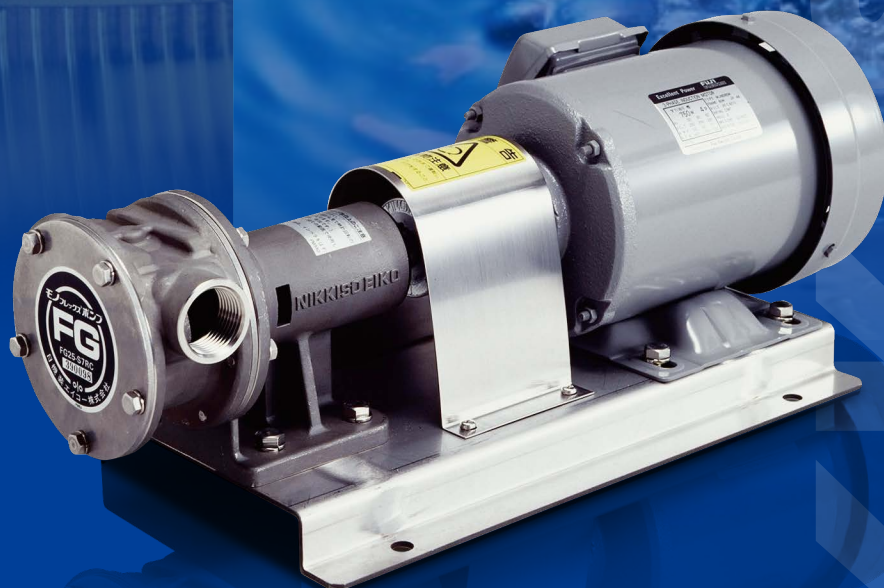


NIKKISO



NIKKISO EIKO

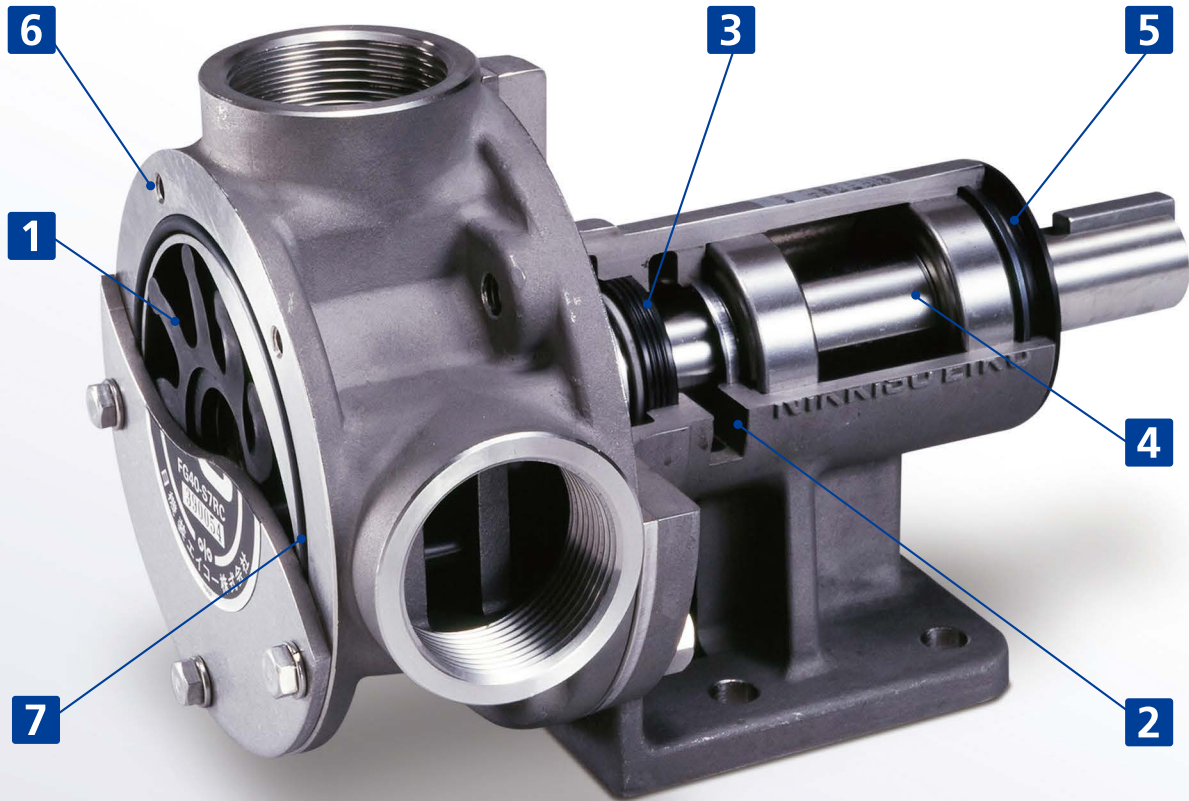
FLEXIBLE RUBBER IMPELLER PUMP

Self-Priming without priming water
Compact, maintenance easily
For slurry transfer and high viscous liquids

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Features (FG Series)

7 usability points

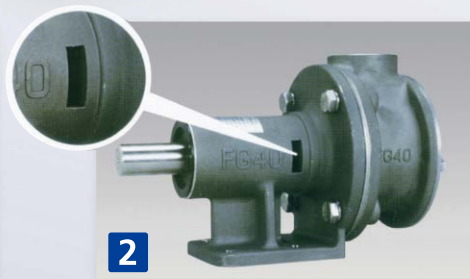


Impeller

Standardized CR(chloroprene rubber), superior to mechanical strength, durability, and chemical resistance. Prepared NBR(oil proof),CRF(Food Sanitation Act), and other materials depending on intended purposes.

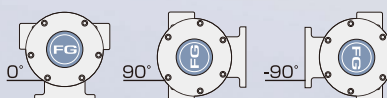
Life duration CR: 3,000hrs - 4,000hrs
NBR: 1,000hrs - 1,500 hrs

Note: ambient clear water, rotation speed at 1500min-1, continuous operation



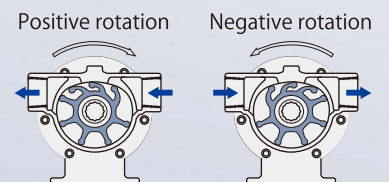
Freely Installed Directions

With the drain holes provided in three different locations, directions of the pump can be installed freely.



Free rotational directions

Rotate either positive or negative rotation by setting mechanical seal.



4



Shaft Assembly

Easily installed to the Impeller bush shaped serration.

5



Seals

Dust seal and End seal are attached to the inside of the bearing housing in order to prevent from the liquid and powder dust.

6



Cam-integrated casing

None of level differential inside the pump casing, and greatly cut damages when the impeller passes through cam section, with adopting cam all in one.

7



O-Ring

Adopting a thick line shaped O-Ring, easily to remove from front plate and sealed tightly.

GOOD POINT

Point 1 Great self-priming performance



Self-priming performance (self-priming height of 4 to 6 m: ambient clear water/initial performance during the pump operation: 1,450 min-1)
Pump and suction start up simultaneously without requiring priming water or a foot valve.
※Self-Priming performance depends on the model and rotational rate.

Point 2 Maintenance Easily



Because of the simple structure and with minimum components, the pump can be easily disassembled/assembled without technical knowledge.

Point 3 Applicable for transferring slurries



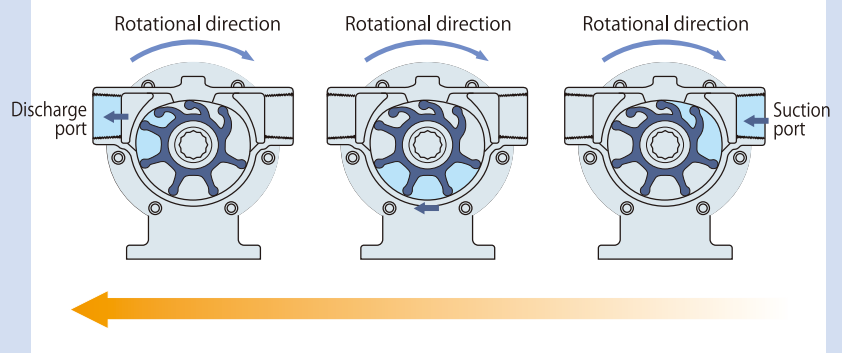
Suitable for transferring slurries including liquid containing solid matter, high viscosity liquid, and gas mixed into liquid.

Point 4 Compact and High performance



A positive displacement pump that can be transferred large capacity by compact body.
※refer to performance curve.

Operating Principle



The pump operates by repeating following processes.

Once the impeller starts rotating, the blade is forcibly warped in the cam section of the pump casing. When it rotates further and passes through the cam section, the blade restores to its original condition due to the elasticity of the rubber. At this point, the inside of the pump casing is vacuumed and self-priming performed.

The liquid suctioned into the pump casing is then transferred to the discharge port by the blade. The liquid is then transferred by repeating this process.

FG series

Stainless-steel Model



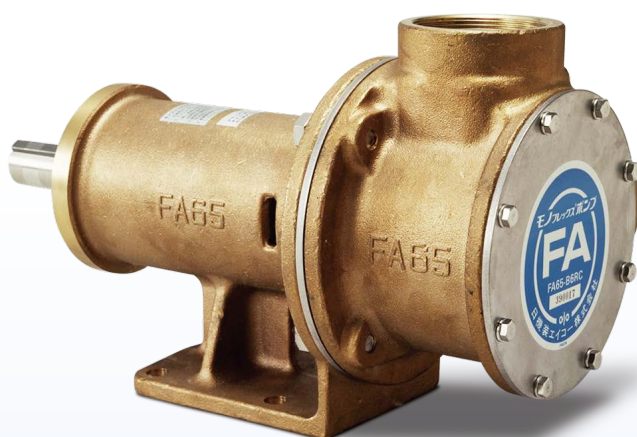
FG65



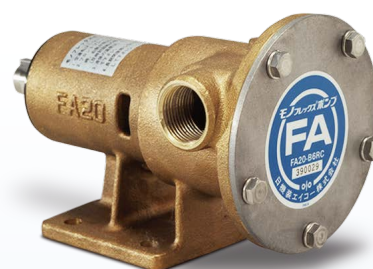
FG25

FA/FB series

Bronze Model



FA65



FA20

FS series

Sanitary care (Buffing) Model



FS40



FS50

Specifications

Model		FG10	FG15	FG20	FG25	FG40	FG50	FG65
Port Size		RC3/8	RC1/2	RC3/4	RC1	RC1½	RC2	RC2½
Pump Casing Material		SCS13						
Impeller Type/ Material	RC	RX	RD	●	●	●	●	●
	RB	RY	RJ	●	●	●	●	●
Shaft Seal		Mechanical Seal						
Total Head·Flow Rate		Refers to performance curve						
Self-Priming Height	RC·RX·RD·RJ	4~6m						
	RB·RY	1~2m					—	
Weight (Pump body)		1.6kg	3kg	4kg	6kg	7.5kg	15kg	25kg
Required Power	Direct Coupled	0.2kW	0.4kW	0.75kW	0.75/1.5kW	1.5kW	3.7kW	5.5kW
	Variable Speed Charger	0.2kW	0.4kW	0.75kW	0.75kW	1.5kW	3.7kW	5.5kW
	Geared Motor	0.4kW	0.4kW	0.4kW	0.4/0.75kW	0.75kW	1.5kW	2.2kW
	Inverter Motor	0.4kW	0.75kW	0.75kW	1.5kW	2.2kW	5.5kW	7.5kW

·Self-Priming Height shows initial performances with ambient clear water, at 1,450min⁻¹.
 ·Total pump head decreases approximately 1/2, flow rate decreases approximately 2/3 in use of RB or RY impellers.

·The RX and RY impellers, which conform to the specifications and standards for food and food additives, etc. (Ministry of Health and Welfare Notification No.370, 1959), and specifications and standards for implements.
 ·Structurally, abrasion powder or broken pieces of impeller might get mixed in the liquid.
 ·Please be careful using in a fabrication plant of food.

Model		FA10	FA15	FA20	FA25/FB25	FA40/FB40	FA50	FA65
Port Size		RC3/8	RC1/2	RC3/4	RC1	RC1½	RC2	RC2½
Pump Casing Material		CAC406						
Impeller Type/ Material	RC	AC	●	—	●	●	●	—
	RB		●	●	●	●	—	—
Shaft Seal		Mechanical Seal						
Total Head·Flow Rate		Refers to performance curve						
Self-Priming Height	RC	4~6m						
	RB	1~2m					—	
	AC	—			3~4m		—	
Weight (Pump body)		1.6kg	2.5kg	3.5kg	5.5kg	7kg	15kg	25kg
Required Power	Direct Coupled	0.2kW	0.4kW	0.75kW	0.75/1.5kW	1.5kW	3.7kW	5.5kW
	Variable Speed Charger	0.2kW	0.4kW	0.75kW	0.75W	1.5kW	3.7kW	5.5kW
	Geared Motor	0.2kW	0.4kW	0.4kW	0.4/0.75kW	0.75kW	1.5kW	2.2kW
	Inverter Motor	0.4kW	0.75kW	0.75kW	1.5kW	2.2kW	5.5kW	7.5kW
Electro-magnetic clutch-mounted	Exciting Voltage	—			DC12V			
	V pulley	—			DC24V			
	Consumed Power	—			Groove "B",Article"1"		Groove "B",Article"1"	
	Rotational Direction	—			43W			
		Positive/Negative directions						

·Prohibited to rotate negative for FB Series with inclined impeller.

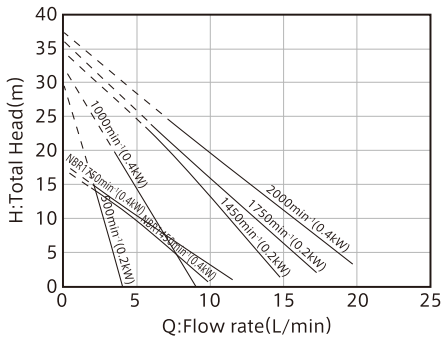
Model		FS40			FS50		
Port Size		IDF1½			IDF2		
Pump Casing Material		SCS13			SUS304		
Impeller Type/ Material	RX	RJ	SI	●	●	●	—
				—	—	—	—
Shaft Seal		Mechanical Seal (SiC/SiC)					
Total Head·Flow Rate (50/60Hz)		Refers to performance curve					
Self-Priming Height	R X · R J	4~6m					
	SI	1~2m			—		
Weight (Pump body)		9kg			14kg		
Electro-magnetic clutch-mounted	Exciting Voltage	1.5kW			3.7kW		
	V pulley	1.5kW			3.7kW		
	Consumed Power	0.75kW			1.5kW		
	Rotational Direction	2.2kW			5.5kW		

·Self-Priming Height shows initial performances with ambient clear water, at 1,450min⁻¹.

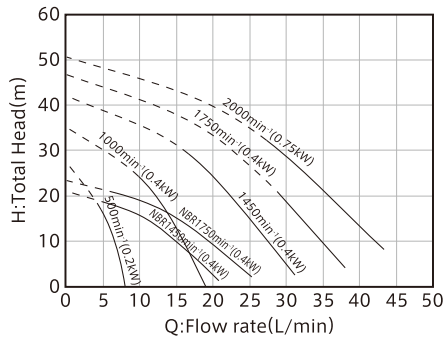
·The RX and RY impellers, which conform to the specifications and standards for food and food additives, etc. (Ministry of Health and Welfare Notification No.370, 1959), and specifications and standards for implements.
 ·Structurally, abrasion powder or broken pieces of impeller might get mixed in the liquid.
 ·Please be careful using in a fabrication plant of food.

Performance Curvers

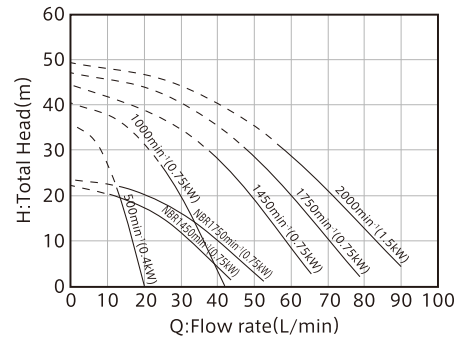
FG10



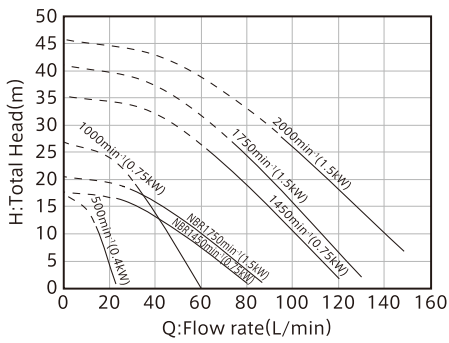
FG15



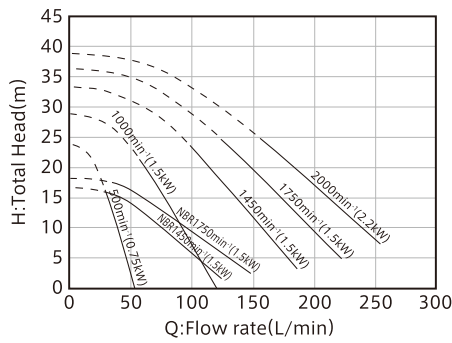
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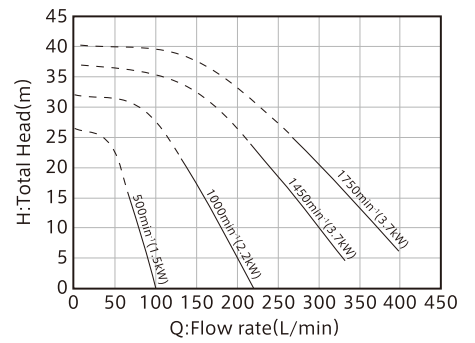
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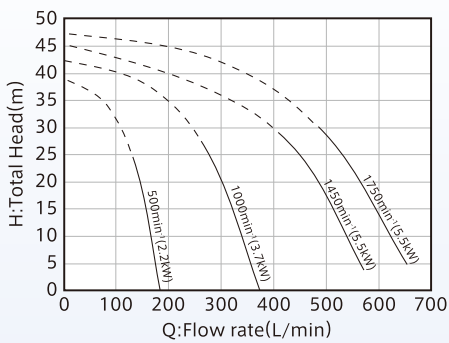
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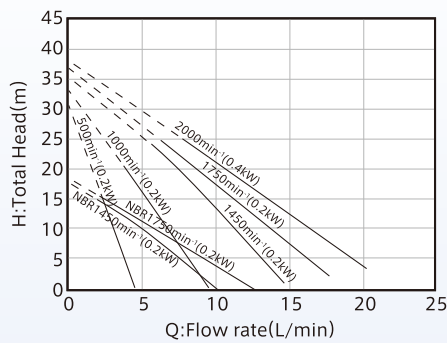
FG50



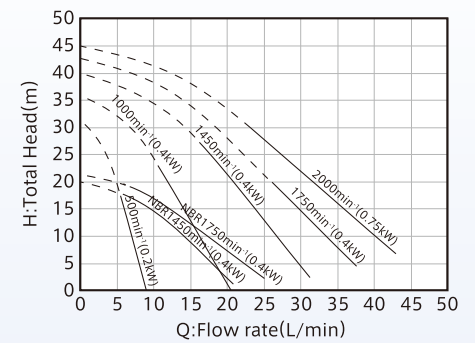
FG65



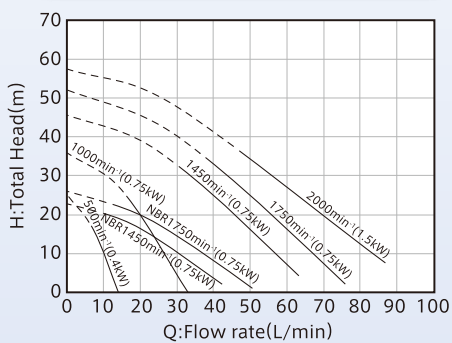
FA10



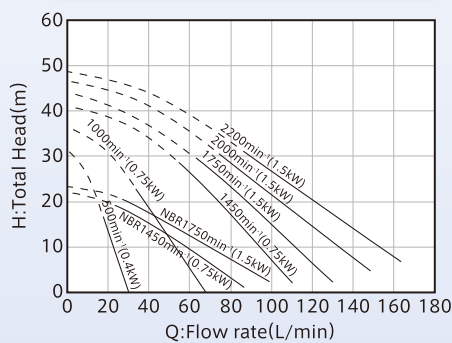
FA15



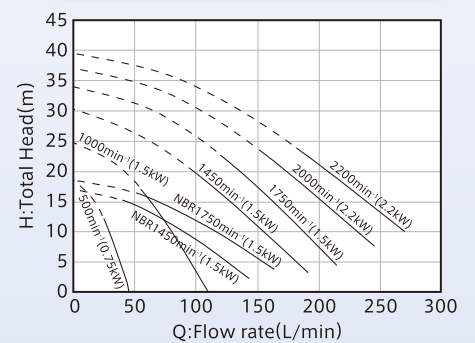
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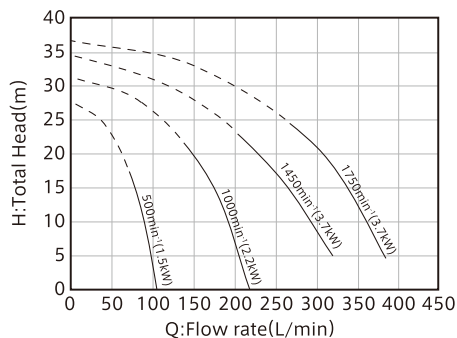
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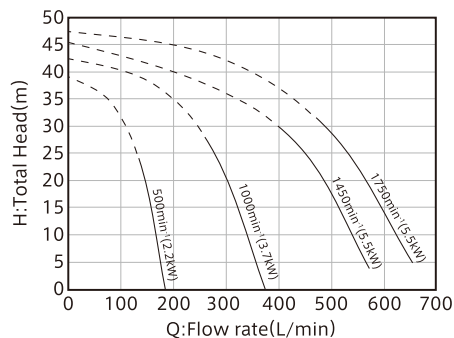
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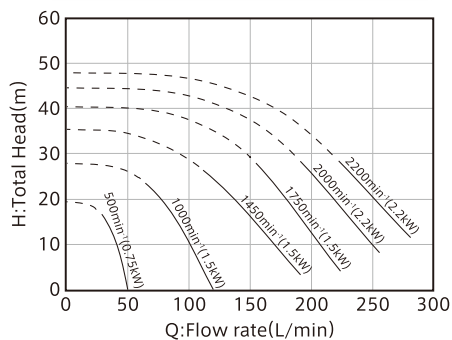
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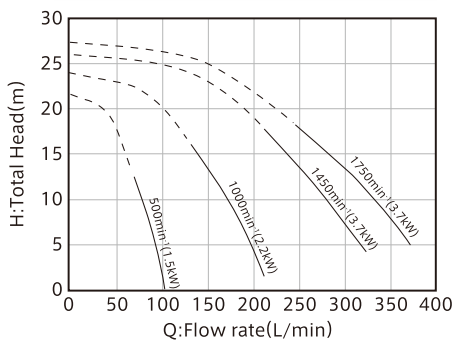
FA65



FS40



FS50



Model Code Chart

① FG | ② 25 | — | ③ S7 | ④ RC | — | ⑤ MC | ⑥ SP

① PUMP series

FG Stainless Body with Standard Impeller
 FA Bronze Body with Standard Impeller
 FB Bronze Body with Inclined Impeller
 FS Sanitary care (Buffing) type

② Port size

Port size : 10 15 20 25 40 50 65
 Inch : 3/8 1/2 3/4 1 1 1/2 2 2 1/2

③ Pump Casing Material

S7: SUS304, SCS13
 B6: CAC406

④ Impeller Type/Material

RC Standard, Chloroprene Rubber
 RX Standard, Chloroprene Rubber, Food grade
 RB Standard, Nitrile Butadiene Rubber (Oil Proof)
 RD Chloroprene Rubber, Gear Cutting Type
 RY Standard, Nitrile Butadiene Rubber, Food grade (Oil Proof)

※ Gear Cutting Impeller has a high intensity between the rubber part and the bush.
 ※ Recommended to use under the hard conditions such as high temperature, corrosiveness.

AC Inclined, Chloroprene Rubber
 RJ CRF Chloroprene Rubber, Gear Cutting Type
 SI Silicone

⑤ Special Function

SP Special Requirement

Option

1. Special specified parts are available for abrasion proof.
2. Slip on flared type connector, Pipe flanged type connector, hoses, ON/OFF switch for power source are available.
3. Mechanical seal and Oil seal are available.

Handling Precautions

1. For solvent such as gasoline, thinner, and others, organic acid, strong acid, strong alkali, and others are prohibited.
2. Liquid temperature of allowable range for continuous operation: 5 - 60°C Short time running: 90°C max.
 (Not recommendable at high temperature)
3. Ambient temperature range of atmosphere: 0 - 40°C
4. Dry operation strictly prohibited



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 **Notice for the safety operation: To use a pump for safety, be sure to read the instruction manual before your operation.**

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Catalog No.CNP-18060R1 (EN)

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