

**YD-GW
Series**

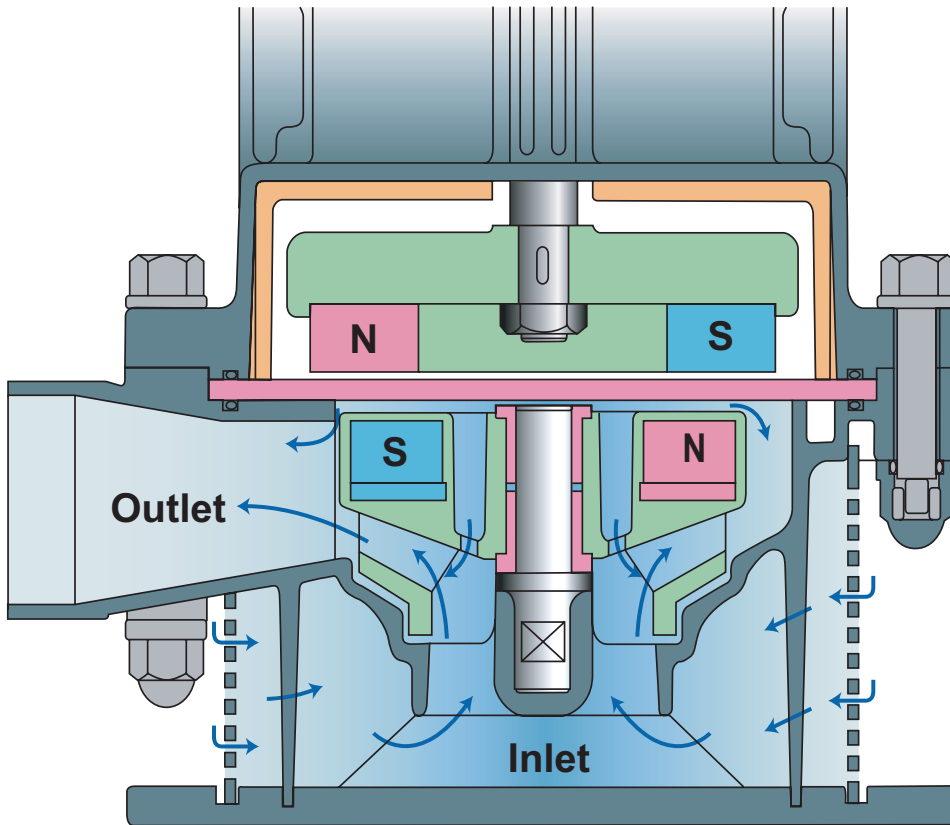
 **WORLD CHEMICAL USA, INC.**

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 of carbon fiber reinforced polypropylene (CFR PP) for the main pump body, and high-purity ceramic or Rulon® 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, single-phase operation or liquid temperatures exceeding the maximum limit are detected to prevent failures.

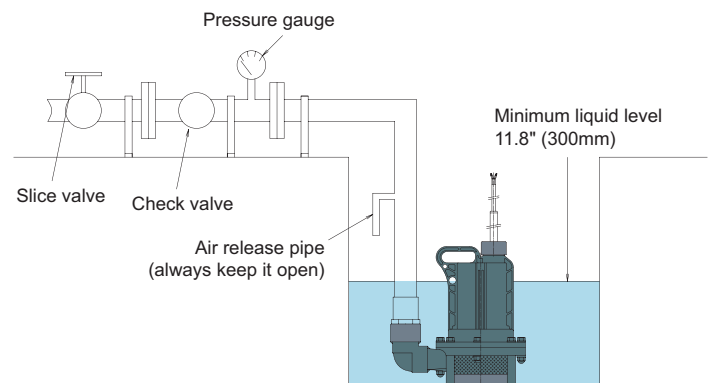
3. Lightweight construction and easy handling in emergency situations

For example, the YD-502/512GW 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 an electric power supply is available.

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

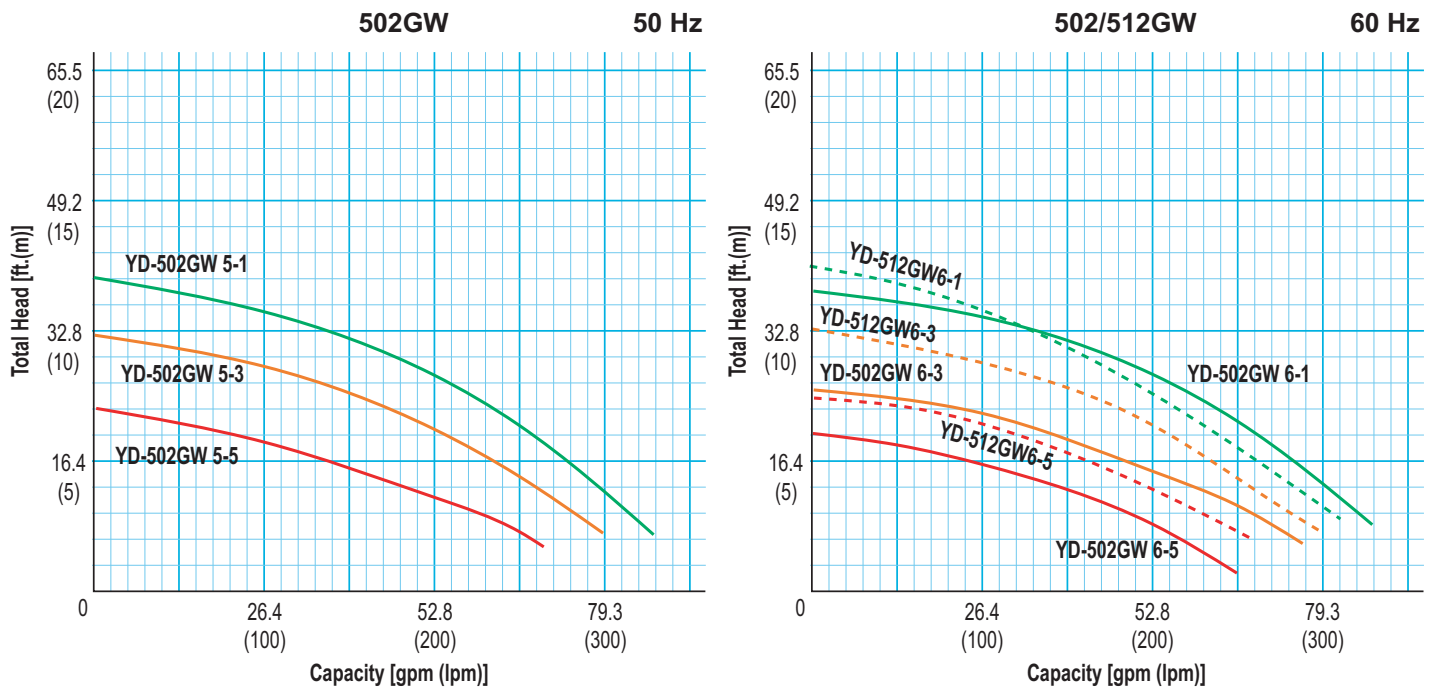


MODEL DESIGNATION

Y D - 5 0 2 G W - A D 6 - 1 H
 (1) (2) (3) (4) (5) (6) (7) (8) (9)

- | | | | | |
|--|--|--|--|--|
| (1) Discharge Bore
50 : 2.0" (50mm) | (3) Motor Output
2 : 1.1 kW | (5) Bushing Material
A : Ceramics
R : Rulon® | (7) Frequency
5 : 50 Hz
6 : 60 Hz | (9) Heat Resistant Cable
None : 131 °F
H : 167 °F |
| (2) Pump Head
0 : Standard Pump Head
1 : High Pump Head | (4) Type
GW : Submersible pump | (6) *O-ring Material
D : FPM
<small>* EPDM o-rings are also available upon request.</small> | (8) Specific Gravity
1 : 1.1
3 : 1.3
5 : 1.5 | |

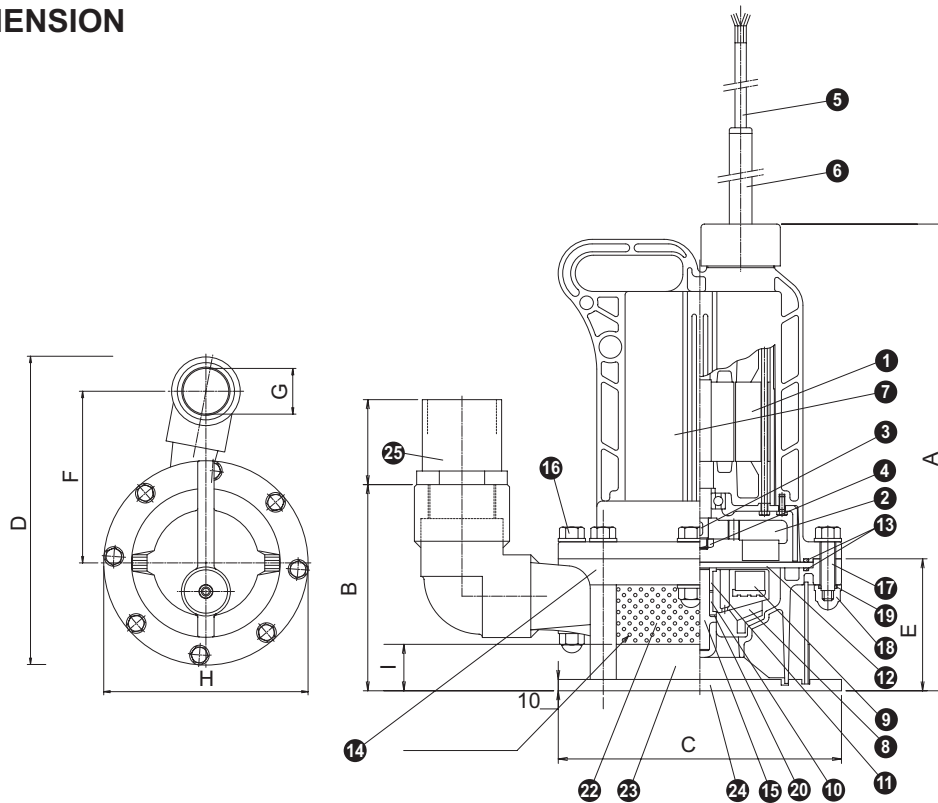
PERFORMANCE CURVES (Three Phase)



SPECIFICATION

MODEL	DISCHARGE BORE	SPECIFIC GRAVITY	MAX HEAD - MAX CAPACITY		MOTOR OUTPUT	WEIGHT [lbs. (kg)]
			50 Hz	60 Hz		
			[m - lpm]	[ft. - gpm]		
YD-502GW	2" (50mm)	1.1	12.0 - 330	34.5 - 85.8	1.1 kW	57 (26)
		1.3	9.8 - 300	25.7 - 75.4		
		1.5	7.0 - 265	20.0 - 65.0		
YD-512GW	2" (50mm)	1.1	-	42.0 - 80.8	1.1 kW	57 (26)
		1.3	-	33.0 - 78.0		
		1.5	-	25.0 - 67.6		

■ OUTLINE DIMENSION



Unit: inch (mm)

MODEL	A	B	C	D	E	F	G	H	I
YD-502/512GW	16.2 (412)	7.2 (182)	9.8 (250)	14.6 (372)	4.6 (116.5)	8.3 (210)	7.6 (70)	9.8 (250)	1.6 (41)

* Measurements are subject to change without notice.

■ PARTS DESCRIPTION

NO.	PART NAME	MATERIAL	QTY	NO.	PART NAME	MATERIAL	QTY
1	Motor	Dry induction type	1	15	Pump shaft	SiC	1
2	Drive magnet	Ferrite magnet	1	16	Set bolt 92	CFR PP	1
3	Magnet key on the motor side	SS	1	17	Set bolts 52	CFR PP	7
4	Magnet nut on the motor side	SS	1	18	Nuts for set bolt	CFR PP	4
5	Cabtire cable	VCT/2PNCT	1	19	O-rings	EPDM / FPM	8
6	Cabtire cable sleeve	S. PVC	1	20	Floating washer	Rulon®*	1
7	Motor cover	CFR PP	1	21	Stand bolts**	HT.PVC	4
8	Impeller	CFR PP	1	22	Strainer	PP	1
9	Magnet on the impeller side	Ferrite magnet	1	23	Sludge fence	PP	1
10	Front bushing	Rulon® / Ceramics	1	24	Bottom board	PP	1
11	Rear bushing	Rulon®	1	25	50A valve socket	PVC	1
12	Separating board	Ceramics	1	26	Hose coupling***	PVC	1
13	O-rings	EPDM / FPM	2	27	Hose holder***	PVC	1
14	Casing	CFR PP	1	28	Valve socket for hose***	PVC	1

* For ceramic bushing only
 ** Not shown in the figure
 *** Optional for hose connection

NORTH / SOUTH AMERICA

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