



Overview

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.

Features

- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Portable apparatus
- lights and instruments
- Electric toys
- Illumination light
- Fire alarms
- Portable power
- Wheelchairs
- Medical equipments.

Battery Specification

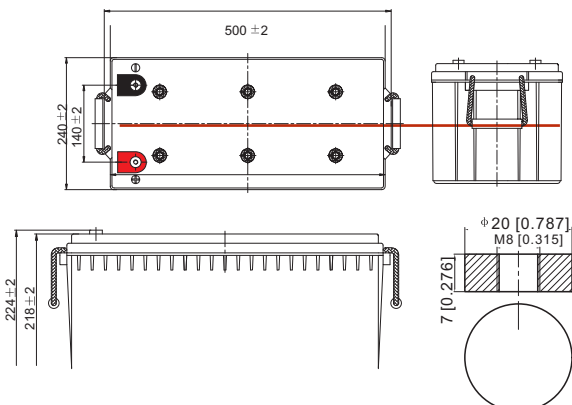
Nominal Characteristics	
Nominal Voltage /V	12
Nominal Capacity /Ah (25° C, 0.2C)	250
Mechanical characteristics	
Weight (Kg/lbs)	62.5 / 137.8
Dimension L*W*H /mm	240*218*224
Terminal	F11
Electrical characteristics	
Voltage window/V	1.80
Float charge voltage/V	14.4 / 15.0
Max. continue discharge current/A	50
Max. permanent discharge current/A	1800(5Sec)
Max. continue charge current/A	10.0
Operating conditions	
Cycle life (+20°C 0.2C 100%DOD)	>1200 Cycles
Operating temperature	Discharge -20°C to 55°C Charge 0°C to 40°C
Storage temperature	-20 to 50°C
Storage duration	6 months
Safety standard	25°C

Certifications

ISO 9001:2008 ISO 14001:2008



Terminal



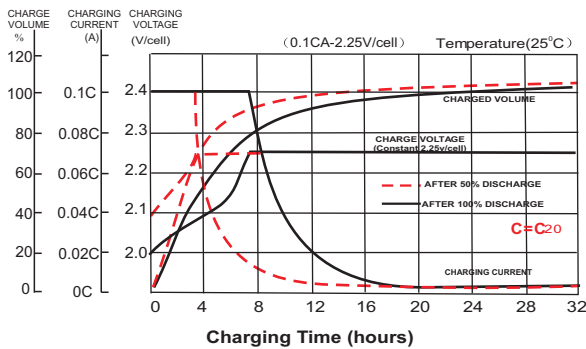
Discharge Constant Current (Amperes) at 77°F (25°C)

Volts/cells	20min	30min	45min	1h	3h	5h	10h	20h
1.80V	193.8	148.4	111.7	93.6	43.9	30.8	18.2	10.0
1.75V	217.8	163.2	120.8	100.2	46.4	32.0	18.6	10.2
1.70V	234.6	174.8	128.3	106.0	48.3	33.0	19.0	10.3
1.67V	244.2	181.6	132.8	110.0	49.9	33.7	19.3	10.4
1.60V	264.6	194.4	142.7	116.8	51.9	34.7	19.6	10.6

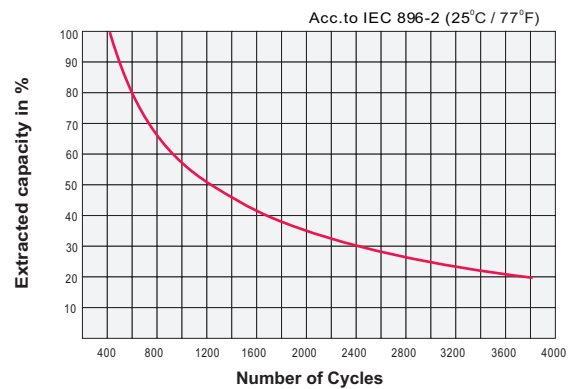
Discharge Constant Power (Watts per cell) at 77°F (25°C)

Volts/cells	10min	15min	45min	1h	3h	5h
1.80V	366.1	283.3	215.1	181.3	85.8	60.6
1.75V	406.9	308.7	230.8	193.1	90.4	62.7
1.70V	433.5	327.8	243.3	203.1	93.9	64.5
1.67V	446.2	337.0	250.2	209.6	96.4	65.7
1.60V	478.1	357.3	266.8	221.3	99.8	67.5

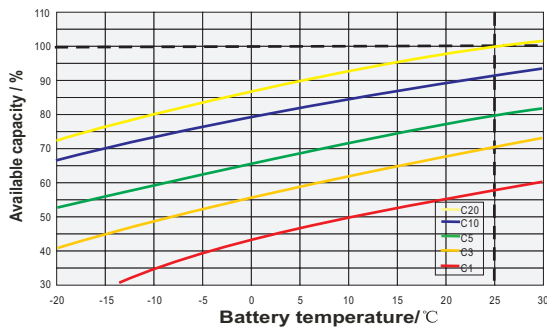
Charging Characteristics (float use)



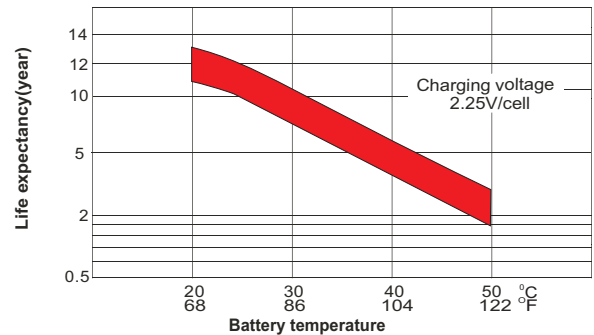
Cycle Life in Relation to Depth of Discharge



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

