

**GWN
Series**

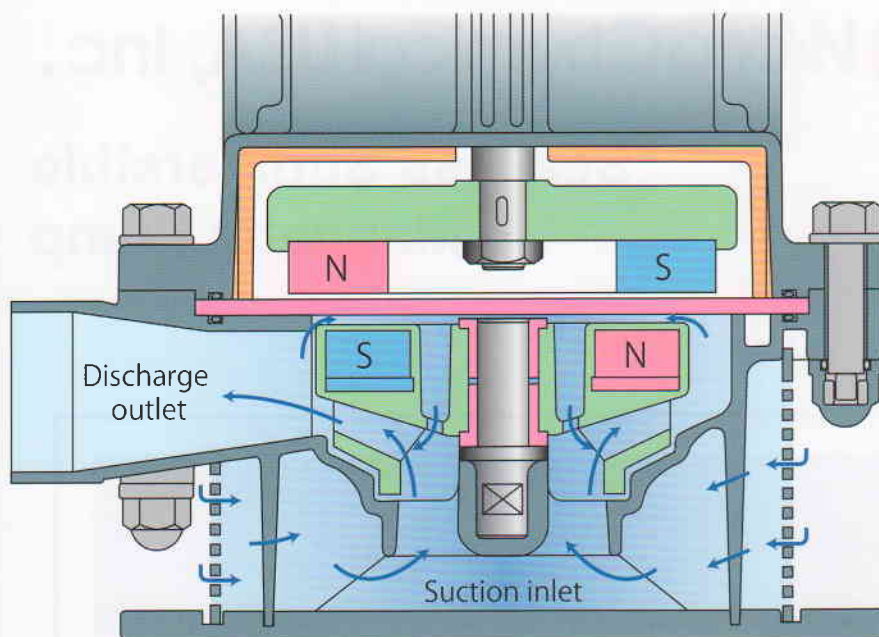
 **World Chemical USA, Inc.**

**Sealless Submersible
Magnetic Pump**



For pumping from a chemical tank
For mixing, agitation and emergency situations

DISK TYPE MAGNETIC DRIVE SYSTEM



Magnetic coupling prevents leakage into the motor

The driving magnet on the motor side and the driven magnet on the pump side rotate around a robust ceramic separating board. This magnetic coupling method separates the motor chamber and the pump chamber completely, preventing liquid leakage into the motor chamber.

FEATURES

1. The world's first fully corrosion-resistant, non-metallic magnetic drive submersible pump for acids and alkalis

Our submersible pump is made from carbon fiber reinforced polypropylene (CFR PP) for the main pump body, and high purity ceramic or PTFE for critical parts. No metal is used in wetted parts. Due to the corrosion resistant materials, our submersible pump is perfect for acidic and alkaline solutions.

2. A built-in thermal protector for automatic motor shutdown

When temperatures reach abnormal levels due to electrical or mechanical factors during operation, the built-in thermal protector automatically shuts off the pump. Any abnormal load or liquid temperatures exceeding the maximum limit are detected to prevent failures.

3. Lightweight construction and easy handling in emergency situations

For example, the YD-5002GWN weighs 57.3 lbs. (26 kg). With convenient grip handles, these pumps can be transported quickly in the event of an emergency. It can be used at any location where electric power supply is available.

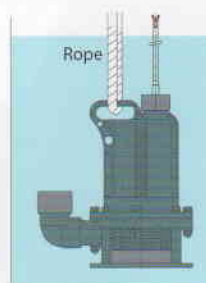
4. Submersible is Oil Free

The seal-less magnetic drive pump does not include the oil-bathed mechanical seals that are typical of general submersible pumps. Therefore, we provide a safe pump without the risk of oil leakage due to wear of the mechanical seal and without oil contamination.

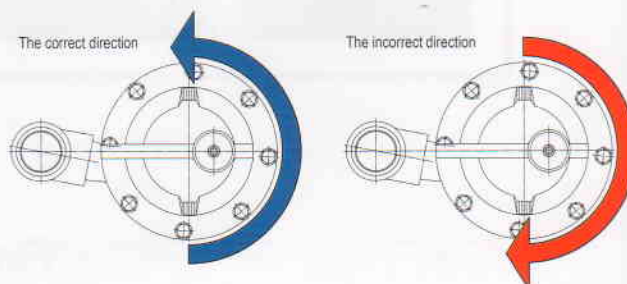
APPLICATIONS

- For pumping from a chemical tank
- For pumping from a tank where the surface liquid may freeze
- For pumping from a sump pit at a breakwater
- For pumping from a tank with foamy liquid
- For pumping from an underground tank
- For scrubber systems
- For mixing and agitation
- For emergency situations

EXAMPLE OF INSTALLATION



Hang the pump sunk in the container or the pit big enough and verify the rotative direction.



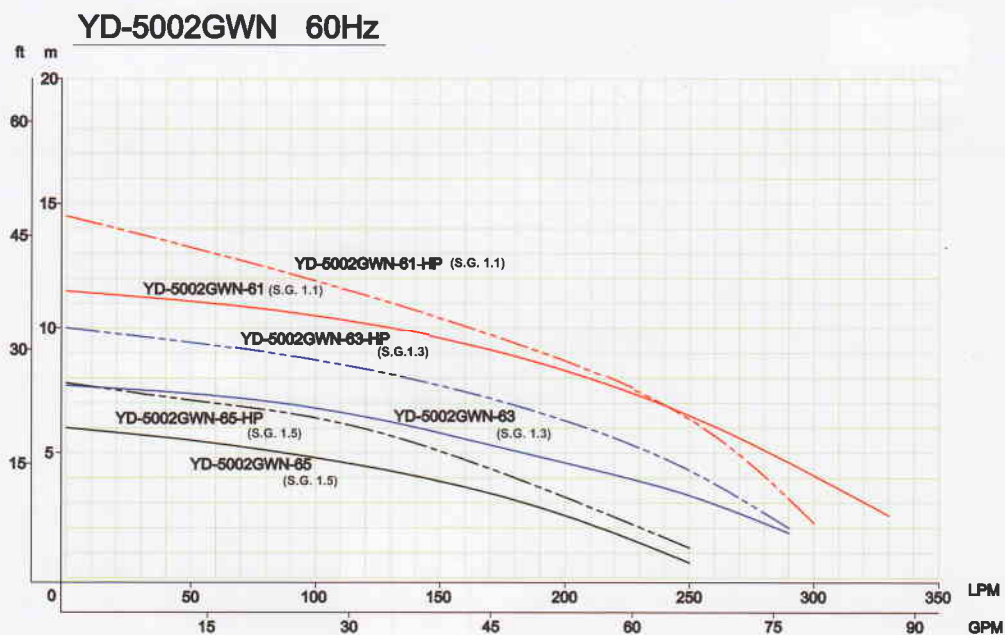
MODEL DESIGNATION

YD – 50 02 GWN – CP – A D 6 1 – HP – V
 (1) (2) (3) (4) (5) (6) (7) (8) (9)

- (1) Bore: 50= 2.0" (50mm)
- (2) Motor output: 02 = 1.5HP (1.1kW)
- (3) Cover Main Material: CFR PP (Carbon Fiber Reinforced Polypropylene)
- (4) Bearing Material: R = PTFE A = Ceramic
- (5) O-Ring Material: E = EPDM D = FPM
- (6) Frequency: 6 = 60Hz
- (7) Specific Gravity: 1 = 1.1 3 = 1.3 5 = 1.5
- (8) Impeller: No Mark = Standard HP = High Pressure
- (9) Special Character (Ex.) V = Non Standard Voltage

*A special character will be added to the end of the model designation when a special material or special specification is requested.

PERFORMANCE CURVE

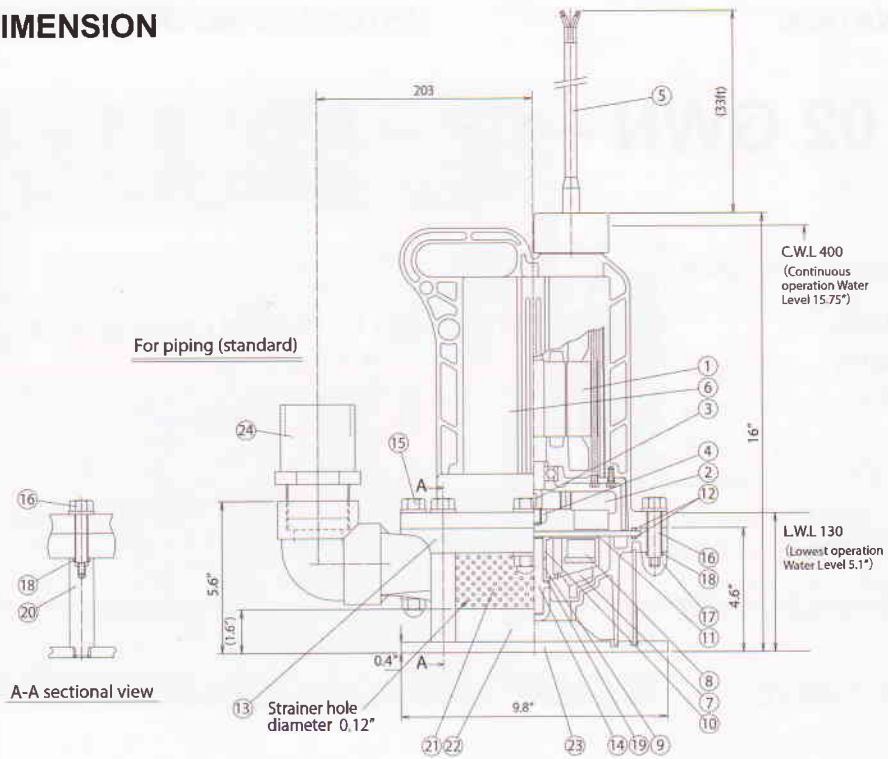


SPECIFICATION

Model	Discharge Bore	Specific Gravity	MAX	Motor Output	Phase	Voltage	Weight (lbs/kg)
			60Hz (Ft-GPM)				
YD-5002GWN (Standard)	2" (50mm)	1.1	37ft-87gpm	1.5HP(1.1kW)	3	460V	57lbs/26kg
YD-5002GWN-HP (High Pressure)	2" (50mm)	1.1	47ft-80gpm	1.5HP(1.1kW)	3	460V	57lbs/26kg

*Different Voltage available upon request.

OUTLINE DIMENSION



PARTS DESCRIPTION

NO.	PARTS NAME	REFERENCE
1	Motor	FC Dry Induction Type
2	Drive Magnet	Ferrite Magnet
3	Magnet Key on the Motor Side	SS
4	Magnet Nut on the Motor Side	SS
5	Cable	2PNCT
6	Motor Cover	CFR PP
7	Impeller	CFR PP
8	Magnet on the Impeller Side	Ferrite Magnet
9	Front Bushing	PTFE / Ceramic
10	Rear Bushing	PTFE
11	Separating Board	Ceramic
12	O-Ring for Separating Board	EPDM / FPM

NO.	PARTS NAME	REFERENCE
13	Casing	CFR PP
14	Pump Shaft	SiC
15	Set Bolt 92	CFR PP
16	Set Bolt 52	CFR PP
17	Nuts for Set Bolt	CFR PP
18	O-Ring for Set Bolt	EPDM / FPM
19	Floating Washer	PTFE*
20	Stand Bolts	HT.PVC
21	Strainer*	PP
22	Sludge Fence	PP
23	Bottom Board	PP
24	2" Valve Socket	PVC

*For ceramic bushing only

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