



# GD series

## 50Hz

### Submersible Grinder Pump

STAIRS GD series Submersible Sewage / Effluent Pumps are designed for commercial and industrial wastewater transferring and dewatering applications.



STAIRS INDUSTRIAL CO., LTD.


**GD series**
**GD series**
**Submersible Grinder Pump**

STAIRS GD series Submersible Sewage / Effluent Pumps are designed for commercial and industrial wastewater transferring and dewatering applications.

The innovative vortex impeller design reduces the risk of clogging problem. Moreover, STAIRS GD series include a stainless steel motor frame to prevent corrosion and are designed to provide great heat dissipation from the motor, ensuring a long service life.

As with STAIRS pump, each one is 100% tested to ensure quality and reliability for years of trouble-free performance.

**General Data**

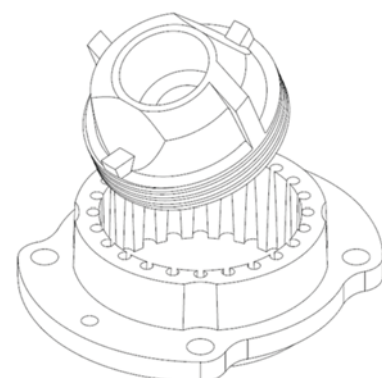
Model Code .....	1
Material and standard table .....	1
Applications .....	1
Advantages .....	1

**Technical Data**

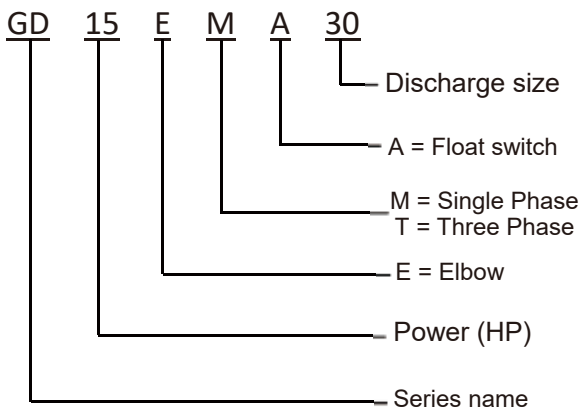
Performance Curves .....	2
Material .....	2
GD 50Hz (Single Phase) .....	3
GD 50Hz (Three Phase) .....	3

**Guide Rail series**

Guide Rail System .....	4
-------------------------	---



Model Code



Applications

- General household use, Drainage systems for Buildings, Apartments, Resorts and Wastewater systems. Waste water drainage.
- Materials such as leather, textile fibres, food and other tougher objects can be pumped.
- Wastewater systems for Domestic, Commercial, Industrial, Municipal, Schools, Hospitals and many other uses.
- Sewage and Drainage systems.



Advantages

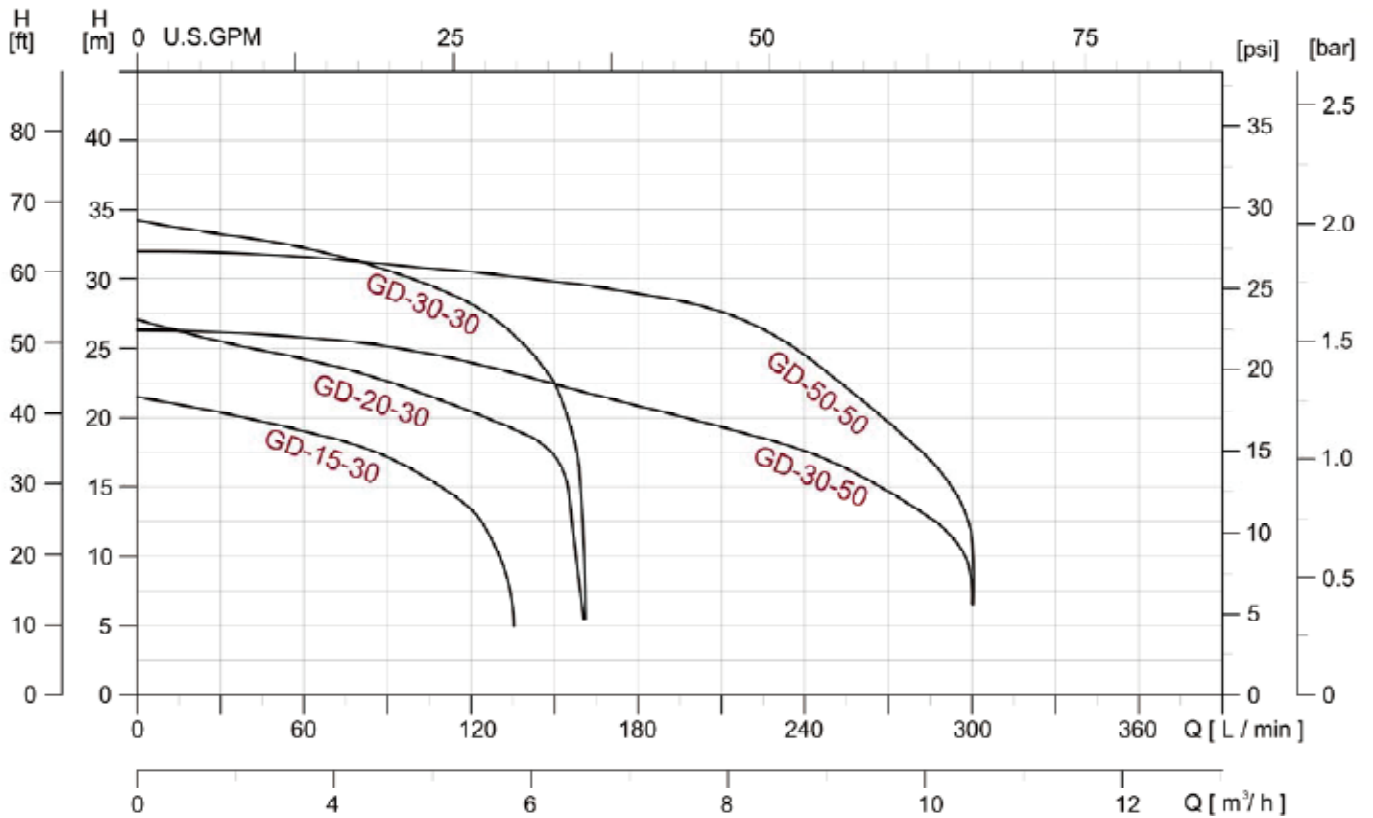
- Robust construction.
- Superior Heat Dissipation.
- Effectively combine various foreign body grinding
- The grate knife/ring is made of SUS440C material, The hardness reaches HRC 55-60 degrees, and the high hardness material is resistant to wear and tear.

Material and standard table

Caiber		32mm · 50mm		
Liquid	Temperature	0°C~40°(32°F~104°F)		
	The lowest depth	▽30M		
Pump	Material	Impeller	Centrifugal Vortex Impeller	
		Upper Cover	FC200	
		Bracket	FC200	
		Bearing	FC200	
		Impeller	FC250	
		Volute Casing	FC200	
		Motor Bracket	FC200	
		M.Seal Bracket	FC200	
		Radial Cutter	SUS440C	
		Radial Ring	SUS440C	
	M:Seal	Lubricant	ISO VG#32	
Motor Side		Carbon / Ceramic		
Pump Side		Silicon Carbide		
Motor	Type	Submersible dry type		
	Pump	Protection Class: IP 68.		
	Insulation Class	F class(155°C)		
	Inner Protector	Auto Reset Motor Protector		
	Material	Casing	FC200	
		Main Shaft	SUS410	
Cable		Standard H07		

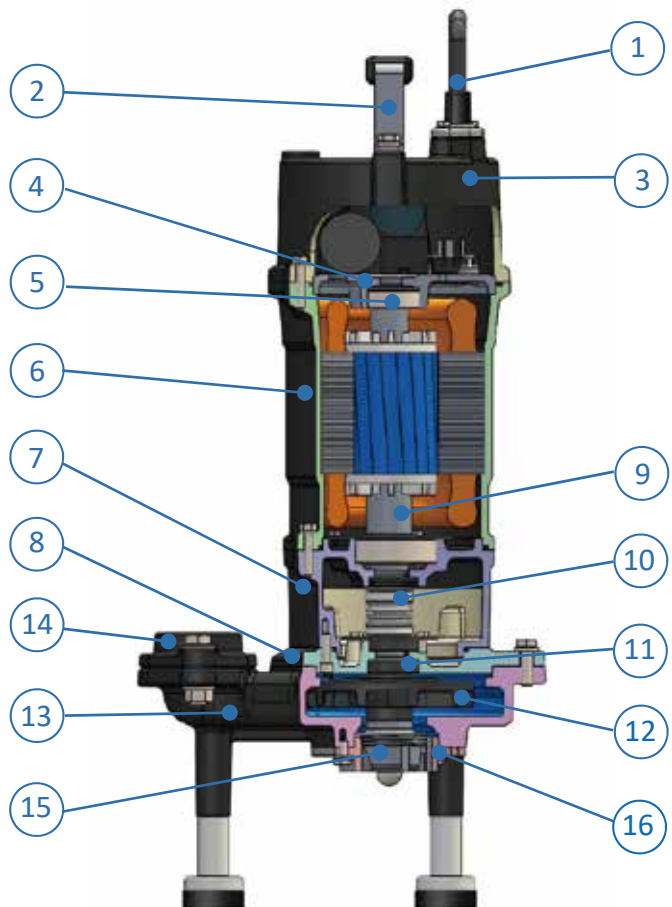


## Performance Curves



## Material

NO.	Component	Material
1	Cable	H07RN-F
2	Handle	AISI304+NBR
3	Motor cover	FC200
4	Bearing cap	FC200
5	Bearing	---
6	Motor frame	FC200
7	Bearing Bracket	FC200
8	M.Seal Bracket	FC200
9	Motor Shaft	AISI 410
10	Mechanical seal	CA / CE, SIC/SIC
11	Oil Seal	NBR70
12	Impeller	FC250
13	Pump casing	FC200
14	Flange	FC200
15	Radidl cutter	AISI 440C
16	Cutter ring	AISI 440C



## Technical Data

Single Phase

Model	Power		Nominal Current [A] 220-230V	Discharge [inch]	Head		Flow		Cable [M]	Weight [kg]
	HP	kw			Rated. (M)	Max. (M)	Rated. (L/min)	Max. (L/min)		
GD-15 M(A)30	1.5	1.1	6.6-6.4	1 1/4"	16	21	60	140	10	27
GD-20 M(A)30	2	1.5	10.4-10.0	1 1/4"	24	26	60	170	10	36

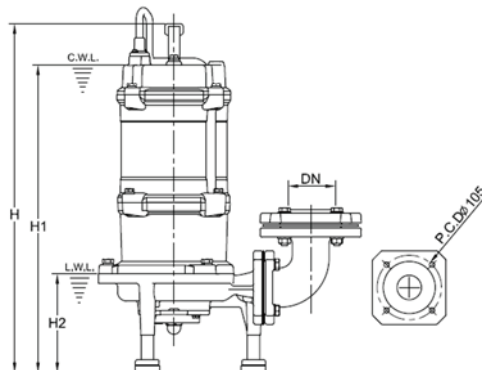
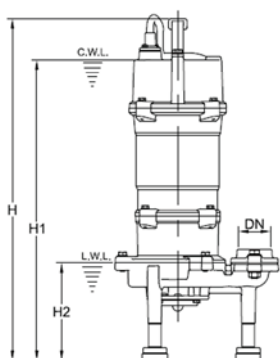
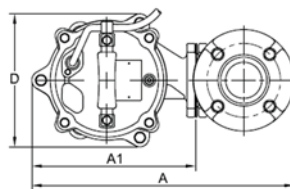
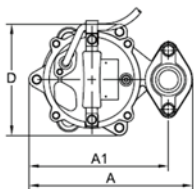
· A = Auto Float Switch

Three Phase

Model	Power		Nominal Current [A]		Discharge [inch]	Head		Flow		Cable [M]	Weight [kg]
	HP	kw	230V	380~415V		Rated. (M)	Max. (M)	Rated. (L/min)	Max. (L/min)		
GD-15 T30	1.5	1.1	4.2	2.4-2.3	1 1/4"	16	21	60	140	10	25
GD-20 T30	2	1.5	6.1	3.6-3.4	1 1/4"	24	26	60	170	10	32
GD-30 T30	3	2.2	8.6	5.1-4.8	1 1/4"	32	34	60	170	10	35
GD-30E T50	3	2.2	9.5	5.6-5.2	2"	20	25	200	300	10	44
GD-50E T50	5	3.7	14.0	8.2-7.7	2"	31.5	27	200	300	10	47

## Dimensions

Model	Phase	Discharge[mm]						DN (mm)
		A	A1	D	H	H1	H2	
GD-15-30	1	267	228	96	558	491	159	32
	3				528	461	159	
GD-20-30	1	290	251	96	605	538	159	32
	3				550	483	159	
GD-30-30	3	290	251	96	550	483	159	32
GD-30E-50	3	428	268	215	569	502	237	50
GD-50E-50	3	428	268	215	589	522	237	50



Guide Rail System



**The Guide Rail System** is also known as the auto coupling system. The auto coupling is fixed to the bottom of the sump, pit or chamber.

Pump can be lowered into the chamber on dual guide rails and automatically connected to the elbow of auto coupling system.

The pump can be automatically disconnected from the auto coupling system elbow when the pump is raised.

The pump can be raised and lowered in a short time without emptying the chamber and without entering the chamber for disconnecting the pump.

Through auto coupling system, technician can easily and safely perform the repair and maintenances of pump.

The operation of entire system can be continued if the additional spare submersible pumps are installed and operated the servicing of the major pump units

Guide Rail System

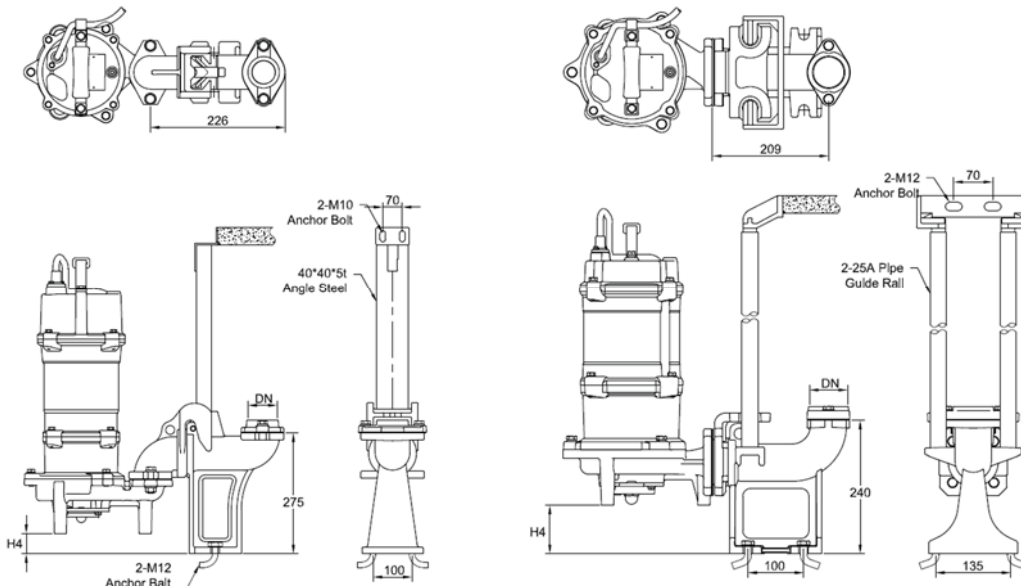
GD Series with pump stool and guide rail system make it easy for removal, dismantling, repair and maintenance of Pumps, Motors, Float switches etc.

SPECIFICATION

Model	Guide Rail	DN (mm)	Dimensions
			H4(mm)
GD-15-30	TS-32	32	36
GD-20-30	TS-32	32	34
GD-30-30	TS-32	32	34
GD-30E-50	TG-50	50	88
GD-50E-50	TG-50	50	88

ATTENTION

The GD Lifting device option is not included in the price of Pumps and may be purchased separately.





 **STAIRS**

No.6-7-1,Shanzijiao, Lucao Township, Chiayi County 61158, Taiwan  
Tel: +886 5 3750488 Fax: +886 5 3755658  
[www.stairs.com.tw](http://www.stairs.com.tw) E-mail:[stairs@stairs.com.tw](mailto:stairs@stairs.com.tw)

1120619