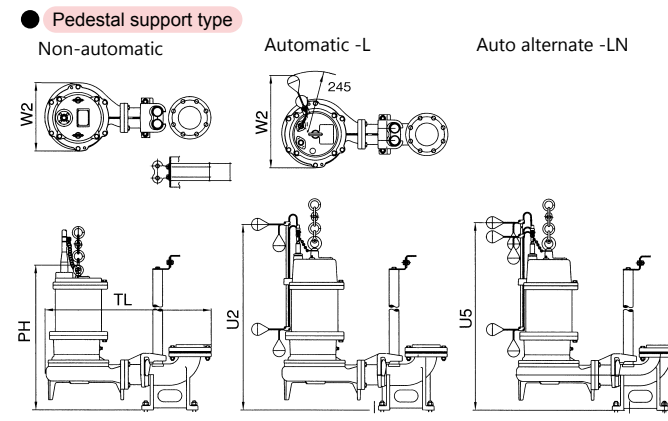
Type	Bore	Dimensions					
		Model	PH	U2	U5	W	W2
AU4 type M	50	AU4-505/6-0.75	484	—	—	379	232
		AU4-505/6-1.5	535	—	—	423	242
		AU4-505/6-2.2	624	—	—	460	266
AU4-L(N) type A	50	AU4-505/6-3.7	634/624	—	—	526/460	309/266
		AU4-505/6-5.5	658	—	—	500	309
		AU4-805/6-1.5	557/562	—	—	464/432	264/237
AU4-L(N) type A	80	AU4-805/6-2.2	636	—	—	464/432	264/237
		AU4-805/6-3.7	656	—	—	546	300
		AU4-805/6-5.5	680	—	—	589/546	339/300
AU4-L(N) type A	100	AU4-1005/6-7.5	680	—	—	558	300
		AU4-1005/6-5.5	680	—	—	601/558	339/300
		AU4-1005/6-3.7	680	—	—	601	339
AU4-L(N) type A	50	AU4-505/6-0.75L(N)	534	603	663	379	232
		AU4-505/6-1.5L(N)	585	614	674	423	242
		AU4-505/6-2.2L(N)	679	758	828	460	266
AU4-L(N) type A	65	AU4-655/6-3.7L(N)	689/679	768/758	838/828	526/460	309/266
		AU4-655/6-5.5L(N)	607/612	636	706	464/431	264/237
		AU4-655/6-7.5L(N)	691	786	856	464/431	264/237
AU4-L(N) type A	80	AU4-805/6-2.2L(N)	711	806	846	546	300
		AU4-805/6-3.7L(N)	711	806	846	546	300
		AU4-1005/6-3.7L(N)	711	806	846	558	300

M : Manual operation U2 : (Pump activation water level)
A : Automatic (Alternate) operation U5 : (Parallel operation activation)

Type	Bore	Dimensions					
		Model	PH	U2	U5	W	W2
BU4 type M	50	BU4-505/6-0.75	499	—	—	401	242
		BU4-655/6-1.5	549	—	—	470	273
		BU4-655/6-2.2	633	—	—	537/502	323/304
	65	BU4-655/6-3.7	633	—	—	537/502	323/304
		BU4-805/6-1.5	574	—	—	501/466	289/259
		BU4-805/6-2.2	653	—	—	501/466	289/259
	80	BU4-805/6-3.7	663	—	—	572	332
		BU4-805/6-5.5	687	—	—	603	358
		BU4-805/6-7.5	687	—	—	603	358
	100	BU4-1005/6-11	760	—	—	675	420
		BU4-1005/6-15	810	—	—	675	420
		BU4-1005/6-3.7	663	—	—	584	332
	150	BU4-1005/6-5.5	687	—	—	616	358
		BU4-1005/6-7.5	687	—	—	616	358
		BU4-1005/6-11	760	—	—	689	420
BU4-H type M	65	BU4-655/6-18H	897	—	—	725	481
		BU4-655/6-22H	897	—	—	725	481
		BU4-805/6-18H	897	—	—	725	481
	80	BU4-805/6-22H	897	—	—	725	481
		BU4-805/6-18H	897	—	—	725	481
		BU4-805/6-22H	897	—	—	725	481
	100	BU4-1005/6-0.75L(N)	549	618	678	401	242
		BU4-655/6-1.5L(N)	599	628	688	470	273
		BU4-655/6-2.2L(N)	688	767	837	537/502	323/304
	150	BU4-655/6-3.7L(N)	688	767	837	537/502	323/304
		BU4-805/6-1.5L(N)	624	653	713	501/466	289/259
		BU4-805/6-2.2L(N)	708	787	857	501/466	289/259
	200	BU4-805/6-3.7L(N)	718	797	867	572	332
		BU4-1005/6-3.7L(N)	718	797	867	584	332
		BU4-1005/6-5.5	602	—	—	454	237
250	BUW655/6-0.75	602	—	—	506	290	
	BUW655/6-1.5	634	—	—	506	290	
	BUW655/6-2.2	708	—	—	560	344	
300	BUW655/6-3.7	708	—	—	560	344	
	BUW805/6-1.5	672	—	—	520	256	
	BUW805/6-2.2	746	—	—	583	312	
350	BUW805/6-3.7	746	—	—	583	312	
	BUW805/6-5.5	771	—	—	642	379	
	BUW805/6-7.5	771	—	—	642	379	
VU4 type M	50	VU4-505/6-0.75	513	—	—	377	232
		VU4-505/6-1.5	553	—	—	416	262
		VU4-506-2.2	632	—	—	416	262
	65	VU4-655/6-1.5	590	—	—	456/423	262/232
		VU4-655/6-2.2	669	—	—	456/423	262/232
		VU4-655/6-3.7	669	—	—	500	303
	80	VU4-655/6-5.5	693	—	—	547/500	335/303
		VU4-655/6-7.5	693	—	—	547	335
		VU4-655/6-11	755	—	—	591	386
	100	VU4-655/6-15	805	—	—	591	386
		VU4-805/6-1.5	619	—	—	452	232
		VU4-805/6-2.2	698	—	—	495/452	267/232
	150	VU4-805/6-3.7	698	—	—	495	267
		VU4-805/6-5.5	722	—	—	551	304
		VU4-805/6-7.5	722	—	—	589/551	336/304
200	VU4-805/6-11	770/769	—	—	618/589	384/336	
	VU4-805/6-15	820	—	—	618	384	
	VU4-1005/6-3.7	735	—	—	527	267	
250	VU4-1005/6-5.5	761	—	—	570	311	
	VU4-1005/6-7.5	761	—	—	570	311	
	VU4-505/6-0.75L(N)	563	632	692	377	232	
300	VU4-505/6-1.5L(N)	603	632	692	416	262	
	VU4-506-2.2L(N)	687	632	692	416	262	
	VU4-655/6-1.5L(N)	640	669	729	456/423	262/232	
350	VU4-655/6-2.2L(N)	724	803	873	456/423	262/232	
	VU4-655/6-3.7L(N)	724	803	873	500	303	
	VU4-805/6-1.5L(N)	669	698	758	452	232	
400	VU4-805/6-2.2L(N)	753	832	902	495/452	267/232	
	VU4-805/6-3.7L(N)	753	832	902	495	267	
	VU4-1005/6-3.7L(N)	790	869	939	527	267	

Type	Bore	Dimensions					
		Model	PH	U2	U5	W	W2
VUS type M	50	VUS-505/6-0.4T	503	—	—	377	232
		VUS-505/6-0.75	503	—	—	377	232
		VUS-505/6-1.5	543	—	—	416	262
	65	VUS-655/6-1.5	580	—	—	456/423	262/232
		VUS-655/6-2.2	669	—	—	456/423	262/232
		VUS-655/6-3.7	669	—	—	500	302
	80	VUS-655/6-5.5	681	—	—	548/500	332/296
		VUS-655/6-7.5	681	—	—	548	332
		VUS-805/6-1.5	617	—	—	451	232
	100	VUS-805/6-2.2	698	—	—	495/451	267/232
		VUS-805/6-3.7	698	—	—	495	267
		VUS-805/6-5.5	710	—	—	551	304
	150	VUS-805/6-7.5	710	—	—	589/551	336/304
		VUS-1005/6-3.7	737	—	—	527	266
		VUS-1005/6-5.5	749	—	—	570	311
200	VUS-1005/6-7.5	749	—	—	570	311	
	VUS-505/6-0.4TL(N)	563	632	692	377	232	
	VUS-505/6-0.75L(N)	563	632	692	377	232	
250	VUS-505/6-1.5L(N)	603	632	692	416	262	
	VUS-655/6-1.5L(N)	638	669	729	456/423	262/232	
	VUS-655/6-2.2L(N)	724	803	873	456/423	262/232	
300	VUS-655/6-3.7L(N)	724	803	873	500	302	
	VUS-805/6-1.5L(N)	667	698	758	451	232	
	VUS-805/6-2.2L(N)	753	832	902	495/451	267/232	
350	VUS-805/6-3.7L(N)	753	832	902	495	267	
	VUS-1005/6-3.7L(N)	792/793	869	939	526/527	266	

M : Manual operation U2 : (Pump activation water level)
A : Automatic (Alternate) operation U5 : (Parallel operation activation)



Type	Bore	Dimensions					
		Model	PH	U2	U5	TL	W2
AU4 type M	50	AU4-505/6-0.75	512	—	—	574	232
		AU4-505/6-1.5	567	—	—	623	242
		AU4-655/6-1.5	567	—	—	633	242



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.

- Matters falling under the following may not be covered by the warranty: uses out of 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 (improper power source, foreign objects, sand etc.), non-compliance with laws and regulations or standards pertaining thereto, accidental or intentional damage or injury, replacement of consumable parts, defects due to resale, etc.
- Do not use the product for applications out of the product specifications. Doing so may cause electric shock, fire, water leakage, etc.
- Have spare equipment ready when using pumps for equipment for living things (fish farms, fish tanks, aquariums, etc.) or critical equipment.
- Pump failure may cause lack of oxygen and water quality deterioration, and may affect the lives of the living things.

When using pumps for equipment for living things (fish farms, fish tanks, aquariums, etc.), do not install the pump in the tank where the living things are put into. The current leakage or sealing liquid leak from the mechanical seal may cause the death of the living things.

- If used to transport food-related items, give due consideration to the materials used. Contamination by foreign objects may occur.
- Avoid using for living things which disagrees with copper alloy. It may affect the lives of the living things.
- Select a product which is appropriate for your application. Inappropriate use of products may cause accidents.
- Conduct construction in accordance with the applicable laws and regulations (the Technical Standards of Electric Installation, interior wiring regulation, Building Standards Act, Water Supply Law, etc.). Not only does it violate the laws and regulations, but it also may cause injuries due to electric shock, fire, falling and tipping over.
- 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.
- Depending on the equipment, attach a filter etc. appropriate for your application on the discharge side before use, perform thorough flushing to 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.
- Do not operate pumps with a specification of 50Hz at 60Hz. It may cause damage due to overpressure or burn damage of motors etc. due to overload. Do not operate pumps with a specification of 60Hz at 50Hz. Pump performance may be reduced.
- Only repair technicians may disassemble, repair, modify the product or replace cables. Defects may cause failure, damage, electrification or fire.
- 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 office.

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

Distributor

Kawamoto Pump MFG. CO., LTD.

Overseas Marketing Section
11-39, Osu 4-Chome, Naka-ku, Nagoya
460-8650, JAPAN

TEL: +81-52-251-7173 FAX: +81-52-747-5500
E-mail: kawamotobo@kawamoto-oms.com
<http://www.kawamoto.co.jp>

For any question about pumps, please contact your nearest distributor

Name	Submersible Sump Pump
No.	3710 Y (E)