KBG121000 GEL 12V 100Ah

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.

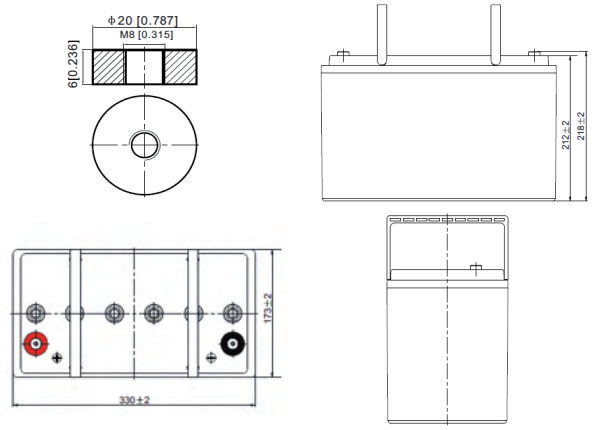
Performance Characteristics

Nominal Voltage	12V	
Design Life	12 years	
Dimensions	Length (mm / inch)	330 / 12.99
	Width (mm / inch)	173 / 6.81
	Height (mm / inch)	212 / 8.35
	Total Height (mm / inch)	218 / 8.58
Approx. Weight	(Kg / lbs)	31 / 68.4
Terminal	M8	
Container Material	ABS	
Rated Capacity	96.0Ah / 4.80A	(20hr, 1.80V / cell, 25ºC / 77ºF)
	90.0Ah / 9.00A	(10hr, 1.75/V / cell, 25ºC / 77ºF)
	80.Ah / 16.0A	(5hr, 1.75V / cell, 25ºC / 77ºF)
	55.0Ah / 55.0A	(1hr, 1.60V / cell, 25ºC / 77ºF)
Max. Discharge Current	1000A (5s)	
Internal Resistance	Approx 5.9mΩ	
Operating Temp. Range	Discharge : -20 ~ 55ºC (-4 ~ 131ºF)	
	Charge : 0 ~ 40ºC (32 ~ 104ºF)	
	Storage : -20 ~ 50ºC (-4 ~ 122ºF)	
Nominal Operating Temp. Range	25 ± 3ºC (77 ± 5ºF)	
Cycle Use	Lnitial Charging current less than 24.0A	
	Voltage: 14.4V ~ 15.0V at 25ºC (77ºF)	
	Temp. Coefficient: -30mV/ºC	
Standby Use	No limit on initial Charging Current Voltage	
	13.5V ~ 13.8V at 25º C (77º F)	
	Temp. Coefficient: -20mV/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 9 months at 25ºC (77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Discharge Constant Current (Amperes) at 77ºF (25ºC)

Volts/cell	20min	30min	45min	1h	3h	5h	10h	20h
1.80V	96.9	74.2	55.9	46.8	22.0	15.4	8.85	4.80
1.75V	108.9	81.6	60.4	50.1	23.2	16.0	9.00	4.90
1.70V	117.3	87.4	64.1	53.0	24.2	16.5	9.23	4.96
1.67V	122.1	90.8	66.4	55.0	24.9	16.8	9.34	5.01
1.60V	132.3	97.2	71.3	58.4	25.9	17.4	9.53	5.08

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

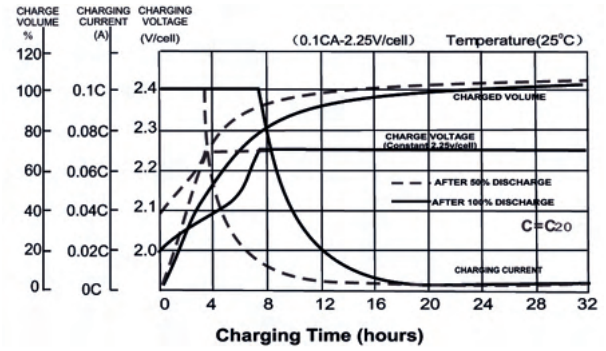
Discharge Constant Power (Watts per cell) at 77ºF (25ºC)

Volts/cell	20min	30min	45min	1h	3h	5h	10h	20h
1.80V	183.0	141.6	107.5	90.7	42.9	30.3	17.6	9.57
1.75V	203.4	154.4	115.4	96.5	45.2	31.4	17.9	9.75
1.70V	216.8	163.9	121.7	101.6	46.9	32.3	18.3	9.86
1.67V	223.1	168.5	125.1	104.8	48.2	32.8	18.5	9.95
1.60V	239.1	178.7	133.4	110.7	49.9	33.8	18.9	10.1

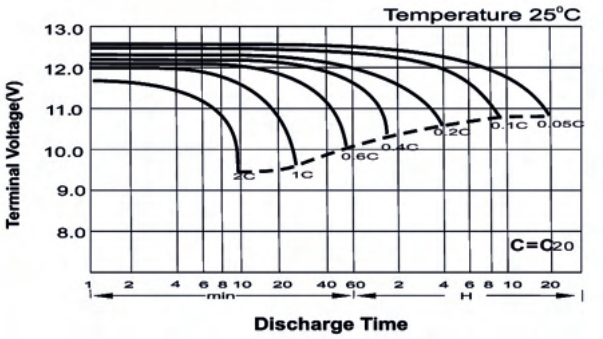
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KBG121000 GEL 12V 100Ah

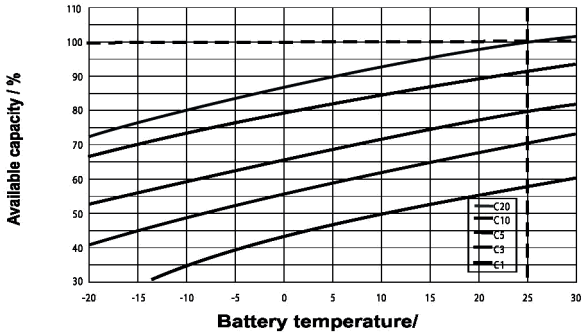
Float Charging Characteristics



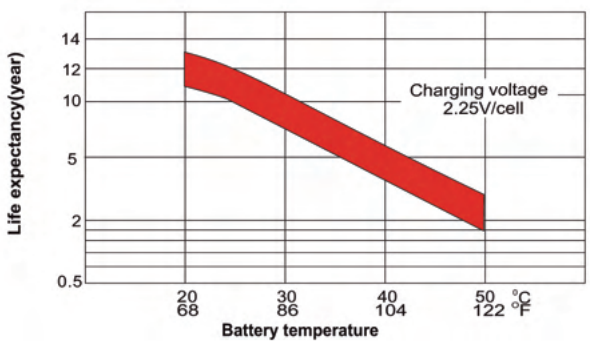
Discharge Characteristics



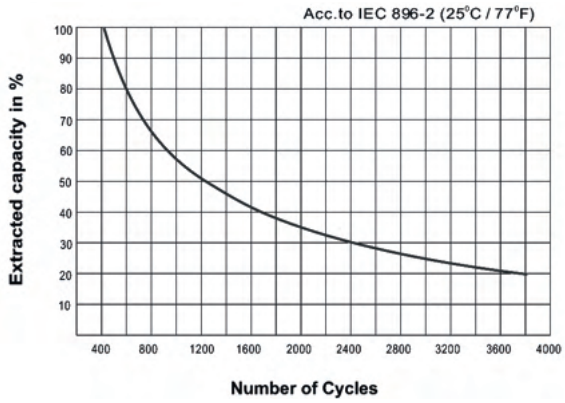
Temperature Effects in Relation to Battery Capacity



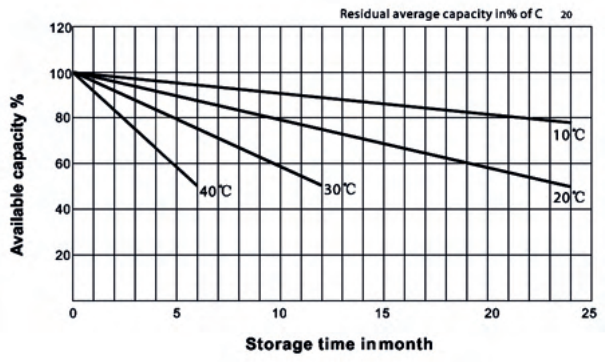
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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

2018/V1/L