

# KBL12750 12V 75Ah



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.

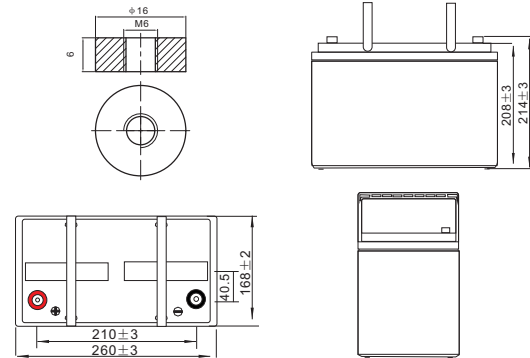
## Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	260±2 / 10.24
	Width (mm / inch)	168±2 / 6.61
	Height (mm / inch)	208±2 / 8.19
	Total Height (mm / inch)	214±2 / 8.43
Approx. Weight	(Kg / lbs) 22.7 / 50.1	
Design Life	10 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	75.0 Ah / 7.50A	(10hr, 1.80V/cell, 25°C/77°F)
	69.0 Ah / 13.8A	(5hr, 1.70V/cell, 25°C/77°F)
	43.7 Ah / 43.7A	(1hr, 1.70V/cell, 25°C/77°F)
Max. Discharge Current	900A (5s)	
Internal Resistance	Approx 6.6mΩ	
Operating Temp. Range	Discharge : -15 ~ 50°C (5 ~ 122°F)	
	Charge : 0 ~ 40°C (32 ~ 104°F)	
	Storage : -15 ~ 40°C (5 ~ 104°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 22.5A.	
	Voltage: 14.4V-15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	No limit on initial Charging Current	
	Voltage: 13.5V-13.8V at 25°C (77°F)	
	Temp. Coefficient: -20mV/°C	
Capacity affected by	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	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	100.4	82.9	59.0	37.8	18.8	12.8	7.50	4.01
1.75V	114.0	93.4	64.1	41.3	19.5	13.1	7.70	4.11
1.70V	128.8	103.6	70.0	43.7	20.5	13.8	8.00	4.22
1.65V	138.3	111.0	73.8	45.2	21.4	14.2	8.22	4.35
1.60V	152.2	121.5	78.8	46.5	21.9	14.6	8.39	4.42

## 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 9001:2008 ISO 14001:2008



## Discharge Current vs. Discharge Voltage

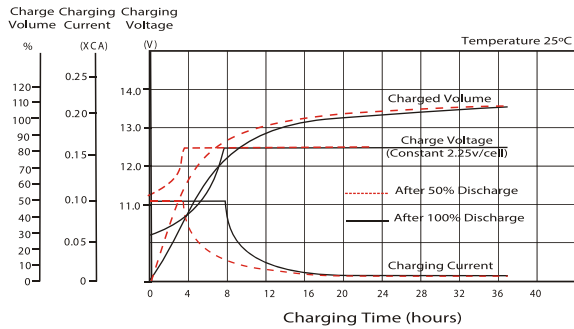
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

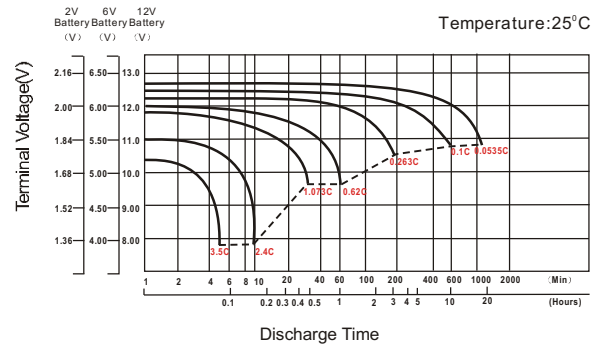
Volts/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.80V	185.3	154.2	111.9	87.1	73.4	48.6	36.7	25.1
1.75V	207.1	171.7	120.6	94.1	79.6	50.4	38.0	25.6
1.70V	228.7	187.9	130.9	101.0	84.0	53.0	40.0	27.1
1.65V	243.3	199.6	137.0	105.9	86.2	54.6	41.4	27.8
1.60V	261.7	215.1	145.2	109.5	88.4	55.7	42.3	28.4

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

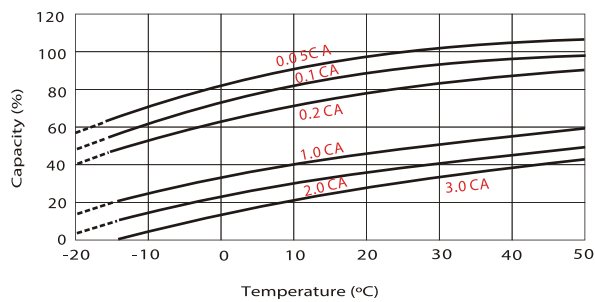
## Charging Characteristics (float use)



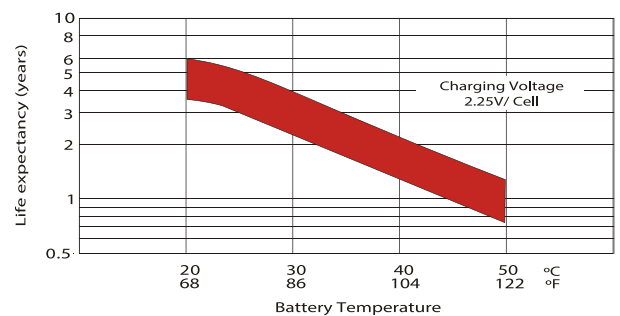
## Discharge Characteristics



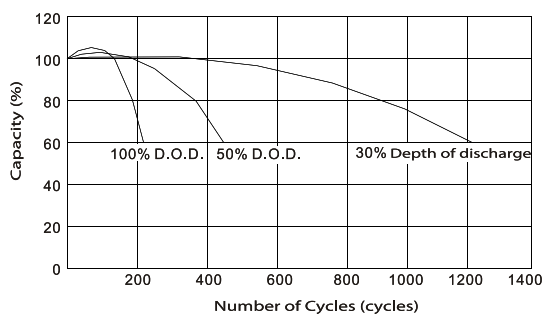
## Temperature Effects in Relation to Battery Capacity



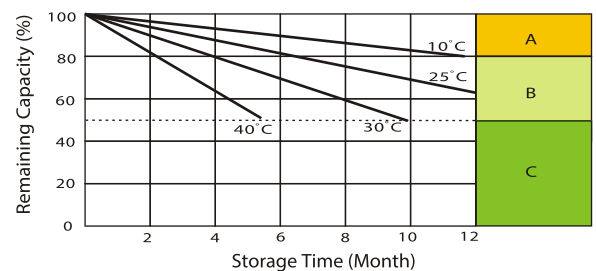
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



- A** No supplementary charge required (carry out supplementary charge before use if 100% capacity is required)
- B** Supplementary charge required before use. Optional charging way as below:
  1. Charged for above 3 days at limited current 0.25 CA and constant voltage 2.25V / cell.
  2. Charged for above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
  3. Charged for 8-10 hours at limited current 0.05 CA.
- C** Supplementary charge often fail to recover the capacity. The battery should never be left standing till this is reached.

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

