

KB12200 12V 20Ah



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.

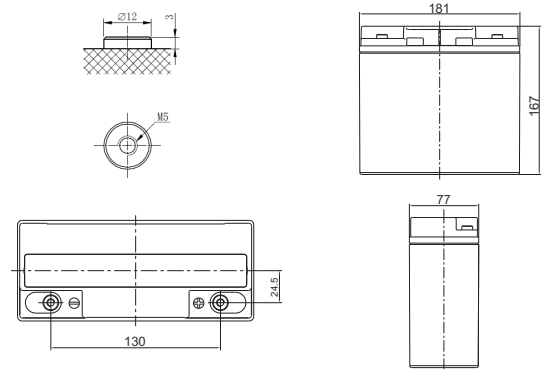
Performance Characteristics

Nominal Voltage	12V		
Dimensions	Length (mm / inch)	181 / 7.13	
	Width (mm / inch)	77 / 3.03	
	Height (mm / inch)	167 / 6.57	
	Total Height (mm / inch)	167 / 6.57	
Approx Weight	(Kg / lbs)	5.40 / 11.91	
Design Life	5 years		
Terminal	M5		
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.		
Rated Capacity	20.0Ah / 1.00A	(20hr, 1.75V / cell, 25°C / 77°F)	
	18.9Ah / 1.89A	(10hr, 1.75V / cell, 25°C / 77°F)	
	17.5Ah / 3.49A	(5hr, 1.75V / cell, 25°C / 77°F)	
	12.22Ah / 12.22A	(1hr, 1.60V / cell, 25°C / 77°F)	
Max. Discharge Current	200A (5s)		
Internal Resistance	Approx 16mΩ		
Operating Temp. Range	Discharge : -20 ~ 60°C (-4 ~ 140°F)		
	Charge : 0 ~ 50°C (32 ~ 122°F)		
	Storage : -20 ~ 60°C (-20 ~ 140°F)		
Nominal Operating Temp. Range	25 ± 5°C (77 ± 41°F)		
Cycle Use	Initial Charging Current less than 6.0A		
	Voltage: 14.6V ~ 14.8V at 25°C (77°F)		
	Temp. Coefficient: -4mV/°C		
Standby Use	Initial Charging Current less than 6.0A		
	Voltage: 13.7V ~ 13.9V at 25°C (77°F)		
	Temp. Coefficient: -3mV/°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	50.09	38.66	29.83	18.67	10.58	4.999	3.399	1.869	0.990
1.75V	57.04	42.70	32.30	19.53	11.00	5.159	3.489	1.893	1.000
1.70V	63.67	46.65	34.71	20.43	11.42	5.317	3.579	1.919	1.012
1.65V	70.56	50.68	37.06	21.38	11.80	5.466	3.675	1.948	1.025
1.60V	75.88	53.63	38.77	22.27	12.22	5.640	3.773	1.972	1.041

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

ISO 9001 / ISO 14001



Discharge Current vs. Discharge Voltage

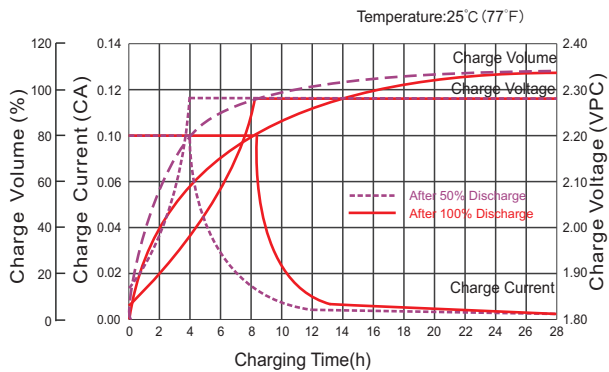
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current [A]	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

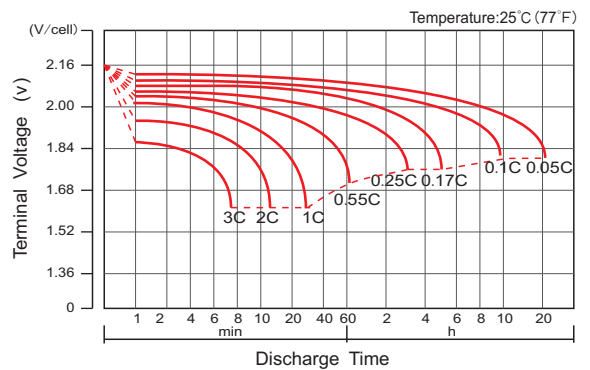
Volts/cell	5min	10min	15min	30min	1h	2h	3h	5h	8h
1.80V	89.68	70.65	55.26	35.31	20.36	12.64	9.710	6.646	4.514
1.75V	100.0	76.71	59.01	36.58	21.04	13.04	9.981	6.798	4.582
1.70V	109.2	82.32	62.51	37.88	21.71	13.45	10.24	6.949	4.637
1.65V	118.3	87.80	65.75	39.23	22.30	13.83	10.48	7.110	4.699
1.60V	125.8	91.16	67.77	40.44	22.96	14.22	10.77	7.272	4.742

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

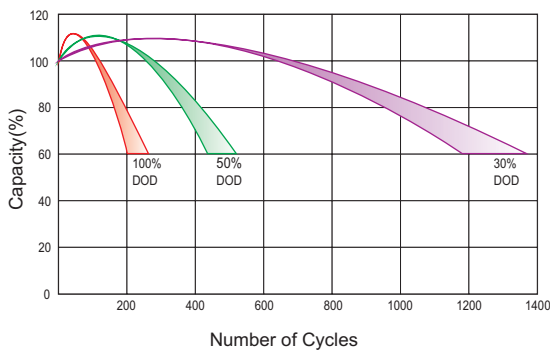
Charge Characteristic Curve For Standby Use



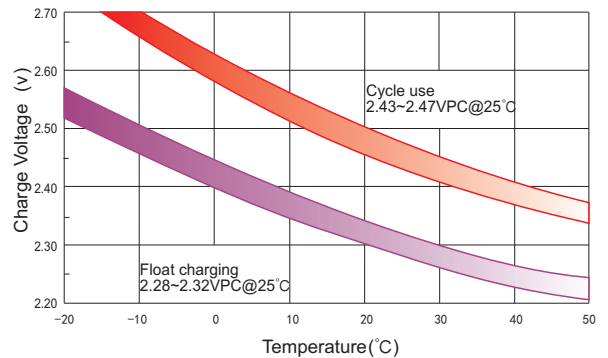
Discharge Characteristics Curve



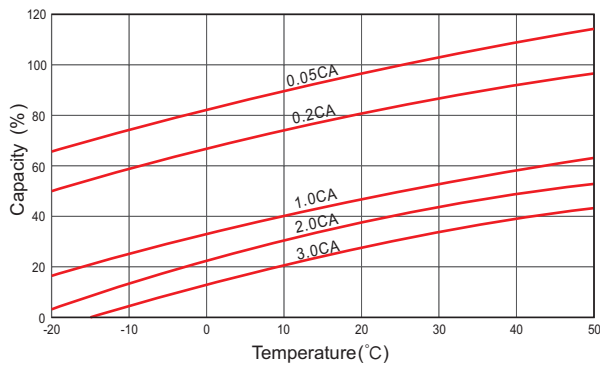
Cycle Life In Relation To Depth Of Discharge



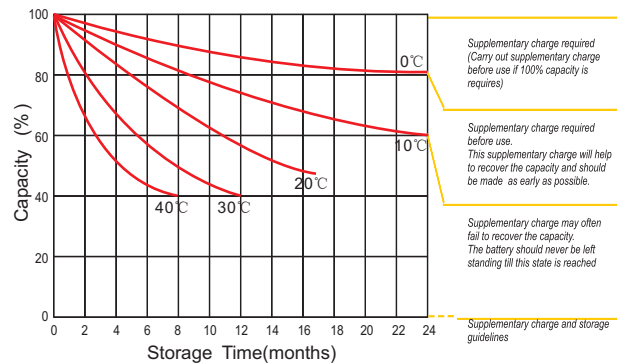
Relationship Between Charging Voltage And Temperature



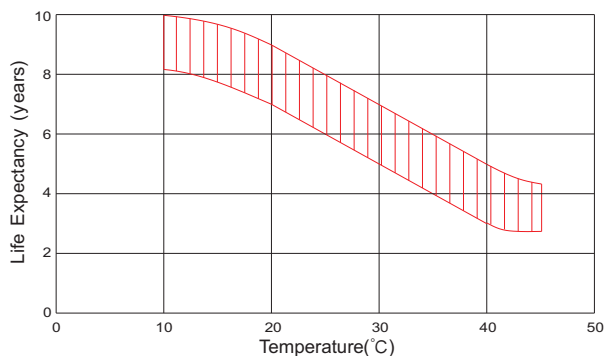
Temperature Effects On Capacity



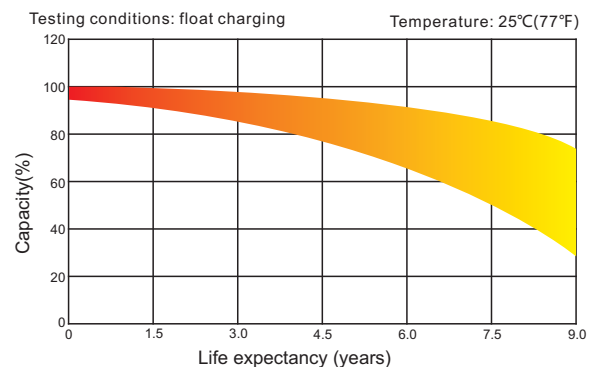
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



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

