

KB1272 12V 7Ah

The KB Standard series consists in VRLA batteries - AGM technology (Absorbent Glass Mat), with a design life of 3-5 years and it is designed for general applications such as UPS, telecommunications and electrical applications.



Performance Characteristics

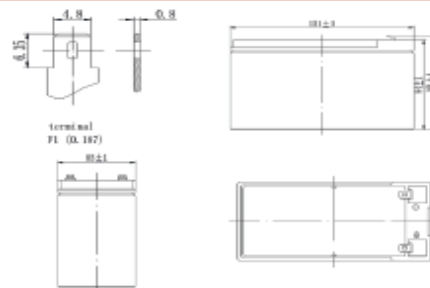
Nominal Voltage	12V	
Dimensions	Length (mm / inch)	151 / 5.94
	Width (mm / inch)	65 / 2.56
	Height (mm / inch)	93.5 / 3.68
	Total Height (mm / inch)	101 / 3.98
Approx Weight	(Kg / lbs)	2.20 / 4.85
	Design Life	5 years
Terminal	F1	
Container Material	ABS	
Rated Capacity	7.0Ah / 0.34A	(20hr, 11.5V / cell, 25°C / 77°F)
	6.5Ah / 0.64A	(10hr, 11.5V / cell, 25°C / 77°F)
	5.30Ah / 1.06A	(5hr, 11.5V / cell, 25°C / 77°F)
	4.15Ah / 4.15A	(1hr, 9.6V / cell, 25°C / 77°F)
Max. Discharge Current	105A (5s)	
Internal Resistance	Approx 25mΩ	
Operating Temp. Range	Discharge : -20 - 60°C (-4 - 140°F)	
	Charge : -10 - 60°C (14 - 140°F)	
	Storage : -20 - 60°C (-4 - 140°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 1.44A	
	Voltage: 14.4V - 14.7V 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 Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise Standard 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.	

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

Volts/cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	22.2	14.6	11.7	6.75	3.64	1.56	1.04	0.44	0.34
1.75V	23.8	15.5	12.3	7.15	3.79	1.63	1.06	0.45	0.35
1.70V	25.3	16.4	12.9	7.51	3.93	1.69	1.08	0.46	0.35
1.65V	26.8	17.3	13.4	7.86	4.05	1.75	1.10	0.47	0.36
1.60V	28.3	18.1	13.9	8.18	4.15	1.80	1.12	0.48	0.36



Dimensions and Terminal (Unit: mm (inches))



Applications

Alarm systems	Marine equipment
Cable television	Medical equipment
Communications Equipment	Micro processor based office machines
Control Equipment	Portable cine & Video lights
Computers	Solar powered systems
Electronic Cash Registers	Telecommunications systems
Electric Test Equipment	Television & Video recorders
Emergency lighting systems	Toys
Fire & Security	Uninterruptible power supply systems
Geophysical equipment	Vending machines

Certifications



Discharge Current vs. Discharge Voltage

Final discharge voltage WCELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.10A$	$0.25CA \geq I > 0.10A$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

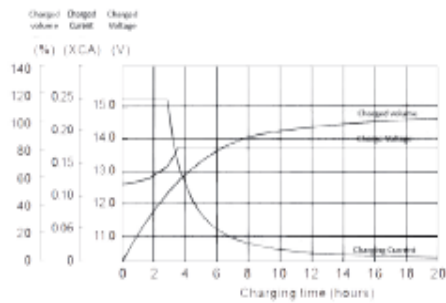
Volts/cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.80V	48.8	27.6	22.0	12.6	9.55	7.43	4.44	3.11	2.08
1.75V	43.5	29.4	23.1	13.2	9.98	7.78	4.59	3.22	2.14
1.70V	46.1	31.1	24.1	13.8	10.40	8.03	4.74	3.32	2.19
1.65V	48.6	32.8	25.0	14.4	10.80	8.37	4.87	3.41	2.23
1.60V	51.0	34.5	25.8	14.9	11.20	8.70	4.98	3.50	2.26

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

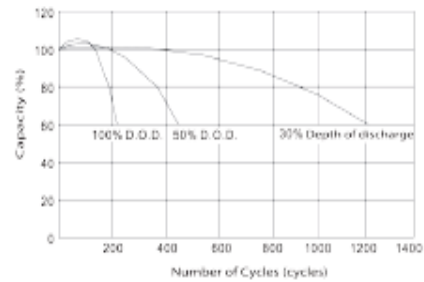
KB1272 12V 7.2Ah



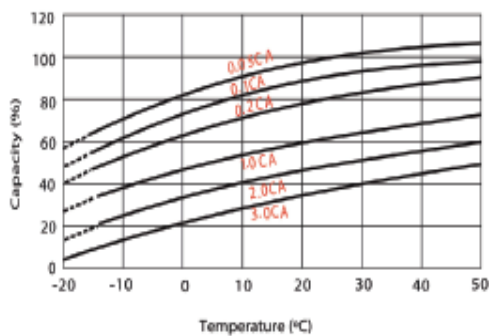
Charging Characteristics (float use)



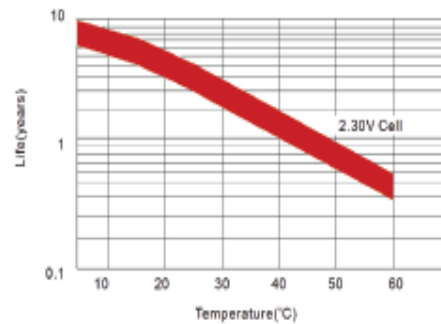
Cycle Life in Relation to Depth of Discharge



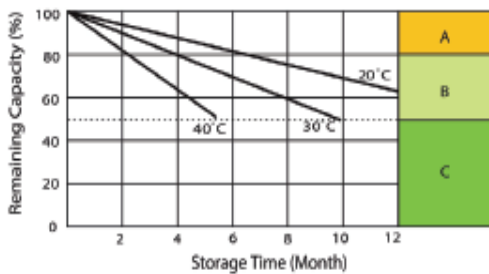
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



- A** No supplementary charge required
(carry out supplementary charge before use if 100% capacity is required)
- B** Supplementary charge required before use. Optimal charging way is below:
 1. Charged for above 3 days at limited current 0.25 CA and constant voltage 2.25V / cell.
 2. Charged to above 28 hours limited current 0.35CA 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.