

KBC122300 12V 230Ah



The Kaise cyclic batteries were developed for deep discharges with very heavy non-porous battery plates to withstand major discharging and charging cycles (deep cycle). These batteries use different chemistry combinations for the plates with active paste material and a slightly stronger than normal electrolyte, which allows for a much longer life in deep cycle applications.

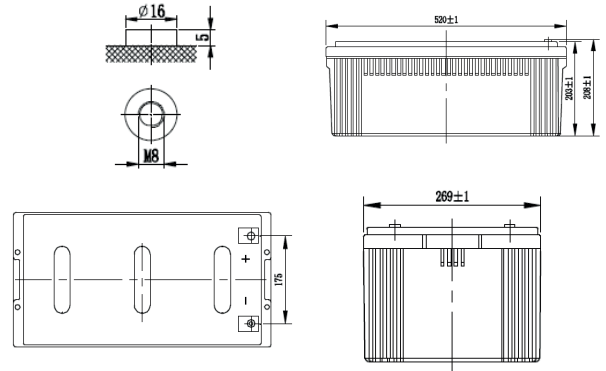
Performance Characteristics

Nominal Voltage	12V		
Dimensions	Length (mm / inch)	520 / 20.5	
	Width (mm / inch)	269 / 10.6	
	Height (mm / inch)	203 / 8.0	
	Total Height (mm / inch)	208 / 8.2	
Approx Weight	(Kg / lbs)	72.6 / 160.1	
Design Life	10 years		
Terminal	M8		
Container Material	ABS		
Rated Capacity	232Ah / 23.2A	(10hr, 1.70V / cell, 25°C / 77°F)	
	150Ah / 150A	(1hr, 1.70V / cell, 25°C / 77°F)	
	91.25Ah / 365A	(15min, 1.70V / cell, 25°C / 77°F)	
Max. Discharge Current	1100A (5s)		
Internal Resistance	Approx 2.8mΩ		
Operating Temp. Range	Discharge : -20 ~ 60°C (-4 ~ 131°F)		
	Charge : -10 ~ 60°C (14 ~ 140°F)		
	Storage : -20 ~ 60°C (5 ~ 140°F)		
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)		
Cycle Use	Initial Charging Current less than 46A		
	Voltage: 2.40VPC~ 2.45VPC at 25°C (77°F)		
	Temp. Coefficient: -30mV/°C		
Standby Use	Initial Charging Current less than 46A		
	Voltage: 2.20VPC~ 2.30VPC 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 Kaise Deep Cycle 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	45min	1h	3h	5h	10h
1.80V	348	233	174	148	66.5	44.3	23.0
1.75V	359	236	176	149	66.8	44.6	23.1
1.70V	365	240	179	150	67.8	44.9	23.2
1.60V	371	242	182	153	68.5	45.4	23.4

Dimensions and Terminal (Unit: mm (inches))



Applications

- Solar power systems
- Electric wheel chairs
- Golf carts
- Maritime equipment
- Power plants
- Railway systems
- Telecommunications systems
- Cable TV systems
- Emergency power systems

Certifications

ISO 9001:2008 ISO 14001:2008



Discharge Current vs. Discharge Voltage

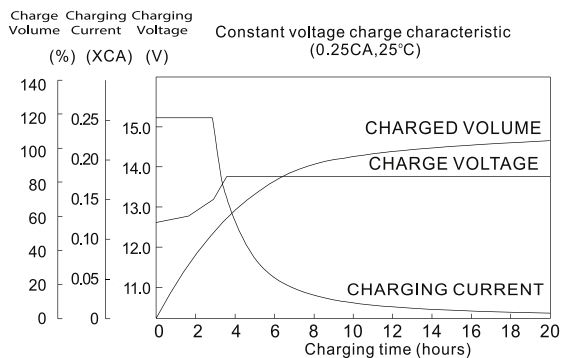
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

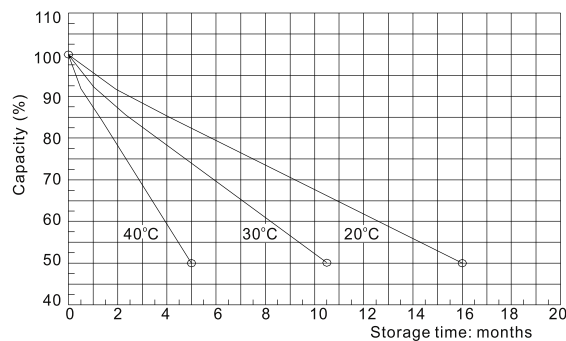
Volts/cell	15min	30min	45min	1h	2h	3h	5h
1.80V	649	455	352	284	166	126	85.4
1.75V	658	459	355	288	168	128	85.8
1.70V	666	462	357	291	169	129	86.1
1.60V	677	469	361	296	172	131	86.7

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

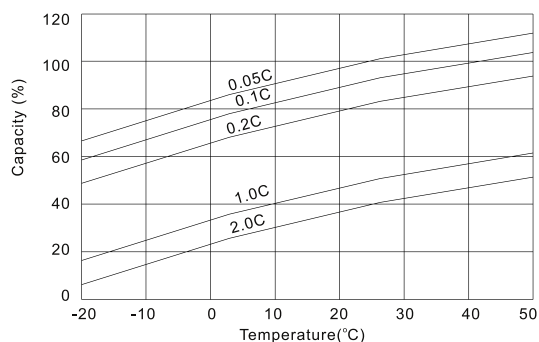
Charging Characteristics (standby use)



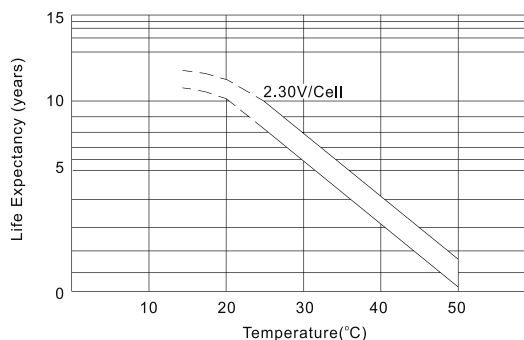
Self Discharge Characteristics



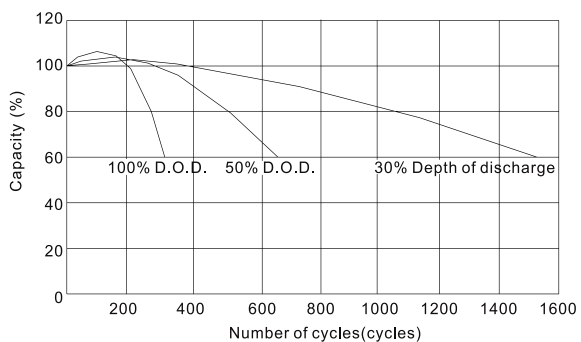
Temperature Effects in Relation to Battery Capacity



Temperature Effects on Float Life



Cycle Life in Relation to Depth of Discharge



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

