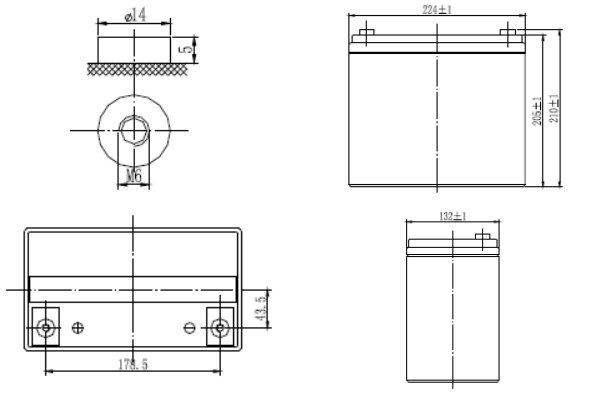
KBC12550 12V 55Ah

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.

Dimensions and Terminal (Unit: mm (inches))



Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	224 / 9.41
	Width (mm / inch)	132 / 5.43
	Height (mm / inch)	205 / 8.07
	Total Height (mm / inch)	210 / 8.27
Approx Weight	(Kg / lbs)	17.3 / 38.1
Design Life	10 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	52.8Ah / 5.28A	(10hr, 1.70V / cell, 25ºC / 77ºF)
	32.8Ah / 32.8A	(1hr, 1.70V / cell, 25ºC / 77ºF)
	18.50Ah / 111A	(10min, 1.70V / cell, 25ºC / 77ºF)
Max. Discharge Current	550A (5s)	
Internal Resistance	Approx 5.8mΩ	
Operating Temp. Range	Discharge : -15 ~ 55ºC (5 ~131ºF)	
	Charge : 0 ~ 40ºC (32 ~ 104ºF)	
	Storage : -15 ~ 40ºC (5 ~ 104ºF)	
Nominal Operating Temp. Range	25 ± 3ºC (77 ± 5ºF)	
Cycle Use	Initial Charging Current less than 11A	
	Voltage: 2.30VPC~ 2.35VPC at 25ºC (77ºF)	
	Temp. Coefficient: -30mV/ºC	
Standby Use	Initial Charging Current less than 11A	
	Voltage: 2.25VPC ~ 2.30VPC at 25ºC (77ºF)	
	Temp. Coefficient: -20mV/ºC	
Capacity affected by Temperature	40ºC (104ºF)	103%
	25ºC (77ºF)	100%
	0ºC (32ºF)	86%
Self Discharge	Fully charged Kaise Deep Cycle 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.	

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 ≤ 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	96.0	77.2	50.6	31.2	13.2	9.01	5.17	2.75
1.75V	102	83.3	52.5	32.0	13.5	9.18	5.24	2.74
1.70V	111	88.0	54.2	32.8	13.8	9.35	5.28	2.78
1.60V	124	96.5	57.8	34.6	14.5	9.77	5.35	2.81

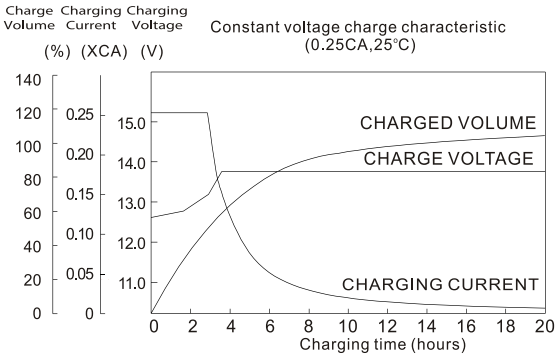
Discharge Constant Power (Watts per cell) at 77ºF (25ºC)

Volts/cell	10min	15min	30min	1h	2h	3h	5h
1.80V	179	150	101	63.1	35.5	26.4	17.8
1.75V	192	157	102	63.3	36.1	27.0	17.9
1.70V	205	164	104	64.8	36.9	27.6	18.1
1.60V	220	177	108	67.9	38.6	28.8	18.7

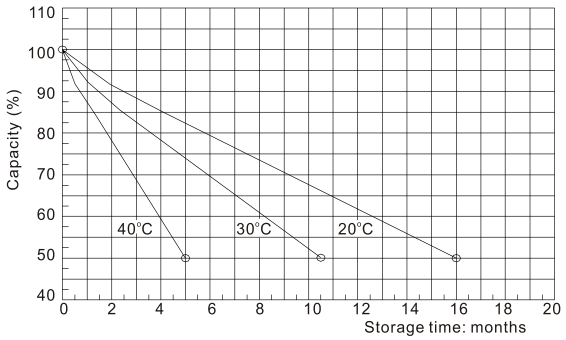
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KBC12550 12V 55Ah

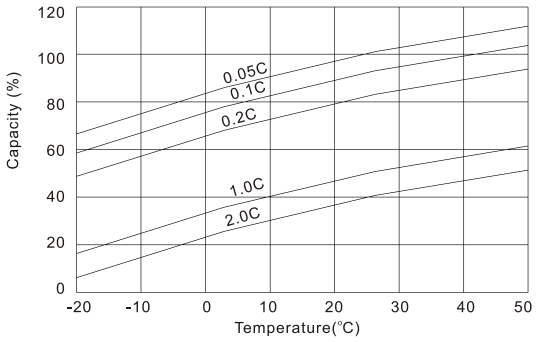
Charging Characteristics (standby use)



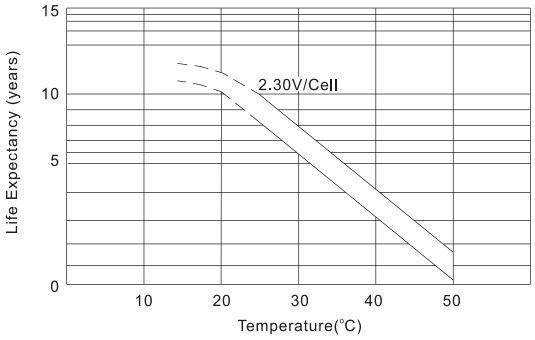
Self Discharge Characteristics



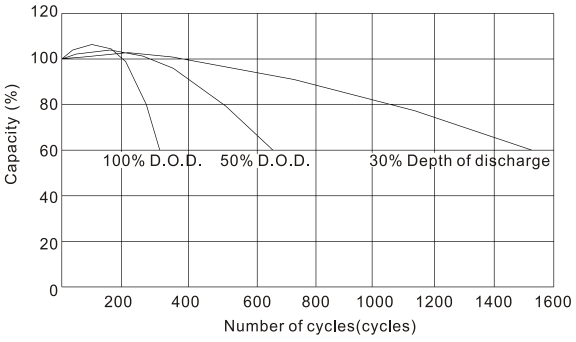
Temperature Effects in Relation to Battery Capacity



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.