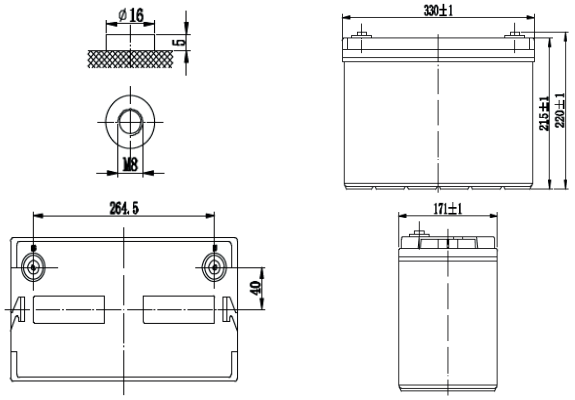
KBG121000 12V 100Ah (C_{10})

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)	330 / 12.99
	Width (mm / inch)	171 / 6.73
	Height (mm / inch)	215 / 8.46
	Total Height (mm / inch)	222 / 8.74
Approx. Weight	(Kg / lbs)	32 / 70.5
Terminal	M8	
Container Material	ABS	
Rated Capacity	106Ah / 5.3A	(20hr, 10.8V / cell, 25ºC / 77ºF)
	100Ah / 10.0A	(10hr, 10.8V / cell, 25ºC / 77ºF)
	87.5Ah / 17.5A	(5hr, 10.5V / cell, 25ºC / 77ºF)
	66.2Ah / 66.2A	(1hr, 9.6V / cell, 25ºC / 77ºF)
Max. Discharge Current	900A (5s)	
Internal Resistance	Approx 5.2mΩ	
Operating Temp. Range	Discharge : -20 ~ 60ºC (-4 ~ 140ºF)	
	Charge : -10 ~ 60ºC (14 ~ 140ºF)	
	Storage : -20 ~ 60ºC (-4 ~ 140ºF)	
Nominal Operating Temp. Range	25 ± 3ºC (77 ± 5ºF)	
Cycle Use	Maximum charging current 30A	
	Voltage: 2.38V ~ 2.42V at 25ºC (77ºF)	
	Temp. Coefficient: -20mV/ºC	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V ~ 13.8V at 25º C (77º F)	
	Temp. Coefficient: -30mV/ºC	
Capacity affected by Temperature	40ºC (104ºF)	103%
	25ºC (77ºF)	100%
	0ºC (32ºF)	86%
Self Discharge	Fully charged Kaise Gel Series batteries may be stored for up to 6 months at 25ºC (77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

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 9001:2008 ISO 14001:2008

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 Current (Amperes) at 77ºF (25ºC)

Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	175	143	91.0	57.4	25.3	15.9	10.0	4.80
1.75V	187	153	93.0	60.5	26.9	16.4	10.3	5.00
1.70V	200	164	96.0	61.5	27.2	16.9	10.5	5.04
1.65V	221	178	104	62.5	27.7	17.4	10.6	5.10
1.60V	229	185	108	66.2	27.9	17.7	10.8	5.15

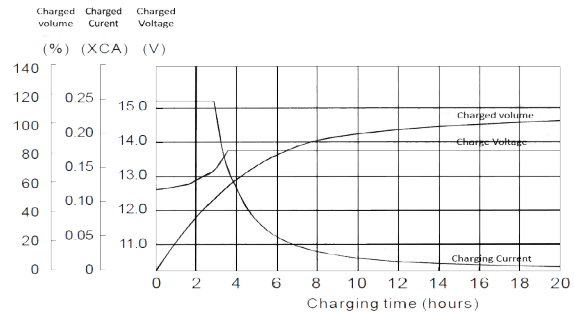
Discharge Constant Power (Watts per cell) at 77ºF (25ºC)

Volts/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.80V	329	321	171	131	104	62.5	48.5	34.0
1.75V	353	315	177	134	111	64.5	49.1	34.4
1.70V	360	299	183	137	114	66.8	50.9	35.0
1.65V	379	294	188	146	118	67.8	49.1	34.4
1.60V	392	321	199	150	124	70.6	48.5	34.0

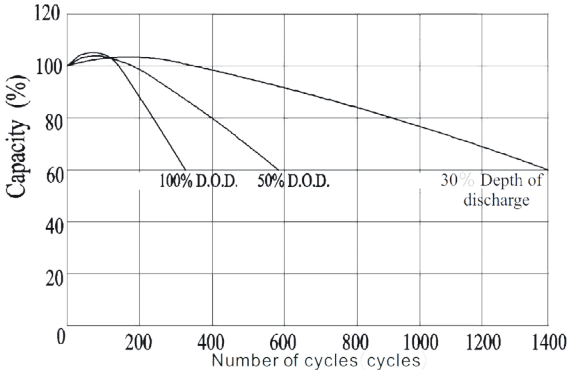
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KBG121000 12V 100Ah (C_{10})

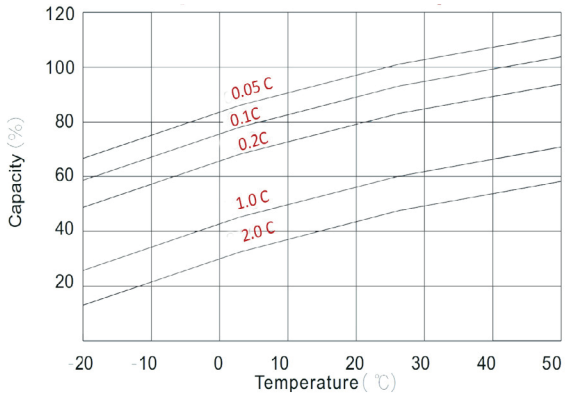
Charging Characteristics (cycle use)



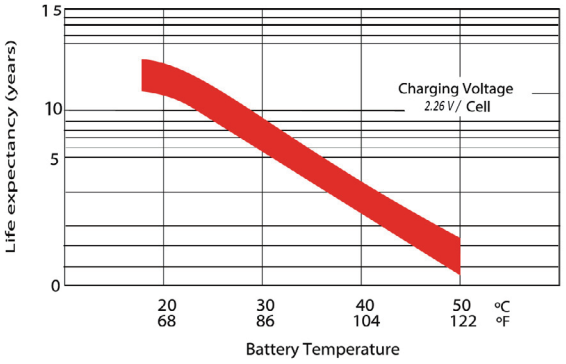
Cycle Life in Relation to Depth of Discharge



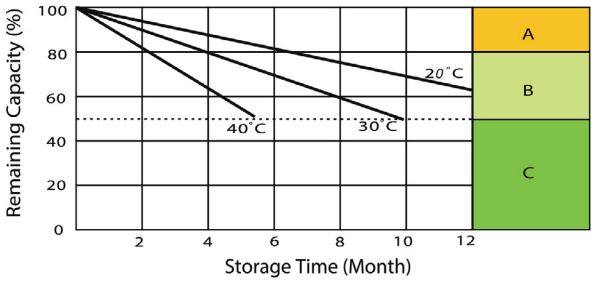
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



A No supplementary charge required
(carrry out supplementary charge before use if 100% capacity is required)

B Supplementary charge required before use . Optional charging way a below:
1. Charged for above 3 days at limited current 0.25 CA and constant voltage 2.25V / cell.
2. Charged fo above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
3. Charged for 8-10 hours ar limited current 0.05 CA.

C Supplementary charge often fail to recover the capacity.
The battery should never be left standing till this is reached.

2018/V1/N

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

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