



Bringing valuable "water" to you

Comfort Earth®



KAWAMOTO PUMP

COOLANT PUMP

RCD

LONG LIFE

TOUGH ON DIRTY LIQUIDS

SEALLESS STRUCTURE

CE, RoHS COMPLIANT

TROPICAL TREATMENT COMPLIANT*

IE1, IE3, GB2, UL motor

*Excludes GB2-compliant products



Ver.2.1



TOUGH

RCD IE1 / IE3 / GB2 / UL

Kawamoto

TOUGH ON DIRTY LIQUIDS!

Tough Pump Construction

Ideal for grinding and gear cutting applications.

■ Pump section material

FCD500 offering outstanding durability

■ Tough casing construction Patent pending

The casing's unique sand step construction offers protection from chips contained in liquids, and its large angles and overall thick design offer peace of mind during use.

■ Motor section

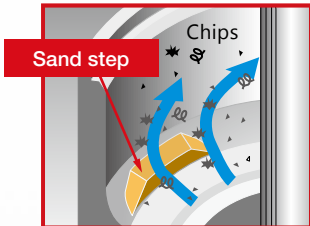
The pump's overall tough design is rounded off with the adoption of a solid motor fan cover and aluminum die cast terminal box.

RCD

Applications:
Coolant circulation and pumping



■ Casing internal image



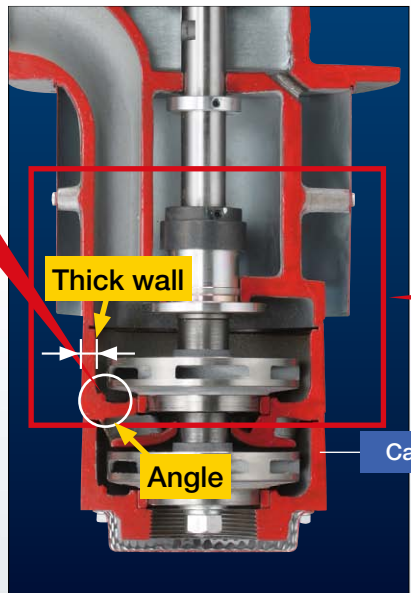
● Sand step construction creates a flow that throws up chips.

■ Case: No sand step



● Chips collide with angled surfaces of casing, resulting in possible holes due to wear.

■ Pump cross-sectional image



Superb sealless structure

Elimination of mechanical seal makes the pump highly resistant to foreign material and durable in the event of dry operation.

Reduced environmental impact structure (Replaceable shaft sealing parts)

Patent

Highly durable quenched materials have been used for the shaft sealing section. Moreover, the environmental burden has been reduced through a design which allows replacement of the shaft sealing section alone if liquid leaks have become frequent as a result of wear.

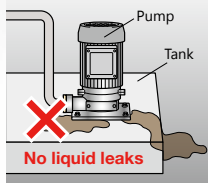
Replacement Parts

- Sleeve (rotating ring): Quenched SUS440
- Bush (securing ring) : Quenched S45C

Unique double anti-splash structure

Patent

Shaft seal parts offer protection from coolant splashes with the first anti-splash cover (see following Fig.①), and sealing has been improved with the adoption of a unique sealless structure.

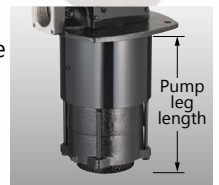


The pump has been enclosed with a second anti-splash cover (see following Fig.②) to protect it from coolant splashes.

Wide adaptability

Standard Specifications

- Support available for all specifications
CE, RoHS, child's finger, tropical treatment*
*Excludes GB2-compliant products
- Two types of leg length
Two types of leg length are available depending on tank depth.
*Refer to the reverse page for detailed dimensions.

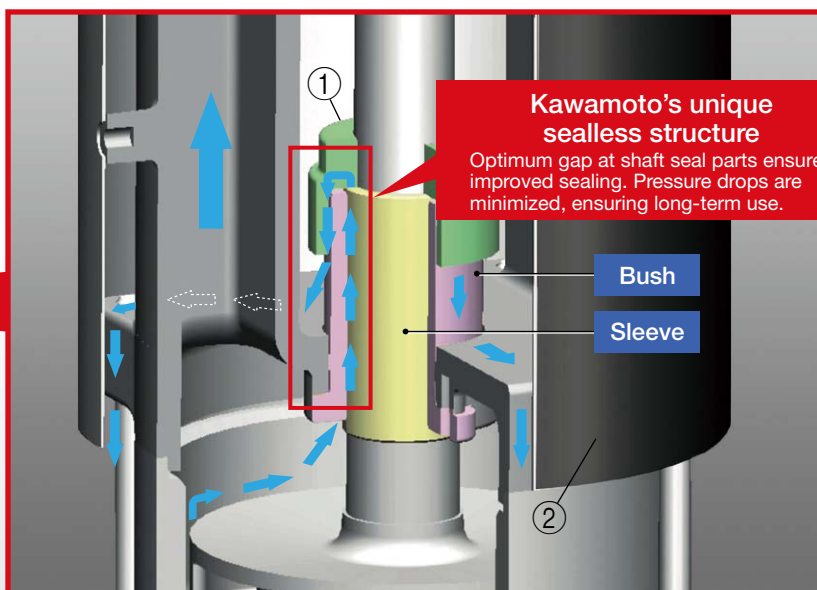
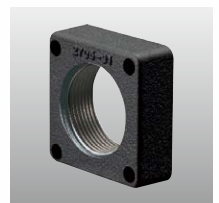


Special specifications

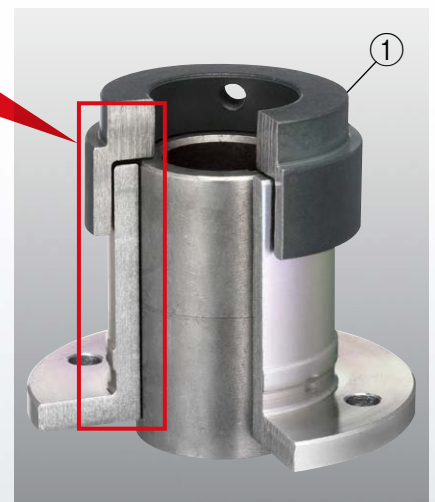
- Many Standards motors are available.
(GB2, UL & NEMA Premium)
- Adjustable terminal box position
(90°, 180°, 270°)

Optional accessory

- Mating flange set
*Please contact distributor or Kawamoto pump if necessary.



Shaft seal part cross-sectional image



← Direction of coolant flow



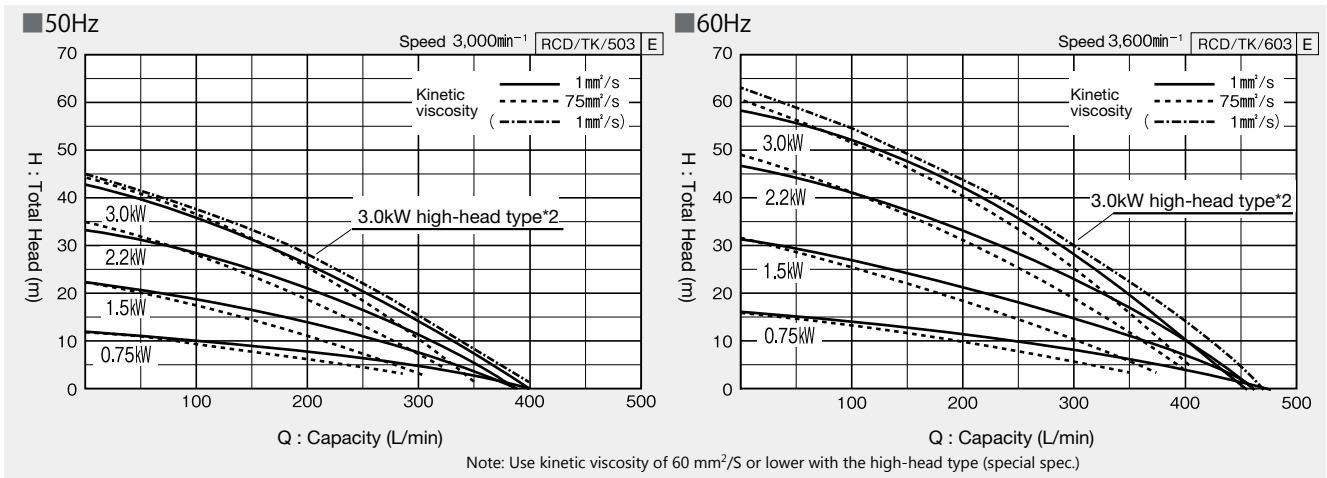
Standard Specifications

Model / Name		RCD Coolant Pump
Scope of application	Installation location	Indoors
	Installation conditions	Vertical installation (horizontal installation not possible)
	Ambient conditions	Temperature: 0 to 40°C Humidity: 85% RH or lower (Non condensing)
	Liquid type*1	Coolant, other
	Liquid temp	0 to 40°C
	Kinetic viscosity	75 mm ² /s or lower *2
Motor	Type	TEFC indoor, 2 poles, three phase, 50Hz/60Hz 200/200, 220V or 380, 400, 415/400, 440V
	Efficiency	Standard efficiency (IE1)

*1 Cannot be used with clean water.

*2 Use kinetic viscosity of 60 mm²/S or lower with the 3.0kW high-head type (special spec.)

Selection chart



Specification table

50Hz		RCD/SI/503 E						
Bore mm	Model	Motor kW	Standard specification				Voltage V	Current A
			Q L/min	H m	Q L/min	H m		
40	RCD-40A0.75	0.75	100	10	300	5	200	3.4
	RCD-40A(B)1.5	1.5	100	18.5	300	8	200	5.8
	RCD-40A(B)2.2	2.2	100	28.5	300	12	200	9
	RCD-40A(B)3.0	3.0	100	36	300	14	200	11
	RCD-40HA(B)3.0	3.0	100	37.5	300	15	200	11
	RCD-40A0.75T4	0.75	100	10	300	5	380/400	1.7/1.7
	RCD-40A(B)1.5T4	1.5	100	18.5	300	8	380/400	2.9/2.9
	RCD-40A(B)2.2T4	2.2	100	28.5	300	12	380/400	4.3/4.5
	RCD-40A(B)3.0T4	3.0	100	36	300	14	380/400	5.4/5.5
	RCD-40HA(B)3.0T4	3.0	100	37.5	300	15	380/400	5.4/5.5

60Hz		RCD/SI/603 E						
Bore mm	Model	Motor kW	Standard specification				Voltage V	Current A
			Q L/min	H m	Q L/min	H m		
40	RCD-40A0.75	0.75	100	14	300	8.5	200/220/230	4.7/4.4/4.2
	RCD-40A(B)1.5	1.5	100	27	300	15	200/220/230	8/7.6/7.4
	RCD-40A(B)2.2	2.2	100	41.5	300	23.5	200/220/230	12/11.5/11.5
	RCD-40A(B)3.0	3.0	100	52	300	28	200/220/230	15/14/14
	RCD-40HA(B)3.0	3.0	100	54.5	300	30	200/220/230	15.2/14/14
	RCD-40A0.75T4	0.75	100	14	300	8.5	400/440/460	2.4/2.2/2.1
	RCD-40A(B)1.5T4	1.5	100	27	300	15	400/440/460	4/3.8/3.7
	RCD-40A(B)2.2T4	2.2	100	41.5	300	23.5	400/440/460	6/5.7/5.7
	RCD-40A(B)3.0T4	3.0	100	52	300	28	400/440/460	7.5/7/7
	RCD-40HA(B)3.0T4	3.0	100	54.5	300	30	400/440/460	7.6/7/7

Motor
IE3

RCD-E



Premium efficiency

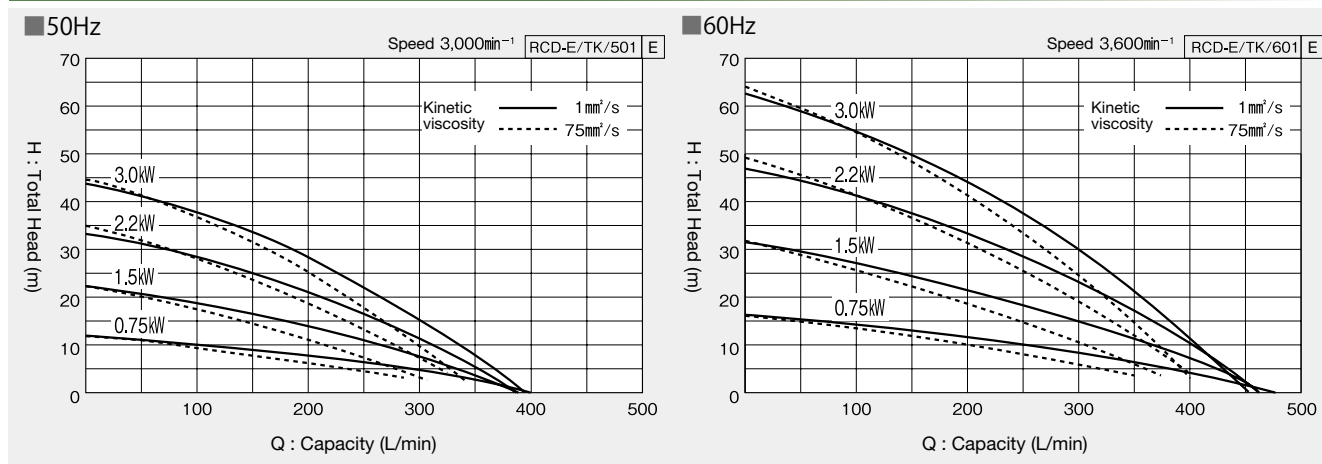


Standard Specifications

Model / Name		RCD-E Coolant Pump
Scope of application	Installation location	Indoors
	Installation condition	Vertical installation (horizontal installation not possible)
	Ambient conditions	Temperature: 0 to 40°C Humidity: 85% RH or lower (Non condensing)
	Liquid type*	Coolant, other
	Liquid temp	0 to 40°C
	Kinetic viscosity	75 mm ² /s or lower
Motor	Type	TEFC indoor, 2 poles, three phase, 50Hz/60Hz 200/200, 220V or 380, 400, 415/400, 440V
	Efficiency	Premium efficiency (IE3)

* Cannot be used with clean water.

Selection chart



Specification table

■ 50Hz RCD-E/SI/501 E

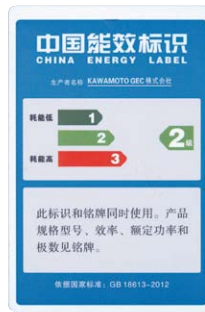
Bore mm	Model	Motor kW	Standard specification				Voltage V	Current A
			Q L/min	H m	Q L/min	H m		
40	RCD-40AE0.75	0.75	100	10	300	5	200	3.1
	RCD-40A(B)E1.5	1.5	100	18.5	300	8	200	5.6
	RCD-40A(B)E2.2	2.2	100	28.5	300	12	200	8
	RCD-40A(B)E3.0	3.0	100	37.5	300	15	200	11.5
	RCD-40AE0.75T4	0.75	100	10	300	5	380/400	1.6/1.6
	RCD-40A(B)E1.5T4	1.5	100	18.5	300	8	380/400	2.8/2.8
	RCD-40A(B)E2.2T4	2.2	100	28.5	300	12	380/400	4.1/4
	RCD-40A(B)E3.0T4	3.0	100	37.5	300	15	380/400	5.6/5.7

■ 60Hz RCD-E/SI/601 E

Bore mm	Model	Motor kW	Standard specification				Voltage V	Current A
			Q L/min	H m	Q L/min	H m		
40	RCD-40AE0.75	0.75	100	14	300	8.5	200/220/230	4.5/4.1/4
	RCD-40A(B)E1.5	1.5	100	27	300	15	200/220/230	8/7.4/7.2
	RCD-40A(B)E2.2	2.2	100	41.5	300	23.5	200/220/230	12/11/11
	RCD-40A(B)E3.0	3.0	100	54.5	300	30	200/220/230	16/15/14.5
	RCD-40AE0.75T4	0.75	100	14	300	8.5	400/440/460	2.3/2.1/2
	RCD-40A(B)E1.5T4	1.5	100	27	300	15	400/440/460	4/3.7/3.6
	RCD-40A(B)E2.2T4	2.2	100	41.5	300	23.5	400/440/460	6/5.5/5.4
	RCD-40A(B)E3.0T4	3.0	100	54.5	300	30	400/440/460	8/7.5/7.3

Motor
GB2 (Special spec)

RCD-G



Compliant with Chinese high efficiency regulation class (GB2)

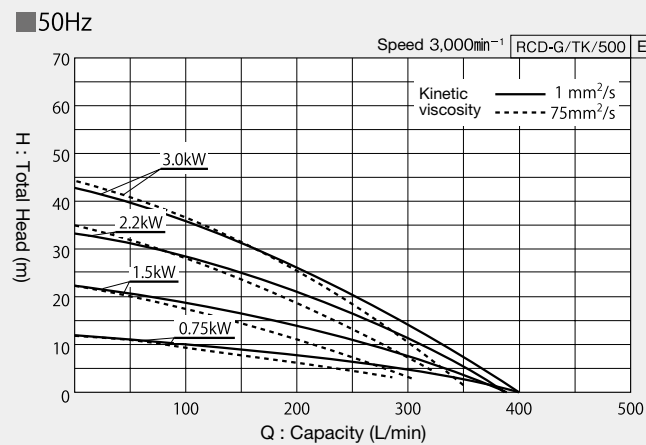


Standard Specifications

Model / Name		RCD-G Coolant Pump	
Scope of application	Installation location	Indoors	
	Installation condition	Vertical installation (horizontal installation not possible)	
	Ambient conditions	Temperature	0 to 40°C
		Humidity	85% RH or lower (Non condensing)
	Liquid type*	Coolant, other	
	Liquid temp	0 to 40°C	
Kinetic viscosity	75 mm ² /s or lower		
Motor	Type	TEFC indoor, 2 poles, three phase, 200V or 380V	
	Efficiency	Chinese national efficiency standard (GB2)	

* Cannot be used with clean water.

Selection chart

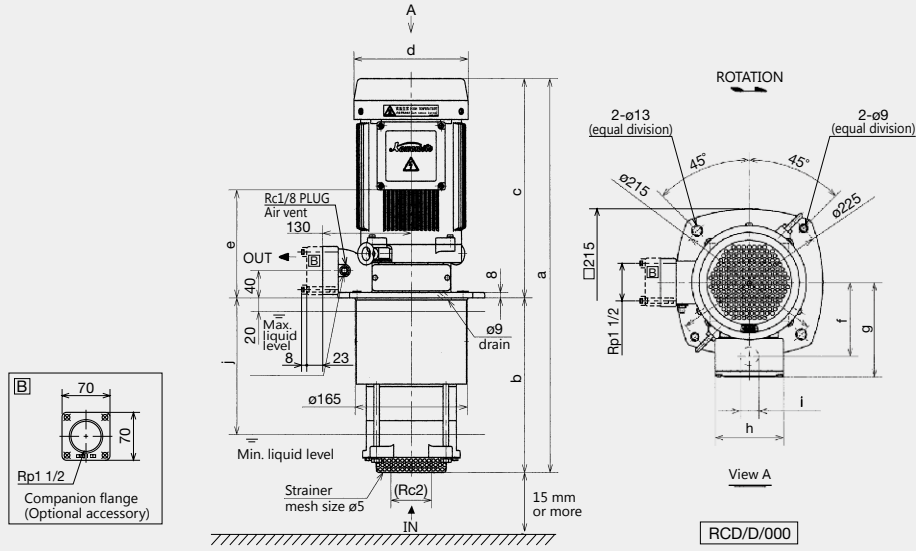


Specification table

Model	Bore	Motor	Voltage	Freq.	Current	Q	H	Q	H
	mm	kW	V	Hz	A	L/min	m	L/min	m
RCD-40A0.75G	40	0.75	200	50	3.1	100	10	300	5
RCD-40A(B)1.5G	40	1.5	200	50	5	100	18.5	300	8
RCD-40A(B)2.2G	40	2.2	200	50	7.6	100	28.5	300	12
RCD-40A(B)3.0G*	40	3.0	200	50	9.3	100	36	300	14
RCD-40A0.75GT4	40	0.75	380	50	1.6	100	10	300	5
RCD-40A(B)1.5GT4	40	1.5	380	50	2.7	100	18.5	300	8
RCD-40A(B)2.2GT4	40	2.2	380	50	4	100	28.5	300	12
RCD-40A(B)3.0GT4*	40	3.0	380	50	4.9	100	36	300	14

* High pressure type is also available. Please inquire further information.

RCD-U (UL & NEMA Premium (IE3)) type is special spec. Please inquire.



unit: mm

Model	Motor kW	Dimensions										Mass (kg)
		a	b	c	d	e	f	g	h	i	j	
RCD-40A0.75	0.75	548	256	292	ø168	136	107	134	86	ø22	200	27
RCD-40A(B)1.5	1.5	578(728)	256(406)	322	ø168	158	108	139	100	ø27	200(350)	31(36)
RCD-40A(B)2.2	2.2	594(744)	256(406)	338	ø194	174	121	152	100	ø27	200(350)	39(44)
RCD-40A(B)3.0	3.0	644(744)	36(406)	338	ø194	174	121	152	100	ø27	250(350)	43(47)
RCD-40HA(B)3.0	3.0	644(744)	306(406)	338	ø194	174	121	152	100	ø27	250(350)	43(47)
RCD-40AE0.75	0.75	548	256	292	ø168	136	107	134	86	ø22	200	27
RCD-40A(B)E1.5	1.5	578(728)	256(406)	322	ø168	158	108	139	100	ø27	200(350)	33(38)
RCD-40A(B)E2.2	2.2	594(744)	256(406)	338	ø194	174	121	152	100	ø27	200(350)	40(45)
RCD-40A(B)E3.0	3.0	674(744)	306(406)	368	ø194	204	121	152	100	ø27	250(350)	48(52)

T4 models have same dimensions as above. GB2 models have same dimensions as each IE1 model.

RCD/d/000



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".



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 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 electrical shock, fire, liquid leakage, etc.
- Close attention is needed when rusting, corrosion/elution are not permissible owing to the application or liquid properties. Take into account both the pump and the rest of the equipment when considering and selecting.
- Select a product which is appropriate for your application. Inappropriate use of products may cause accidents.
- Have spare equipment ready when using pumps for critical equipment.
- Conduct construction in accordance with the applicable laws and regulations (the Technical Standards of Electric Installation, interior wiring regulation, Building Standards Act, 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.
- 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.
- 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 install in places with no drainage or places which have not been waterproofed. Liquid 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.
- 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 place flammables near or cover the surroundings of the pump, cable, control panel and inside the pump cover with combustibles. This may cause fires due to heating.
- 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 office.

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

Distributor

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E-mail: kawamotobo@kawamoto-oms.com
http://www.kawamoto.co.jp

For any question about pumps, please contact your nearest distributor

Name	RCD
No.	4023 B (E)