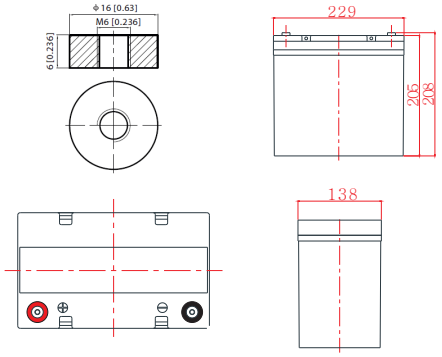
KBC12550 12V 55Ah

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.

Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	229 / 9.02
	Width (mm / inch)	138 / 5.43
	Height (mm / inch)	205 / 8.07
	Total Height (mm / inch)	208 / 8.19
Approx Weight	(Kg / lbs)	17.5 / 38.6
Design Life	12 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	55.0Ah / 5.50A	(10hr, 1.80V / cell, 25ºC / 77ºF)
	50.0Ah / 10.0A	(5hr, 1.75V / cell, 25ºC / 77ºF)
	36.5Ah / 36.5A	(1hr, 1.70V / cell, 25ºC / 77ºF)
Max. Discharge Current	660A (5s)	
Internal Resistance	Approx 8.6mΩ	
Operating Temp. Range	Discharge : -20 ~ 50ºC (-4 ~122ºF)	
	Charge : -20 ~ 50ºC (-4 ~ 122ºF)	
	Storage : -20 ~ 50ºC (-4 ~ 122ºF)	
Cycle Use	Initial Charging Current less than 13.8A	
	Voltage: 14.4V~ 15.0V at 25ºC (77ºF)	
	Temp. Coefficient: -30mV/ºC	
Standby Use	Initial Charging Current less than 13.8A	
	Voltage: 13.5V ~ 13.8V at 25ºC (77ºF)	
	Temp. Coefficient: -18mV/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.	

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 ≤ 0,1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

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

Volts/cell	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	149	89.1	58.0	35.1	14.8	9.76	5.50	2.94
1.75V	166	95.6	60.6	36.0	14.9	10.0	5.56	2.96
1.70V	180	98.8	61.2	36.5	15.0	10.1	5.61	2.97
1.65V	188	101	62.3	36.8	15.3	10.2	5.67	2.99
1.60V	194	104	63.3	37.0	15.4	10.3	5.72	3.00

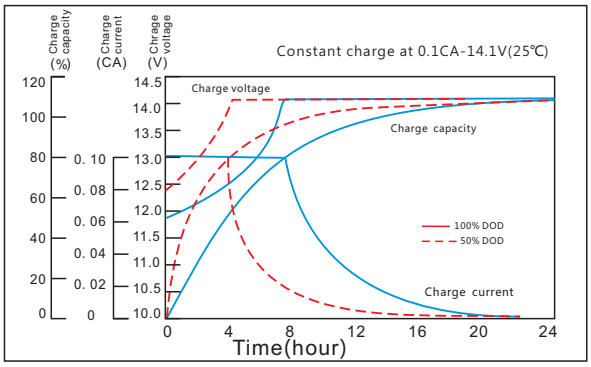
Discharge Constant Power (Watts per cell) at 25ºC (77ºF)

Volts/cell	5min	15min	30min	1h	2h	3h	5h
1.80V	266	167	110	67.9	39.6	28.5	19.0
1.75V	290	177	113	68.4	39.7	28.6	19.2
1.70V	311	178	114	68.9	39.9	28.8	19.4
1.65V	313	180	114	69.5	40.0	28.9	19.5
1.60V	325	183	115	70.0	40.2	29.3	19.6

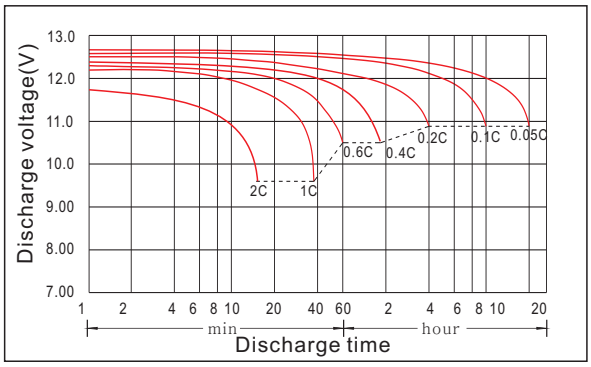
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KBC12550 12V 55Ah

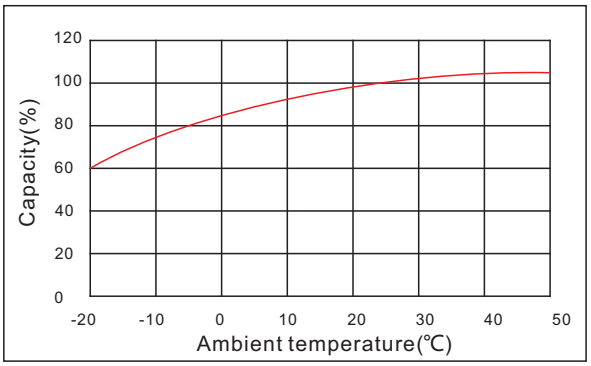
Charging Characteristics (standby use)



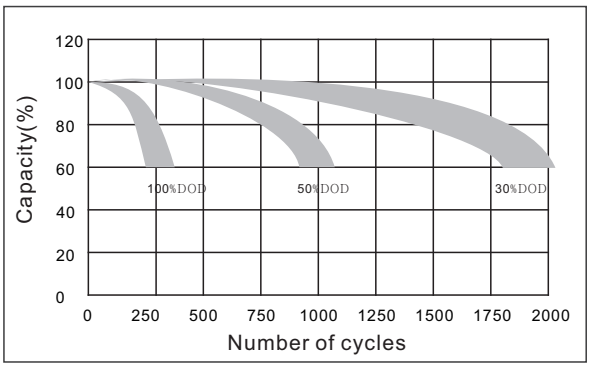
Discharge Characteristics



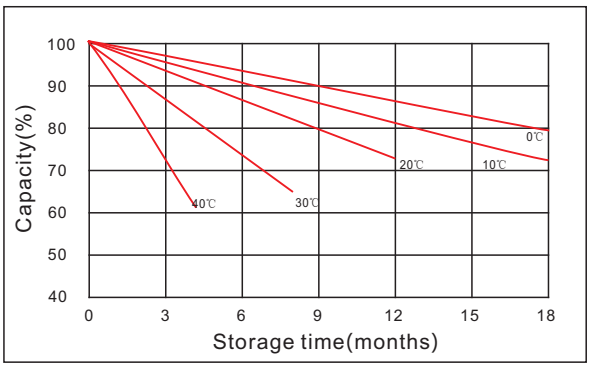
Temperature Effects in Relation to Battery Capacity



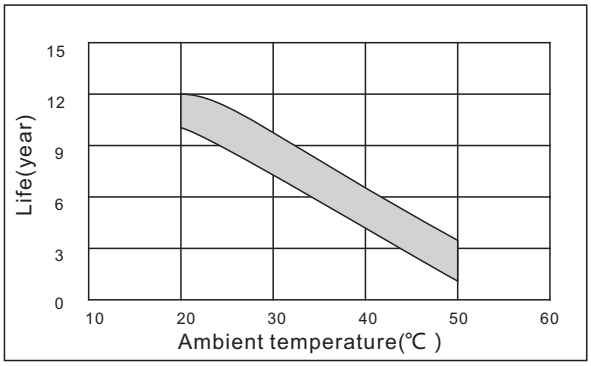
Cycle Life in Relation to Depth of Discharge



Curves of Self- Discharge



Temperature Effects on Float Life



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

2022/V1/K

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