IWAKI PUMPS

IWAKI
Magnetic Drive Turbine Pump
MDT series (built-in type)
Instruction Manual

⚠ Read this manual before use of product

Thank you for having selected IWAKI's magnetic drive turbine pump MDT Series. This instruction manual deals with the correct handling and operation of the pump. You are requested to read this manual prior to installing and using the pump to ensure safe and long life of the pump. The content of this manual may be changed without notice.

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Important Instruction

For the Safe and Correct Handling of the Pump

- "Safety Instruction" section deals with important details about handling of the product. Before use, read this section carefully for the prevention of personal injury or property damage.
- Observe the instructions accompanied with "WARNING" or "CAUTION" in this manual. These instructions are very important for protecting pump users from dangerous situations.
- The symbols on this instruction manual have the following meanings:

⚠ **WARNING**	**Nonobservance or misapplication of the contents of "Warning" section could lead to a serious accident which may result in death.**
⚠ **CAUTION**	**Nonobservance or misapplication of the contents of "Caution" section could lead to personal injury or property damage.**

Types of Symbols

⊘	Indicates a prohibited action or procedure. Inside or near this circle, a concrete and practical image of the activity to be avoided is depicted.
!	Indicates an important action or procedure which must be performed or carried out without fail. Failure to follow the instructions herein can lead to malfunction or damage to the pump.

⚠ Export Restrictions

Technical information contained in this instruction manual might be treated as controlled technology in your countries, due to agreements in international regime for export control.
Please be reminded that export license/permission could be required when this manual is provided, due to export control regulations of your country.

Safety Instruction

⚠ WARNING

- **Turn off power before service**
  Risk of electrical shock. Be sure to turn off power to stop the pump and related devices before service is performed.


Electrical shock

- **Stop operation**
  If you notice any abnormal or dangerous conditions, suspend operation immediately and inspect/solve problems.



- **Do not use the pump in any condition other than its intended purpose**
  The use of the pump in any conditions other than those clearly specified may result in failure or injury. Use this product in specified conditions only.


Prohibited

- **Do not modify the pump**
  Alternations to the pump carry a high degree of risk. It is not the manufacturer's responsibility for any failure or injury resulting from alterations to the pump.


Do not rework or alter

- **Wear protective clothing**
  Always wear protective clothing such as an eye protection, chemical resistant gloves, a mask and a face shield during disassembly, assembly or maintenance work.


Wear protectors

⚠ CAUTION

- **Qualified personnel only**
  The pump should be handled or operated by qualified personnel with a full understanding of the pump.


Prohibited

- **Use specified power only**
  Do not apply power other than that specified on the nameplate. Otherwise failure or fire may result. Ensure the pump is properly grounded.


Prohibited

- **Do not touch the pump or pipe with bare hands**
  Risk of burns. The surface temperature of the pump or piping becomes very high during and immediately after operation, depending on the liquid temperature.


Caution

- **Keep electric parts and wiring dry**
  Risk of fire or electric shock. Install the pump where it can be kept dry.


Prohibited

- **Ventilation**
  Fumes or vapours can be hazardous with certain solutions. Ensure proper ventilation at the operation site.


Caution

- **Spill precautions**
  Ensure protection and containment of solution in the event of plumbing or pump damage (secondary containment).


Prohibited

- **Do not use the pump in a wet location**
  The pump is not waterproof. Use of the pump in wet or extremely humid locations could lead to electric shock or short circuit.


Prohibited

Safety Instruction

⚠ CAUTION

- **Do not damage the power cable**
  Do not pull, knot, or crush the power cable. Damage to the power cable could lead to a fire or electrical shock if cut or broken.
- **Do not cover the pump with a cloth**
  Covering the pump may cause heat to build up in the motor, resulting in fire or electrical/ mechanical failure.
- **Grounding**
  Risk of electric shock! Always properly ground the pump. Conform to local electric codes.
- **Install a GFCI (earth leakage breaker)**
  An electrical failure of the pump may adversely affect other devices on the same line. Purchase and install a GFCI (earth leakage breaker) separately.
- **The power cable is not replaceable**
  Do not use a damaged power cable, as it may result in fire or electric shock. If the cable is damaged, the entire pump unit must be replaced.
- **Do not use a damaged pump**
  Use of a damaged pump could lead to an electric shock or death.
- **Do not install or store the pump:**
  - In a flammable/explosive/corrosive atmosphere.
  - In a dusty/humid environment.
  - Where ambient temperature can exceed 0-40°C.
  - In direct sunlight or wind & rain.


Caution




Earthing


Electrical shock




Electrical shock


Prohibited

⚠ CAUTION

- **Do not drain liquid onto the floor**
  The liquid discharged from the pump must be drained into a special container. Never drain it directly onto the floor.
- **Disposal of a used pump**
  Dispose of any used or damaged pump in accordance with local rules and regulations. See the last page of the manual to comply with the European Directive 2012/19/EU on waste electrical and electronic equipment.
- **Preventative maintenance**
  Follow instructions in this manual for replacement of wear parts. Do not disassemble the pump beyond the extent of the instructions.
- **Countermeasure for static electricity**
  When liquids with a conductivity at rest of less than 1000 pS/m, especially less than 100 pS/m (e.g. hydrocarbons and halogenated hydrocarbons) are pumped, static electricity may be produced inside the pump during high flow velocities, which causes leakage from pump housing due to pin holing. Take countermeasure to avoid static electricity (e.g. increase conductivity, reduce flow velocity). Dangerous static electricity is not expected to occur with homogenous water mixed liquids.


Prohibited






Caution

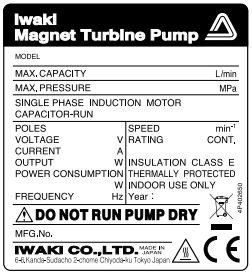
Outline of Product

1. Unpacking and inspection

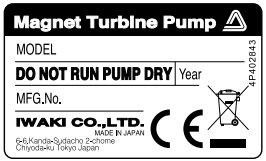
After unpacking the product, check to see:

1) If model name, discharge capacity, discharge pressure, voltage etc. shown on the nameplate are those that you order.

NOTE: The CE marking on our product(s) is for us to market the product(s) into the European market, however, the CE marking does not ensure any safety or conformity of the product(s) outside the European market.
When the pump is incorporated into the equipment marketed in the European market, such equipment must meet all the requirements of applicable directives.
In such a case, any person who places the equipment on the market must carry a CE mark on the equipment as a manufacturer.



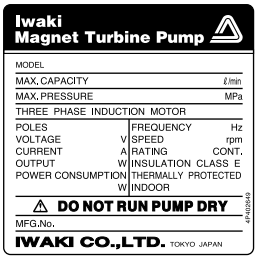
Spec label (pump unit)
for the European market



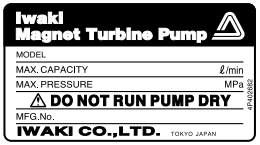
Pump label (pump with no motor)
for the European market



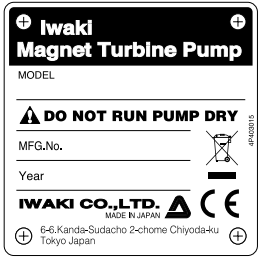
Spec label (100VAC/220-240VAC
pump unit) for any area other than
the European market



Spec label (200VAC, 3ph,
pump unit) for any area other
than the European market



Spec label (115VAC pump unit)
for any area other than the
European market



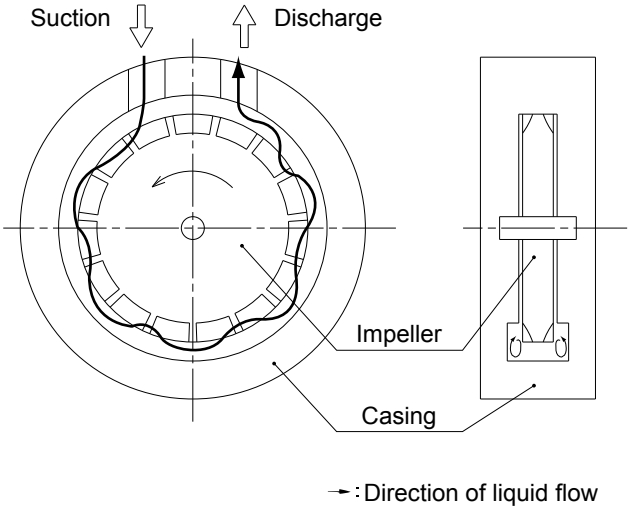
Nameplate (pump with no motor)
for the European market

2) If the product is not damaged or its bolts and nuts are not loosened during transportation.

If you find any abnormality, please contact your dealer.

2. Operating principle

The impeller (turbine) is rotated by magnetic coupling. The rotating impeller makes vortex flow towards rotating direction to transfer liquid from suction port to discharge port making high discharge pressure.



Outline of Product

3. Model identification

MDT - 20 L C A 220
(1) (2) (3) (4) (5) (6)

(1) Series code

(2) Max. discharge flow (50/60Hz)
15 : 14/16
20 : 17/20

(3) Liquid temperature
L : 65 deg. C or below
H : 95 deg. C or below

(4) Bearing material
C : Carbon
D : Siliconized graphite

(5) Size of connection bore
A : R1/2
B : 1/2NPT

(6) Power source voltage
100 : AC100V (Single phase)
115 : AC115V (Single phase)
200 : AC200V (Three phase)
220 : AC220~240V (Single phase)

4. Specification

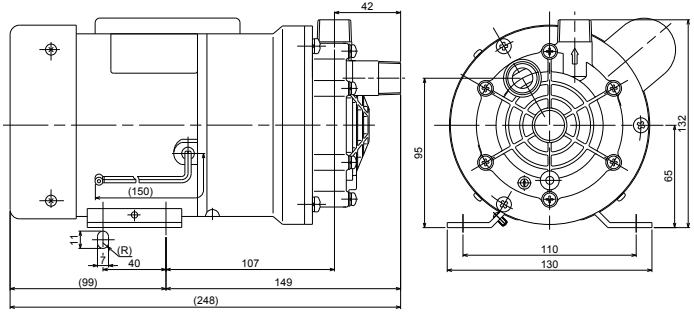
50/60Hz

Model	Max. flow L/min.	Max. press. MPa	Max. vacuum kPa (Abs.)	Rated rpm	Motor		Mass kg
					Voltage	Amperage	
MDT-15L( )( )100	14/16	0.35	8.00	2800/3280	AC100	3.6/3.9	6.3
MDT-15L( )( )115					AC115	– /3.2	
MDT-15L( )( )200					AC200 (3ph)	1.2/1.3	
MDT-15L( )( )220				2760/3140	AC220~240	1.4/1.7	6.7
MDT-15H( )( )100	14/16	0.35	9.33	2800/3280	AC100	3.6/3.9	6.3
MDT-15H( )( )115					AC115	– /3.2	
MDT-15H( )( )200					AC200 (3ph)	1.2/1.3	
MDT-15H( )( )220				2760/3140	AC220~240	1.4/1.7	6.7
MDT-20L( )( )100	17/20	0.35	8.00	2800/3280	AC100	3.6/3.9	6.3
MDT-20L( )( )115					AC115	– /3.2	
MDT-20L( )( )200					AC200 (3ph)	1.2/1.3	
MDT-20L( )( )220				2760/3140	AC220~240	1.4/1.7	6.7
MDT-20H( )( )100	17/20	0.35	8.00	2800/3280	AC100	3.6/3.9	6.3
MDT-20H( )( )115					AC115	– /3.2	
MDT-20H( )( )200					AC200 (3ph)	1.2/1.3	
MDT-20H( )( )220				2760/3140	AC220~240	1.4/1.7	6.7

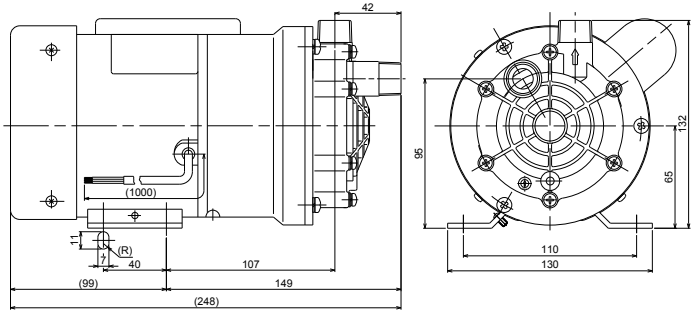
Note 1. Above mentioned performance is based on pumping clear water at temperature of 25 deg. C. Flow rate changes depending on the temperature of liquid. Ask us for details.
2. Ask us for other liquid than water.
3. Allowable ambient temperature is 0 ~ 40 deg. C.
4. Maximum operating noise is 65dB or below.
(1m away from the front of a pump, A scale)

Outline of Product

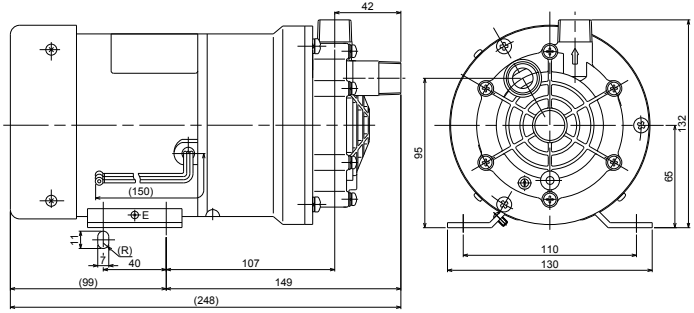
5. Dimension



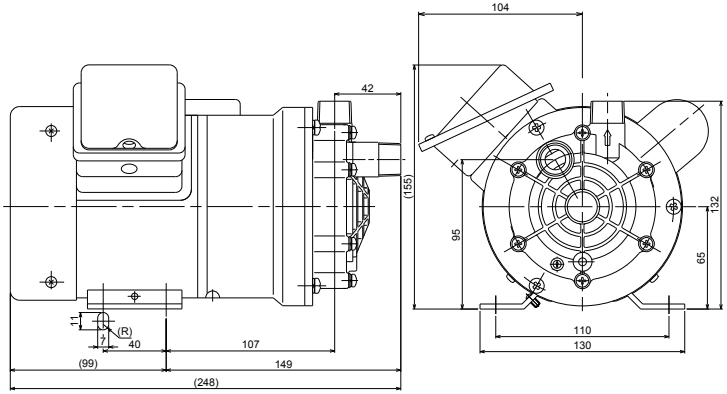
MDT-15/20-100V



MDT-15/20-115V



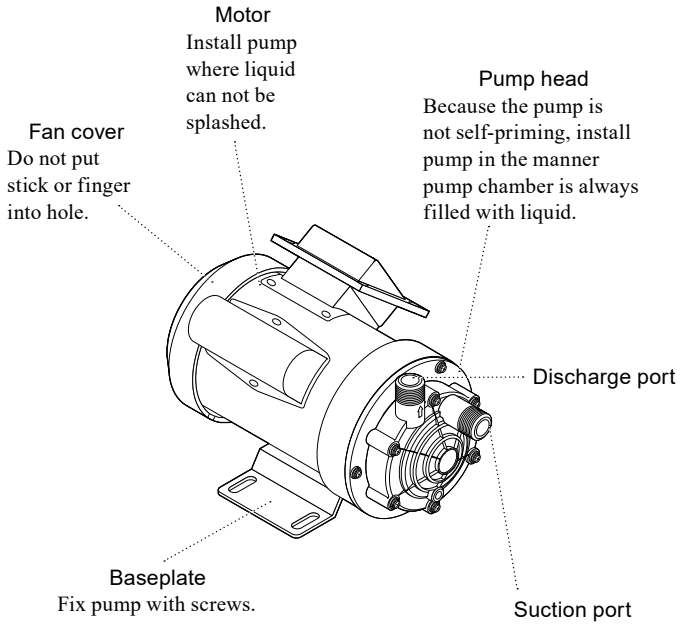
MDT-15/20-200V (3ph)



MDT-15/20-220V

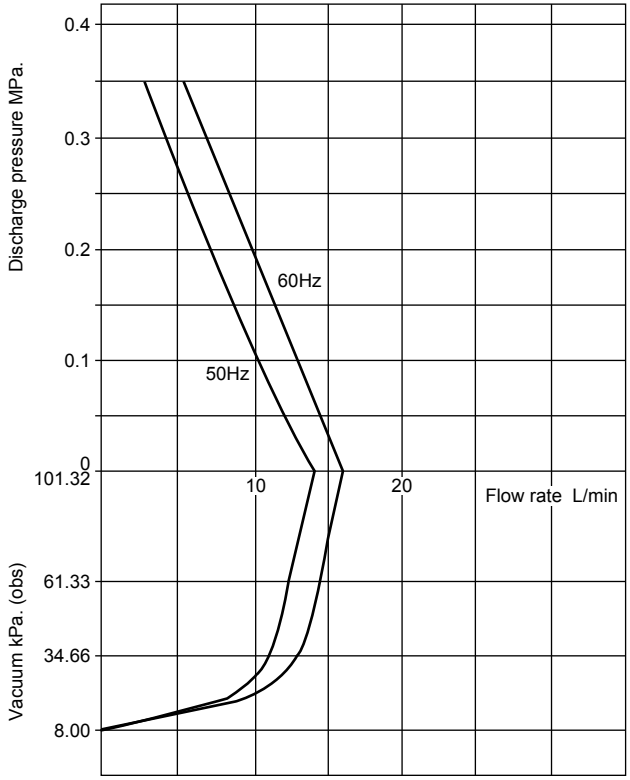
Outline of Product

6. Main parts and label



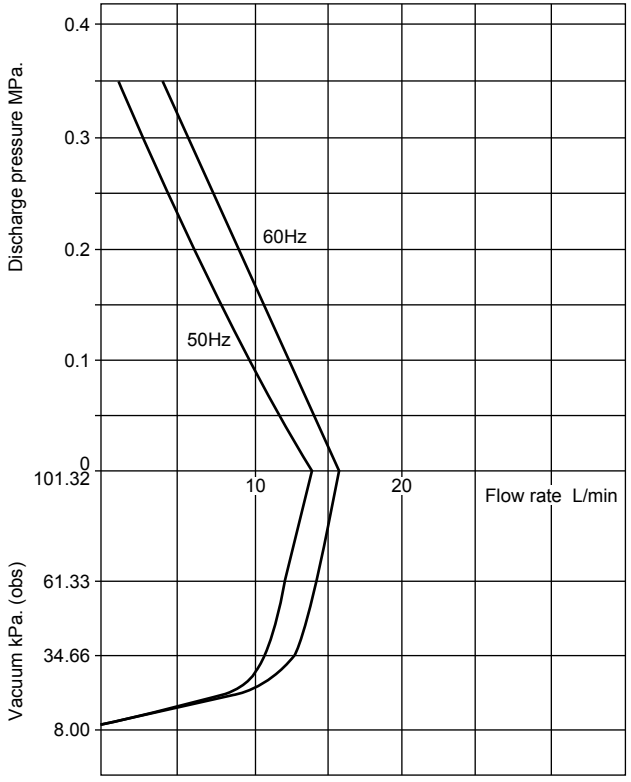
7. Performance curves

MDT-15L **Water at 25 deg. C**

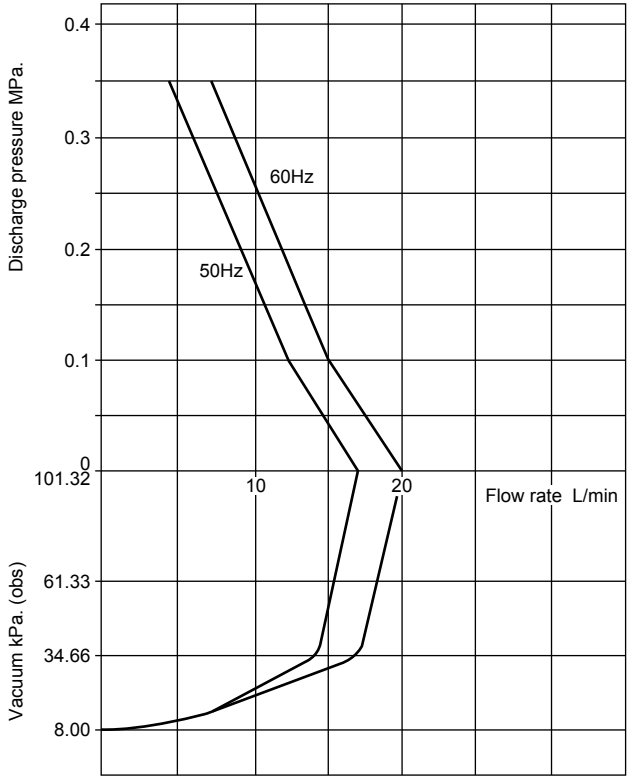


Outline of Product

MDT-15H **Water at 25 deg. C**

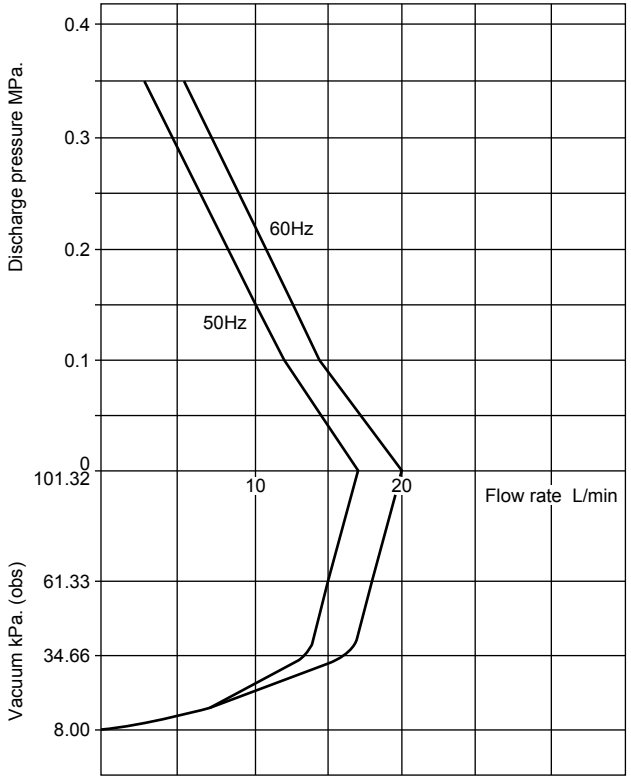


MDT-20L **Water at 25 deg. C**



Outline of Product

MDT-20H **Water at 25 deg. C**



Installation

1. Before use of product

⚠ Caution

Do not run pump dry
Dry running of pump causes quick wearing of impeller and bearing.

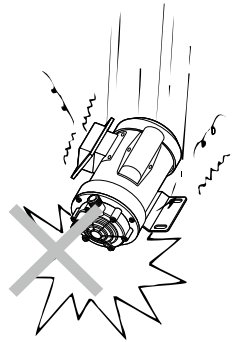
Do not close discharge and suction valves
If pump is operated with suction and discharge valves closed, temperature inside pump excessively increases in a short time resulting in pump failure or burning. Operate pump with valves opened.

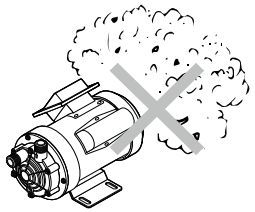
Do not install pump outdoor
Motor is not water-proof construction. If liquid is splashed on motor, it may cause fire or damage of motor. Do not install pump outdoor.

Keep fire away from pump
Do not put dangerous or flammable substance around pump.

Damaged pump
Do not use damaged pump to avoid short-circuit or electrical shock.

2. Precautions on operation





(1) Handle pump carefully
Strong impacts on pump caused by dropping it on floor or so may result in damage or faulty performance of pump.

(2) Do not touch pump
Pump/motor is very hot during operation or just after it is stopped. Do not touch it with bare hand.

(3) Prime pump
Pump is not self-priming. Prime pump with liquid before starting pump.

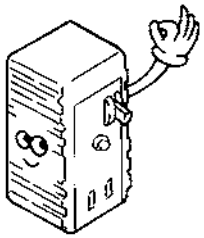
(4) Keep pump away from dusty atmosphere
Do not use pump at dusty atmosphere and take measures for dust not to adhere to motor.

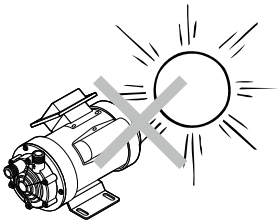
Installation

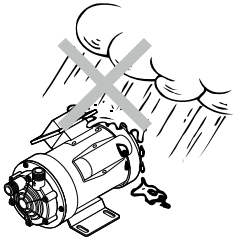
(5) Install earth leakage breaker
Install earth leakage breaker to avoid accident such as electrical shock etc.

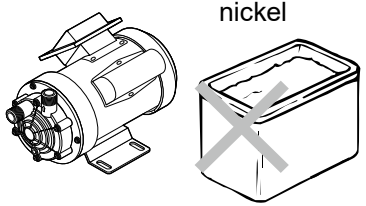
(6) Do not splash liquid on motor.
If motor or wires are wetted by splashed liquid, it may cause fire or electrical shock. Install pump at place where liquid can not be splashed on pump/motor.

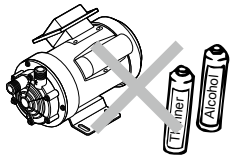
(7) Place to be installed
Do not install or store pump at following places.
- where exposed to direct sunlight
- where ambient temperature increases to 40 deg. C or more
- where humid and dusty atmosphere
- where ambient temperature becomes 0 deg. C or below.
- where exposed to rain and wind
- Change of liquid temperature
  The change of pumped liquid temperature at pump starting, during operation and at stopping must be limited to 80 deg. C. or less.











(8) Ground
Connect ground from ground wire.

(9) Prohibited liquids
Following liquids can not be pumped.
- liquids which contain iron or nickel powder
- liquids which contain slurry
- liquids which are crystallized when stopping
- flammable liquids such as gasoline or kerosene
- Viscous liquid
- Liquid of which vapor pressure is 0.6MPa or more.

(10) Power cord can not be replaced.
Do not use pump of which the power cord is damaged.

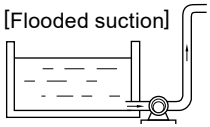
(11) Maintenance and cleaning
Do not use solvents such as benzene, alcohol or thinner to clean pump. Otherwise, paint gets discolored or peeled.

3. Installation, plumbing and wiring

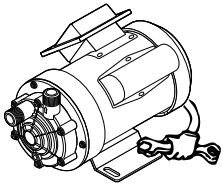
3-1. Installation

1) Place to be installed
   Install the pump at the place where ambient temperature is 40 deg. C or below, relative humidity is 85% or below and where the maintenance and inspection works can be done easily. Do not install pump outdoor.

2) Install the pump the lower position than liquid level of suction tank (Flooded suction piping).



3) Fix baseplate
   Fix the baseplate with screws M6. If the noise is large because of resonance of mounting floor, mount the pump via rubber cushion. Mount the pump in horizontal position.

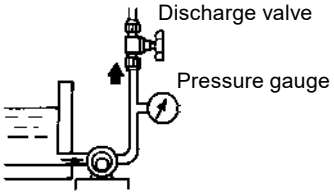


3-2. Plumbing

1) To minimize the pipe resistance of liquid, use the piping as short and as less bends as possible.

2) Connect joints to the suction and discharge ports of pump. Apply seal tape so that the air can not be sucked in. Above all improper connection of suction side joint will cause air being sucked resulting in fallen pump performance. Refer to "Model identification" on page 5.

3) When you screw the joints in suction and discharge ports, hold the pump head with hand but do not hold the motor. Tightening torque is 6N·m or less.

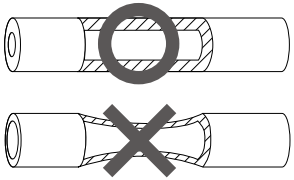


4) A pressure gauge installed at discharge piping enables you to find the abnormal operation of pump.

5) For hose piping, use correct size of hose to ensure firm connection.
   Use the hose of which the material can chemically resist to the pumped liquid.
   Use the hose such as Teflon hose which can endure the pressure made by the pump.

⚠ **Caution**

Suction side hose may be collapsed due to vacuum made by pump operation. When hose is used, employ the endurable one such as blade hose. Special attention must be paid when pumping high temperature liquid.



6) Periodically check the piping if it is not loosened and tighten it if loosened.

3-3. Wiring

⚠ Caution

Electrical and wiring works must be done by qualified electrician. Otherwise accident of injury or damage may happen.

1) Before wiring is done, check if the main power source is switched off.

2) Use the power of pump which is indicated on the nameplate of pump.

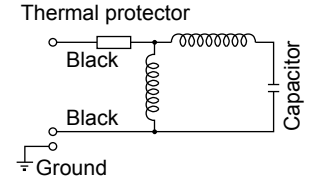
3) The pump has no ON/OFF switch. The pump starts running as soon as the power cord is connected to the power source.

4) Take the ground.

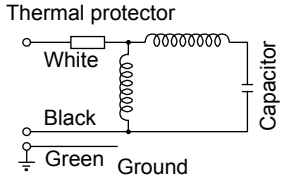
5) In case the earth leakage breaker is installed and when it is operated, reset it after the reason is settled. Switch off the power when you check the reason.

■ Rated current, starting current

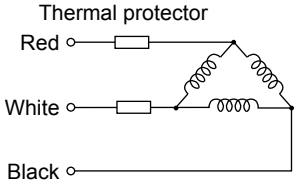
●AC100V



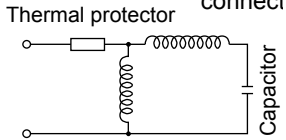
●AC115V



●AC200V (3ph)



●AC220~240V(Terminal bl
connect



50/60Hz

Model	Voltage (V)	Rated current (A)	Starting current (A)
MDT-15/20 ( )( )100	AC100 (1-phase)	3.6/3.9	9.2/8.2
MDT-15/20 ( )( )115	AC115 (1-phase)	– /3.2	– /6.3
MDT-15/20 ( )( )200	AC200 (3-phase)	1.2/1.3	3.9/3.6
MDT-15/20 ( )( )220	AC220~240 (1-phase)	1.4/1.7	3.15/3.42~2.95/3.15

Operation

1. Operation

Operate the pump according to following procedure.

⚠ Caution

Do not run pump dry (without liquid) nor run pump with suction and/or discharge valve closed. Otherwise, pump is damaged.
Release air from pump chamber. Otherwise pump may be damaged.

No.	Procedure	Description
1	Check piping, wiring and power voltage.	• Check plumbing, wiring according to items “Plumbing” and “Wiring” in Installation section. • Check power voltage according to description on nameplate.
2	Open valves	• Fully open the valves on suction and discharge pipings.
3	Check if liquid is filled in pump chamber.	• In case of suction lift application, prime liquid sufficiently.
4	Switch on power to start	• After above procedures, switch on power and check if pump runs normally. If pump does not discharge liquid, stop it immediately and eliminate the cause referring to item “Troubleshooting”.
5	Operation	• Adjust valves gradually to get required flow rate, pressure or vacuum. • Quick opening and closing of valves will cause disconnection of magnetic coupling. If this happened, switch off power to stop motor. Magnetic coupling will recover once the motor stops its rotation. • Do not operate pump with discharge and suction side valves fully or almost fully closed.
6	Precaution during pump operation	• Do not get foreign matters into pump. Foreign matter in pump will cause locked impeller or abnormal wear of impeller. • If earth leakage breaker operates, reset it after the cause is eliminated. Switch off the power and check the reason referring to item “Troubleshooting”.

Maintenance

1. Troubleshooting

Trouble	Cause	Countermeasures
Motor stops during operation.	• Wrong wiring • Thermal protector operates due to over loaded motor. • Earth leakage breaker operates due to short circuit.	• Check and correct wiring. • Reduce viscosity of liquid or discharge pressure. • Check and repair or replace.
Pump does not discharge liquid or capacity is low.	• No liquid at suction side and pump runs dry. • Air is sucked in from suction side. • Suction side hose is collapsed. • Pressure at suction port is below saturated vapor pressure of pumped liquid. • Viscosity of liquid is too high. • Valve is closed. • Too large pipe resistance • Worn impeller	• Fill liquid in suction tank or open suction side valve. • Check suction side piping and correct it. • Replace hose by stronger one. • Decrease liquid temperature or pipe resistance of suction piping. • Decrease liquid viscosity. • Open valve. • Correct piping. • Replace impeller.
Magnet coupling is disconnected.	• No liquid at suction side and pump runs dry. • Impeller is locked by their swelling. • Impeller is locked by expansion by heat. • Foreign matters adhere to impeller. • Damaged impeller • Magnet capsule touches rear casing. • Valve is fully closed. • Too large pipe resistance. • Wrong pump is used in view of chemical resistibility.	• Fill liquid in suction tank or open suction side valve. • Check chemical resistibility of impeller. • Bring down liquid temperature. • Disassemble pump and remove foreign matters. • Replace impeller. • Disassemble pump and repair or replace parts. • Open valve. • Correct piping. • Select suitable pump.

Trouble	Cause	Countermeasures
Motor does not start.	• Power is not switched on. • Wrong or disconnected wiring. • Failed motor or its winding is disconnected. • Earth leakage breaker operates due to short circuit. • Earth leakage breaker operates due to lack of power capacity.	• Switch on power. • Check and correct wiring. • Repair or replace motor. • Check and repair or replace. • Employ larger power capacity.
Abnormal noise or vibration	• No liquid at suction side and pump runs dry. • Foreign matters on impeller. • Damaged impeller. • Magnet capsule touches rear casing. • Worn impeller.	• Fill liquid or open valve of suction side. • Disassemble pump and remove foreign matters. • Replace impeller. • Disassemble pump and repair or replace parts. • Replace impeller.
Liquid leaks.	• Damaged O ring. • Loosened bolts. • Wrong pump is selected in view of chemical resistibility.	• Replace O ring. • Tighten bolts. • Use suitable pump.

2. Maintenance and inspection

No.	Check item	Description	Method
1	If pump discharge liquid normally.	• If liquid is normally transferred. • If suction and discharge pressure is normal.	• Flow meter or by eye. • Refer to figures shown on name plate.
2	If sound and vibration are normal.	• Abnormal sound or vibration may be generated when pump does not operate normally. • Resonance of base to which pump is mounted may enlarge vibration. In this case, take countermeasure such as rubber cushion etc.	• By eye and year. • By eye and year.
3	If liquid does not leaks or air does not sucked from pump or piping.	• Tighten bolts of the parts from which liquid leaks. • When you see bubbles in discharged liquid, air is sucked in. Check piping and tighten relating bolts.	• By eye.
4	If pump or motor surface is not extremely hot.	• Surface temperature of pump body is same as that of pumped liquid. • Surface temperature of motor is within ambient temperature plus approx. 40 deg. C. You may not touch motor but it is not abnormal if it is within this temperature.	• By touching or thermometer.

3. Wear parts

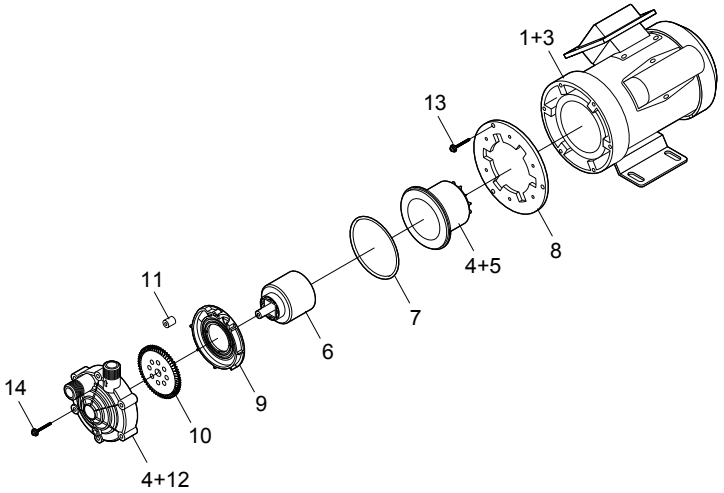
To ensure long time pump operation, it is needed to replace the wear parts.
Replace the wear parts listed as below by new ones at the life time (actual running time) shown as below.

No.	Wear parts		Q'ty/pump	Life time
4+5	Rear casing with bearing		1	8,000 hrs.
6	Magnet capsule		1	
9	Rear plate		1	
10	Impeller		1	
4+12	Front casing with bearing		1	
7	O ring		1	

Note 1. Above mentioned life time is based on pumping clear water at ambient temperature and the life time is influenced by the pumped liquid, its temperature and other conditions.
2. O ring must be replaced by new one every time when pump is disassembled regardless of above mentioned life time.

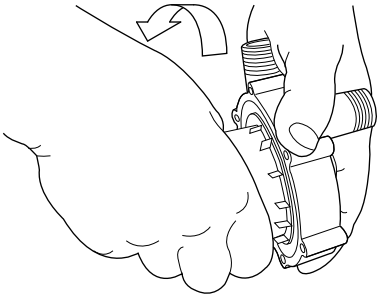
4. Disassembly and assembly

> **⚠ Caution**
>
> Disassembling and assembling of pump must be done according to this manual. Do not disassemble the pump beyond the extent shown on this manual. We are not responsible for person injury or damage which is caused by non observance of this manual.



4-1. Disassembly

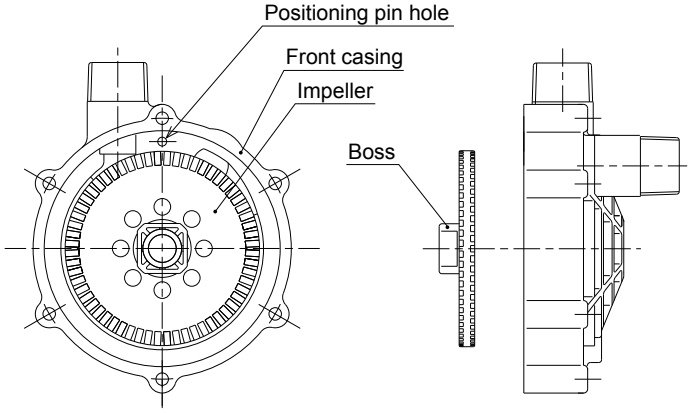
1) Remove three screws (13) to remove pump body + mounting plate (8) from motor (1).
2) Remove six screws (14) together with plate washers and spring washers to remove mounting plate (8) from pump body.
3) Remove rear casing (5) from front casing (12). As shown on illustration below, turn rear casing by force to remove it. (Strength is needed to turn it.) Pay attention not to drop magnet capsule (6). Also pay attention to the liquid which may stay in rear casing.



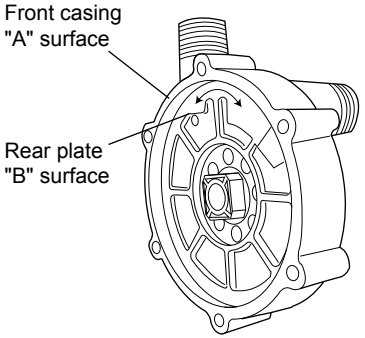
4) Remove O ring (7) from rear casing and take out magnet capsule (6).
5) Remove rear plate (9) and impeller (10) from front casing (12). Pay attention not to lose positioning pin (11).

4-2. Assembly

1) Put positioning pin (11) on front casing (12) and put impeller (10) on front casing (12) with its boss facing to this side as shown on illustration below.
Coincide center hole of impeller with inner diameter of bearing of front casing (12).

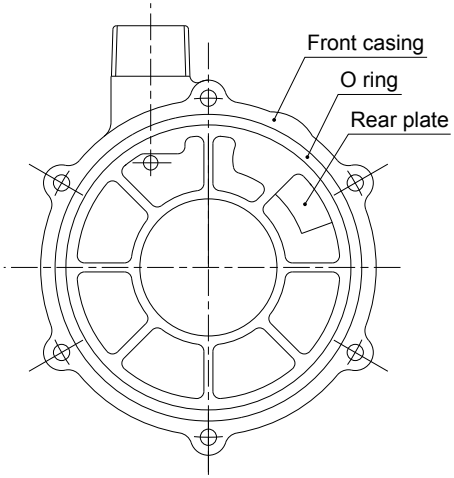


2) Insert positioning pin (11) into positioning pin hole of front casing (12). Mount rear plate (9) on front casing (12) positioning the rear plate (9) so that the pin (11) comes to pin hole of rear plate (9).
When rear plate (9) was correctly mounted on front casing (12), rear plate “B” surface comes approx. 5.5mm below the front casing “A” surface. Refer to illustration below.
Confirm that the positioning pin is correctly inserted into the rear plate. If the pin is inserted correctly, the rear plate does not move to the direction shown by arrow as bellow.



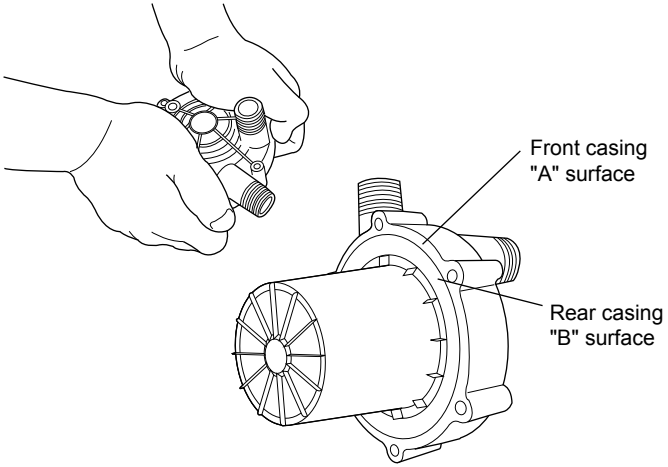
Note: For the above procedures 1) and 2), rear plate can be mounted easily if a round bar of 100mm dia. (approx. 5 cm long) is inserted into the bearing of front casing (12) to position impeller (10).

3) Apply a little bit of silicone grease to O ring (7) and mount it on front casing (12). Pay attention for O ring not to be twisted.

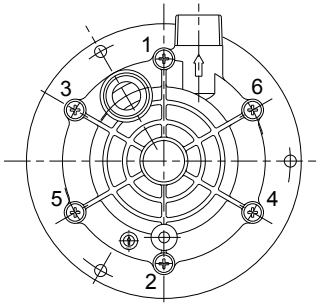


4) Mount magnet capsule (6) to front casing (12) by engaging spindle of magnet capsule with impeller (10).

5) Mount rear casing (5) to front casing (12). As shown on illustration below, push front casing strongly putting your weight on it so that front casing A surface and rear casing B surface become flat as shown on illustration below.



6) Paying attention to the position of three through holes of mounting plate, fix the unit of front casing to rear casing to mounting plate (8) with six screws (l4) (with plate washers and spring washers). Tightening torque : 0.7N·m



Caution : Tighten six screws in diagonal order as shown above evenly little by little and finally by specified tightening torque.

7) Mount assembled pump unit to motor (1) and tighten it by three screws (13).
(Tightening torque : 1.42 N·m)

■ Assembly of the motor to the pump

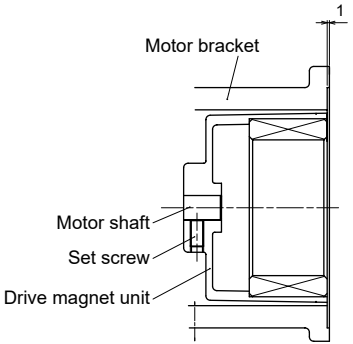
If a customer mounts the pump and the motor bracket to the motor, follow the instructions below.

⚠CAUTION

- Be sure to turn off power to stop the motor and related devices before work.
- Before the motor bracket is mounted to the motor, make sure that the motor size is correct.
- To avoid personal injury, do not place the drive magnet unit near any metal part or tool.

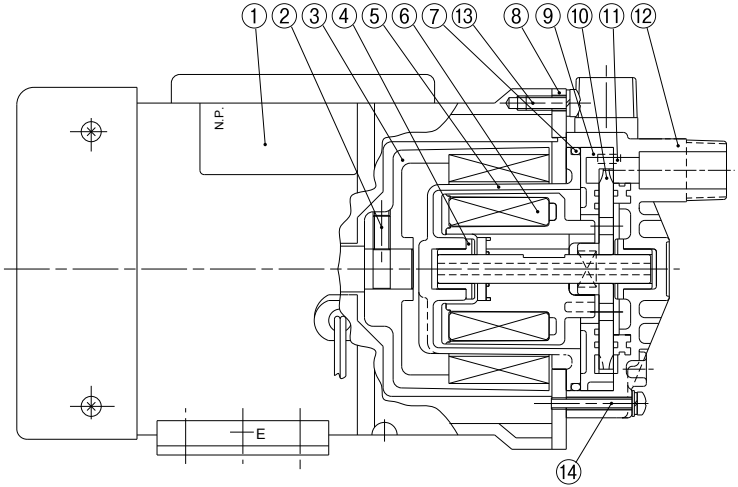
1. Mount the motor bracket to the motor and tighten them up with the screws.

2. Do not allow foreign matters such as iron pieces to stick to the magnet capsule unit. Slide the drive magnet unit onto the motor shaft straight without excessive force. Check the distance between the end faces of the drive magnet and the bracket is 1mm (see the figure below) and secure them with the set screw and the Loctite #222.



3. Mount the pump to the motor bracket and secure them by 1.42N·m with the three M5×15 screws. Magnetic force of the pump is strong. Be careful not to catch the finger in parts. See the arrow mark on the pump head for the correct direction of the liquid flow.

5. Construction and parts names



No.	Parts name	Q'ty	Material	Remarks	No.	Parts name	Q'ty	Material	Remarks
1	Motor	1			8	Mounting plate	1	Aluminum alloy	
2	Hex. socket head screw	1	Steel	M6 × 12	9	Rear plate	1	CFRPPS	
3	Drive magnet unit	1	Ferrite, Aluminum alloy		10	Impeller	1	CFRPEEK	
4	Bearing	2	Carbon or Siliconized graphite		11	Positioning pin	1	GFRPPS	
5	Rear casing	1	GFRPPS		12	Front casing	1	GFRPPS	
6	Magnet capsule	1	GFRPPS, Ferrite, Alumina ceramic		13	Screw	3	Stainless steel	M5 × 15
7	O ring	1	EPDM		14	Screw	6	Stainless steel	M4 × 30 (with PW, SW)

EC DECLARATION OF CONFORMITY

A copy of the original Declaration of Conformity

(SUPPLIER'S NAME)
WE
IWAKI CO.,LTD.

(ADDRESS)
6-6 2-CHOME KANDA-SUDACHO CHIYODA-KU TOKYO JAPAN

(PRODUCT)
DECLARE UNDER OUR SOLE RESPONSIBILITY THAT THE PRODUCTS
NON-METAL MAGNETIC DRIVE TURBINE PUMP

(MODEL NAME)
MDT SERIES

TO WHICH THIS DECLARATION RELATES ARE IN CONFORMITY
WITH THE FOLLOWING STANDARDS OR DIRECTIVES AS FAR AS APPLICABLE

(DIRECTIVES)
MACHINERY DIRECTIVE 2006/42/EC (ANNEX IIA)
RoHS DIRECTIVE 2011/65/EU

(STANDARDS)
EN ISO12100:2010 EN809:1998+A1:2009 EN IEC63000:2018

(A PERSON WHO IS AUTHORISED TO COMPILE THE TECHNICAL FILE
IN THE COMMUNITY)
IWAKI EUROPE GMBH
SIEMENSRING 115 D-47877 WILLICH GERMANY

NOTE: THIS DECLARATION BECOMES INVALID IF TECHNICAL OR OPERATIONAL MODIFICATIONS ARE INTRODUCTED WITHOUT THE MANUFACTURER'S CONSENT.

T. Sawada

TSUTOMU SAWADA
DEPUTY SENIOR GENERAL MANAGER,
QUALITY ASSURANCE HEAD OFFICE

Tokyo, Sep. 13, 2021

(PLACE AND DATE OF ISSUE) **(NAME AND SIGNATURE OR EQUIVALENT MARKING OF AUTHORIZED PERSON)**

DOCUMENT NO. IS-51K-383-4

CE conformity

■ **Information on CE conformity of pump units when the motor is fitted by the customer (dealer/operator)**

We hereby confirm the CE conformity of our pump unit provided that the following criteria about intended use are satisfied as described in this instruction manual:

- Motor conformity in accordance with any relevant EC directives which are currently effective.
- The dimensions of a required motor flange and shaft must fit the specified pump.
- The motor must be installed to the pump according to this instruction manual.
- Guaranteed grounding
- The pump must not be repainted over our original upper coating.

Any reseller or dealer who connects the pump with a motor and markets it as a complete unit must conform to all relevant EC directives. In such cases, the reseller or dealer then becomes the manufacturer.

Waste Electrical and Electronic Equipment (WEEE)



In accordance with the European Directive 2012/19/EU on waste electrical and electronic equipment, this product features the crossed-out wheelie bin symbol. When this product is disposed of in household wastes, toxic components included in it can cause major environmental and human health problems. Use appropriate waste collection systems for recovery and recycling. Contact your local distributor or nearest Iwaki company for the detailed collection systems.

https://www.iwakipumps.jp

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