

KBG12550 12V 55Ah



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.

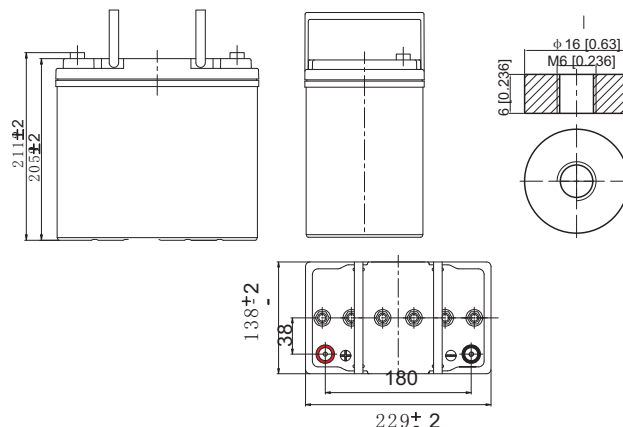
Performance Characteristics

Nominal Voltage	12V		
Design Life	12 years		
Dimensions	Length (mm / inch)	229/ 9.02	
	Width (mm / inch)	138 / 5.43	
	Height (mm / inch)	205 / 8.07	
	Total Height (mm / inch)	211 / 8.31	
Approx. Weight	(Kg / lbs)	16.6 / 36.60	
Terminal	M6		
Container Material	ABS		
Rated Capacity	55.0 AH / 2.75A	(20hr, 1.80V / cell, 25°C / 77°F)	
	46.5AH / 4.65A	(10hr, 1.75V / cell, 25°C / 77°F)	
	40.0AH / 8.00S	(5hr, 1.75V / cell, 25°C / 77°F)	
	27.5Ah / 27.5A	(1hr, 1.67 / cell, 25°C / 77°F)	
Max. Discharge Current	500A (5s)		
Internal Resistance	Approx 9.0mΩ		
Operating Temp. Range	Discharge : -20 ~ 55°C (-4 ~ 131°F)		
	Charge : 0 ~ 40°C (32 ~ 104°F)		
	Storage : -20 ~ 50°C (-4 ~ 122°F)		
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)		
Cycle Use	Cycle Use Maximum charging current 12.5A		
	Voltage: 14.4V ~ 15.0V at 25°C (77° F)		
	Temp. Coefficient:-30mV/°C		
Standby Use	No limit on Initial Charging		
	Current Voltage 13.5V ~15.0V at 25°C (77° F)		
	Temp. Coefficient: -20mV/°C		
Capacity affected by Temperature	40°C (104°F)	103%	
	25°C (77°F)	100%	
	0°C (32°F)	86%	
Self Discharge	Fully charged Kaisel Gel Series batteries may be stored for up to 9 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	20min	30min	45min	1h	3h	5h	10h	20h
1.80V	48.5	37.1	27.9	23.4	11.0	7.70	4.56	2.75
1.75V	54.5	40.8	30.2	25.1	11.6	8.00	4.65	2.77
1.70V	58.7	43.7	32.1	26.5	12.1	8.25	4.76	2.78
1.67V	61.1	45.4	33.2	27.5	12.5	8.42	4.82	2.79
1.60V	66.2	48.6	35.7	29.2	13.0	8.68	4.91	2.80

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

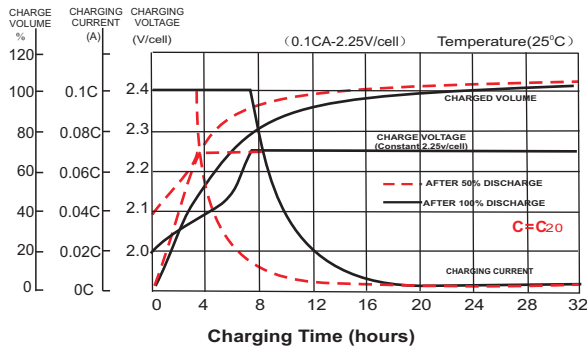
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

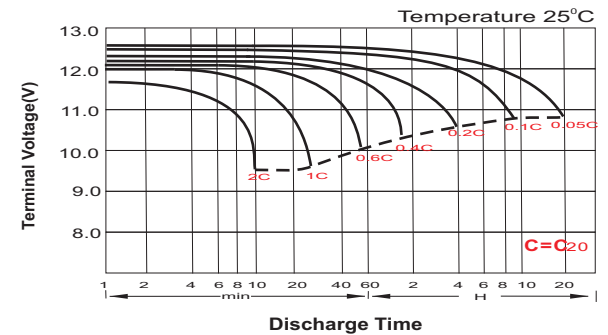
Volts/cell	20min	30min	45min	1h	3h	5h	10h	20h
1.80V	91.5	70.8	53.8	45.3	21.4	15.1	9.07	5.48
1.75V	101.7	77.2	57.7	48.3	22.6	15.7	9.24	5.52
1.70V	108.4	81.9	60.8	50.8	23.5	16.1	9.45	5.54
1.67V	111.5	84.2	62.6	52.4	24.1	16.4	9.55	5.54
1.60V	119.5	89.3	66.7	55.3	25.0	16.9	9.72	5.55

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

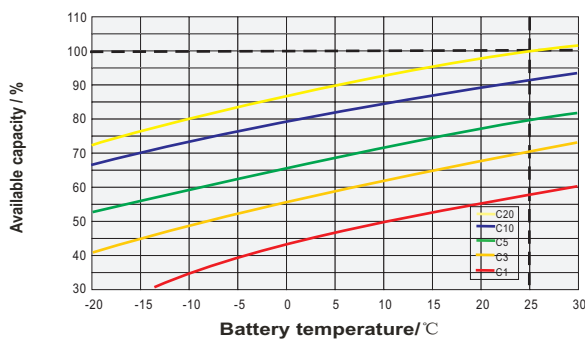
Float Charging Characteristics



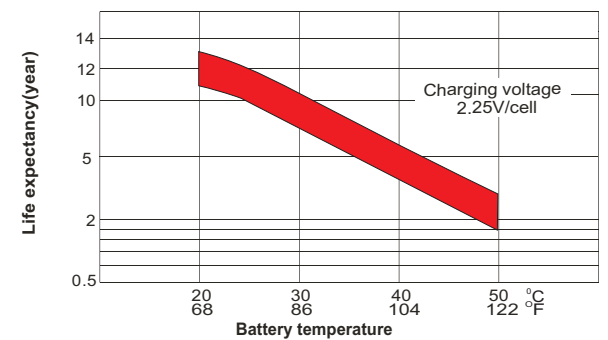
Discharge Characteristics



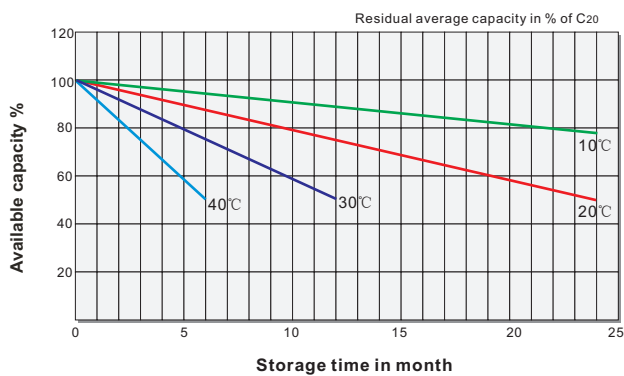
Temperature Effects in Relation to battery Capacity



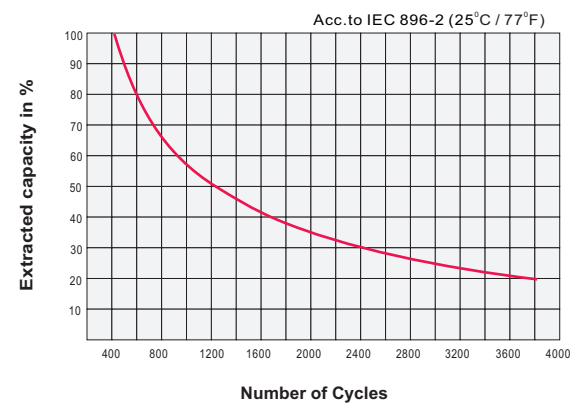
Effect of Temperature on Long Term Float Life



General Relation of Capacity VS Storage Time



Cycle Life in Relation to Depth of Discharge



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

