

ShinMaywa

Submersible Grinder Pump

CKM Series



Non-clogging Pumping of Sewage

Grinder Mechanism

● Excellent Grinding Performance

The powerful cutting device grinds solids into 5-10 mm particles for non-clogging pumping of sewage even small-diameter pipes. It enable an effective and an economic pumping using discharge lines of small-diameter pipes.



Cutting Example



* The square size is 5x5mm.

Features

● High-Durability

- **Grinder blades**
The both rotary and fixed blades are made of wear resistance high-chrome cast iron.
 - **Impeller**
SCS13 (Stainless steel casting) which resists cavitation erosion is employed.
- * 2-poles motor models: standard
* 4-poles motor models: option

● Extensive Performance Range

The wide range of lineup of 2-poles and 4-poles motor models cover in an extensive performance range from low to high-head as shown on the performance curves.

Applications

- Pressurized sewage system
- Manhole pumping
- Sewage transportation for small residential community
- Building wastewater sump and others

■ Standard Specifications

Handling Liquid	Kind of Liquid	Sewage and Wastewater
	Temperature	0—32°C
Material	Cable	VCT
	Motor Shaft	SUS420J2
	Pump Casing	FC200
	Impeller	SCS13 (2-poles) FC200 (4-poles)
	Grinder	Rotary Blade
Fixed Blade		High-chrome cast iron
Electric Motor	Name	Air-filled type submersible induction motor
	Insulation Class	Class E
	Enclosure	IP68
	Phase	3-ph
	Voltage	200—480V

(Note) SUS: Stainless steel, SCS: Stainless steel casting FC: Gray iron casting

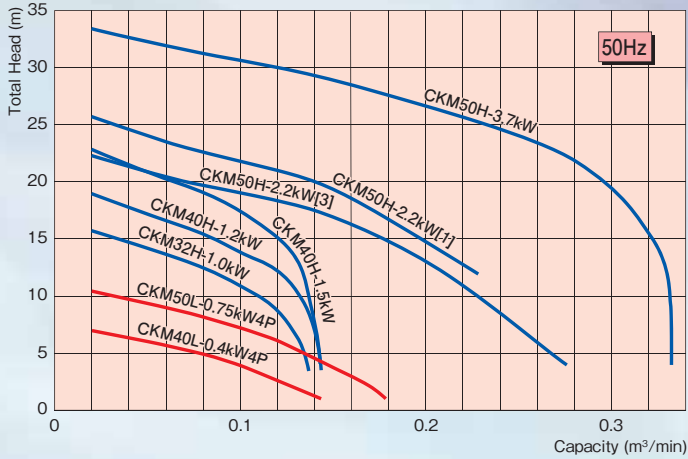
■ Special Specifications

Motor Insulation	Class F
Cable Extension	Cable length: 10 to 30m (every 5m)
Material Change	Lifting chain (Stainless steel)

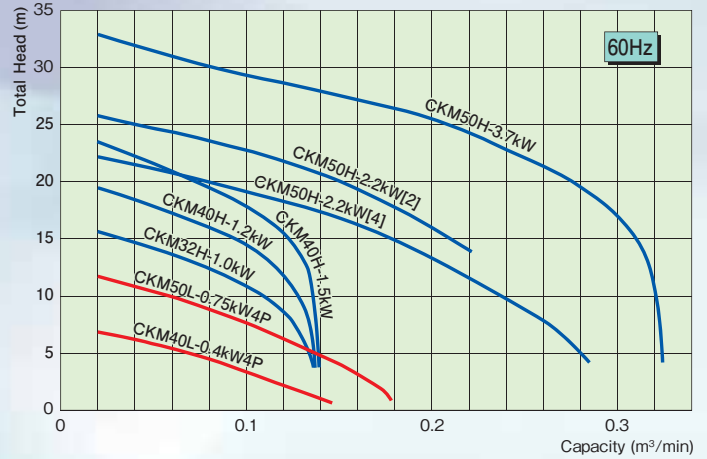
*For specifications other than the above, please contact us.

by the Built-in Powerful Grinder

Performance Curves



[] Impeller code No.



Standard Specifications

Bore mm	Model	Connection Part No.		Output kW	Phase	Capacity - Total Head m³/min-m		No. of Poles P	Motor Protector	Weight (Bare Pump) kg
		Auto-connection	Free Standing			50Hz	60Hz			
32(40)	CKM32H	P32 (P40)	F32 (F40)	1.0	3-ph	0.06—13.6	0.06—13.6	2	Thermal Protector (Auto-reset type)	28
40(32)	CKM40H	P40 (P32)	F40 (F32)	1.2		0.06—16.5	0.06—17.2			28
				1.5		0.06—20	0.06—20.8			
50(40)	CKM50H	P50 (P40)	F50 (F40)	2.2		0.12—21.2[1]	0.12—21.7[2]			46
				3.7		0.15—16.8[3]	0.15—17.0[4]	55		
40(50)	CKM40L	P40 (P50)	F40 (F50)	0.4		4	0.08—4.9	0.08—4.5		28
50(40)	CKM50L	P50 (P40)	F50 (F40)	0.75			0.10—7.3	0.10—7.7		28

* Bore () is also available.

(Option) For P50, the companion flange can be changed to a JIS10K standard flange.

[] Impeller code No.

Standard Accessories

- Power cable 1 pc.
- CKM32/40/50H 6 m
- CKM40/50L 8 m

- Auto-connection type
- Connection (with bolts and packing)
- Guide holder (with bolts and nuts)
- Sliding bracket
- Lifting chain (6m)

Connection Part No.	Set Weight	Connection Weight
P32	11kg	4.5kg
P40		
P50		

- Free standing type

Connection Part No.	Set Weight
F32	Included in the body
F40	
F50	

Upon placing an order or inquiries, please inform us of the pump model and connection part No.

- Part Specifications

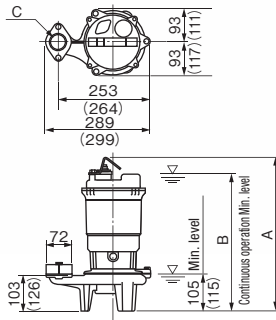
Applicable Model	Cable Specification				Starting Method	Mechanical Seal	
	Type	Section Area (mm²)	Cores	Outer Dia (mm)		Lower	Upper
CKM32H, CKM40H, CKM50H (2.2kW) CKM40L, CKM50L	VCT	1.25	4	φ11.5	Direct	SiC/SiC	SiC/SiC
CKM50H (3.7kW)	VCT	2.0	4	φ12			

Dimensions

Free standing type

CKM32H
CKM40H
CKM40L
CKM50L

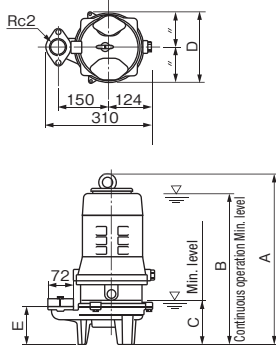
() : CKM40L
CKM50L



Model	Connection Part No.	Output kW	A	B	C
CKM32H	F32	1.0	432	385	Rc11/4
CKM40H	F40	1.2			Rc11/2
		1.5			
CKM40L	F40	0.4	380	380	Rc11/2
CKM50L	F50	0.75			Rc2

Free standing type

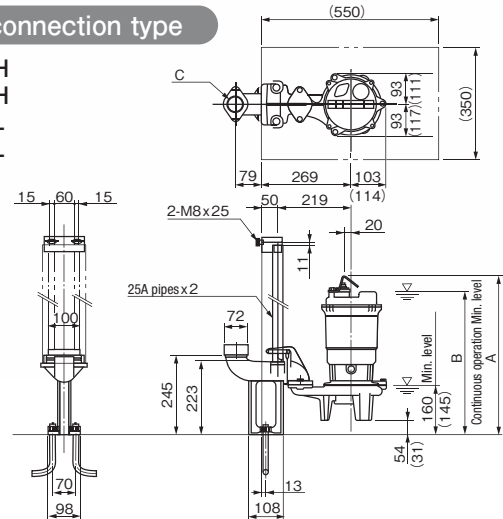
CKM50H



Model	Connection Part No.	Output kW	A	B	C	D	E
CKM50H	F50	2.2	499	445	130	208	109
		3.7	547	495	135	210	118

Auto-connection type

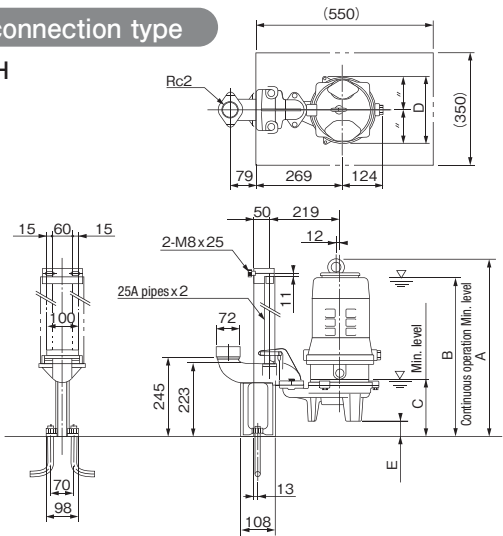
CKM32H
CKM40H
CKM40L
CKM50L



Model	Connection Part No.	Output kW	A	B	C
CKM32H	P32	1.0	486	440	Rc11/4
CKM40H	P40	1.2			Rc11/2
		1.5			
CKM40L	P40	0.4	463	410	Rc11/2
CKM50L	P50	0.75			Rc2

Auto-connection type

CKM50H



Model	Connection Part No.	Output kW	A	B	C	D	E
CKM50H	P50	2.2	547	495	180	208	48
		3.7	588	535	175	210	41

Specifications and dimensions are subject to change without notice.

ShinMaywa Industries, Ltd.

International Business Group
Sales & Marketing Dept., Fluid Div.

3-2-43, Shitte, Tsurumi-ku, Yokohama, 230-0003, Japan
Phone : +81-45-584-1322 Fax : +81-45-575-2286
E-mail : sales.eisui@shinmaywa.co.jp

ShinMaywa (America), Ltd.

10737 Gateway West, Suite 240,
El Paso, Texas 79935, U.S.A.
Phone : +1-915-594-9862
Fax : +1-915-594-9866
E-mail : info@shinmaywaamerica.com

ShinMaywa (Asia) Pte. Ltd.

8 Burn Road, #14-10 Trivex,
Singapore 369977
Phone : +65-6224-0728
Fax : +65-6224-9678
E-mail : asia.ad@shinmaywa.com.sg

ShinMaywa (Shanghai) Trading Co., Ltd.

201107 Building 6, Lane 333, Zhujian Road,
Minhang District, Shanghai, China
Phone : +86-21-5296-2966
Fax : +86-21-5296-2970
E-mail : shanghai@shinmaywa.co.jp



ShinMaywa ONO PLANT

ISO 9001(No.956445)/ISO 14001(No.771888)