

## SPECIFICATION: CG12-26XA(12V26Ah)

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The rechargeable GEL batteries are lead-lead dioxide systems. Which are new products developed success base on SLA batteries. In contrast with AGM batteries, electrolyte of GEL batteries is composed of micro millimeter SiO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> gelled electrolyte is reversibility and steady three-dimensional network structure; especial grid alloy and gelled electrolyte micro-crack" structure is easy for returning into H<sub>2</sub>O when producing oxygen; special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. On the other hand, the battery is completely sealed, maintenance-free, Safety and usable in any position.

## **GENERAL FEATURES**

- I Micro millimeter SiO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> gelled electrolyte technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- I UL-recognized component.
- I Can be mounted in any orientation.
- I Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- I Maintenance-free operation.
- I Low self discharge.
- I Case and cover available in both standard and flame retardant ABS.

## **CONSTRUCTION**

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Gelled acid

#### TECHNOLOGY PARAMETER

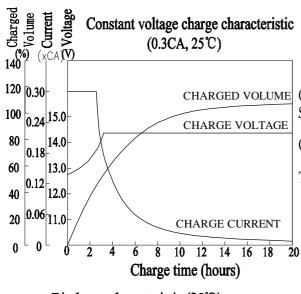
Battery model	CG12-26XA 12V								
Nominal voltage									
Number of cell	6								
Capacity	20hR (1.3A, 10.5V)	10 hR (2.37A, 10.8V)	5hR (4.1A,10.5V)	1hR( 16 A, 9.6 V)					
(25°C)	26Ah	26Ah 23.7Ah 20.5Ah		16 Ah					
D: .	Length	Width	Height	Total Height					
Dimensions.	166±1mm	175±1mm	125 ±1mm	125 ±1mm					
Approx. weight	8.1 Kg (17.9 lbs) (Weight deviation: ± 3%)								
Internal resistance	Full charged at 25°C: ≦12 mOhms								
Self discharge	3% of capacity declined per month at 20°C (average)								
Operating temperature	Discharge	Cha	rge	Storage					
range	-20∼60°C	-10∼	-10∼60℃						
Max. discharge current (25°C)	300A (5s)								
Short circuit current	1200 A								

Constant curre	ent discharge	rating-amperes	at 25°C(	77°F)

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	95.0	64.0	48.0	28.5	16.0	6.74	4.47	2.52	1.24
1.65V	90.1	60.9	45.9	27.4	15.4	6.53	4.36	2.47	1.23
1.70V	84.9	57.8	43.7	26.2	14.8	6.30	4.24	2.42	1.22
1.75V	79.7	54.5	41.1	24.9	14.2	6.05	4.10	2.37	1.20
1.80V	74.3	51.3	39.1	23.6	13.5	5.78	3.95	2.31	1.18

# Constant power discharge rating-watts per cell at 25°C (77°F)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	185	121	90.0	55.0	40.0	31.7	19.6	13.4	8.54
1.65V	173	114	85.1	52.3	38.2	30.3	19.0	13.1	8.39
1.70V	161	107	80.2	49.4	36.3	28.9	18.3	12.5	8.22
1.75V	151	99.7	75.2	46.6	34.3	27.5	17.6	12.0	8.03
1.80V	139	92.7	70.3	43.7	32.3	26.0	16.9	11.4	7.83



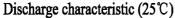
CHARGING METHODS: Constant voltage charging at 25°C Standby use: Maximum charging current: 30% of rated capacity Charging voltage: 2.20-2.30VPC

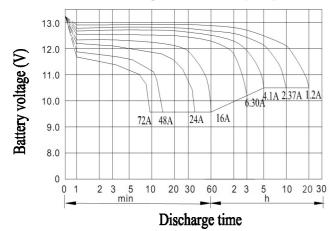
Cyclic use: Maximum charging current: 30% of rated capacity Charging voltage: 2.40-2.45VPC

Charging voltage. 2.40-2.

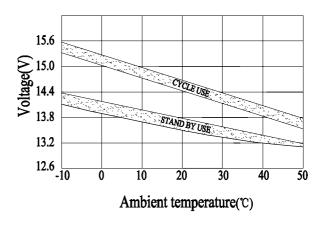
Temperature compensation:

stand by  $-20 \text{ mV/}^{\circ}\text{C}$ ; cyclic use  $-30 \text{mV/}^{\circ}\text{C}$ 

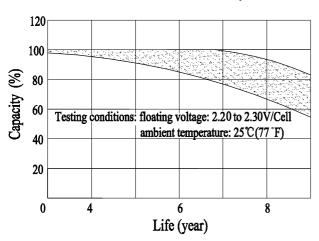




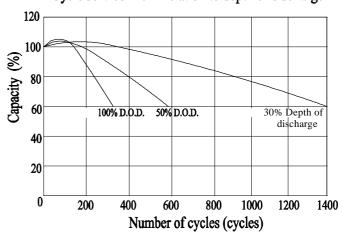
# Relationship between charge voltage and temperature



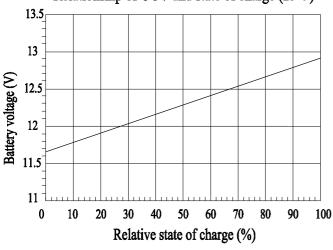
Life characteristics of standby use



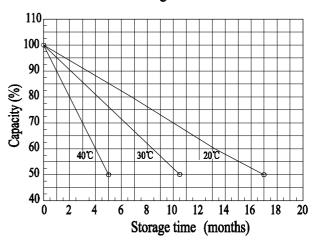
Cycle service life in relation to depth of discharge



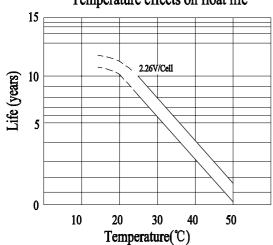
Relationship of OCV and state of charge (25°C)



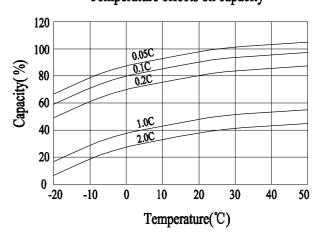
Self-discharge characteristic



Temperature effects on float life



Temperature effects on capacity



# Battery and terminal dimensions

