

KBG12400 12V 40Ah (C₁₀)



Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, scrubber, folklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.



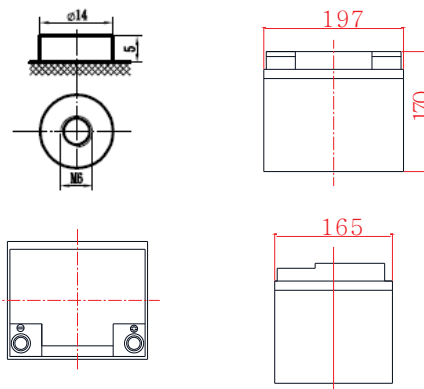
Performance Characteristics

Nominal Voltage	12V	
Design Life	12 years	
Dimensions	Length (mm / inch)	197 / 7.76
	Width (mm / inch)	165 / 6.50
	Height (mm / inch)	172 / 6.77
	Total Height (mm / inch)	172 / 6.77
Approx. Weight	(Kg / lbs)	13.2 / 29.1
	Terminal	M6
Container Material	ABS	
Rated Capacity	40.0Ah / 4.00A	(10hr, 1.80V/cell, 25°C / 77°F)
	36.9Ah / 7.37A	(5hr, 1.70V/cell, 25°C / 77°F)
	26.6Ah / 26.6A	(1hr, 1.70V/cell, 25°C / 77°F)
Max. Discharge Current	480A (5s)	cell, 25°C / 77°F)
Internal Resistance	Approx 12.5mΩ	
Operating Temp. Range	Discharge : -40 ~ 60°C (-40 ~ 140°F)	
	Charge : -20 ~ 50°C (-4 ~ 122°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Cycle Use	Cycle Use Maximum charging current 10A	
	Voltage: 14.4V ~ 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Maximum charging current 10A 13.5V	
	Voltage: 13.5V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -18mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise Gel Series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Discharge Constant Current (Amperes) at 77°F (25°C)

Volts/cell	15min	30min	1h	2h	3h	5h	10h	20h
1.80V	64.8	42.2	25.5	14.7	10.7	7.10	4.00	2.14
1.75V	69.5	44.1	26.2	15.0	10.8	7.29	4.04	2.15
1.70V	71.9	44.5	26.6	15.2	10.9	7.37	4.08	2.16
1.65V	73.4	45.3	26.8	15.4	11.1	7.45	4.12	2.17
1.60V	75.7	46.1	26.9	15.4	11.2	7.53	4.16	2.18

Dimensions and Terminal (Unit: mm (inches))



Applications

- Wind and solar energy systems
- Cable TV systems
- Telecommunications
- Electric wheel chairs
- Military equipment
- Emergency lighting
- Power plants
- Medical equipment
- Golf carts

Certifications

ISO 9001 / ISO 14001



Discharge End Voltage vs. Discharge Current

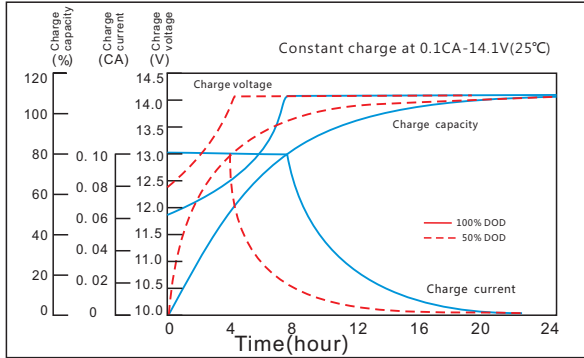
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

Discharge Constant Power (Watts per cell) at 77°F (25°C)

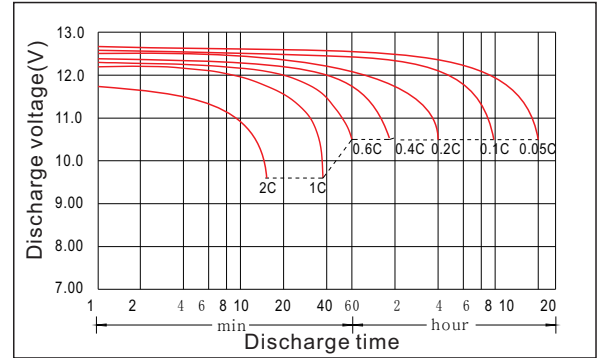
Volts/cell	15min	30min	1h	2h	3h	5h	10h	20h
1.80V	122	80.2	49.4	28.8	20.7	13.8	7.68	4.24
1.75V	129	82.2	49.7	28.9	20.8	14.0	7.76	4.26
1.70V	129	82.6	50.1	29.0	20.9	14.1	7.84	4.28
1.65V	131	82.6	50.5	29.1	21.1	14.2	7.92	4.30
1.60V	133	83.3	50.9	29.2	21.3	14.3	8.00	4.32

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

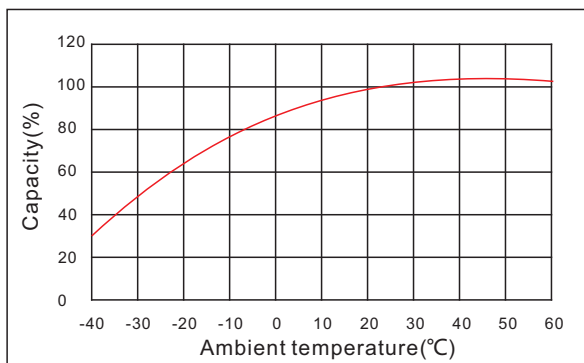
Charging Characteristics



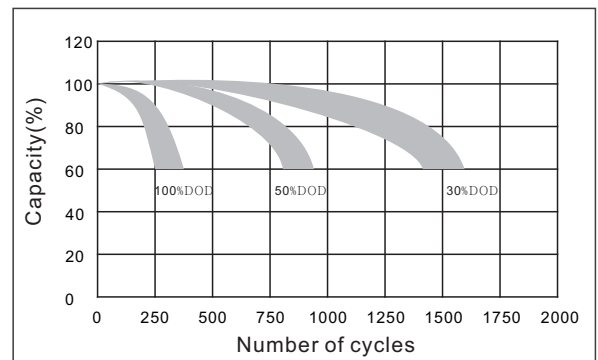
Discharge characteristic



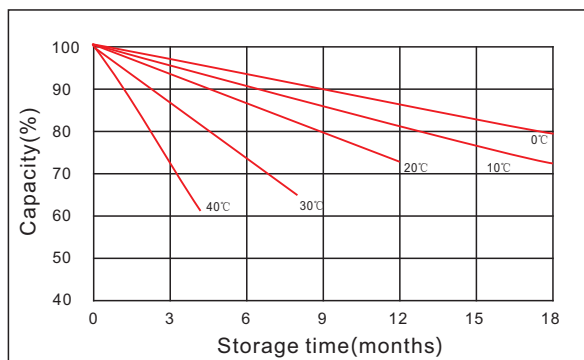
The effect of temperature on capacity



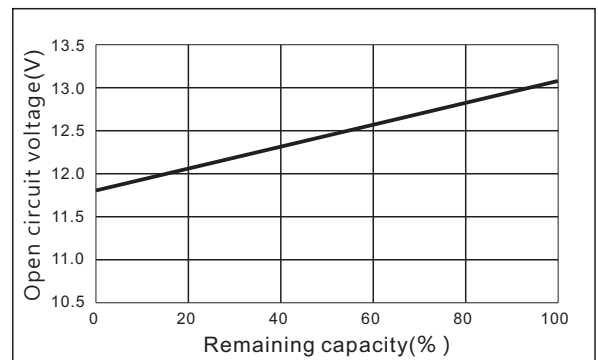
The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity



IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

2024/NT/K

