

KBL12400 12V 40Ah



The KAISE LONG LIFE Series 10 years has been designed for different applications, such as UPS, electric and telecommunications applications that require a long useful life.



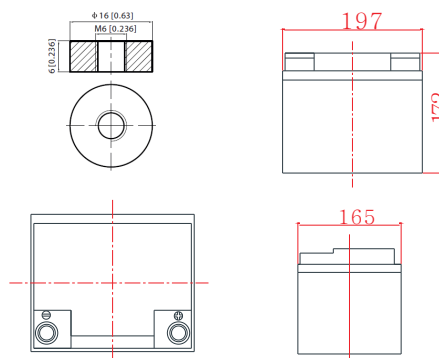
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	197 / 7.76
	Width (mm / inch)	165 / 6.50
	Height (mm / inch)	172 / 6.77
	Total Height (mm / inch)	172 / 6.77
Approx. Weight (Kg / lbs)	13.2 / 29.1	
Design Life	10 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	40.0 Ah / 4.00A	(10hr, 1.80V / cell, 25°C / 77°F)
	36.5 Ah / 7.29A	(5hr, 1.75V / cell, 25°C / 77°F)
	26.6 Ah / 26.6A	(1hr, 1.70V / cell, 25°C / 77°F)
Max. Discharge Current	480A (5s)	
Internal Resistance	Approx 12.2mΩ	
Operating Temp. Range	Discharge : -20 ~ 50°C (-4 ~ 122°F)	
	Charge : -20 ~ 50°C (-4 ~ 122°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Cycle Use	Initial Charging Current less than 10.0A.	
	Voltage: 14.4V ~ 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 10.0A.	
	Voltage: 13.5V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -18mV/°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 Long Life 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.	

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

Volts/cell	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	108	64.8	44.2	25.5	10.7	7.10	4.00	2.14
1.75V	121	69.5	44.1	26.2	10.8	7.29	4.04	2.15
1.70V	131	71.9	44.5	26.6	10.9	7.37	4.08	2.16
1.65V	137	73.4	45.3	26.8	11.1	7.45	4.12	2.17
1.60V	141	75.7	46.1	26.9	11.2	7.53	4.16	2.18

Dimensions and Terminal (Unit: mm (inches))



Applications

- UPS
- Telecommunications equipment
- Solar energy systems
- Cable TV
- Power station
- Marine equipment
- Military equipment
- Emergency power systems
- Railway systems

Certifications

ISO 9001 / ISO 14001



Discharge Current vs. Discharge Voltage

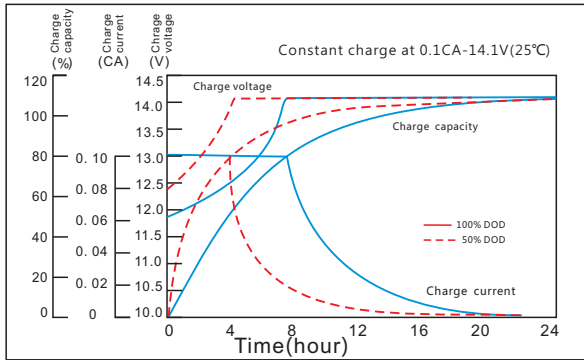
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

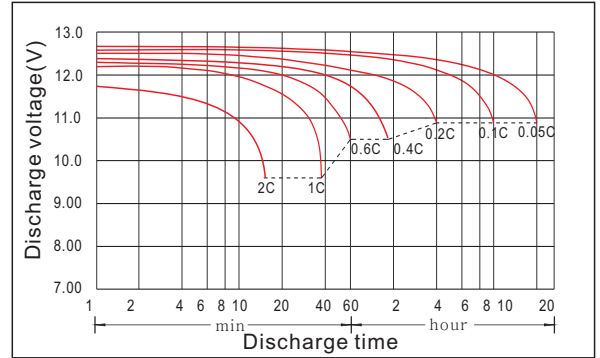
Volts/cell	5min	15min	30min	1h	2h	3h	5h	10h
1.80V	194	122	80.2	49.4	28.8	20.7	13.8	7.68
1.75V	211	129	82.2	49.7	28.9	20.8	14.0	7.76
1.70V	226	129	82.6	50.1	29.0	20.9	14.1	7.84
1.65V	227	131	82.6	50.5	29.1	21.1	14.2	7.92
1.60V	236	133	83.3	50.9	29.2	21.3	14.3	8.00

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

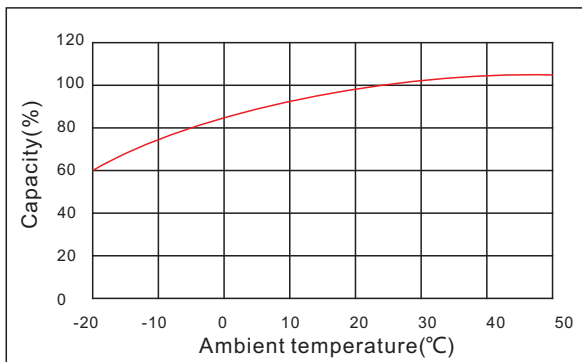
Charging Characteristics (float use)



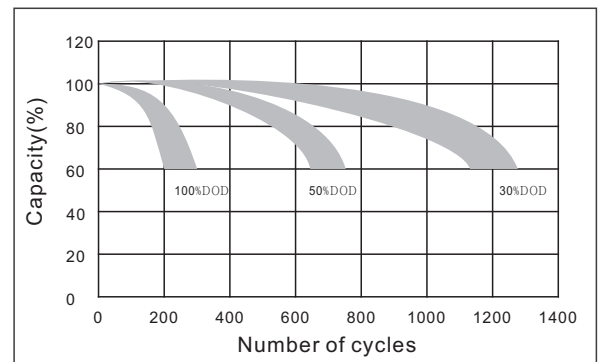
Discharge Characteristics



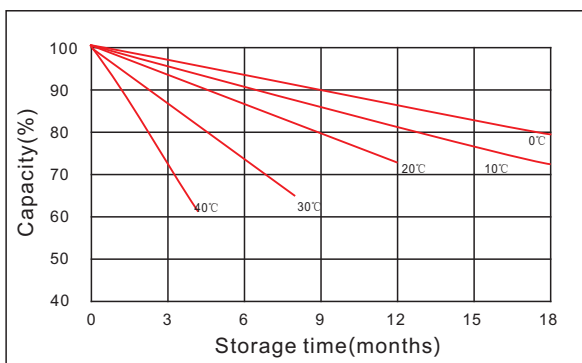
Temperature Effects in Relation to Battery Capacity



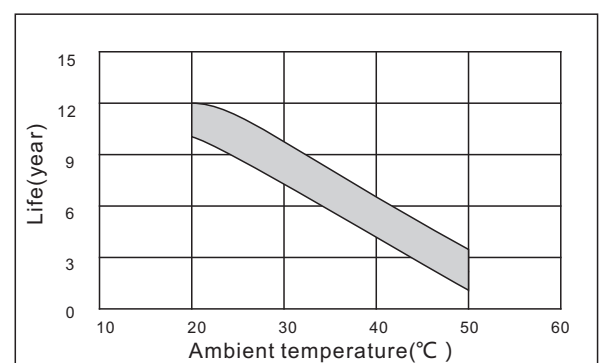
Cycle Life in Relation to Depth of Discharge



Curves of Self-Discharge



Effect of Temperature on Long Term Float Life



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

2024/11/14

